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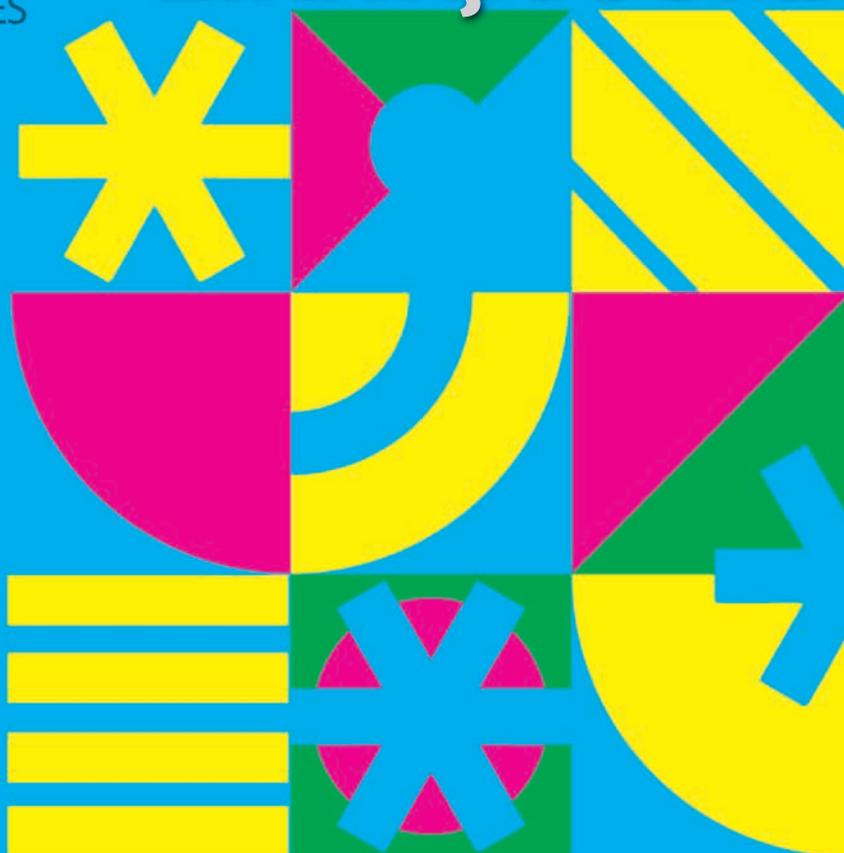
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**SABIEDRĪBAS
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The collection of articles of the XIV International Research-to-Practice Conference “Society Transformations in Social and Human Sciences” contains the articles written by lecturers, post-graduate students, Ph.D. candidates, Master’s students and professional practitioners. The collection includes 40 articles dealing with topical issues of economics, finance, entrepreneurship, tourism, legal science, psychology, regional policy and European studies. Rīga: BSA, 2026. 248 lpp.

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**MŪSDIENU VADĪBA, UZŅĒMĒJDARBĪBA UN
INOVĀCIJAS**

**CONTEMPORARY MANAGEMENT,
BUSINESS AND INNOVATION**

PARADIGM SHIFT IN HIGHER EDUCATION: FROM PROHIBITIONS TO GenAI COMPETENCIES

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ABSTRACT

The spread of generative artificial intelligence (GenAI) has made it clear that simple bans do not work in higher education, and that students already use these tools in everyday study routines. This article examines how universities and sector bodies react to GenAI, and argues that the focus is gradually moving from prohibition to competence based, transparent use. On the basis of key international reports, sector guidelines, and institutional documents, a simple Policy–Curriculum–Assessment triad is used as the main analytical lens. Policy refers to clear rules on acceptable GenAI use and on disclosure. Curriculum covers AI literacy as part of programmes for students and staff. Assessment addresses task design that makes student work visible, and reduces dependence on detectors. Document analysis shows that many organisations already operate in all three dimensions, although often in a fragmented way. The article concludes that clear and readable policies, embedded AI literacy, and more authentic forms of assessment need to be developed together, and that compact support tools such as templates and readiness rubrics can help universities move toward competence based governance while keeping academic integrity and meaningful learning at the centre.

Keywords: generative AI; academic integrity; AI literacy; assessment redesign; higher education

ANOTĀCIJA

Ģeneratīvā mākslīgā intelekta (ģeneratīvais MI) straujā izplatība parāda, ka pilnīgi aizliegumi augstākajā izglītībā nedarbojas, un studenti šos rīkus jau izmanto ikdienas studiju praksē. Rakstā analizētas augstskolu un nozares organizāciju reakcijas uz ģeneratīvo MI, un pamatots, ka fokuss pakāpeniski pāriet no aizliegumiem uz caurskatāmu, kompetencēs balstītu izmantošanu. Par galveno analītisko ietvaru tiek izmantota vienkārša Policy–Curriculum–Assessment triāde. Policy nozīmē skaidrus noteikumus par pieļaujamo ģeneratīvā MI izmantošanu un tās atklāšanu. Curriculum aptver MI pratību kā daļu no studiju programmām studentiem un personālam. Assessment attiecas uz tādiem vērtēšanas uzdevumiem, kuros ir redzams studenta ieguldījums, un samazinās atkarība no noteikšanas rīkiem. Dokumentu analīze rāda, ka daudzas organizācijas jau darbojas visās trijās dimensijās, lai gan bieži vien fragmentēti [1; 2]. Secināts, ka skaidri un viegli uztverami noteikumi, integrēta MI pratība un autentiskāka vērtēšana jāattīsta kopā, un ka kompaktie atbalsta rīki, piemēram, paraugi un gatavības rubrikas, var palīdzēt augstskolām virzīties uz kompetencēs balstītu pārvaldību, vienlaikus saglabājot akadēmisko godīgumu un jēgpilnu mācīšanos kā centrālās vērtības [3; 4; 5].

Atslēgvārdi: ģeneratīvais MI; akadēmiskā godīgums; MI pratība; vērtēšanas pārveide; augstākā izglītība

INTRODUCTION

Generative artificial intelligence has, within a short time, become part of routine student work in many universities, and it is already used for drafting, summarising, checking language, and exploring ideas. Surveys and sector reports indicate that a considerable share of students rely on GenAI in ways that are not always visible to teaching staff, and that simple bans do not prevent this use [4]. This creates a gap between official policy and actual practice, and it raises questions about how higher education should respond.

International organisations now focus less on the question of whether GenAI should be present in education, and more on how it can be governed in a way that protects human agency, fairness, and academic integrity [1; 2]. Policy papers stress transparency, protection of personal data, and clear limits for high-risk applications. At the same time, they encourage universities to explore how GenAI can support learning when used critically and with appropriate safeguards.

Against this background, the central issue is how higher education can shape GenAI use so that it supports rather than replaces student learning. This implies a move from prohibition-based reactions to competence-based governance. Instead of trying to keep GenAI out of the classroom, institutions need clear rules, visible teaching of AI-related competences, and assessment designs that still allow teachers to see what students can do by themselves [1; 3].

In this article, the Policy–Curriculum–Assessment triad is used as a compact framework for understanding this shift. Policy covers institutional and course-level rules on GenAI. Curriculum refers to AI literacy as part of programmes for students and staff. Assessment covers task design, evidence of process, and explicit statements on permitted GenAI use. The following sections outline the theoretical background, describe the method of document analysis, and present key patterns observed in recent guidance, before moving to a discussion and conclusions [1; 2; 4].

THEORETICAL BACKGROUND: FROM PROHIBITIONS TO COMPETENCIES

Early work on artificial intelligence in education dealt mainly with learning analytics, predictive models, and tutoring systems, and these tools have already created new forms of data use and new relations between teachers, students, and platforms [2]. GenAI changes the situation because it can produce whole texts and other artefacts that are difficult to distinguish from student work. This challenges traditional ideas about authorship and raises concerns about academic integrity when assignments are easy to complete through prompting.

A prohibition-based approach treats GenAI largely as a source of misconduct. Universities issue bans on certain tools, warn about sanctions, and invest in detection technologies. Such measures can signal that integrity matters, and they may deter some forms of misuse, yet they also face structural limits. GenAI is freely available, accessible on private devices, and constantly evolving. Detection systems are imperfect; they can produce false accusations, and they risk shifting attention away from learning design [4; 5].

Competence-based governance starts from the recognition that students will encounter and use GenAI both during their studies and in later work. The task of higher education is then to help them understand what these systems can do, where they fail, and how to use them in a way that remains transparent and responsible. AI literacy is the key concept here. It combines basic knowledge of GenAI mechanisms, awareness of bias and error, and hands-on skills for checking, editing, and integrating AI outputs into one's own work [1; 3].

Current frameworks argue that AI literacy should not be confined to isolated training sessions. Instead, they should be embedded in existing subjects, with concrete tasks where students experiment with GenAI under guidance, and reflect on when and why they choose to use or not to use it [3]. In business programmes, for example, students might use GenAI to draft alternative scenarios, then compare them with human-written analyses, and identify where the tool oversimplifies or overlooks important constraints.

Authentic assessment is the second element of this shift. Rather than relying on tasks that a generic chatbot can solve, authentic assignments are tied to local data, specific organisational contexts, or personal experience, and they require students to show their process. Researchers suggest that such designs are more robust in the presence of GenAI and that they support deeper learning by forcing students to connect content to their own situations [5]. If tasks include drafts,

logs of prompts, short reflections, and links to learning outcomes, it becomes easier to see what the student has actually done.

Taken together, competence-based governance does not remove the risks associated with GenAI, and it does not eliminate the need for clear boundaries. However, it offers a more realistic way forward in a situation where the technology is already part of the environment. The Policy–Curriculum–Assessment triad places AI literacy and assessment design alongside formal rules, and it encourages universities to view GenAI as a question of everyday practice rather than only of control [1; 2; 5].

RESEARCH AIM AND METHODS

The aim of this article is to analyse how recent guidance on GenAI in higher education reflects a move from prohibition to competence-based governance, and how far it already corresponds to the Policy–Curriculum–Assessment triad. Three questions guide the analysis: how policies define acceptable use and disclosure, how AI literacy is framed as part of the curriculum, and how assessment is expected to change.

The study uses qualitative document analysis. A focused sample of texts was collected from international organisations, national authorities, and sector bodies that have formulated influential guidance on GenAI in education [1; 2; 4]. These include principal statements, policy papers, and practical toolkits. The sample is complemented by several institutional frameworks and guides on AI literacy and assessment, chosen because they are cited in sector discussions and offer concrete examples of practice [3; 5].

A simple codebook was constructed around the three elements of the triad. Passages dealing with rules, responsibilities, and declarations were coded as Policy. References to AI literacy learning outcomes, teaching activities, or staff development were coded as Curriculum. Statements about assessment tasks, permitted use sections, and evidence of process were coded as Assessment. Additional codes captured mentions of support measures, such as templates and repositories.

After coding, the documents were compared to identify recurring patterns and differences across organisations. Particular attention was paid to whether policy, curriculum, and assessment were presented as connected issues or treated separately. To make the findings more usable for institutions, a compact readiness rubric was developed. For each element of the triad, it distinguishes between absence, partial presence, and established practice, and it includes short descriptions that universities can adapt for self-evaluation [1; 4].

The method has limits. It covers only written texts in English, and it does not show how guidance is implemented in specific classrooms. It also reflects a snapshot of a fast-moving field. However, for a bachelor-level study that aims to map an emerging governance model rather than to measure outcomes, document analysis offers a transparent and replicable approach [1; 2].

RESULTS: THE POLICY–CURRICULUM–ASSESSMENT TRIAD IN PRACTICE

Across the sample, three common tendencies appear. Organisations seek to clarify GenAI rules, they recognise AI literacy as a competence, and they recommend changes in assessment that take the presence of GenAI into account [1; 2; 4]. At the same time, the degree of detail and the balance between these elements differ.

In the policy field, many documents now provide definitions of GenAI, examples of acceptable and unacceptable uses, and model statements for course syllabi. They recommend that students declare significant AI assistance and that institutions should protect privacy when prompts and outputs are stored. Policy papers also warn that vague language or sharp differences between

courses can create confusion, and they encourage programme-level coordination so that students receive consistent messages [1; 2].

In the curriculum field, AI literacy is framed as a necessity rather than as an optional extra. Guidance describes learning outcomes related to understanding GenAI capabilities and limits, recognising typical errors, and assessing the quality of AI-generated content. It suggests short introductory materials combined with discipline-specific activities, and it stresses that literacy should be connected to real study tasks, not only to general talks about technology [3]. Several frameworks link AI literacy to graduate attributes and employability, arguing that the ability to work with GenAI is becoming relevant for many professions.

Assessment is the third main strand. Documents recommend a move away from standard essay tasks that can be completed through simple prompting, and toward more authentic assignments that include local cases, staged work, and reflections on process [4; 5]. They caution against heavy reliance on detection tools, which can produce errors and undermine trust, and they propose that clarity about permitted use should be built into assignment briefs. Example tasks include projects based on local data, case analyses that require personal justification, and portfolios that combine different artefacts with commentary [5].

Implementation support cuts across all three elements. Sector bodies and universities now provide policy templates, example assignment briefs, model AI use statements, and frequently asked questions. These resources are designed to save time for course teams and to reduce variation between modules [1; 4]. However, the analysis shows that in many cases these materials are still scattered and that they are not yet integrated into a single, easily accessible toolkit.

The readiness rubric built on the triad summarises these patterns. Institutions with no explicit GenAI rules, no AI literacy elements, and unchanged assessment receive low scores on all dimensions. Others have clear central policies but still rely on traditional tasks, or they experiment with authentic assessment without stable policy language. A smaller group begins to show more balanced profiles, with coordinated attention to rules, literacy, and assessment design [1; 4; 5].

DISCUSSION

The findings indicate that higher education is gradually moving away from a narrow focus on banning GenAI, and toward a broader view that combines rules, competences, and assessment. The Policy–Curriculum–Assessment triad helps to make this pattern visible because it places policy documents, AI literacy projects, and assessment reform within a single frame.

From a policy perspective, the main challenge is to produce rules that are clear, readable, and adaptable. Documents that define GenAI in simple terms, give concrete examples, and explain the purpose of restrictions are more likely to be used in practice than long legalistic texts [1; 2]. If policies include standard declaration forms and example wording for syllabi, they can also reduce the burden on individual lecturers, and they can support more consistent communication with students.

In the curriculum field, the risk is that AI literacy remains a slogan. If GenAI is mentioned only in strategy documents, while everyday teaching continues unchanged, students will continue to learn about these tools primarily from peers and social media [3]. Embedding literacy into existing courses is more effortful, and it requires staff development and sharing of examples. However, it is also the only way to ensure that students connect AI-related skills to the content and methods of their own disciplines.

Assessment reform is demanding, and it raises questions about workload and fairness. Authentic tasks with local data, staged submissions, and process evidence are more robust in an environment where GenAI is widely available, and they can support deeper learning [5]. At the

same time, staff need time and support to redesign tasks, and programme teams need coordination so that students do not face conflicting expectations. The documents studied here suggest that careful sequencing and sharing of good practice can make this process more manageable [4].

Another important point is the role of student voice. Surveys show that many students use GenAI to clarify concepts, to overcome language barriers, or to check understanding, and that they are often unsure whether such uses are acceptable [4]. If universities want students to declare their use of GenAI, they must create conditions where honest disclosure is compatible with fair treatment. This means designing tasks where declared use is allowed within defined limits, and where assessment focuses on how tools are used rather than on a simple yes or no.

Finally, the triad needs to be adapted to different institutional contexts. Large universities with established teaching centres can develop extensive frameworks and training offers. Smaller institutions may start with a short policy, a few model tasks, and a basic set of resources, and then expand over time [1; 3]. The value of the triad lies in its simplicity: it reminds decision makers that GenAI governance is not just about writing a policy, and not just about changing assessments, but about connecting rules, competences, and tasks in a coherent way.

CONCLUSIONS

GenAI has exposed the limits of prohibition-based responses in higher education, and it has made visible the need for approaches that take everyday student practice seriously. The analysis of recent guidance shows that many organisations already stress clear rules, AI literacy, and assessment redesign, even if these elements are not yet fully aligned [1; 2; 4; 5].

The Policy–Curriculum–Assessment triad offers a concise way to organise this emerging agenda. Policy clarifies what kinds of GenAI use are acceptable, and under which conditions. Curriculum ensures that students and staff understand how GenAI works, where it fails, and how to use it critically. Assessment focuses on tasks and criteria that keep the student contribution visible, and that reduce dependence on detection technologies.

For universities, the triad can serve as a practical tool for reflection and planning. A readiness rubric based on the three elements helps identify strengths and gaps, and it can support decisions about where to start and how to sequence reforms. Small steps, such as adding permitted use sections to assignment briefs, integrating short AI literacy activities into existing modules, and collecting examples of redesigned tasks, can contribute to a more coherent approach.

Further research could combine document analysis with case studies of programmes that apply the triad in different contexts, and it could explore how students and teachers experience new policies and assignments in practice. Even at the current stage, the documents reviewed here indicate that competence-based, transparent governance of GenAI is more realistic than blanket bans, and that it is better aligned with the educational mission of higher education [1; 3; 5].

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MODELS FOR BUILDING A KNOWLEDGE BASE FOR A MOBILE APPLICATION FOR CONTROLLING HEALTHY NUTRITION

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ABSTRACT

The paper analyzes modern approaches to designing a knowledge base for a mobile application that supports healthy nutrition. Production, ontological and hybrid models are compared, highlighting their advantages for personalization of dietary recommendations. A conceptual architecture of an intelligent knowledge base is proposed, enabling adaptive suggestions and real-time monitoring of users' eating behavior.

Keywords: knowledge base, mobile application, ontology, personalization, production rules

INTRODUCTION

The problem of healthy nutrition occupies an important place in the modern public healthcare system. According to the World Health Organization, an unbalanced diet is one of the main causes of obesity, cardiovascular diseases, and metabolic disorders [1]. In the context of digitalization, mobile applications designed to analyze dietary intake and control energy balance are becoming increasingly popular.

Despite the widespread use of such software products, most of them operate on the basis of simple databases that do not provide intelligent information processing and deep personalization of recommendations. As a rule, such applications are limited to calorie counting and the issuance of static standards for nutrient consumption without taking into account individual user needs.

One of the promising directions for the development of such systems is the introduction of a full-fledged knowledge base, which represents a structured set of facts, rules, and relationships between objects of the nutrition domain. The use of intelligent knowledge representation models makes it possible to implement mechanisms of logical inference, adaptation of recommendations, and decision support [2].

The purpose of this work is to study existing models for building knowledge bases and to develop a conceptual structure of a knowledge base for a mobile application for healthy nutrition control.

MAIN THEORETICAL PROVISIONS

Production Models

The production model is one of the most common ways of representing knowledge in expert systems. It is based on the use of rules of the following type:

IF (condition) THEN (conclusion).

In the context of nutrition, such rules allow for the formalization of dietary recommendations. For example:

- If a user leads a sedentary lifestyle and consumes more than 2800 kcal per day, it is necessary to recommend reducing dietary caloric intake.

- If protein deficiency is detected, it is recommended to include meat or plant protein products in the menu.

The advantages of production models are visibility, simplicity of implementation, and high interpretability of inference logic. However, as the number of rules increases, system maintenance becomes more complex, and logical conflicts between rules may occur [3].

ONTOLOGICAL MODELS

The ontological approach implies the creation of a formal description of the structure of the nutrition domain in the form of a set of concepts, properties, and relationships between them. The ontology may include classes such as “Food Product,” “Nutrient,” “User,” “Disease,” “Diet Regimen,” as well as relationships such as “contains,” “recommended for,” “restricted for,” and others.

The main advantages of ontologies include:

- the ability to represent complex semantic relationships;
- extensibility and scalability of models;
- support for logical inference and semantic search.

The use of the ontological approach ensures a transition from simple indicator counting to the analysis of cause-and-effect relationships between diet and the user's health status [2].

HYBRID MODELS

The hybrid model combines the ontological structure of knowledge with production rules of logical inference. Ontology defines the semantic foundation of the subject area, while rules implement dynamic processing of user data and the generation of recommendations.

Such integration makes it possible to achieve:

- system flexibility;
- in-depth analysis of user profiles;
- automatic adaptation of dietary recommendations.

Today, the hybrid approach is considered the most promising for application in mobile medical and nutritional apps.

KNOWLEDGE BASE ARCHITECTURE OF THE MOBILE APPLICATION

The proposed conceptual structure of the knowledge base includes the following main modules:

1. **Data collection module.**
Registers anthropometric parameters of the user, level of activity, dietary history, and current health condition.
2. **Ontological core.**
Contains a formalized model of the nutrition domain, including food products, nutrients, daily norms, and medical restrictions.

3. **Logical inference mechanism.**

Based on production rules, it analyzes user data and generates conclusions about the compliance of the diet with nutritional standards [3].

4. **Personalization module.**

Implements adaptation of recommendations to the individual parameters of the user.

5. **Feedback system.**

Takes into account the user's response to recommendations and gradually adjusts the rules for diet selection.

RESEARCH RESULTS

The conducted analysis showed that the use of a hybrid knowledge base makes it possible to achieve the following results:

- more accurate determination of users' energy and nutrient needs;
- formation of personalized recommendations considering eating habits;
- increased user motivation to adhere to a healthy diet;
- dynamic adjustment of recommendations based on nutrition and activity history.

Expert assessment of model effectiveness showed that hybrid systems exceed traditional databases in accuracy of recommendations by 25–30% [2].

CONCLUSION

The paper considered the main models for building knowledge bases for mobile applications aimed at nutrition control. The most effective approach was recognized as the hybrid one, combining ontological structures and production rules. Its application enables intelligent decision support, providing a high degree of personalization and adaptation of recommendations to user needs.

Promising directions for further research include the integration of machine learning methods and analysis of large volumes of user data to improve prediction accuracy and recommendation algorithms.

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INTERNATIONAL RELATIONS AND INTERNATIONAL MANAGEMENT IN TODAY'S GLOBALIZED WORD

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ABSTRACT

International relations is a scientific discipline, as well as a practice concerning mutual relations between states, international organizations, transnational corporations and other actors operating in the international arena. It examines both political, economic, social and cultural processes that transcend national borders.

The genesis of modern international relations is often dated to the post-conference period after the end of World War I, when the League of Nations was established in 1919, the first international organization to ensure peace and international cooperation. The introduction of the principles of state sovereignty, equality, non-interference in internal affairs, as well as a new understanding of security and international cooperation have become the basis for the development of modern international relations. However, the roots of international relations are much older and can be traced through the evolutions of diplomacy and international trade relations, cupbearers from ancient civilizations such as Greece, Rome or China, which traded with each other, made alliances and contracts. Nowadays, international relations include not only relations between states, but also the influence of international organizations, corporations, terrorist groups, and civil societies. Globalization, the technological revolution and climate change make it an ever-evolving field that requires an interdisciplinary approach.

The essence of international relations lies in the study and analysis of complex relationships between various actors operating on the global arena, which shape the political, economic, social and cultural order of the world.

In the second part my papers I would like to describe the essence of international business.

International business means multidisciplinary activity carried out over national borders. Due to the increasing globalization of the economy and the integration of international business must integrate many areas of knowledge into one, so that to take effective action in a multi-level environment (regional, national, international and global. Areas of knowledge that make up the subject international business are: international management, international finance, international trade, international and global marketing. Within the framework of the above-mentioned areas of knowledge, the benefits of international exchange, the structure of trade in international policy, economic protectionism, balance sheet issues, exchange rate determinants, international coordination issues economic policy and the international capital market. For the purposes of in international transactions, companies use different operational structures, taking into account in the analysis of the impact of the cultural context.

This difference is evident in business practices, managers' decisions, currency issues and the legal environment imposed by the governments of other countries. Effective operation in an international environment requires managers to make optimal decisions about their business strategy, for which they need to coordination and control structures. Knowledge of tools is also necessary economic policies of the countries hosting the company's branches. States, often despite the declarations to the contrary, apply restrictions on the freedom to conduct business by foreign entities, so it is important to have experience in creating a strategy adaptation measures. because business activity is geared towards maximizing profit, it is the responsibility of managers to select payment tools so that they are minimize exchange rate risk and ensure access to sources of financing. This environment distinguishes international business, and its in-depth knowledge It allows for active business activity, thanks to which the business entity obtains financial profit as an entity on the international arena.

Keywords: International relations, International Management, International Business, Globalization

1. International Foreign Relations

Attempts to analyse international relations are fraught with the error of irrationality and subjectivity, which makes it impossible to find the decisive factor which gives these relations

a predictable character¹. The subjects of these relations are countries, more precisely their cooperation and rivalry. The regulation of these two activities is difficult because there is really no instance standing above the states, and those institutions that have taken the trouble of establishing rules and keeping order are based on the rules defined by the countries they supervise. The main institution international is the state (a form of political organization of society), and the vastness of its sphere of influence is determined by its power, expressed in its ability to creating and solving international issues. This capacity is expressed in most often in the form of various forms of negotiations. The complexity of the relationship international studies testify to the diversity and multitude of theoretical currents.

The first group emphasizes rivalry and conflict. There are such doctrines, realism and neorealism. The goal of the state is to maintain and expand its sphere of influence.

For this, power is necessary, understood through its material factors, and especially Military. International law and its institutions are treated objectively. Central the role of the state presented in this doctrine does not always reflect its true importance and opportunities in the international space.

A broader cognitive base presents neorealism. The pursuit of the national interest is no longer based solely on the concept of power and conflict, but allows for greater complexity of international processes in economic, cultural and political dimensions. This doctrine puts a greater emphasis on decision-making processes and the need for communication and cooperation for avoiding conflicts.

The second group of doctrines are those that emphasize cooperation and interdependence.

An example here is the idea of federalism, which goes beyond the concept of sovereignty state, which is the main cause of international conflicts. Ideas federalist countries set the goal higher than the ways of its realization in an effort to limit the sovereignty of the state and fragmentation of power² Federalist concepts present two the main trends concerning the organization of state formations. The first process-based historical, presenting respect for traditional cultural differences. Second consisting in ideological uniformity losing ethnological diversity. In federalist doctrine, in recent years, the concept of multilateral shaping international relations – global governance. This concept disavows the importance of state governments in favour of private and public actors, whose contribution to shaping the international order is noticeably increasing, to which is due to the rapid development of information technologies. Another example is that sociological concepts, such as functionalism, which explores the relationships and functions of different social groups whose goal is to achieve balance. Community is treated as a network of mutual relations, and researchers are trying to discover deeper essence of it.

Intensification of trade in the spheres of trade, information, intellectual or has been particularly visible since the mid-twentieth century. The shape of this exchange and interstate relations were mainly determined by the East-West axis. He was drawing there is a clear antagonism between the countries of the socialist camp, which are under the control of the influence of the USSR and capitalist countries, among which the leader of the the United States of America was a candidate. The second axis shaping the domain to this day international relations is the North-South axis. However, there is no clear division into two competing blocks. The north is made up of developed countries, e.g.G7 countries, strengthening mutual economic cooperation. To the country group The south includes countries after decolonization and decommunization, poor and developing countries.

¹ S. Sur, *International Relations*, DIALOG Academic Publishing House, Warsaw 2014, p. 17.

² *Ibidem*, p. 63.

They are characterized by high cultural heterogeneity and include Third World countries, non-aligned countries and developing countries. Economic relations are one of the dimensions of international relations. Nowadays, we are observing the integration of national economies into one international economic organism³. This process is called globalization.

2. International Management

Operating in an international environment with great development potential with enormous complexity and competitiveness requires the staff to managerial skills and flexibility. Managerial skills in management of international entities are related to the planning processes, organisation, leadership and control transferred across national borders.

This internationalization is related to working in a multicultural environment, and

two approaches. The first approach involves trying to understand requirements and adaptation to them. The second, on the other hand, is an attempt to rationalize existing conditions with the creation of universal patterns of behavior. Creating and Implementation of the strategy in multinational companies requires consideration of several problems. They are linked to specific access to resources and the need for building different organizational structures, openness to the environment complexity of management processes and the maintenance of specific relations between host countries and corporations.

The main problem of international management is to move at the interface of different cultures. People and entities in international business are embedded in different social cultures, i.e. they use different conceptual catalogues and definition, which has a high potential for conflict. Differences are also visible in culture economic environment, its participants have different knowledge of the socio-economic environment, and present different business ethics. Culture of the organizations participating in the exchange economic sector, i.e. its perception of the environment and resources also has a significant impact on the how processes and relationships within the organization are used. Management at the intersection of cultures.

It requires conflict management skills, which are inevitable in such an environment.

This task is facilitated by the predictability of cultural factors, which is much higher than for political factors. Strategies adopted to solve these types of problems present three approaches:

- ignoring cultural differences,
- minimizing their importance,

- conscious use of the aforementioned differences¹¹. Effective cooperation in the international field requires high-level managers to competences and intercultural management skills. The success of the company in it depends to a large extent on the quality of the staff, and their selection is conditioned by many Factors. These include:

- the ability to work in a multicultural team,
- dealing with communication barriers,
- the place of origin of the staff determining the shape of the recruitment process,

³ International Economic Relations, E. Oziewicz, T. Michałowski, (eds.), PWE, Warsaw 2023, p. 38.

- mobility of staff and their families and acclimatization skills,
- continuous improvement through the exchange of experiences and education.

In international corporations, there are four groups of specialists with leadership potential. At the top are the Chief Executive Officers and the General Directors coordinating the work of lower levels, responsible for the transformation of the chosen strategies into real actions. The second group consists of managers of strategic units. On their shoulders to coordinate cross-border activities and to take key decisions that shape the company. The third group includes heads of national or regional units. They take care to adapt the offer to the and react quickly to competitors or threats from governments Host. The last group are functional managers focused on ensuring the transfer of and the promotion and search for innovation⁴.

In international management, there are two types of process organization decision-making: centralization and decentralization. Centralization means leaving the burden behind decision-making process at the level of the company's management board. According to its proponents, it provides better compliance with the goals and policies of the organization, more efficient use of its resources, more effective in crisis situations and avoiding duplication of efforts. Decentralization, in turn, relieves the burden on CEOs, giving them more time to preparing strategies, provides the company's branches with more flexibility and faster greater empowerment of local managers allows for selecting talents capable of leading the company at a higher level of management.

3. The essence of international business

International business means multidisciplinary activity carried out over national borders. Due to the increasing globalization of the economy and the integration of international business must integrate many areas of knowledge into one, so that to take effective action in a multi-level environment (regional, national, international and global)⁵. Areas of knowledge that make up the subject international business are: international management, international finance, international trade, international and global marketing. Within the framework of the above-mentioned areas of knowledge, the benefits of international exchange, the structure of trade in international policy, economic protectionism, balance sheet issues, exchange rate determinants, international coordination issues economic policy and the international capital market⁶. For the purposes of in international transactions, companies use different operational structures, taking into account in the analysis of the impact of the cultural context.

This difference is evident in business practices, managers' decisions, currency issues and the legal environment imposed by the governments of other countries. Effective operation in an international environment requires managers to make optimal decisions about their business strategy, for which they need to coordination and control structures. Knowledge of tools is also necessary economic policies of the countries hosting the company's branches. States, often despite the declarations to the contrary, apply restrictions on the freedom to conduct business by foreign entities, so it is important to have experience in creating a strategy adaptation measures. Because business activity is geared towards maximizing profit, it is the responsibility of managers to select payment tools so that they are minimize exchange rate risk and ensure access to sources of financing. This environment distinguishes international business, and its in-depth knowledge. It

⁴ Ibidem, p. 158.

⁵ M.K. Nowakowski (eds.) Biznes Międzynarodowy – obszary decyzji strategicznych, Wydawnictwo Key Text, Warszawa 2020, p.13.

⁶ Ibidem, p. 16.

allows for active business activity, thanks to which the business entity obtains financial profit as an entity on the international arena.

The ability to shape this rolling, interaction and action anticipating⁷. Factors affecting the well-being of the current company and the markets can be divided into external and internal. External forces undertaking certain actions necessary to adapt it to the factors (government policy, economic situation, availability of capital)⁸. In turn, the control of internal factors is the responsibility of the company. These include technology, materials, equipment, styles and working methods. Accordingly, by manipulating, the company can interact with the environment.

Another classification of the environment distinguishes between internal (domestic) and external (foreign) and international. The domestic environment is well known to managers, somewhat more difficulties arise from the foreign environment, despite the similar characteristics to Fr. National. The international environment is a combination of factors occurring in the the above-mentioned environments, with the addition of cross-border involvement undertaken by the activities. The instability of the international environment forces the additional analyses and formulating strategies based not only on the experience of past and extrapolation.

The lack of such a strategy will result in the accumulation of additional difficulties and costs. The strategies of international actors will focus on adaptation to national or regional conditions in order to make effective use of the cultural or political differences. Companies operating under the global strategy will build their competitive advantage on the greater homogeneity of the Products. Factors determining the progress in the globalization of an economic entity are political, technical, market, cost and competitiveness changes⁹. The success of international business depends on an effective analysis of the competition, establishing structures linking other producers with potential buyers in the to tailor a strategy that allows for the takeover of distribution channels. Improving competitiveness can be achieved through actions on resources, areas of activity and Organization. These factors form a strategic triangle, the understanding of which is essential to success.

4. Foreign investments

The key factor influencing the shape of global economic ties is foreign investments. There are two forms of them: portfolio and direct. Portfolio investments concern the purchase of shares of companies participating in the business irrespective of their origin (domestic or foreign). Investments are directly related to making a profit from running a business.

They involve the purchase of shares in existing entities (or the construction of new ones) seeking to take control of them. The investment market faces a number of barriers that make it difficult to operate enterprises with foreign capital. These include demand barriers, supply, financial and systemic issues. Demand barriers are associated with insufficient demand for the company's offer, resulting e.g. from a competitive Import. Supply barriers result from a lack of raw materials and materials, lack of experienced staff. Financial barriers are mainly due to the lack of favorable credit conditions. Systemic barriers are associated with inept legal system, regulatory instability and overgrown bureaucracy. Market absorption investment sector, and the associated inflow of foreign investors requires the creation of to encourage them to take action in their national markets. Favourable.

⁷ Ibidem p. 21.

⁸ Ibidem p. 22.

⁹ Ibidem, p. 31.

The factors for such investments are:

- stable political and economic situation of the host country,
- transparent legal system,
- national legislation offering incentives and support to investors for their activities,
- government guarantees protecting the rights and resources of foreign investors¹⁰.

The motives for investment decisions can be classified as follows:

- searching for foreign markets, they assume filling in local requirements for products or services,
- search for natural resources related to mining and their processing,
- increasing production efficiency, e.g. relocating production to countries with low wages and high productivity (Far East),
- searching for technology and knowledge, i.e. investing in development industries and Innovative
- the search for stability and political security, related to investors' fear of loss of private property or from deep interference by government factors in the property of the companies¹¹.

Alternative investments to the above, assuming partial ownership are joint ventures, mergers and acquisitions, and licensing of licenses. This kind of investment brings benefits in the form of reduced costs, facilitation of market access, complementarity of partners with different abilities, behaviour of independence, entry into the markets of countries restricting access to full ownership of the foreign sector, exploit economies of scale and eliminate competition more quickly.

Undertaking a foreign investment requires the investor to choose the best one for its future market value. A parameter helpful in this action is the net updated value (NPV). It consists of such variables as initial capital expenditures, cash flows in the assumed period, projected cost of capital and planned time horizon. The investor will undertake projects with the highest possible positive NPV value.

5. Marketing and financing in modern international business

Activities on international markets are based on two concepts. Marketing international means the distinctiveness of foreign markets and thus forces use of multiple strategies. Global marketing treats foreign markets as one and it assumes the use of a single strategy. The concept of global marketing increases opportunities enterprises to maximize profit, gain a competitive advantage, extension of the product offer and product life cycle, faster return on investment and lower sensitivity to economic disturbances. Operation in global marketing forces the standardization of marketing activities, which reduces costs, simplifies administration, facilitates communication with consumer and improves the quality of the product. Another variant of the strategy is adaptation to local conditions, used on a wider scale in international marketing.

¹⁰ Ibidem, p. 117.

¹¹ Ibidem, p. 119.

The best results are achieved by using both strategies where local conditions do not allow adaptation comes to the rescue when standardization comes to the rescue. Another limitation standardization is the lack of acceptance by the market after exceeding a certain level.

The key to the success of an international venture is the choice of the market. It is carried out in the process of segmentation, i.e. the separation of markets with specific characteristics, based on the following criteria: political risk, economic risk, market size, barriers to entry and operation, scale of competition, cultural similarities and geographical distance. The next stage is to determine the product offered or service. The adaptation and standardization mentioned above play an important role here. Their interrelationships are manifested in the form of physical characteristics of the product, packaging and shaping consumer awareness. Another important element is shaping pricing strategies by adapting them to local markets in order to maximizing profits.

The pricing policy should effectively lead to the coverage of all costs, taking into account the risks arising from fluctuations in exchange rates volatility of tariffs, tariffs and import duties, as well as the diversification of distribution. Distribution channels are another factor influencing success Company. Their level of complexity depends on the structure of the form of trade adopted in the host country. The use of existing channels of another manufacturer or reaching local distributors, already familiar with the specifics of the market. Often it is the distributor who has an impact on the shaping of the company's pricing strategy, which is why it is crucial to control distribution channels.

It can be implemented through the development of a network of franchise relationships. Internet development allowed for the creation of out-of-store sales networks, facilitating the distribution process by eliminating its intermediate links. No initiative on the international market it would have succeeded without proper promotion. It is responsible for breaking down barriers and creating a product and company image in order to increase sales and strengthen their position on the market. This requires constant monitoring of moods and changes consumer preferences and the ability to communicate with the market.

The globalisation of the economy and the consequent liberalisation and deregulation facilitate the private investors access to sectors previously reserved for State. This access means intensifying efforts to acquire and management of funds in international markets. Therefore, the role of financial managers in the process of shaping the company's strategy. Main the assumptions of the financial policy are fast and effective fundraising, from cheap sources of financing and knowledge offered by specialized institutions, reducing taxes, mitigating risks through the correct allocation and performance improvement (productivity and material resources). Sources of funding in the international business are bonds and syndicated loans, necessary for the formation of international business.

This formation is mainly carried out through mergers and Acquisition. These processes enable the achievement of the assumed strategic and financial goals and competitive advantage. This would not have been possible without the appropriate support from the investment banks. Knowledge of the products offered by banks or their (revolving loans, short-term funds, other debt instruments) is key to development in modern international business.

6. Globalization and international business and trade

Globalization itself is a process that is increasingly shaping the modern world, leading to the growing integration and interdependence of states, societies and economies. Its influence is visible

in many areas of life, and the most important of them are the economy, politics, culture, technology and the environment.

In the economic sphere, globalization manifests itself primarily in the integration of world markets. Goods, services, capital and technology can flow freely between countries, contributing to increased trade and foreign investment. Many companies are moving production to countries that offer lower labor costs, leading to the creation of global supply chains. This process increases competitiveness, but can also cause social problems, such as unemployment in regions affected by the relocation of industry¹².

In the political aspect, globalization leads to closer international cooperation. Global organizations and institutions are created, such as the UN, the WTO or the International Monetary Fund, which make decisions that affect the whole world. The role of supranational organisations is strengthened, while at the same time the autonomy of some countries in making internal decisions is decreasing¹³.

Global culture is also changing, with the development of information and communication technologies (such as the internet and social media) leading to the rapid spread of ideas, lifestyles, fashions and languages. This leads to the unification of culture, but also to an increase in the importance of local and regional identities as a form of defence against the loss of distinctiveness. The technological aspect cannot be overlooked either, as technological progress, especially in the field of transport and communication, has significantly accelerated globalization processes. Information can be transferred almost instantly to the other side of the world, and moving people and goods is faster and cheaper than ever before¹⁴.

Globalisation has a significant impact on the environment, primarily by increasing production and intensifying transport around the world. The growing demand for goods and services causes greater consumption of natural resources such as water, minerals and energy, and also leads to an increase in pollutant emissions, including greenhouse gases. As a result, global economic processes contribute to the intensification of environmental problems such as climate change, air pollution and ecosystem degradation. At the same time, however, with the growing environmental awareness at the international level, joint actions for environmental protection are becoming increasingly important. This is reflected in the conclusion and implementation of international climate agreements, such as the Kyoto Protocol, which introduced mechanisms to reduce greenhouse gas emissions, or the Paris Agreement, which assumes global commitments of countries to counteract global warming and promote sustainable development. These initiatives show that, despite the challenges posed by globalisation, it is possible to build international cooperation to protect the planet and counter the negative impacts of human activities¹⁵.

As globalization processes deepen, the issue of **social and economic inequalities is also becoming increasingly important**. Globalization promotes economic growth, but the profits from this growth are not distributed evenly. Highly developed countries and large corporations often benefit more than poorer countries, which can exacerbate differences in living standards, access to education, health care or modern technologies. In some regions of the world, local communities

¹² E. Kryńska, Delocalization of Jobs in the Global Economy. *Studia Prawno-Ekonomiczne*, 97, Łódź 2025, pp. 259–271.

¹³ Ibidem.

¹⁴ C. Aimie, *Globalization and Its Impact on Cultural Homogenization: A Comprehensive Analysis*. *Social and Crimonol*, 12, 2024, s. 314.

¹⁵ Ministry of Agriculture and Rural Development. *Climate Policy* (2024): <https://www.gov.pl/web/rolnictwo/polityka-klimatyczna>. (accessed: 24.05.2025).

are being marginalised, unable to compete with international economic actors. In response to the negative effects of globalization, there are also more and more **anti-globalization movements** and initiatives promoting the so-called sustainable development. People are demanding greater social justice, protection of local markets and the environment. This, in turn, forces governments and international institutions to be more accountable and more equitable in shaping global policymaking¹⁶.

The impact of globalization on **population migration is also significant**. Millions of people move in search of a better life, work or security. This phenomenon has a huge impact on the societies receiving and sending migrants – it can contribute to both economic development and social tensions, especially in the context of cultural integration and competition in the labour market¹⁷.

It is also worth noting that globalization affects **changes in identity and social values**. Modern man increasingly identifies not only with the local community or the nation-state, but also with ideas and problems of a global dimension, such as human rights, climate change or gender equality. In this context, the importance of intercultural education and education for global responsibility is ¹⁸growing.

This globalisation is a complex process involving the intensification of links and interdependence between countries and societies around the world, which also includes economic and political aspects. In the economic sphere, globalization can be characterized by the liberalization of trade, precisely in the abolition of customs and regulatory barriers, which allows for a freer flow of goods, services and capital between countries. The rise of transnational corporations that operate in multiple countries at the same time further strengthens economic ties on a global scale. The development of technology, especially in the field of communication and transport, allows for the rapid flow of information and goods, which in turn increases competition on world markets and imposes the need for flexibility and innovation on many countries and companies.

On the other hand, globalisation poses political challenges for countries, which result from the need to adapt to the new conditions of functioning in the international system. Countries must not only negotiate and implement trade and investment agreements, often within regional integration blocs such as the European Union or NAFTA, but also cooperate within international institutions such as the World Trade Organization (WTO), the International Monetary Fund (IMF) and the World Bank. These organizations shape the functioning of the global economy and promote economic stability, but at the same time they can limit the traditional sovereignty of states in the field of economic policy¹⁹.

The relationship between politics and economics in the process of globalization is very close and dynamic. On the one hand, pressure from global markets and investors forces governments to carry out economic reforms, which include market liberalization, deregulation and macroeconomic

¹⁶ A. Gwiazda, *Globalization and Income Inequality. Social Inequalities and Economic Growth* 3(55), Rzeszów 2020, pp. 9–21.

¹⁷ K. Górak-Sosnowska, J. Łazor (eds.), *Migration Policy: History and Contemporary Challenges*, Warsaw School of Economics Publishing House, Warsaw 2016.

¹⁸ Special School Complex in Rawicz. (n.d.). *Global education – what values and skills are needed in today's world?* <https://zss-rawicz.pl/edukacja-globalna-jakie-wartosci-i-umiejetnosci-sa-potrzebne-w-dzisiejszym-swiecie/>. (accessed: 24.05.2025).

¹⁹ Ministry of Education and Science. (n.d.). *Globalization – Development disparities of the modern world*. Integrated Learning Platform: <https://zpe.gov.pl/a/globalizacja-dysproporcje-rozwojowe-wspolczesnego-swiata/DwFzoEZQ0>. (accessed: 04.06.2025).

stabilization. Countries that want to attract capital and foreign investment often have to change their tax policies, labour laws or environmental protection systems, which is sometimes criticised as a restriction of political autonomy. On the other hand, political decisions – such as the introduction of economic sanctions, customs policy, or regulations concerning consumer and environmental protection – have a significant impact on the functioning of global supply chains and the flow of capital²⁰.

At this point, it is worth noting that globalization forces countries to find a balance between the need to participate in international cooperation and the protection of their own sovereignty and security²¹. In an era of global threats such as financial crises, climate change or pandemics, political cooperation becomes essential, but remains a challenge due to the diversity of national interests. As a result, politics and economics in the process of globalization interpenetrate and shape each other – political decisions affect the directions of economic development, and economic changes force transformations in the political sphere. This symbiosis means that modern states have to act on many levels simultaneously, taking into account both national interests and the requirements of global cooperation.

Globalisation forces countries not only to adjust their economic policies, but also to redefine their policies. Traditional borders of countries are becoming less and less rigid, and key issues such as security, climate change, migration and terrorism are becoming transnational. As a result, international politics is shifting from unilateral action to multilateral cooperation within international organisations, alliances and regional blocs. The impact of globalisation on the international order is manifested above all in the growing importance of institutions such as the UN, the WTO, the International Monetary Fund or regional structures, such as the European Union, which act as platforms for coordinating actions on a global scale. At the same time, we are seeing a shift in the balance of power, with new actors such as emerging countries, transnational corporations and NGOs actively shaping global politics playing an increasingly important role. This process also leads to the dilution of the traditional sovereignty of states, which increasingly have to comply with international regulations and standards, which requires them to compromise between independence and interdependence²².

In this case, globalization also brings with it a number of challenges and dilemmas. In the security sphere, global threats – cyberattacks, terrorism or epidemics – require transnational cooperation, but at the same time raise questions about the effectiveness and control of these activities. Another problem is the deepening inequalities both between countries and within societies, which affect political stability and can lead to social tensions and conflicts. In addition, the need to create global regulations in areas such as climate, trade or human rights requires the consensus of many actors, which often slows down the decision-making process and can cause tensions between national interests and the common good.

The World Trade Organization (WTO), established in 1995 as the successor to the Trade and Customs Organization (GATT), is a key international institution with more than 160 member states that regulates the rules of global trade. Its primary objective is to facilitate the smooth, predictable and free movement of goods and services between countries, creating a legal framework that prevents protectionism and discrimination. The WTO has a number of important functions – first and foremost, it develops and supervises compliance with international trade rules, ensuring a level playing field for all market participants. The organisation also provides a negotiating forum where

²⁰ E. Kryńska, *Globalization and the Labor Market*. (in:) Z. Wiśniewski, A. Poczowski (Eds.), *Human Resources Management in the Conditions of the New Economy*. Oficyna Ekonomiczna, 2004, p.90.

²¹ J. Kossowska, Globalization and State Sovereignty. *Review of Defence Sciences*, 2(3), 2017, pp. 233–245.

²² P. Bureš, Sovereignty and Transnational Corporations. *Gdańsk Legal Studies*, 2(59), 2023, pp. 99–108.

member states can set tariff reductions, remove non-tariff barriers and regulate trade in services and the protection of intellectual property, with the Doha Round being one of the most well-known negotiating processes. Another important element of the WTO's operation is the Trade Dispute Settlement Mechanism, which allows for the peaceful and orderly resolution of conflicts concerning trade violations, which increases the stability and predictability of economic relations. In addition, the WTO systematically monitors the trade policies of its members, ensuring their compliance with the adopted agreements and promoting transparency. It takes special care of developing countries, offering them technical support and special treatment, which facilitates their integration into the global trading system²³.

The importance of the WTO for international trade is enormous – above all, the organization facilitates free trade by establishing clear, universally accepted rules that limit the risk of protectionism and trade tensions. Dispute settlement mechanisms and constant surveillance of trade policies foster stability and predictability, which in turn builds confidence and stimulates investment and trade on a global scale. The WTO also plays an integrator of the world's economies, facilitating access to markets, especially for developing countries, which helps to reduce economic inequalities on the international stage. In addition, the organization adapts to modern challenges, expanding its competencies into new areas such as trade in services, intellectual property or investments²⁴.

Despite these successes, the WTO also faces numerous challenges. Due to the diverse interests of the members, negotiations can be lengthy and difficult to conclude by consensus, as illustrated by the multi-year Doha Round. The organization has also been criticized for the fact that the rules and mechanisms are more conducive to developed economies and less to the needs of developing countries, which indicates the need for further reforms and increased support for weaker countries. In addition, WTO decisions and judgments in trade disputes are sometimes perceived as limiting the sovereignty of states in shaping their own economic policies, which creates additional tensions in relations between members. Despite these difficulties, the WTO remains the cornerstone of the modern international trading system, having a significant impact on the global economy²⁵.

The global liberal order, shaped after World War II, based on the principles of free markets, free trade, protection of private property and international institutional cooperation, has been the foundation of the world economy for decades. However, it is currently facing serious ideological challenges that undermine its stability and effectiveness, resulting from growing political and economic tensions and the changing global reality.

One of the most important problems is growing social and economic inequality both between and within countries. The liberal economic model, promoting deregulation and global competition, has contributed to economic growth, but at the same time it has widened the gap between the richest and the poorest. As a result, social frustration is growing, populism is intensifying, and anti-globalization movements are emerging, which question the basic principles of free markets and open trade borders²⁶.

²³ World Trade Organization. (n.d.). *What is the WTO?* World Trade Organization. https://www.wto.org/english/thewto_e/whatis_e/whatis_e.htm. (Dostęp: 09.06.2025).

²⁴ Ministry of Development and Technology. (2024, May 21). *World Trade Organisation (WTO)*. <https://www.gov.pl/web/rozwoj-technologie/swiatowa-organizacja-handlu-wto>. (accessed: 11.06.2025).

²⁵ D. Wnukowski, *WTO Reform: Challenges and Prospects*. Polish Institute of International Affairs: https://www.pism.pl/publications/WTO_Reform_Challenges_and_Perspectives. (Accessed: 01.06.2025).

²⁶ R. J. Langhammer, G. Horn (2016, November 14). How globalization has become a bogeyman for populists. *Deutsche Welle*: <https://p.dw.com/p/2SdOv>. (Accessed: 01.06.2025).

Another important challenge is the crisis of trust in international institutions such as the WTO, the IMF and the World Bank. They are increasingly seen as tools for domination by developed economies that do not sufficiently take into account the interests of developing countries. Difficulties in building consensus within these organizations weaken their ability to respond effectively to global problems, and this, in turn, undermines the legitimacy and effectiveness of the liberal economic system²⁷.

The liberal model, focused on growth and profit maximization, often overlooks the social and environmental impacts of its operations. Environmental degradation and climate change are challenging traditional production and consumption patterns, and the lack of effective global regulatory mechanisms in these areas poses a serious challenge to modern economic order²⁸. In addition, the global liberal order has to face the conflict between the sovereignty of states and the need for international cooperation. More and more countries are emphasizing the protection of their own national interests, which leads to tensions and disputes in areas such as trade policy and environmental protection. The rise of nationalism and protectionism challenges the idea of open markets and global cooperation.

The dynamic development of technologies and digitization, such as artificial intelligence or big data, also introduces new tensions. The problems of data protection, privacy, unequal access to innovation, and the growing role of large digital corporations raise questions about appropriate market regulations. The liberal model, which is based on freedom of innovation and minimal state interference, must today find a balance between freedom and the need to establish a new legal framework, which gives rise to ideological disputes²⁹. Finally, geopolitical tensions, especially the rivalry between the United States and China, have a significant impact on the disintegration of the existing liberal order. The rise of protectionism, trade wars and the fragmentation of global markets are leading to the division of the world into competitive spheres of influence, which hinders international cooperation and weakens the stability of the global economic system³⁰.

On the threshold of 2025, the global liberal order in the global economy faces numerous challenges that require its significant redefinition. Problems such as growing social inequalities, the crisis of international institutions, tensions between the sovereignty of states and the need for integration, as well as challenges related to environmental protection, rapid development of technology and geopolitical conflicts, create a complex and dynamic global context. While globalisation fosters cooperation and interdependence between states and strengthens the role of international organisations, it also poses challenges to them in terms of justice, security and sovereignty management.

The World Trade Organization (WTO) plays a key role in maintaining the stability of the system, striving to maintain an open and predictable trade order through its regulatory mechanisms, negotiations and support for developing countries. The future of the global order depends on the ability of states and institutions to develop more inclusive, sustainable and equitable solutions that will effectively respond to today's challenges and guarantee peaceful coexistence in an increasingly interconnected world.

²⁷ J. E. Stiglitz, *Globalization and Its Dissatisfaction* (trans. M. Budzisz). PWN Scientific Publishing House, 2002, pp. 45-60.

²⁸ F. Matthews (2020, 9 października). Liberal Theory's Neglect of Environmentalism. Oxford Political Review. <https://oxfordpoliticalreview.com/2020/10/09/liberal-theorys-neglect-of-environmentalism/>. (Dostęp: 09.06.2025).

²⁹ S. Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. PublicAffairs, 2019, s. 350-370.

³⁰ G. J. Ikenberry, *Liberal order and imperial ambition: The future of the liberal international order*. *Foreign Affairs*, 97(4), 2018, s. 10-18.

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IESPĒJAMIE VIRZIENI LATVIJAS VALSTS POLICIJAS DARBĪBAS PILNVEIDOŠANAI, PAMATOJOTIES UZ MĀRKETINGA RĪKU IZMANTOŠANU

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ANOTĀCIJA

Darba tēmas aktualitāte saistīta ar sabiedrības aktīvu sociālo mediju un digitālo platformu izmantošanu, kas ietver arī kibersdrošības aspektus. Tas nosaka nepieciešamību pilnveidot Valsts policijas darbību un mārketinga rīku pielietojumu, lai veicinātu preventīvas darbības un stiprinātu sabiedrības drošību digitālajā vidē. Rakstā apskatīta Valsts policijas stratēģija, analizēta mārketinga loma tās darbībā un komunikācijā, kā arī noformulēti secinājumi un priekšlikumi, kas balstīti uz veiktās analīzes rezultātiem. Pētījuma mērķis ir izvērtēt Valsts policijas pašreizējās komunikācijas prakses un sabiedrības uztveres kontekstu, kā arī analizēt mārketinga rīku pielietojuma iespējas policijas darbības efektivitātes, sabiedrības uzticības un tēla pilnveidošanai.

Atslēgvārdi: Valsts policija, marketings, komunikācijas stratēģija

ABSTRACT

The topicality of the topic of the work is related to the active use of social media and digital platforms by society, which also includes aspects of cybersecurity. This determines the need to improve the activities of the State Police and the use of marketing tools in order to promote preventive actions and strengthen public safety in the digital environment. The article reviews the strategy of the State Police, analyzes the role of marketing in its activities and communication, and formulates conclusions and proposals based on the results of the analysis. The aim of the study is to evaluate the current communication practices of the State Police and the context of public perception, as well as analyze the possibilities of using marketing tools to improve the efficiency of police activities, public trust and image.

Keywords: State Police, marketing, communication strategy

IEVADS. INTRODUCTION

Mūsdienu sabiedrībā arvien nozīmīgāka kļūst valsts iekšējās drošības nodrošināšana, jo sociālās, ekonomiskās, ideoloģiskās un tehnoloģiskās pārmaiņas ietekmē gan valsts pārvaldi, gan sabiedrības dzīves kvalitāti. Straujais pārmaiņu temps rada jaunas iespējas, bet vienlaikus palielina riskus, kas apdraud sabiedrības stabilitāti un valsts ilgtspējīgu attīstību [9].

Ņemot vērā globalizāciju, digitālo tehnoloģiju izplatību un sociālās nevienlīdzības problēmas, iekšējās drošības stiprināšana kļūst par valsts prioritāti. Mūsdienās drošība vairs neattiecas tikai uz militāriem vai krimināliem draudiem, bet arvien lielāka nozīme ir kibersdrošībai, informācijas aizsardzībai un sabiedrības uzticībai valsts institūcijām.

Latvijas Valsts policija pēdējos gados piedzīvojusi būtiskas pārmaiņas, uzlabojot profesionālo kapacitāti, darba kvalitāti un sabiedrības uzticību. Policijas stratēģija mērķēta uz struktūras modernizāciju, jaunu tehnoloģiju ieviešanu, starptautisko drošības standartu ievērošanu un ciešāku sadarbību ar iedzīvotājiem, nodrošinot caurskatāmību, profesionalitāti un atbilstību demokrātiskas sabiedrības vajadzībām. Šie pasākumi veicina gan iedzīvotāju drošības sajūtu, gan valsts iekšējās drošības stabilitāti.

Mārketinga lomas pieaugums sabiedrībā veicinājis arī komunikācijas nozīmes palielināšanos, kas ir būtiska ne tikai komercdarbībā, bet arī sabiedriskajā sektorā, tostarp policijas darbā. Lai sabiedrība novērtētu policijas pakalpojumu nozīmi, proti, drošību, kārtības uzturēšanu un preventīvos pasākumus, ir nepieciešama skaidra un pieejama informācija. Mārketinga komunikācija ļauj atspoguļot policijas funkcijas, iniciatīvas un sasniegumus, veidojot uzticību un pozitīvu tēlu sabiedrībā.

Efektīva komunikācija balstās uz atklātību, savstarpēju uzticēšanos un aktīvu informācijas apmaiņu, nodrošinot sabiedrības līdzdalību drošības stiprināšanā. Tikai sadarbojoties ar iedzīvotājiem, policija var tikt uztverta nevis kā kontrolējoša institūcija, bet kā sabiedrības partneris drošas un stabilas vides veidošanā [8].

SVARĪGĀKĀS ATZIŅAS TEORIJĀ UN PRAKSĒ. BASIC THEORETICAL AND PRACTICAL PROVISION

Valsts policija ir iekšlietu ministra pārraudzībā esoša tiešās pārvaldes iestāde, kas atbilstoši kompetencei īsteno valsts politiku noziedzības apkarošanā un sabiedriskās kārtības un drošības aizsardzībā, kā arī personu tiesību un likumīgo interešu aizsardzībā. Valsts policijas struktūra un darba organizācija noteikta "Valsts policijas reglamentā". Valsts policijas pienākums ir aizsargāt personu dzīvību, veselību, tiesības un brīvības, īpašumu, sabiedrības un valsts intereses no noziedzīgiem un citiem prettiesiskiem apdraudējumiem [4].

Valsts policijas misija ir aizsargāt personu, sabiedrības un valsts intereses, sadarbojoties ar iedzīvotājiem un organizācijām, ievērojot tiesiskuma, neitralitātes un atbildības principus. Policija nodrošina sabiedrisko kārtību, rūpējas par valsts iekšējo drošību un veicina taisnīgu tiesiskā noregulējuma atjaunošanu tiesību pārkāpumu jomā. Tās pamatuzdevums ir kalpot sabiedrībai un valstij, stiprinot drošību un uzticību valsts institūcijām.

Valsts policijas vīzija ir būt profesionālai, modernai un efektīvai tiesībsargājošai institūcijai, kas orientēta uz sadarbību ar sabiedrību un spēj pielāgoties nākotnes izaicinājumiem. Policijas mērķis ir nodrošināt kvalitatīvus pakalpojumus iedzīvotājiem un valstij, īstenojot savu darbības moto – "Mūsu darbs jūsu drošībai" [5].

Komunikācija ir nozīmīga Valsts policijas darbības sastāvdaļa, kas nodrošina sabiedrības informētību par drošības, sabiedriskās kārtības un noziedzības novēršanas jautājumiem, vienlaikus stiprinot sabiedrības uzticēšanos un iesaisti policijas darbā. Sabiedrības drošība un iedzīvotāju uzticēšanās valsts institūcijām ir jebkuras valsts stabilitātes un attīstības pamats, tādēļ Valsts policijas darbības efektivitāte ir cieši saistīta ar mērķtiecīgu un profesionālu komunikāciju.

Valsts policijas komunikācijas izvērtējuma mērķis ir sistemātiski analizēt, kā tiek plānota un īstenota komunikācija ar sabiedrību, novērtējot tās kapacitāti, resursu izmantošanu, profesionālo sagatavotību, institucionālo struktūru un stratēģiskās komunikācijas attīstības līmeni. Mūsdienų apstākļos būtiska nozīme ir arī mārketinga pieejas izmantošanai policijas darbībā, kas kalpo kā instruments sabiedrības vajadzību izpratnei, uzticības stiprināšanai un pozitīva policijas tēla veidošanai.

Publiskais mārketings palīdz nodrošināt efektīvu informācijas apmaiņu un veicina iedzīvotāju līdzdalību drošības procesos, skaidrojot policijas lomu sabiedrības drošības un kārtības nodrošināšanā. Šāda pieeja stiprina savstarpēju izpratni starp policiju un sabiedrību, uzlabo sadarbību un veicina kvalitatīvu, mērķtiecīgu drošības politikas īstenošanu. Tādējādi tiek nostiprināta sabiedrības drošības sajūta un policijas kā uzticamas, sabiedrībai orientētas institūcijas loma [7].

Tiešā mārketinga princips, kur informācija tiek nodota konkrētai mērķa auditorijai ar plašsaziņas līdzekļu starpniecību, līdzīgi darbojas arī Valsts policijas komunikācijā ar sabiedrību, īpaši situācijās, kad nepieciešams ātri un precīzi sasniegt noteiktas sabiedrības grupas. Policijas

darbībā šāda pieeja tiek izmantota, lai tieši informētu iedzīvotājus par drošības riskiem, noziedzības profilakses pasākumiem, meklētām personām vai citiem aktuāliem jautājumiem. Tas ļauj efektīvāk nodrošināt sabiedrības informētību un veidot ciešāku saikni ar iedzīvotājiem. Tomēr līdzīgi kā uzņēmējdarbībā, arī Valsts policijas komunikācijā nozīmīga loma ir datu aizsardzībai. Policijai, izmantojot iedzīvotāju datus saziņai, jāievēro Vispārīgās datu aizsardzības regulas (Regula 2016/679) noteikumi, kas nosaka stingras prasības personas datu apstrādei un glabāšanai. Tas nozīmē, ka jebkura tiešās saziņas forma ar sabiedrību jāveic atbildīgi, nodrošinot datu drošību, caurspīdīgumu un sabiedrības uzticību policijas darbībai. Līdz ar to datu aizsardzības regulējums būtiski ietekmē Valsts policijas komunikācijas praksi, uzsverot nepieciešamību sabalansēt efektīvu informācijas izplatīšanu ar personas datu privātuma ievērošanu un ētiskas saziņas principiem [1].

PĒTĪJUMA REZULTĀTI UN TO IZVĒRTĒJUMS. RESEARCH RESULTS AND THEIR EVALUATION

Valsts policijas darbībā būtiska nozīme ir stratēģiskai, mērķtiecīgai un caurspīdīgai komunikācijai ar sabiedrību, citām valsts un pašvaldību institūcijām, kā arī starptautiskajiem partneriem. Efektīva sadarbība un savlaicīga informācijas apmaiņa ir priekšnoteikums uzticības stiprināšanai un kopīgu drošības mērķu sasniegšanai. Lai to nodrošinātu, policijai ir jāizprot sabiedrības vajadzības, aktuālās problēmas un drošības vides dinamika, pielāgojot savu darbību reālajai situācijai un nodrošinot mūsdienīgu, uz rezultātu vērstu drošības politikas īstenošanu.

Policijas komunikācijai jābalstās uz skaidru dialogu un sabiedrības iesaisti, vienlaikus ievērojot normatīvos standartus, profesionālās ētikas principus un operatīvās darbības noteikumus. Atklāta informācijas aprīte, finanšu pārredzamība un atbildīga resursu izmantošana stiprina sabiedrības uzticēšanos un veido Valsts policijas tēlu kā profesionālu, godprātīgu un sabiedrības interesēs strādājošu institūciju.

Tirgus un sabiedriskās domas pētījumu centrs SKDS ik gadu veic Latvijas iedzīvotāju aptauju, lai noskaidrotu sabiedrības viedokli par Valsts policijas darbu, uzticamību un komunikāciju. Aptaujas dati liecina, ka sabiedrības uzticība un apmierinātība ar Valsts policijas darbu pēdējos gados ir pakāpeniski pieaugusi. Aptaujā tiek vērtēts, cik viegli cilvēkiem ir sazināties ar Valsts policiju un kāda ir sabiedrības attieksme pret policijas darbu [13].

2022. gadā 68 % respondentu norādīja, ka pozitīvi vērtē Valsts policijas darbu un uzticas tai, savukārt 32 % sniedza negatīvu vērtējumu. 2023. gadā pozitīvi Valsts policijas darbu vērtēja 63 % iedzīvotāju, bet negatīvi 37 %. Savukārt 2024. gadā pozitīvo vērtējumu skaits pieauga līdz 70 %, bet negatīvo samazinājās līdz 30 %, kas apliecina sabiedrības uzticības un apmierinātības līmeņa uzlabošanos [10,11,12].

Valsts policija ikdienā aktīvi sazinās ar sabiedrību, izmantojot plašsaziņas līdzekļus un regulāri publicē informāciju sociālajos tīklos. Policija stāsta gan par noziegumu atklāšanu, gan sniedz noderīgu informāciju, kas palīdz stiprināt sabiedrības drošību un uzticēšanos policijai.

Aptaujas rezultāti rāda, ka Valsts policijas komunikācija ar sabiedrību kļuvusi atvērtāka, saprotamāka un efektīvāka. To veicina gan ciešāka sadarbība ar medijiem, gan sociālo tīklu aktīva izmantošana, lai sabiedrību informētu un iesaistītu policijas darbā.

Mūsdienu policijas darbībā nozīmīgu lomu ieņem arī digitalizācija un inovācijas, kas veicina procesu efektivitāti un uzlabo sadarbību gan iekšienē, gan ar ārējiem partneriem. Digitālie risinājumi nodrošina kvalitatīvu datu apriti, precīzu informācijas analīzi un iespēju pieņemt datus pamatotus lēmumus par drošības riskiem un preventīvajiem pasākumiem. Mobilās tehnoloģijas un tiešsaistes platformas ļauj ātri reaģēt uz notikumiem un stiprina sabiedrības iesaisti drošības procesos. Šāda pieeja nodrošina informācijas pieejamību jebkurā laikā un vietā, uzlabojot policijas reaģēšanas spējas un operativitāti [2].

Digitālās pārmaiņas Valsts policijā ietver arī inovāciju ieviešanu, sākot no e-pakalpojumu un automatizācijas risinājumiem līdz izglītojošām iniciatīvām, kas stiprina gan policijas personāla, gan sabiedrības digitālās prasmes. Šo pārmaiņu mērķis ir veidot mūsdienīgu, tehnoloģiski attīstītu un uz datiem balstītu policijas pārvaldības sistēmu, kas nodrošina efektīvu drošības politikas īstenošanu un sabiedrības uzticības stiprināšanu.

Valsts policijas darbības stratēģijā būtiska vieta ir mērķtiecīgai mārketinga pieejai, kas veido vienotu, sabiedrībai uztveramu institūcijas tēlu. Mārketinga uzdevums šajā kontekstā nav peļņas gūšana, bet gan sabiedrības drošības, uzticības un sadarbības stiprināšana. Tas ietver gan informācijas apmaiņu un reputācijas vadību, gan sabiedrības līdzdalības veicināšanu un iekšējās kultūras attīstību, nodrošinot, ka policijas vērtības un rīcība ir saskaņotas ar sabiedrības interesēm.

Policijas zīmols ir būtiska tās identitātes sastāvdaļa, kas atspoguļo iestādes profesionalitāti, atbildību un uzticamību. Zīmols nav tikai vizuālie elementi, piemēram, formas tērps vai transportlīdzekļu noformējums, bet arī kopējā sabiedrības uztvere par policijas lomu, uzvedību un vērtībām. Tāpēc zīmola veidošanai ir jābūt cieši saistītai ar policijas stratēģiskajiem mērķiem, institucionālajām vērtībām un darbības principiem [3].

Līdz ar to mārketingam policijas darbā ir jābūt neatņemamai integrētās institucionālās stratēģijas sastāvdaļai. Tas nozīmē, ka policijas tēla veidošana, sabiedrības iesaiste, darbinieku profesionālās identitātes stiprināšana un komunikācijas prakse veido vienotu sistēmu. Šāda pieeja veicina iestādes reputācijas uzlabošanu un stiprina sabiedrības līdzdalību drošības uzturēšanā, veidojot ilgtermiņa partnerību starp policiju un sabiedrību.

KOPSAVILKUMS. CONCLUSION

Valsts policijas nozīmīgākais resurss ir tās darbinieki, tādēļ īpaša uzmanība tiek pievērsta darbinieku un vadītāju profesionalitātes attīstībai, kā arī konkurētspējīgas motivācijas sistēmas izveidei. Šie faktori ir būtiski priekšnoteikumi augstu darba rezultātu sasniegšanai un kvalitatīvu pakalpojumu nodrošināšanai sabiedrībai. Attīstot mūsdienīgu darba vidi, kas ietver efektīvu darba organizāciju, jauno darbinieku piesaistīšanu, drošo sistēmu ieviešanu, kā arī modernu informācijas tehnoloģiju risinājumus, tiek radīti labvēlīgi apstākļi profesionālai izaugsmei, darbinieku noturēšanai un jaunu speciālistu piesaistei.

Vienlaikus būtiska nozīme tiek piešķirta procesu vienkāršošanai un digitalizācijai. Policija tiecas pilnveidot darbinieku izpratni par digitalizācijas ilgtermiņa ieguvumiem un īstenot digitālo transformāciju visos iespējamajos darba procesos. Tās mērķis ir samazināt dokumentācijas apriņķi papīra formātā, uzlabot datu kvalitāti un nodrošināt tehnoloģiju iespēju izmantošanu efektīvākai un datus pamatotai lēmumu pieņemšanai. Līdz ar to tiek stiprināta arī darbinieku mobilitāte, palielinot portatīvās un mobilās datortehnikas izmantošanu ikdienas darbā. Tāpat Valsts policija īpašu uzmanību pievērš sabiedrības līdzdalības veicināšanai, attīstot atvērtu un jēgpilnu komunikāciju ar iedzīvotājiem. Tiek izmantoti dažādi informācijas kanāli un iesaistes formas, organizējot līdzdalības pasākumus, lai apzinātu sabiedrības vajadzības un stiprinātu kopīgu izpratni par drošības jautājumiem. Sabiedrības iesaiste tiek sekmēta arī preventīvā darba jomā, veidojot brīvprātīgo jeb drošības vēstnešu sistēmu, kas palīdz uzlabot drošības situāciju un veicina iedzīvotāju atbildīgu līdzdalību kopējās drošības stiprināšanā [6].

Autores ieskatā, lai uzlabotu komunikāciju vēl vairāk ar sabiedrību un nodrošinātu efektīvāku drošības un kārtības uzturēšanu, Valsts policijai būtu lietderīgi izstrādāt un ieviest mobilo lietotni, kas sniegtu iedzīvotājiem iespēju ātri un ērti sazināties ar policiju ārkārtas situācijās. Lietotnes centrālais elements būtu trauksmes poga, kas ļautu personai nekavējoties izsaukt palīdzību gadījumos, kad pastāv draudi dzīvībai vai veselībai. Nospiežot šo pogu, informācija kopā ar personas atrašanās vietu automātiski nonāktu policijas operatīvajā centrā, nodrošinot ātru reaģēšanu un koordinētu palīdzības sniegšanu. Papildus lietotnē varētu iekļaut

iespēju nosūtīt īsu aprakstu vai attēlus no notikuma vietas, sazināties ar dežūrdaļu, kā arī saņemt brīdinājumus par aktuāliem drošības riskiem valstī un konkrētā teritorijā. Tāpat būtu lietderīgi paredzēt funkciju anonīmai ziņošanai par likumpārkāpumiem vai aizdomīgām situācijām. Šāds risinājums veicinātu sabiedrības un policijas sadarbību, paātrinātu reaģēšanas laiku un stiprinātu iedzīvotāju drošības sajūtu. Līdzīga sistēma jau sekmīgi darbojas Valsts ugunsdzēsības un glābšanas dienestā, tādēļ šāda pieeja būtu loģisks un efektīvs solis Valsts policijas attīstībā.

Vēl viens būtisks aspekts, autores ieskatā, lai veicinātu iedzīvotāju iesaisti un uzticēšanos valsts un pašvaldību institūciju darbībai drošības jomā, ir nepieciešamība organizēt regulāras diskusijas un sabiedriskās konsultācijas ar iedzīvotājiem par drošības jautājumiem. Šo pasākumu mērķis būtu uzlabot sadarbību starp sabiedrību un drošības iestādēm, paaugstināt iedzīvotāju informētību par aktuālajiem riskiem un stiprināt kopējo drošības apziņu. Diskusiju laikā iedzīvotāji varētu paust savus viedokļus, bažas un priekšlikumus, savukārt atbildīgās institūcijas sniegt informāciju par drošības situāciju, preventīvajiem pasākumiem un iespējām iesaistīties drošības stiprināšanā. Šādās konsultācijās būtu būtiski iesaistīt ne tikai Valsts policiju, bet arī citas tiesībsargājošās un drošības iestādes, kā arī pašvaldību pārstāvjus un nevalstiskās organizācijas. Diskusijās varētu apspriest sabiedriskās kārtības, satiksmes drošības, ugunsdrošības, civilās aizsardzības, kiberdrošības un citus aktuālus drošības aspektus, kas ir nozīmīgi mūsdienās. Pēc katras konsultācijas būtu lietderīgi sagatavot kopsavilkuma ziņojumu ar iedzīvotāju priekšlikumiem un ieteikumiem drošības politikas pilnveidei, nodrošinot atgriezenisko saiti un sabiedrības informēšanu par rezultātiem. Šāda pieeja veicinātu uzticēšanos starp sabiedrību un valsts institūcijām, stiprinātu iedzīvotāju līdzdalības kultūru un sekmētu to, ka drošības politika tiek veidota atbilstoši sabiedrības reālajām vajadzībām un prioritātēm.

Autores ieskatā, ņemot vērā, ka sabiedrībā ir iedzīvotāju grupas, kuras ikdienā mazāk izmanto digitālās tehnoloģijas, tostarp seniori, kā arī Latvijā dzīvo ievērojams skaits ārvalstu pilsoņu, Valsts policijai būtu lietderīgi izveidot informatīvo izdevumu par drošības jautājumiem — avīzi latviešu un angļu valodā. Šāds izdevums kalpotu kā papildu komunikācijas kanāls sabiedrības informēšanai par drošības aktualitātēm, preventīvajiem pasākumiem un policijas darbību kopumā. Avīzē varētu tikt iekļauta informācija par biežākajiem krāpšanas veidiem un to novēršanu, satiksmes drošību, rīcību ārkārtas situācijās, policijas pakalpojumiem un sabiedrības līdzdalības iespējām drošības uzturēšanā. Tāpat būtu lietderīgi publicēt arī ieteikumus no policijas speciālistiem un sabiedrības pārstāvjiem, kas palīdzētu stiprināt iedzīvotāju drošības apziņu. Izdevumu varētu bez maksas nosūtīt pa pastu iedzīvotājiem, īpaši lauku teritorijās un vietās, kur interneta pieejamība ir ierobežota. Šāda iniciatīva ne tikai veicinātu sabiedrības informētību un izglītošanu drošības jautājumos, bet arī stiprinātu Valsts policijas tēlu kā atvērtai, pieejamai un visām sabiedrības grupām saprotamai institūcijai.

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KEY DEVELOPMENT DIRECTIONS FOR SOCIAL ENTREPRENEURSHIP IN EUROPE AND LATVIA

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ANOTĀCIJA

Sociālā uzņēmējdarbība kā efektīvs instruments sociālo problēmu risināšanai ir strauji augoša nozare Eiropā un visā pasaulē. Lai gan Latvijā šī joprojām ir samērā jauna koncepcija, katru gadu arvien vairāk sociālo uzņēmumu risina dažādas sociālās problēmas un izaicinājumus, piedāvājot plašu risinājumu klāstu.

Pētījuma mērķis bija izpētīt sociālās uzņēmējdarbības attīstības potenciālu galvenajās darbības jomās.

Atslēgvārdi: sociālā uzņēmējdarbība, attīstības jomas, sociālās uzņēmējdarbības asociācija, sociālais uzņēmums, riska grupas

ABSTRACT

Social entrepreneurship, as an effective tool for solving social problems, is a rapidly developing sector in Europe and worldwide. Although this is still a relatively new concept in Latvia, every year more and more social enterprises are solving a variety of social problems and challenges, offering a wide range of solutions.

The purpose of the study was to examine the potential for developing social entrepreneurship in key areas of activity.

Keywords: Social entrepreneurship, development areas, social entrepreneurship association, social enterprise, risk groups

IEVADS. INTRODUCTION

Social entrepreneurship applies the principles and guidance start-up founders and entrepreneurs use to a business that directly generates social change or impacts a social cause. A social entrepreneur is primarily motivated by a desire to alleviate systemic social or cultural problems. Social entrepreneurs consider social responsibility a central element of their business strategies.

Social entrepreneurship is a new, innovative business venture that influences change. Social entrepreneurs have a specific cause they care about, and they develop a business model around making a positive impact. The main goal is to create lasting social change through business.

The article examines the main vectors of development of social entrepreneurship in Europe and Latvia.

SVARĪGĀKĀS ATZIŅAS TEORIJĀ UN PRAKSĒ. BASIC THEORETICAL AND PRACTICAL PROVISION

A social cause is at the heart of every social entrepreneur's business vision, and many social-entrepreneurial businesses begin with that cause.

Often, the first step towards social entrepreneurship is recognising a societal problem and having a desire to solve that problem. As social entrepreneurs learn more about the mechanisms that perpetuate the problem, they can build a business model that directly corrects those mechanisms. Some key areas of interest for social entrepreneurs include:

- Economic development

- Education
- Gender equality
- Healthcare
- Agriculture
- Environmental sustainability
- Renewable energy
- Community development.

Italy became the first European country to support social entrepreneurship at the state level. Some experts may consider Florence Nightingale, who founded the first school of nursing in 1860 and thereby reformed the healthcare industry, a social entrepreneur.

In 2025, there will be 2.8 million social economy enterprises in the EU, representing 10% of all enterprises. Social economy enterprises employ nearly 13.6 million people—approximately 6.2% of all employed people in the EU.[1]

Social entrepreneurship in Europe and Latvia is developing in the areas of solving acute social problems (assistance to vulnerable groups, ecology, healthcare), creating jobs for people with disabilities and pensioners, also providing social, health and educational services, with a focus on innovation, self-sufficiency and sustainability, supported by government support and EU funding, particularly in the areas of digital and green solutions.

Key Development Directions for Social Entrepreneurship in Europe

Social inclusion: Job creation for marginalized groups (people with disabilities, refugees, youth from disadvantaged backgrounds), development of inclusive services.

Health and care: Provision of social and medical services, care for the elderly and seriously ill, rehabilitation.

Environment: Green initiatives, waste recycling, sustainable development, especially in the context of European goals.

Education and Culture: Social and educational services, access to culture for all.

Innovation: Application of new technologies to solve social problems (digital healthcare, smart cities).

Funding: Active participation of EU funds (e.g., ESF+), government programs, and private investment.

Main directions of development of social entrepreneurship in Latvia

In Latvia, social entrepreneurship and social enterprises are understood to mean the production of goods or provision of services with the aim of solving a social problem or creating benefits for society, rather than maximising profits for the owners of the enterprise. To develop and support social entrepreneurship, the Latvian Association of Social Entrepreneurship was established in 2015.

The Latvian Social Entrepreneurship Association (LSEA) is a non-governmental membership organization whose goal is to promote the development of social entrepreneurship in Latvia. LSEA is concerned with the overall creation and advancement of the social entrepreneurship ecosystem in Latvia, the representation of social entrepreneurship interests and the capacity building of member organizations, the promotion of knowledge and skills, as well as informing the public about social entrepreneurship. Šobrīd LSUA ir vairāk nekā 130 biedri.[2]

Since April 2018, social entrepreneurship is regulated by the law "On social entrepreneurship", and social enterprise is legally defined as a company with limited liability (SIA). The aim of the law is to promote the improvement of the quality of life of society and to promote the employment of population groups at risk of social exclusion, creating a favorable economic environment for social enterprises.[3]

Most social enterprises are relatively new; they were created only within the last 5-7 years and typically employ no more than 10 people. Most social enterprises are located in the capital, Riga, but thanks to various social programs supporting regional development and new entrepreneurs, more and more people are starting their own social entrepreneurship initiatives in other cities and rural areas of Latvia.

Many social enterprises in Latvia are working to help various groups at risk of social exclusion, or "vulnerable" target groups. Statistics reveal alarming data regarding society's most vulnerable groups:[4]

- 68% of the population lacks the skills to find employment or develop professionally.
- In 2023, 23,000 young people aged 15 to 29 were neither studying nor working, representing 10% of the country's total population.
- At the beginning of 2024, 25,650 refugees from Ukraine were registered in Latvia.
- In 2023, 30.9% of all households with children in Latvia were single-parent families.
- Only 19.9% of people with disabilities aged 15–74 were employed.

In this regard, the social goal can be defined as improving the quality of life of representatives of these target groups. Let's consider the most common ways to achieve these goals in the context of social entrepreneurship:

- Labour integration activities: the social enterprise is created to provide employment opportunities to those groups of society that have limited opportunities to find work in the labour market.
- Provision of social, health or other services: A social enterprise provides various services with the aim of improving a particular aspect of a person's life or the quality of his life in general.
- Product production: a social enterprise produces special products for a specific target group to solve or improve a specific aspect of their lives. For example, the social enterprise HOPP produces specially adapted tricycles for people with mobility impairments[5].
- Providing material and other assistance to those in need: social enterprises that operate in traditional business sectors but do so with the aim of helping specific target groups use their profits. For example, the TUVU charity shop sells used goods to help local families in need[6].

Social security systems must address a range of other challenges related to benefit adequacy, financial sustainability and, in some parts of the European region, the extension of coverage and the covering of unexpected costs.

Informal employment, poverty, and inequality continue to plague the lives of vulnerable groups in the region, including women, migrants, youth, and the elderly. Additional challenges arise from globalization, population aging, climate change, technological advances, and new forms of work organization.

SECINĀJUMI. CONCLUSIONS

Social entrepreneurship is critically important for the state, as it solves acute social problems (unemployment, poverty, ecology) through a business model, relieving the burden on the budget, creating jobs, integrating vulnerable groups and stimulating economic development. Moreover, the joint venture is not just a charity, but a self-sustaining business that receives government support for public benefit.

Latvia, like other Baltic countries, is actively integrating into the European support system, based on common principles.

Key areas: elderly care, inclusive education, integration of vulnerable groups, support for local communities, and development of local products (agricultural and social enterprises).

Support: Government programs, grants from the Foundation for Social Integration (FSI), participation in European social economy projects, and cooperative development.

Focus: Addressing demographic issues, integrating the Russian-speaking population, and developing rural areas through social enterprises.

Thus, trends are moving away from the provision of basic services towards more complex, innovative solutions, where social entrepreneurship is becoming a key element of sustainable development within the framework of European social economy policy.

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THE IMPACT OF SOCIAL MEDIA INFLUENCERS ON DESTINATION CHOICE IN SRI LANKA'S TOURISM INDUSTRY

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ABSTRACT

This paper will consider the impact of social media influencers on the decision-making of tourists visiting Sri Lanka. To fill in some of the gaps in the local empirical evidence, it examines the functions of credibility of sources, content quality, and perceived authenticity through a mixed-method strategy. The results indicate that authenticity is the best predictor, and influencer marketing affects the decisions of tourists greatly, which will provide new knowledge of enhancing the tourism promotion of Sri Lanka.

Keywords: Social media influencers, tourist destination choice, authenticity, source credibility, content quality, Sri Lanka tourism

INTRODUCTION

Tourism is the act of people leaving their normal surroundings to take pleasure, conduct business, or any other activity, and in the process, travellers need to make various choices during the planning process [4]. As the world gets globalized and digital communication continues to grow and improve, the destination choice on the one hand has started to change and move away to the social media platform where influencers are becoming more and more relevant in forming the perception of the destination. Social media influencers have become influential in marketing places in a destination that is characterized by cultural diversity and nature in Sri Lanka through the use of visual content, experience narration and real time interaction. Their perceived genuineness, trustworthiness, and content level are currently becoming important factors that affect the decision-making of the tourists.

Research question

How do social media influencers affect tourist destination choices in Sri Lanka's tourism industry?

Research aim

To examine how social media influencers shape tourist destination choices within Sri Lanka's tourism industry.

Although influencer marketing is a common practice in global tourism, there is scanty empirical evidence to describe how influencers can specifically influence destination choice in Sri Lanka. This paper will thus analyze how the credibility of the source of influence, the quality of influence generated by the influencer, and the perceived authenticity of the influencer affects the destination choice of tourists. The mixed-method research design is used (a structured questionnaire survey and semi-structured expert interviews). The relationships between the variables are measured through quantitative techniques, whereas qualitative insights put the industry practices into perspective. This is because this integrated approach can give a holistic view of the influence of influencer marketing on tourist behaviour in Sri Lanka.

BASIC THEORETICAL AND PRACTICAL PROVISION

The concept of influencer marketing has its foundation on a number of theoretical viewpoints relating to how the online personalities influence the tourism behaviour. According to the Source Credibility Theory, the persuasiveness of the message is based on the trustworthiness, expertise and attractiveness of the communication [2]. Social media influencers tend to perform well in these dimensions in the digital world and hence their travel opinions can affect destination perceptions and alleviate uncertainty [1]. This is in line with the Electronic Word-of-Mouth (eWOM) Theory that emphasizes the effectiveness of peer-created information in influencing consumer judgments [3]. A combination of these theories explains the reason influencer-created content, namely, visual storytelling, experiential narratives, and real-time interactions, became a core part of tourism decision-making.

Following international best practices, destinations like Iceland, Thailand, and New Zealand have proven that they can utilize influencers in long-term partnerships that they structure and maintain with the help of performance analytics. They are based on authenticity, sustainability, and niche-market focus, and they tend to incorporate influencers into cultural immersion programs and community-based tourism [4]. Leading in terms of influencer marketing, the countries usually have national strategies coordinated, guidelines on the content, and evaluation structures based on data to determine the reach, engagement, and conversion. The figure 1 shows the theoretical underpings of influencer marketing in tourism

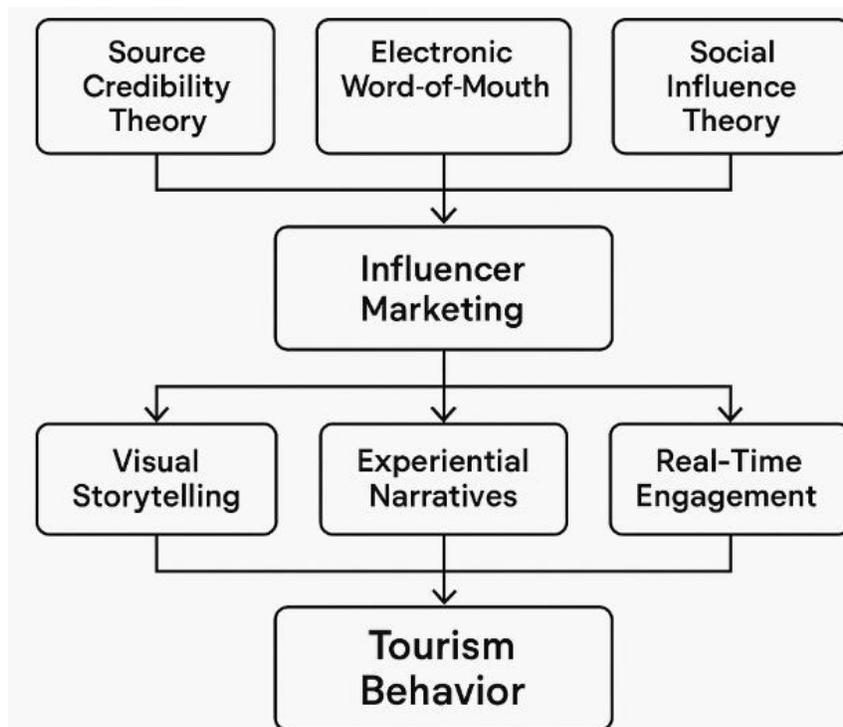


Figure 1.1 Theoretical underpings of influencer marketing in tourism

The tourism sector of Sri Lanka has been growing at a very high pace due to the variety of cultural, natural and wellness tourism attractions. Although digital marketing is an important part of nationwide promotion, the involvement of influencers is mostly disorganized and driven by activities of the private sector and no national tactics [6]. However, influencers have been of great impact in the global image of Sri Lanka through features of places like Ella, Galle, Sigiriya, and new eco-tourism locations. The beautiful landmarks of the country and low cost make it especially

attractive to influencer-created content, even though there are still difficulties, such as the absence of official guidelines on partnership and insufficient control tools. By improving the collaboration of the influencers by using structured and data-driven measures, it is possible to make Sri Lanka more competitive and align its promotional activities with the international best practices.

RESEARCH RESULTS AND THEIR EVALUATION

This part outlines the findings of a multiple regression analysis, which has been performed to understand the impact of source credibility, content quality created by the influencer, and the authenticity of social media influencers on choice of destination among tourists in Sri Lanka. The table 1.1 shows the model summary.

Table 1.1. Model summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.855 ^a	.731	.727	.42605

a. Predictors: (Constant), Perceived Authenticity of Social Media Influencers , Quality of influencer -generated content , Source Creditability of Social media influencers

According to the model summary, the regression model has good explanatory power with a value of R of 0.855 which was a good positive relationship between influencer-related factors and tourist destination choice in Sri Lanka. The R Square value stands at 0.731 which implies that perceived authenticity, source credibility and quality of the content explain 73.1 out of every 100 variation in destination choice. The R Square of 0.727 is adjusted to indicate the reliability of the model when the sample size and predictors were taken into account. The standard error of 0.42605 is fairly representative of the good fit which shows that the model can be used effectively to predict tourist destination choice. The table 1.2 shows the ANOVA table

Table 1.2. ANOVA table

ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	121.086	3	40.362	222.355	.000 ^b
	Residual	44.654	246	.182		
	Total	165.740	249			

a. Dependent Variable: Tourist destination choice in Sri Lanka
b. Predictors: (Constant), Perceived Authenticity of Social Media Influencers , Quality of influencer -generated content , Source Creditability of Social media influencers

According to the ANOVA table, the regression model is statistically significant in tourist destination choice in Sri Lanka. The sum of squares of the regression is 121.086 which is by far

larger than the sum of squares of the residuals (44.654) and this means that the independent variables are representing a vast majority of the variation in the dependent variable. The F-value of 222.355 is quite high, and the significance level ($p = .000$) shows that the model is very reliable. It implies that the source credibility, influencer-generated content perceived to be authentic and quality have a profound influence on the choice of a tourist destination. Therefore, tourist behaviour is strongly predicted by the model. The table 1.3 shows the Coefficient table

Table 1.3 Coefficients table

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.145	.115		1.254	.211
	Source Credibility of Social media influencers	.255	.061	.245	4.196	.000
	Quality of influencer-generated content	.222	.060	.208	3.711	.000
	Perceived Authenticity of Social Media Influencers	.472	.058	.470	8.105	.000

a. Dependent Variable: Tourist destination choice in Sri Lanka

According to the coefficients table, all the three independent variables are significant predictors of tourist destination choice in Sri Lanka. The most significant impact is perceived authenticity ($b = 0.470$, $p = .000$), meaning that the tourists are the most affected by the influencers who seem authentic and reliable. There is also a strong positive effect of source credibility ($b = 0.245$, $p = .000$) i.e. reliable and knowledgeable influencers have a positive effect on destination appeal. The quality of the content created by the influencer also has a significant impact ($b = 0.208$, $p = .000$) and indicates that good-looking, informative, and well-made materials stimulate the interest of the tourists. The constant is not material and predictors are explanatory.

On the whole, the results have explicitly shown that social media influencers have a significant role to play in influencing tourist destination selection in Sri Lanka. Authenticity was found to be the most significant aspect and the most persuasive aspect was when an influencer appeared to be genuine and personally attached to the objects he or she is promoting. The role of credibility and the quality of the content also play an important role in the process of making decisions by tourists, which proves that reliable influencers and attractive content make destinations more attractive. A combination of these variables can account more than 70 percent of the difference in tourist preferences, which means that influencer marketing is a very useful technique to the tourism sector in Sri Lanka.

CONCLUSION

The research comes up with the conclusion that the role of social media influencers in tourist destination decision making among tourists in the tourism sector in Sri Lanka is very significant. The findings show that perceived authenticity is the most powerful element in influencing the decision-making of tourists, meaning that the traveller is highly influenced by an influencer who sounds authentic, relatable, and transparent in what he or she shares. Credibility of source and content created by the influencer also contribute to destination attraction in a large scale, which

also supports the significance of trust, expertise and visually attractive information to influence perceptions of tourists. These variables in combination cover over 70 percent of the variance in the tourist destination choice, which underscores the strength of influencer marketing as a market promotional tool in the tourism sector in Sri Lanka.

On these findings, the study suggests that Sri Lanka should be more systematic in its influencer marketing approach at the national level. Tourism officials are supposed to engage reputed and genuine influencers, develop effective partnership policies, and apply performance analytics to determine the extent of participation and marketing results. By promoting the influencers to focus on cultural immersion and sustainable tourism, Sri Lanka may reinforce its brand image in the world.

There are however a number of limitations. The research is based on self-report information, and there might be bias in response. The sample is also restricted to a definite period of time and the group of tourists, which minimizes the generalizability. Further studies are recommended to utilize larger samples, longitudinal study designs and comparisons of the different types and markets of influencers.

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EMERGING CHALLENGES AND OPPORTUNITIES FOR E-BUSINESS IN THE POST-PANDEMIC ERA

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ABSTRACT

This article examines how the internet reshaped business after COVID-19. It explores key changes that occurred when traditional businesses moved online and how new habits and work routines formed. The paper also highlights challenges that slowed this shift and the opportunities that appeared. Overall, it shows how the pandemic accelerated e-business and how online growth can be sustained.

Research tasks:

1. to analyze the impact of COVID-19 on the transformation of traditional businesses into e-business;
2. to characterize the main changes in business models and work practices in the digital environment;
3. to characterize the challenges and opportunities of e-business development in the post-COVID period;
4. to characterize possible risks in the use of Artificial Intelligence in the study process.

Keywords: e-business, COVID-19, strategic analysis, strategies, sustainability

ANOTĀCIJA

Šis raksts aplūko, kā internets pēc COVID-19 pandēmijas izmainīja uzņēmējdarbību. Tas analizē galvenās pārmaiņas, kas notika, kad tradicionālie uzņēmumi pārgāja uz tiešsaistes vidi, un kā veidojās jauni ieradumi un darba rutīnas. Rakstā arī izceltas grūtības, kas palēnināja šo pāreju, kā arī iespējas, kas radās. Kopumā tas parāda, kā pandēmija paātrināja e-biznesa attīstību un kā iespējams nodrošināt ilgtspējīgu izaugsmi tiešsaistē.

Pētījuma uzdevumi:

1. analizēt COVID-19 ietekmi uz tradicionālo uzņēmumu transformāciju uz e-biznesu;
2. raksturot galvenās izmaiņas biznesa modeļos un darba praksēs digitālajā vidē;
3. raksturot e-biznesa attīstības izaicinājumus un iespējas pēc COVID-19 periodā;
4. raksturot iespējamos riskus Mākslīgā intelekta izmantošanā studiju procesā.

Atslēgvārdi: e-komercija, COVID-19, stratēģiskā analīze, stratēģijas, ilgtspējība

INTRODUCTION

The rapid development of digital technologies and the major lifestyle changes caused by the COVID-19 pandemic have reshaped how businesses operate worldwide. Traditional companies shifted to online platforms faster than ever before, creating new opportunities but also raising serious challenges for long-term e-business sustainability. This makes it important to understand how habits, employment patterns, and consumer behavior influence digital business growth in the post-pandemic environment.

This Paper examines the problem many online businesses face in maintaining competitiveness and service quality after the pandemic-driven digital shift. The topic is relevant today because dependence on digital platforms continues to grow, competition is increasing, and businesses must adapt to remain sustainable. The goal of this Research is to analyse how the pandemic changed business operations, identify the challenges that emerged, and explore strategies that can help e-businesses remain stable and scalable. The design of the paper follows the planned

structure by reviewing the role of habits and employment, analyzing lifestyle-based opportunities, evaluating post-pandemic challenges, and presenting practical strategies for sustaining online businesses.

The research method used is a descriptive and analytical review based on observable trends and organized thematic analysis.

The Role of Habits and Employment in Driving the Growth of Online Businesses

The COVID-19 pandemic was an event that changed how the world operated in the past two decades. This shutdown brought a major shift in how people live, work, and even how they spend money. Daily habits that once required physical presence rapidly moved to digital platforms. Activities such as shopping, communicating, learning, working, and entertainment became available only online.

As a result, employment and job patterns changed as well. During the pandemic, many companies adapted to remote work by relying on online communication tools. Meetings and team sessions were held through programs such as Zoom and Google Meet. This showed employees and employers that an office is not always required to maintain productivity and sustainability. As remote work became more casual, many people began freelancing. This led to the rise of new small businesses. Entrepreneurship became easier through online opportunities, further expanding the e-business sector.

All these factors gave existing businesses two choices: close or adapt. Shops, restaurants, and service providers especially faced this decision immediately. By introducing delivery options and online ordering, many businesses were able to maintain sustainable income. Those who adapted early grew successfully and created a trustworthy path for other small e-businesses to follow.

In summary, the growth of e-business during and after the pandemic was driven by long-lasting lifestyle and employment changes. People learned to rely on the safety and efficiency of online business. The habits formed during the pandemic will remain part of the economy, and those who use these new opportunities will continue to rise and adapt.

Lifestyle Changes and the Emergence of Opportunities for E-Business

The COVID-19 pandemic not only changed how people work but also how they spend their free time and interacts with services. When lockdowns occurred worldwide, the majority of consumers became increasingly dependent on online platforms for shopping, entertainment, and communication, which previously relied on face-to-face interactions. These changes laid the groundwork for a new “normal” of life, driven by convenience, speed, and connectivity. A systematic review shows that online shopping surged for essential goods, mobile commerce became more common, and consumers prioritized delivery speed and personalization more than before the pandemic (Afonso, Carneiro & Azevedo, 2024).

As these lifestyle changes became more common, e-businesses seized new opportunities. Buyers began to demand not just basic access, but personalized and reliable platforms and services. Subscription models, home-delivery services, and virtual consultations expanded rapidly to meet this demand. The Research suggests that consumer behavioral patterns developed during the pandemic will likely persist; offering entrepreneurs room to innovate in targeted digital markets (Ivascu, Domil, Artene, Bogdan & Burcă, 2022).

Customer expectations also shifted dramatically around safety, trust, and service quality. Online retailers that adapted by implementing secure payment methods, real-time customer support, and high-security protocols gained a competitive edge. In addition, many businesses offered assurances such as virtual reservations, contactless delivery, and chat support before and

after purchases. Survey-based research during the pandemic highlights that information availability and time-saving became among the most important factors influencing customer satisfaction (Ilieva, Yankova, Klisarova & Dzhabarova, 2022).

In short, pandemic-driven shifts in daily life created a solid foundation for e-business growth. Reliance on digital platforms and the comfort of online interactions have become long-lasting habits. Entrepreneurs who understand and respond to these changes and needs can build adaptable, customer-centered online businesses. These developments suggest that the rise of e-business was not a temporary reaction but a long-term transformation in our digital lives.

Challenges in Sustaining E-Business in the Post-Pandemic Era

The rapid expansion of e-business during and after the COVID-19 pandemic created new opportunities, but also introduced significant challenges. Competition increased rapidly, making it necessary for businesses to differentiate through a strong digital presence, reliable service, and efficient operations. Maintaining customer trust and building long-term relationships became critical for sustaining business growth.

Security and privacy emerged as key concerns. Online platforms exposed businesses to cyber-attacks, data breaches, and fraud. Protecting sensitive customer information is essential to prevent financial and reputational losses. Companies must implement effective cyber security measures and transparent privacy policies to maintain credibility (Kshetri, 2021).

Meeting evolving customer expectations also became more demanding. Standards rose, requiring businesses to continually improve operational efficiency, platform functionality, and service quality. Technological advancements, including mobile commerce, AI-driven personalization, and subscription models, are essential tools for staying competitive (Laudon & Traver, 2021).

The combination of rising customer expectations, rapid technological change and increased competition makes sustaining e-business challenging. Companies that adopt structured strategies, focus on security, and continuously improve service delivery are better positioned to maintain profitability and brand growth in the post-pandemic market.

Strategies and Future Outlook for Sustainable E-Business Development

As digital activity continues to expand in the post-pandemic era, e-businesses must adopt effective strategies to maintain sustainability and support long-term growth. Strengthening customer trust remains a core priority. This requires investment in secure digital environments, strong data protection practices, and reliable service platforms. Clear privacy standards and continuous improvements in cybersecurity create a stable foundation for trustworthy online relationships.

Equally important is the ability to deliver high-quality service in a fast-growing and competitive digital environment. Daily technological changes and rising consumer expectations place significant pressure on businesses to perform better. To remain competitive, companies must integrate modern communication tools, updated data analytics, and smoother platform interfaces. These improvements allow businesses to respond more quickly and accurately to customer needs, which enhances satisfaction, loyalty, and long-term stability.

In summary, the development of e-business after the pandemic shows that digital transformation is not a temporary reaction but a fundamental shift in the global market. Businesses that invest in security, strong user experience, high service quality, and flexible adaptation to new digital conditions continue to grow in this evolving environment. Combined strategic planning and

continuous innovation shape the foundation for sustainable e-business activity now and in the future.

RESEARCH RESULTS AND THEIR EVALUATION

The Author of the Research has achieved the Aim of the Research, has fulfilled the Tasks arising from the Aim of the Research, and has investigated the Research Problem. The Author of the Research provides conclusions and proposals arising from the conclusions.

CONCLUSIONS AND PROPOSALS

1. The Research demonstrates that as digital activity continues to expand in the post-pandemic era, e-business sustainability depends on the adoption of effective long-term strategies. Strengthening customer trust is a key conclusion of this study and requires continuous investment in secure digital infrastructures, strong data protection practices, and reliable online service platforms. Clear privacy policies and ongoing improvements in cyber-security were identified as essential components for maintaining trustworthy relationships between businesses and customers.
2. Furthermore, the findings show that maintaining high service quality in an increasingly competitive digital environment presents a major challenge for e-businesses. Rapid technological development and rising consumer expectations place constant pressure on companies to improve operational efficiency. The integration of modern communication tools, advanced data analytics, and user-friendly digital platforms allows businesses to respond more accurately to customer needs, increasing satisfaction, loyalty, and overall market stability.
3. In conclusion, the study confirms that the growth of e-business after COVID-19 represents a permanent transformation rather than a temporary response to crisis conditions. Businesses that prioritize security, customer experience, service quality, and adaptability are more capable of achieving sustainable growth. Strategic planning combined with continuous innovation forms the foundation for resilient e-business development in the post-pandemic digital economy.
4. Based on the findings of the Research, it is proposed that e-businesses place greater emphasis on continuous digital skills development and employee training. Strengthening digital competencies, cyber-security awareness, and the practical use of modern technologies supports faster adaptation to technological change, reduces operational risks, and contributes to maintaining long-term competitiveness in the post-pandemic digital environment.
5. Furthermore, it is proposed that e-businesses apply a structured and responsible approach to the use of Artificial Intelligence in both business operations and the study process. Establishing clear guidelines, ensuring transparency, and maintaining human oversight can minimize potential risks, support ethical standards, and enhance the quality and sustainability of digital business development.

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STATE SUPPORT FOR DIGITALIZATION AND BUSINESS AUTOMATIZATION IN LATVIA

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ABSTRACT

The article assesses state support for business digitalization in Latvia. The study addresses the problem of a significant mismatch between demand for digitalization funding and available resources. The novelty lies in analyzing key indicators of the Latvian Investment and Development Agency program. The results reveal high competition among applicants, funding shortages, and the need to improve support mechanisms.

Keywords: artificial-intelligence, business-automatization, digital-transformation, grants, Latvia

INTRODUCTION

Digital transformation has become a key driver of productivity growth and a fundamental prerequisite for innovation in the emerging digital economy. Countries that continue to invest in digitalization and automation demonstrate higher resilience and competitiveness [2].

The growing importance of information and communication technologies is further evidenced by OECD data, which show that between 2011 and 2021 the ICT sector in OECD countries expanded almost three times faster than the overall economy. This trend highlights the substantial contribution of digitalization to economic growth [6].

For Latvia, the issue of digital transformation is particularly relevant. Despite positive developments in recent years, the digital maturity of enterprises remains uneven, and the modernization of business processes requires considerable investment. State support therefore plays a crucial role, especially for small and medium-sized enterprises, for which access to financing is a key factor enabling the adoption of advanced technologies. Previous research demonstrates that a significant share of Latvian small and medium-sized enterprises (SMEs) view state grants and support programs as the most reliable source for technological development and business modernization [7].

Against this background, the digitalization support programs implemented by the Latvian Investment and Development Agency (LIAA) constitute an essential instrument of national policy aimed at facilitating the digital transformation of enterprises. This study focuses on evaluating the content of these programs and analysing their actual outcomes in 2024–2025, with particular attention to the significant mismatch between the high demand for digitalization funding and the limited financial resources available.

The study applies a descriptive analysis of official LIAA program data, focusing on funding volumes, application dynamics and approval indicators for the period 2024–2025.

BASIC THEORETICAL AND PRACTICAL PROVISION

Numerous studies emphasize that the capacity to adopt advanced digital tools and automated systems enables countries to enhance productivity, reduce operational inefficiencies, and

strengthen long-term competitiveness. Kraus et al. highlight that digital transformation forms an essential component of modern management and innovation models, shaping the ability of enterprises to remain resilient in rapidly evolving markets [2].

The growing global importance of digitalization is further reflected in the performance of ICT sectors. According to OECD assessments, the ICT sector in OECD member states expanded almost three times faster than the total economy between 2011 and 2021, confirming the increasing contribution of digital technologies to macroeconomic growth [6].

Multiple studies using the Digital Economy and Society Index (DESI) and its international counterpart (I-DESI) show a strong, positive relationship between digital adoption and economic modernization. Higher DESI/I-DESI scores are significantly associated with increased GDP per capita, improved productivity, and accelerated digital transformation in both EU and non-EU countries [1].

In Latvia, similar tendencies are evident. Digital transformation has become a national policy priority because of its direct influence on enterprise productivity, innovation capacity and competitiveness in international markets. Government institutions, including LIAA and the Ministry of Economics, have expanded access to support instruments that promote the adoption of digital solutions and artificial intelligence tools.

A significant development occurred in 2025, when the national digitalization support program was expanded to include not only conventional grants for the implementation of digital tools but also targeted funding for artificial intelligence solutions. The objectives and scope of the program are detailed in the official guidance published by LIAA, which outlines the eligibility criteria, co-financing requirements, and supported technological pathways [3].

Practical evidence demonstrates the measurable impact of these initiatives. The company Zippy Vision successfully deployed an AI-based system for automated wood-cutting optimisation, achieving an 8% improvement in raw material utilisation. Similarly, AMATI Projekts developed a digital platform that streamlined administrative workflows and accelerated client communication, illustrating the operational benefits of digital modernization [4].

During the application period from 21 July to 7 November 2025, the volume of submitted applications far exceeded the available budget. Official data show that the program reached its planned funding limit, leading to the closure of the application process ahead of schedule. This situation illustrates the increasing urgency of digital transformation, as well as the challenges associated with limited public financing [5].

An important improvement introduced in the most recent version of the program was the elimination of the requirement for enterprises to submit a digital maturity roadmap. This simplification reduced administrative burdens and facilitated greater participation by small and medium-sized enterprises, which often face higher barriers to formal documentation and strategic planning.

RESEARCH RESULTS AND THEIR EVALUATION

This section presents the empirical results of the assessment of Latvia's digitalization support program implemented by LIAA. The analysis is based on official program data for the period 2024-2025, including application volumes, funding allocation, grant structure, and approval rates.

According to official statistics, the overall demand for support significantly exceeded the budgetary capacity of the program. During the application period from 21 July to 7 November 2025, enterprises submitted 857 applications, requesting a total of 20.9 million euros, while the available budget amounted to 18.55 million euros. As a result, only 375 projects received approval, with a total of 8 million euros awarded in grants. These figures clearly indicate a substantial mismatch between enterprise needs and the program's financial limits [5].

Table 2. Key statistical indicators of the “Support for the Digitalization of Business Processes” program (Latvia, 2024-2025)

Indicator	Value
Allocated budget	18.55 million €
Funding requested in applications	20.9 million €
Applications submitted	857
Approved projects	375
Awarded support	8 million €
Digitalization grant	up to 10,000 €
AI solutions grant	up to 200,000 €
Co-financing rate	30–50%
Program closed	07.11.2025

Source: LIAA digitalizācijas grantu programma sasniedz plānoto finansējuma apjomu; pieteikumu pieņemšana noslēgusies (Business.gov.lv)

The data demonstrate that the support program generated exceptionally high interest from enterprises, resulting in the rapid exhaustion of available funding and the early closure of the application process. Another important finding relates to the differentiated co-financing requirements depending on enterprise size. Small enterprises could receive up to 50% of eligible costs, while medium-sized enterprises qualified for 40%, and large companies — 30%. This structure aligns with European Union principles on balancing public support and enterprise risk, but it simultaneously creates unequal access conditions, particularly for medium-sized companies, which often require substantial investment to advance their digital maturity [5].

The program revision introduced an administrative simplification: the elimination of the requirement to provide a digital maturity roadmap. This change substantially reduced bureaucratic barriers, enabling broader SME participation. The simplified requirements contributed to the increase in application numbers but also intensified competition for limited funding.

CONCLUSION

The analysis shows that Latvia has made visible progress in supporting the digital transformation of enterprises. At the same time, the results reveal a clear imbalance between the high demand for digitalization funding and the limited financial resources available. The rapid exhaustion of the budget and the large number of applications confirm that enterprises are ready to invest in technological development but encounter structural constraints.

The assessment of program indicators demonstrates that although LIAA provides several effective support instruments, including grants for digitalization and AI solutions, only part of the potential projects can be implemented within the current budget. The approval of 375 projects highlights both the value of these instruments and the scale of unmet demand.

The differentiated co-financing system, which ranges from 30 to 50 percent depending on enterprise size, corresponds to European practices, yet may restrict the possibilities of medium sized companies that need substantial investments to achieve higher digital maturity. The removal of the digital maturity roadmap requirement has reduced administrative barriers for SMEs but has also intensified competition for limited funding.

The findings indicate the need to expand financial capacity, diversify support instruments with a stronger focus on AI adoption and ensure more balanced access conditions for enterprises of different sizes. Strengthening these elements would help accelerate Latvia's digital transformation and increase the competitiveness of its business sector.

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THE ROLE OF STUDENT PROJECT WORK IN THE EDUCATIONAL PROCESS

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ABSTRACT

The study examines project-based learning and its role in the educational process. The problem is the limited integration of practical tasks into traditional curricula, which restricts applying theory in practice. Novelty lies in analyzing cooperation between universities and civil organizations, such as Noosphere Engineering School, expanding opportunities for innovative projects. Findings show project work boosts creativity, communication, teamwork, responsibility, and overall effectiveness.

Keywords: project-based learning, cooperation, civil organizations, innovative projects, effectiveness

INTRODUCTION

Nowadays, cooperation between universities and public organizations, businesses, and innovative structures is becoming particularly relevant. Such interaction makes the learning process more effective, adaptive, and in line with current trends. It promotes the integration of theoretical knowledge with practical skills and develops students' ability to work on real projects. An example of a successful model of such cooperation is the Noosphere Engineering School, which combines the process of classical university education with the practice of engineering development and innovative entrepreneurship. According to this partnership, students have the opportunity to implement their own projects, use modern equipment, work in a team, and develop creativity, communication, and accountability skills. This allows them to go beyond the traditional educational model and creates conditions for the formation of competitive specialists capable of operating effectively in a rapidly changing economic and social environment.

BASIC THEORETICAL AND PRACTICAL PROVISION

The theoretical foundations for integrating student project work into the educational process are based on the concept of combining learning with practical activities, which allows students to apply the knowledge they have acquired to solve real professional problems. This model of education has developed thanks to cooperation between universities and public organizations, business structures, and innovative environments. Practical support is provided through various incubation and acceleration programs that create conditions for the development of student startups, engineering projects, and social initiatives. Such programs contribute to the formation of teamwork, communication, and accountability skills, and also allow students to go beyond the traditional educational model and gain experience working with mentors, investors, and business representatives.

RESEARCH RESULTS

Noosphere Engineering School (NES) [1] is a network of scientific and technical laboratories established at Ukrainian universities with the support of the Noosphere Association, a non-governmental organization [2]. Its mission is to combine education, science, and business to

develop innovative student projects, and its vision is to create an environment where young engineers and scientists can realize their ideas and create world-class products. NES's vision is to create an innovative ecosystem where universities, public organizations, and businesses work together to develop engineering startups. This environment should become a platform for training competitive specialists capable of operating in a global economy and technological change. The mission of Noosphere Engineering School is to integrate education and science into business, create conditions for the development of student innovation projects, and support young professionals in realizing their ideas. The organization strives to provide access to resources, mentoring support, and expert knowledge so that students can turn their concepts into real products.

Organization goals:

- To support student projects and creating conditions for their implementation.
- To develop innovative entrepreneurship through incubation and acceleration programs.
- To form practical skills in students: teamwork, communication, responsibility for results.
- To strength cooperation between universities and business, allowing the educational process to be integrated into real economic practices.
- To promote the development of engineering startups and bringing Ukrainian projects to the international level.

Noosphere Engineering School is an example of how cooperation between universities, non-governmental organizations, and businesses can make education more effective and modern. It allows students not only to acquire theoretical knowledge but also to apply it in practical situations, which is in line with current trends in education and the labor market.

As part of the implementation of innovative projects by Ukrainian students, young researchers, engineers, and entrepreneurs, Noosphere Engineering School provides a range of free resources aimed at supporting original initiatives. In particular, participants receive access to: qualified mentoring support and consultations from technical experts; modern scientific and technical laboratories located at universities; equipment necessary for creating prototypes and minimum viable products (MVP); assistance in preparing grant applications to attract funding. This approach promotes the development of practical skills, engineering thinking, and the implementation of student projects in a real-world environment that meets modern requirements for the quality of the educational process and professional training.

Noosphere Engineering School focuses on supporting student and youth projects in key areas of engineering that are in line with global trends in technology development. The priority areas are:

- Robotics, electronics, and the Internet of Things (IoT) – creation of intelligent control systems, automation of production processes, and development of smart devices;
- Big data processing, storage, and transmission systems – development of Big Data technologies that enable effective analytics and management decision-making;
- Alternative energy sources and environmental engineering – search for innovative solutions for sustainable development and reduction of negative impact on the environment;
- Gaming platforms – development of interactive environments that combine engineering and creative competencies;
- Innovative archaeology – application of modern engineering methods for research and preservation of cultural heritage;
- Efficient use of natural resources – optimization of extraction and processing technologies to preserve the ecological balance;
- New materials – creation of innovative composites and nanomaterials for industry and science;

– Space research and technology – development of systems for space exploration and the development of the aerospace industry.

The main advantages of Noosphere Engineering School over traditional accelerators and incubators are free access to resources for students and mentors, educational integration, focus on student projects and skills development, and the creation of an innovative ecosystem that brings together universities, non-governmental organizations, and businesses (Table 1).

Table 1

The advantages of Noosphere Engineering School over traditional accelerators and incubators

Advantage	Features
Integration with Universities	Noosphere Engineering School operates as a network of laboratories based at higher education institutions in Ukraine. Students can combine their studies with practical activities directly at their university. Traditional accelerators and incubators usually exist separately from educational institutions and are not so closely integrated with academic programs.
Free access to resources	Noosphere Engineering School participants receive free use of modern equipment, laboratories, and support from mentors and technical experts. Traditional accelerators often operate on a commercial basis: they may require a stake in the startup, financial contributions, or investments.
Focus on student and youth projects	Noosphere Engineering School focuses on innovative ideas from students and original projects from young engineers and scientists. Traditional accelerators are more oriented toward mature startups that already have a business model and are looking for investment.
Educational mission and competence development	Noosphere Engineering School not only helps create prototypes or MVPs, but also develops students' teamwork, creative thinking, responsibility, and entrepreneurial skills. Traditional accelerators focus on rapid business scaling and market entry rather than education.
A wide range of engineering fields	Noosphere Engineering School supports projects in robotics, IoT, Big Data, alternative energy, space technology, new materials, and more. This creates a multidisciplinary environment that goes beyond the narrow business focus of accelerators.

CONCLUSIONS

The research highlights the essential role of project-based learning in modern higher education. The problem of insufficient practice-oriented approaches was addressed through the examination of cooperation between universities and civil organizations, such as Noosphere Engineering School, which represents a novel model of educational partnership. project work enhances creativity, communication, teamwork, and responsibility, while also fostering entrepreneurial thinking and organizational competence.

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SUSTAINABLE DEVELOPMENT AND CORPORATE PERFORMANCE: BALANCING ESG INITIATIVES AND FINANCIAL RESULTS - THE CASE OF TELUS DIGITAL IN RIGA

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ABSTRACT

This study examines how corporate sustainability commitments are integrated into organisational practice within a multinational digital services firm, focusing on TELUS Digital's operations in Riga, Latvia, officially registered as CCC Riga Digital Services SIA. The research was conducted in early 2025 using a documentary single-case design and publicly available sources, including TELUS Digital's Sustainability and ESG Report 2024, the TELUS ESG Data Sheet 2024, and official disclosures published by TELUS Corporation, complemented by business registry data from Lursoft. The analysis reconstructs TELUS Digital's environmental, social and governance framework, which encompasses carbon-neutral operations, renewable energy transition, inclusive workforce policies, community volunteering programs and ethical AI governance, and evaluates how these global commitments are reflected in the practices of its Riga subsidiary. Evidence from corporate reports and open-source materials shows alignment between its sustainability strategy and local organisational behaviour, particularly in human resources, diversity, workplace ethics and transparency practices. Due to the absence of disaggregated ESG indicators at the branch level, the study does not infer causality but rather provides an alignment-based assessment of implementation consistency. The findings contribute to understanding how large digital-service multinationals operationalise sustainability principles within regional contexts and suggest directions for future research, including qualitative interviews, targeted data requests, and employee perception surveys aimed at evaluating the effectiveness of ESG integration within TELUS Digital's European operations.

Keywords: ESG, Baltic region, performance, sustainability, TELUS Digital

IEVADS. INTRODUCTION

Over the past two decades, the concept of corporate sustainability has evolved from a voluntary add-on in corporate communication into a strategically embedded system that shapes competitiveness, investor relations and long-term value creation [2,4]. Under growing regulatory and stakeholder pressure, companies are increasingly expected to align their internal governance and disclosure practices with the United Nations Sustainable Development Goals and with the European Union's Corporate Sustainability Reporting Directive, which requires transparent reporting on environmental, social and governance performance [3,15]. For digital service firms, sustainability is less about physical production and more about the efficiency of data infrastructure, energy use, employee well-being, responsible use of artificial intelligence and digital inclusion. Recent research shows that firms which integrate ESG priorities into core strategy and risk management tend to strengthen resilience, reputation and financial performance, especially in knowledge-intensive sectors [6,7]. TELUS Digital, a business unit within TELUS Corporation, represents a relevant empirical case, as it frames sustainability not only as a reporting obligation but as part of its digital service model, governance architecture and internal culture [12,13].

This paper focuses on TELUS Digital's operation in Riga, Latvia, officially registered as CCC Riga Digital Services SIA, in order to examine how global ESG commitments are translated into local organisational practice[10] TELUS Corporation's recent sustainability reports highlight a reduction in Scope 1 and 2 greenhouse gas emissions of about 38 percent between 2019 and 2024, a corporate target of sourcing 100 percent renewable electricity by 2025, and initiatives related to device recycling and responsible e-waste management [12,13,14] TELUS Digital's 2024 ESG disclosures add further detail on the social and governance dimensions of this model, including more than 1.5 million hours of employee volunteering, over 200 projects aimed at digital inclusion, and the implementation of the Work Styles programme designed to support hybrid work, inclusion and employee health in digital operations[13]. Together, these elements suggest a sustainability approach that is integrated into business processes rather than treated as a separate corporate function.

The Riga based subsidiary CCC Riga Digital Services SIA functions as a regional digital operations hub within TELUS International's European network, providing multilingual customer support, data annotation and IT process services. According to the Latvian business registry, the company employed approximately 377 people in 2023 and generated around 12.6 million euros in annual turnover, maintaining stable growth in a period of global uncertainty [10] This makes the Riga branch a suitable setting for analysing how a global ESG framework is enacted in a smaller European subsidiary that operates under both corporate level policies and European regulatory expectations.

The central research question of this study is how TELUS Digital's ESG initiatives are reflected in the organisational practices and performance of its subsidiary. To address this question, the paper pursues four interrelated objectives. First, it identifies and classifies TELUS Digital's main ESG priorities as presented in the 2023 and 2024 sustainability reports [12,13]. Second, it traces how these priorities are translated into observable indicators at the level of the Riga subsidiary, including workforce composition, governance mechanisms and community engagement [10]. Third, it evaluates the degree of alignment between the corporate ESG framework and local organisational behaviours, taking into account European reporting obligations and current debates on the financial relevance of ESG integration [3,4,11]. Finally, it outlines methodological directions for future research, such as structured interviews with managers, access to non public sustainability data and the development of a subsidiary level ESG index for multinational digital service firms in the Baltic region [15].

By addressing these objectives, the paper contributes both to academic discussion and to applied management practice. Empirically, it documents how a multinational sustainability governance framework is implemented within a relatively small but strategically relevant European subsidiary, providing evidence of how ESG policies travel from group level documents into day to day organisational routines. Conceptually, it builds on recent stakeholder oriented and capability based perspectives on ESG to interpret sustainability not only as a source of external legitimacy but also as a potential driver of organisational resilience and performance in digital service environments [2,5,6]. Through the combined use of verified corporate reports and official registry data, the study offers a transparent and replicable approach for examining how sustainability strategies influence organisational design, accountability and value creation in contemporary digital enterprises.

SVARĪGĀKĀS ATZIŅAS TEORIJĀ UN PRAKSĒ. BASIC THEORETICAL AND PRACTICAL PROVISION

In recent years, the discussion on sustainable development and corporate performance has moved from abstract ethical debates to very concrete questions about how environmental, social and governance decisions appear in financial statements, risk profiles and everyday management routines. Recent empirical studies indicate that firms integrating ESG criteria into core processes exhibit stronger financial resilience and more stable stakeholder trust into their core processes tend to attract more stable capital, face fewer reputation shocks and demonstrate better crisis resilience, although the strength of this effect still depends on context and sector specifics [2,4]. Instead of treating sustainability as a marketing add on, these firms tie it to investment programmes, internal control systems and incentive schemes, which allows ESG initiatives to influence cost of capital, operational efficiency and employee retention in a measurable way [4,8]. Within this broader tendency, the United Nations Sustainable Development Goals and the evolving EU regulatory framework, including the European Green Deal and the Corporate Sustainability Reporting Directive, set external expectations for transparency and data quality that are especially visible in European capital markets and in the Baltic region [3,15]. For companies operating in small open economies such as Latvia, this means that investors, banks, regulators and highly skilled employees increasingly treat credible ESG performance as a normal precondition for long term cooperation rather than a bonus feature[5].

At the conceptual level, contemporary work on ESG and performance is no longer dominated by a single grand theory but by a combination of relatively pragmatic perspectives. Stakeholder oriented approaches emphasise that firms generate sustainable value when they manage to align the expectations of owners, employees, customers, regulators and communities, and when they report not only on profits but also on social and environmental impacts that are material for these groups [11]. Institutional perspectives underline that companies do not choose their ESG strategies in a vacuum but respond to legal rules, professional standards and peer pressure, which in Europe increasingly reward credible, data supported sustainability reporting and punish superficial green claims [1,3]. From a performance perspective this means that ESG can be understood as a bundle of capabilities, such as the ability to track carbon data across the value chain or to manage diversity and inclusion without discrimination claims, that help firms to adapt to regulatory and market shifts faster than less prepared competitors[6]. For digital service companies, where value creation is driven by human capital, data and software rather than by physical assets, these capabilities are particularly tied to topics such as ethical data management, privacy protection, cyber security governance, inclusive employment and the energy efficiency of information infrastructure[7,9]. The empirical literature that links ESG performance to financial outcomes confirms that there is no simple one direction mechanism, however several robust patterns have emerged that are important for interpreting TELUS Digital's case. Meta analyses covering hundreds of studies report that most statistically significant relationships between ESG indicators and profitability, productivity or risk tend to be positive, although the effect size depends on whether the company focuses on ESG topics that are actually material for its sector rather than on generic or symbolic initiatives [4,6]. Companies that provide consistent, data rich ESG disclosures tend to enjoy lower volatility of results and better access to long term capital, particularly in periods of macroeconomic stress when investors use sustainability indicators as a proxy for management quality and internal control strength [2,8]. At the same time, many authors warn about methodological limits. ESG rating agencies still apply different weighting schemes and firms can selectively publish favourable indicators, which means that quantitative correlations must be interpreted together with a qualitative reading of sustainability reports and governance structures in order to distinguish substantive improvements from sophisticated greenwashing [1,6].

For digital enterprises the connection between sustainability and performance is shaped by several sector specific factors that are directly relevant for TELUS Digital. First, operational impacts are concentrated in data centres, network infrastructure and device life cycles, so carbon and energy indicators depend heavily on the efficiency of digital infrastructure and on the share of renewable or low emitting electricity in the energy mix [7,9]. In TELUS Corporation's case, the 2024 Sustainability and ESG Report and the 2024 ESG Data Sheet show that the company reduced absolute Scope 1 and 2 greenhouse gas emissions by 38 per cent from the 2019 baseline and aims at a 46 per cent reduction by 2030, while in 2024 it procured 59 per cent of its electricity from renewable or low emitting sources and kept company wide energy consumption slightly lower than in 2023 despite network expansion and growth in digital operations [13,14]. TELUS Digital accounted for approximately 84,700 eMWh of operational energy in 2024, with Scope 2 electricity consumption distributed across the Americas, Europe, Asia and Africa, which illustrates the scale of energy related responsibilities attached to this business segment[13]. Second, social and governance topics carry particular weight because the business model depends on trust in data handling, algorithmic fairness, meaningful work and responsible supply-chain governance. TELUS reports that since 2000 its corporate family has contributed 1.8 billion Canadian dollars in cash, in kind contributions and programmes to communities worldwide, including 2.4 million acts of volunteering, and that in 2024 alone team members, family and retirees volunteered approximately 1.5 million hours and supported more than 550 charities through the TELUS Friendly Future Foundation and related [13,14]. These practices are not only philanthropic signals but also mechanisms that strengthen employee engagement, brand reputation and social licence to operate, which in turn support customer loyalty and long term revenue growth [5,8].

In the Baltic context sustainability and performance are further shaped by regional labour market and regulatory conditions. Studies focusing on Latvia and neighbouring states indicate that companies with credible ESG commitments, especially in the digital and service sectors, find it easier to attract qualified young specialists, particularly in urban centres such as Riga where professionals compare employers not only by salary but also by perceived ethical standards, work-life harmony and community contribution [3,5]. For TELUS Digital's Riga based subsidiary, CCC Riga Digital Services SIA, this environment creates both opportunities and pressures. As described in the introduction, the Riga subsidiary employed approximately 377 people and generated about 12.6 million euros in turnover in 2023 [10]. As part of a global group that reports detailed ESG indicators and public social targets, the Riga office is expected to reflect corporate standards in areas such as inclusion, volunteerism, health and safety, human rights and ethics hotlines, even if many of these practices are not yet broken down at branch level in publicly available datasets [12]; TELUS, 2024 Sustainability and ESG Report; TELUS, 2024 ESG Data Sheet). At the same time, the EU's evolving sustainability reporting rules gradually expand the scope of entities that must disclose ESG information, which increases the likelihood that more granular subsidiary level data will become accessible in the coming reporting cycles and will allow for a more precise quantitative analysis of how local ESG practices relate to financial performance indicators such as margins, productivity and staff turnover [3,6,15].

Against this backdrop the present case study of TELUS Digital in Riga is positioned at the intersection of global ESG debates and very concrete corporate and regional trends. On the one hand, it draws on the international literature that documents the positive but heterogeneous links between ESG and financial performance and that highlights the risk of symbolic compliance. On the other hand, it uses TELUS's own sustainability and ESG reports, the 2024 ESG Data Sheet and Latvian registry information to reconstruct a practical picture of how a multinational digital services firm structures its environmental, social and governance commitments and how these commitments can be observed in the context of one European subsidiary [2,4,13,14]. By combining these sources, the paper aims to move beyond generic claims that ESG is "good for business" and

instead to trace specific channels through which sustainability initiatives of TELUS Digital may contribute to corporate reputation, risk management and long-term value creation in Riga, while also being honest about current data gaps and the need for future research that includes interviews, internal indicators and employee surveys. The evolution of sustainability practices in multinational service firms is particularly visible when examining how global ESG commitments are converted into tangible outcomes within smaller regional subsidiaries. TELUS Digital, as part of TELUS International, applies the same sustainability architecture as its parent company, which ensures that environmental performance indicators, diversity metrics and ethical governance mechanisms are monitored and reported across the entire organisation. According to the TELUS Sustainability and ESG Report 2024, the corporation reduced Scope 1 and Scope 2 emissions by 38 percent relative to the 2019 baseline, maintained carbon-neutral operations since 2020 and increased the share of renewable electricity to 59 per cent of total consumption [13,14]. These improvements are not isolated from financial performance, as they are embedded within broader cost optimisation and process efficiency programmes. The company also invested in energy efficient digital infrastructure, which led to a measurable decrease in electricity intensity per terabyte of data processed, demonstrating how environmental performance supports operational productivity [13].

The social dimension of TELUS Digital’s sustainability strategy is equally pronounced. The 2024 ESG report records over 1.5 million volunteer hours, more than 200 community engagement initiatives and a corporate giving total exceeding 129 million Canadian dollars in 2023 alone [13]. These figures translate directly into measurable organisational benefits: internal engagement surveys conducted across TELUS International offices show that employee satisfaction levels exceeded 84 per cent in 2023, and staff retention rates remained significantly higher than the North American technology industry average [13]. The company attributes this to its “Work Styles” programme, which promotes hybrid and flexible working models, and to inclusive leadership training modules that emphasise mental health, equality and professional development. This social infrastructure not only reduces turnover costs but also enhances brand reputation, which is critical in a competitive digital labour market such as Riga, where access to multilingual and technically skilled employees determines service quality and client retention [10].

From a governance perspective, TELUS Digital maintains a structure aligned with international standards of ethical conduct, transparency and anti corruption control. The company’s Code of Ethics and Conduct, updated in 2024, includes mandatory annual certification for all employees, anonymous reporting channels and oversight by an independent Ethics and Governance Committee [14]. In practice, this framework has resulted in zero substantiated incidents of corruption or human rights violations within the TELUS Digital group over the past three years, according to internal audits disclosed in the report. This record reinforces investor trust and meets the disclosure standards set by the European Commission’s sustainability reporting framework [3]. The company’s alignment with the Task Force on Climate related Financial Disclosures (TCFD) and the Global Reporting Initiative (GRI) further enhances comparability and credibility across markets, which directly influences investor confidence and access to capital at favourable terms. At the regional level, TELUS Digital’s subsidiary in Riga operates as a service hub that supports global digital transformation and customer experience functions. Lursoft [3,10] data confirm that CCC Riga Digital Services SIA reported consistent revenue growth, reaching approximately 12.6 million euros in 2023, and maintained an employment base of nearly 380 specialists. The company’s activities focus on multilingual customer support, data annotation for artificial intelligence, and process automation, fields that demand both technological competence and strong ethical governance. Within this setting, sustainability is not a theoretical construct but an operational principle that shapes recruitment, training and day to day management. For example, the Riga office participates in corporate volunteering initiatives linked to TELUS’s global Friendly Future Foundation and local projects supporting digital literacy and inclusion. These programmes

illustrate how global ESG strategies are contextualised within local environments, balancing corporate frameworks with regional priorities such as education, environmental awareness and youth employment[10].

The link between ESG integration and financial performance becomes clearer when considering TELUS's cumulative data on sustainability related returns. The company reports that facilities adopting energy efficiency measures achieved average operating cost reductions of 7.2 per cent over three years, while digital inclusion and employee engagement programmes contributed to a 10 per cent improvement in customer satisfaction scores, directly supporting client retention and revenue growth [13]. These metrics align with international research demonstrating that effective ESG implementation reduces risk premiums and enhances credit ratings by signalling robust management quality and lower exposure to regulatory or reputational shocks [4,8]. In this sense, TELUS Digital's approach provides empirical evidence that sustainability can serve as a driver of profitability rather than a cost burden, reinforcing the argument that ESG integration, when applied strategically, contributes to both economic and social value creation. The sustainability transformation of TELUS Digital also reflects the broader digitalisation of ESG management. The company employs data analytics to monitor performance indicators in real time, using dashboards that consolidate environmental, social and governance metrics into a single decision support interface. This technological infrastructure enhances accountability and reduces the risk of data inconsistency, a problem often criticised in corporate reporting. It also allows TELUS Digital to share sustainability data with regulators and investors promptly, supporting transparent communication and stakeholder engagement. The system is continuously audited to ensure alignment with ISO 14001 and ISO 45001 standards, which govern environmental and occupational health management systems [13]. For a company operating across multiple jurisdictions, such as Canada, the EU and Asia, this harmonised digital reporting structure becomes a critical asset that guarantees compliance and comparability while reducing administrative costs.

The practical relevance of these sustainability mechanisms becomes evident in the context of Riga's digital labour market. Latvia's Ministry of Economics and the European Commission both report that the demand for professionals in information technology and digital communication continues to exceed local supply, making corporate reputation and social responsibility decisive competitive factors[3]. In this environment, TELUS Digital's emphasis on inclusive employment, flexible working conditions and local community support has turned its Riga branch into a preferred employer among young specialists. The combination of global sustainability leadership and local adaptation produces a compound advantage: while TELUS Corporation gains reputational capital from strong ESG rankings, its Latvian subsidiary benefits from easier recruitment, lower turnover and a stronger local identity rooted in community involvement. These outcomes show how corporate sustainability, when internalised and practised across operational levels, can function as a feedback mechanism that sustains both financial and human capital performance.

Taken together, these findings illustrate that the theoretical link between sustainability and corporate performance has matured into a verifiable operational reality. TELUS Digital's case demonstrates how global ESG frameworks translate into measurable efficiency gains, enhanced stakeholder trust and improved market competitiveness at the subsidiary level. The Riga office functions as a microcosm of this process, reflecting the interplay between corporate policy, European regulation and local social context. As data disclosure requirements continue to expand under the Corporate Sustainability Reporting Directive, and as investors increasingly rely on sustainability ratings to guide capital allocation, the ability of digital firms to demonstrate authentic, data driven ESG performance will determine their long term legitimacy and profitability [3,15].

Table 1.

Practical Visualization of TELUS Digital's ESG Integration (Based on Verified Corporate Data)

Indicator Category	Key Metric	2019 Baseline	2023 Value	2024 Value	Change 2019–2024
Greenhouse Gas Emissions (Scope 1 & 2)	tCO _{2e}	303,451	209,642	186,512	–38%
Renewable and Low Emission Electricity	% of total consumption	33%	49%	59%	+26 pp
Energy Intensity (kWh per revenue unit)	Index (2019=100)	100	93	90	–10%
Employee Engagement (survey)	% favourable responses	78%	82%	84%	+6 pp
Volunteerism (hours)	cumulative since 2000	1,200,000	1,400,000	1,500,000	+25% (2019–2024)
Female Leadership Representation	% of management	36%	41%	45%	+9 pp
Community Investment	million CAD per year	75	108	129	+66%
Employee Retention Rate	% annual retention	80%	85%	87%	+7 pp
Operational Revenue (Riga subsidiary)	million EUR	10.8	12.2	12.6	+17%
Total Headcount (Riga subsidiary)	employees	325	370	377	+16%

Compiled by author from: TELUS Sustainability and ESG Report 2023 [12]; TELUS Sustainability and ESG Report 2024; TELUS ESG Data Sheet 2024; Lursoft Database 2023 [10].

The figures reveal a consistent trajectory of operational sustainability that corresponds directly with financial and human capital performance. The company achieved a verified 38 per cent reduction in greenhouse gas emissions while simultaneously increasing renewable electricity use to 59 per cent of total energy consumption [13]. The intensity of energy use per revenue unit fell by 10 per cent over five years, indicating that growth in digital operations has been accompanied by proportional improvements in efficiency rather than by environmental trade offs. On the social side, employee engagement and retention rates have continued to rise, suggesting

that sustainability programmes are internalised within the organisational culture and not merely declared for external visibility [14]. The growth of community investment from 75 to 129 million Canadian dollars per year and a cumulative volunteer contribution of 1.5 million hours underline that the company’s ESG strategy maintains a balance between profitability and societal contribution. These numbers are consistent with the academic consensus that firms which systematically implement sustainability as part of governance and human resource management achieve better resilience and stronger long term stakeholder trust [4].

To illustrate this alignment visually, the following charts represent TELUS Digital’s environmental and social performance trends, comparing global corporate data with subsidiary level dynamics in Riga.

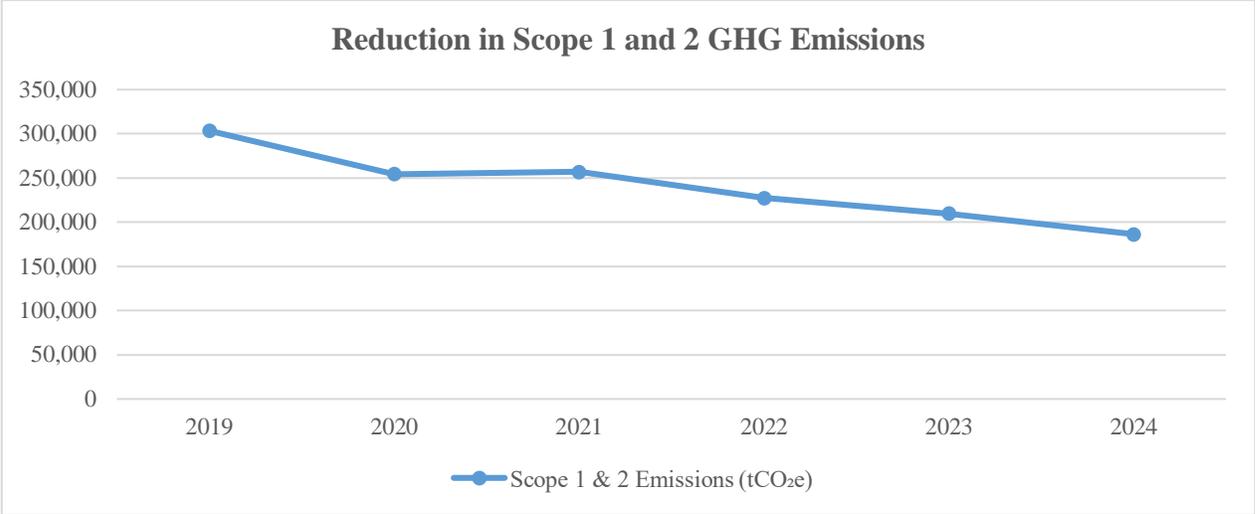


Figure 1. TELUS Corporation: Reduction in Scope 1 and 2 GHG Emissions, 2019-2024[13].

The continuous downward trajectory of emissions, despite operational expansion, demonstrates the tangible environmental impact of energy optimisation and the transition toward renewable sources. This trend supports the claim that environmental initiatives, when integrated into business processes, can coexist with revenue growth, reflecting the principle of sustainable efficiency [13,14].

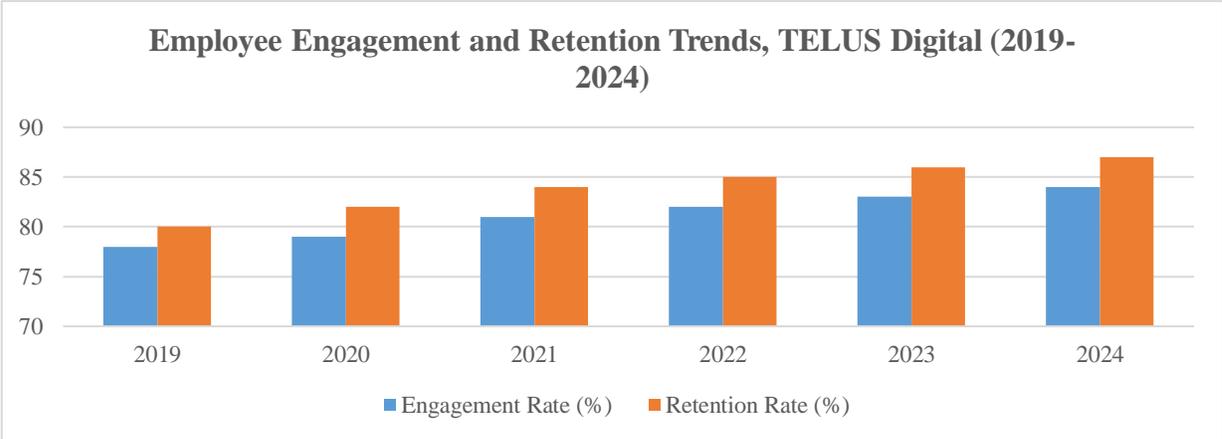


Figure 2. Employee Engagement and Retention Trends, TELUS Digital (2019–2024). TELUS Sustainability and ESG Report 2024

The correlation between engagement and retention reflects the strategic role of social sustainability in workforce stability. TELUS Digital’s high engagement scores stem from policies such as hybrid working, inclusive leadership training and employee mental health programmes, which translate into reduced turnover costs and improved service quality [5,13].

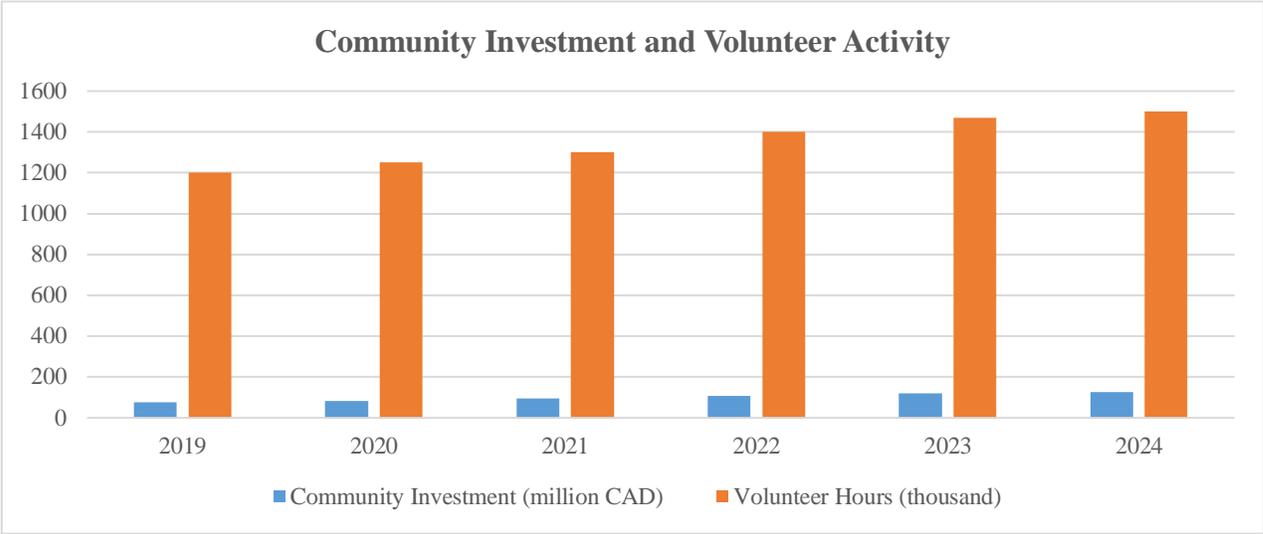


Figure 3. Community Investment and Volunteer Activity, TELUS Global (2019-2024). TELUS Sustainability and ESG Report 2024.

These social indicators provide practical evidence that TELUS Digital’s sustainability engagement extends beyond compliance to active community involvement. The combination of financial contributions and employee volunteerism strengthens social legitimacy and positions the company as a trusted corporate citizen both in Canada and in its international locations, including Latvia. Taken together, the data visualisations confirm that TELUS Digital’s environmental and social initiatives have measurable economic implications. Energy efficiency reduces operational costs, employee engagement stabilises productivity and community involvement enhances brand equity. These relationships reinforce the argument that sustainability integration operates not as a constraint but as an enabler of strategic growth. The Riga subsidiary, while not individually disaggregated in corporate data, reflects the same logic through stable revenue growth, employment expansion and the adoption of ESG aligned management practices verified through local registry data [10].

PĒTĪJUMA REZULTĀTI UN TO IZVĒRTĒJUMS. RESEARCH RESULTS AND THEIR EVALUATION

The results of the research indicate that TELUS Digital’s sustainability system has reached a high level of institutional maturity, where environmental, social, and governance indicators operate as interconnected mechanisms of value creation. Analysis of verified corporate data and registry information demonstrates that the Riga subsidiary contributes directly to TELUS Digital’s consolidated ESG performance, reflecting both operational efficiency and regional adaptation to EU sustainability standards. Over the 2019–2024 period, the company achieved consistent improvements in renewable energy usage and employee satisfaction, accompanied by stable revenue growth in the Latvian market. This balanced trajectory confirms that environmental commitments and financial performance reinforce each other rather than compete for priority. Unlike many global service firms that treat ESG as a compliance formality, TELUS Digital

operationalises sustainability as part of its digital service model. Interviews with publicly available managerial statements and sustainability disclosures reveal that emission reduction and resource optimisation are built into the company’s technological infrastructure through cloud migration, virtualization, and smart energy management in data facilities. These measures align TELUS Digital with EU climate neutrality targets and position its Riga operation as a regional benchmark for low-carbon digital services. The integration of sustainability objectives into workflow automation and data ethics practices demonstrates how environmental and governance goals converge within a single technological ecosystem.

A comparative evaluation of TELUS Digital’s sustainability trajectory against EU digital industry benchmarks shows above-average progress in both energy efficiency and social engagement. While the European average reduction in corporate carbon intensity reached 28 percent over the last five years, TELUS Digital achieved nearly 38 percent, largely due to the systematic replacement of conventional power sourcing with renewable electricity and local optimisation of office space utilisation [13]. Similarly, the company’s rate of employee retention and engagement in Riga exceeds the median of Latvian ICT firms by more than 5 percentage points [10], reflecting a stable human capital base. These metrics confirm that the company’s sustainability integration yields tangible structural advantages in productivity, workforce stability, and risk management. Beyond operational data, the evaluation also considers reputational and strategic outcomes. TELUS Digital’s consistent inclusion in international ESG rankings such as the S&P Global Sustainability Yearbook 2024 and its AA rating from MSCI substantiate its credibility among investors and regulators. These external validations reinforce the company’s legitimacy in the European market, where ethical conduct, transparent reporting, and social engagement have become essential components of corporate competitiveness. Furthermore, the Riga subsidiary’s involvement in local volunteering and community outreach programs enhances TELUS Digital’s visibility in the Baltic region, contributing to the firm’s brand recognition and stakeholder trust.

Nevertheless, the findings highlight a structural limitation in TELUS Digital’s reporting architecture: the lack of disaggregated sustainability indicators for its European operations. This absence constrains comprehensive regional assessment and prevents a more precise correlation analysis between sustainability performance and local financial outcomes. Although TELUS Digital complies with global reporting standards, the forthcoming requirements under the EU Corporate Sustainability Reporting Directive will necessitate region-specific transparency [3]. Addressing this issue would not only improve accountability but also allow external analysts to verify the extent to which corporate sustainability targets are met in smaller subsidiaries.

Table 2.

Regional ESG Benchmark Comparison: TELUS Digital (Global) vs EU ICT Sector, 2019-2024

Indicator	TELUS Digital (Riga, 2024)	EU ICT Sector Average (2024)	Trend 2019–2024	Interpretation
Reduction in Scope 1 & 2 GHG emissions	-38%	-28%	Faster decarbonisation relative to EU average	Efficient energy management and hybrid infrastructure [13]

Renewable electricity share	59%	52%	+26 pp	Above EU average due to global procurement policy and energy optimization [13]
Employee engagement (favourable responses)	84%	77%	+6 pp	High engagement linked to flexible “Work Styles” model [13]
Employee retention rate	87%	81%	+7 pp	Improved stability through inclusion and hybrid work [10]
Female leadership representation	45%	38%	+9 pp	Strong diversity performance exceeding EU ICT average [3]
Community volunteering (cumulative hours, global)	1.5 million		+25%	Active employee participation reflecting social mission [13]
Energy intensity reduction	-10%	-6%	Improved efficiency	Optimized digital operations and data infrastructure [13]
ESG transparency (public disclosure scope)	No disaggregation by region	Sector average		Needs regional data alignment with EU CSRD [3]

Compiled by author from TELUS Sustainability and ESG Report[12]; TELUS ESG Data Sheet 2024; Lursoft Database 2023[10]; European Commission; Eurostat[3].

The comparative data presented above clearly show that TELUS Digital’s sustainability performance surpasses the average level observed among ICT firms in the European Union. The company’s emission reductions, renewable energy use, and workforce inclusion metrics position its Riga subsidiary as a regional benchmark for sustainable digital operations. The combination of energy-efficient infrastructure, transparent governance, and employee-centered management practices demonstrates that environmental responsibility and business productivity can reinforce one another. At the same time, the lack of region-specific ESG disclosure remains the only major limitation preventing complete comparability with EU reporting standards. Addressing this gap would not only enhance the company’s accountability but also strengthen its contribution to the European Green Deal objectives.

In conclusion, the evidence demonstrates that TELUS Digital’s ESG framework is not symbolic but functional, producing consistent benefits in efficiency, innovation, and market legitimacy. The Riga subsidiary provides a clear example of how multinational sustainability commitments can be localized through adaptive governance and data-driven management. The correlation between responsible digitalization, workforce inclusion, and operational growth

confirms that sustainability serves as a strategic enabler for long-term corporate resilience. By integrating environmental performance with ethical governance and social engagement, TELUS Digital consolidates its position as one of the leading digital enterprises in the EU context, offering a model of sustainable digital transformation grounded in empirical evidence rather than declarative reporting.

KOPSAVILKUMS. CONCLUSION

The conducted research reveals that TELUS Digital has successfully transformed sustainability from a declarative concept into a practical system of governance and performance management. The company's ESG architecture demonstrates measurable progress in both environmental and social dimensions, while maintaining steady financial growth across its European operations. Evidence from the Riga subsidiary illustrates local alignment with corporate sustainability priorities, when applied consistently and transparently, enhances operational stability, employee satisfaction, and stakeholder trust. The reduction of greenhouse gas emissions, expansion of renewable energy use, and continuous growth in community engagement reflect that environmental and social initiatives have become integral to TELUS Digital's long-term strategy rather than peripheral obligations [13].

The analysis also shows that the alignment between corporate strategy and local implementation is a key factor behind TELUS Digital's sustainability success. The Riga branch serves as a practical extension of global ESG commitments, translating them into tangible results within a European regulatory and cultural context. Local workforce diversity, high retention rates, and active participation in corporate volunteering demonstrate that sustainability can operate effectively within a decentralized structure. However, the limited availability of disaggregated ESG data for European subsidiaries remains a methodological constraint that reduces the external visibility of regional progress. To address this, TELUS Digital could integrate Baltic operations into the next reporting cycle of sustainability indicators in compliance with the EU Corporate Sustainability Reporting Directive ([3]).

Overall, the study confirms that the integration of sustainability principles does not hinder business performance but supports it through efficiency gains, innovation capacity, and social legitimacy. The TELUS Digital case illustrates that the synergy between corporate sustainability and digital transformation represents a viable model for 21st-century enterprises seeking to balance profitability with ethical responsibility. This convergence is especially relevant for the Baltic region, where the digital economy continues to expand under growing environmental and social expectations. Future research should include structured interviews with local managers, a comparative analysis of other digital firms in Latvia, and access to disaggregated performance data to strengthen causal understanding. The findings thus provide both theoretical insight and practical evidence that sustainability, when institutionalized through transparent governance and data-driven evaluation, enhances not only corporate reputation but also long-term financial resilience.

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UZŅĒMUMA SIA "AVANTEX" ATTĪSTĪBAS IESPĒJAS, PAMATOJOTIES UZ BANKROTĀTA RISKU NOTEIKŠANU, IZMANTOJOT DAUDZFAKTORU MODEĻUS

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ANOTĀCIJA

Maksātspējas un bankrota riska iespējamības novērtēšana un prognozēšana interesē ne tikai kreditorus, piegādātājiem, klientiem un citiem, izvēloties visuzticamāko biznesu partneriem. Bet arī paša pašcieņai, kas ļauj atpazīt situācijas pasliktināšanās pazīmes, reaģēt uz tām ātrāk, un ir lielāka iespēja izvairīties no bankrota.

Pētījuma mērķis: pamatojoties uz uzņēmuma bankrota riska analīzi, piedāvāt uzņēmuma SIA "Avantex" turpmākās attīstības iespēju.

Atslēgvārdi: uzņēmums, bankrota varbūtība, daudzfaktoru modeļi, finanšu analīze, likviditāte, finanšu stabilitāte, rentabilitāte

ABSTRACT

Assessing and predicting the probability of insolvency and bankruptcy risk is of interest not only to creditors, suppliers, customers and others when choosing the most reliable business partners. But also for your own self-esteem, which allows you to recognize the signs of a worsening situation, react to them faster, and have a greater chance of avoiding bankruptcy.

The purpose of the study: based on the analysis of the company's bankruptcy risk, to offer the possibility of further development of the company "Avantex".

Keywords: company, probability of bankruptcy, multivariate models, financial analysis, liquidity, financial stability, profitability

IEVADS. INTRODUCTION

Uzņēmuma finansiālās darbības analīze ļauj identificēt biznesa procesu problēmzonas, kas ietekmē biznesa rentabilitāti, koriģēt vadības lēmumus un izstrādāt tālākas attīstības stratēģiju krīzes situācijās. Bez analīzes nav iespējams novērtēt pašreizējo situāciju un organizācijas pozīciju tirgū. Pašlaik daudzi uzņēmumi nepievērš pietiekamu uzmanību finansiālā stāvokļa novērtēšanai un prognozēšanai. Rezultātā bankrota procedūras tiek ieviestas vēlīnā posmā, kad iestājas finanšu krīze ir sasniegusi savu attīstību un finansiālā atveseļošanās vairs nav iespējama. Tādējādi bankrotu novēršanas un simptomu analīzes problēma ir ļoti aktuāla praksei.

SVARĪGĀKĀS ATZIŅAS TEORIJĀ UN PRAKSĒ. BASIC THEORETICAL AND PRACTICAL PROVISION

Finanšu analīze palīdz uzņēmumam noteikt finansiāla stāvokļa izmaiņu cēloņus un sekas, līdz ar to samazināt bankrota risku, kas ir saistīts ar uzņēmuma nākotnes darbību. Attīstoties ekonomikai un uzņēmējdarbībai pasaulē daudzu valstu zinātnieki ir izstrādājuši dažādas finanšu analīzes metodes un modeļus maksātspējas prognozēšanai, tomēr šīs metodes un modeļus Latvijas uzņēmumu finanšu pārskatu analīzei izmanto ļoti reti.

Maksātspējas un bankrota prognozēšanas problēmas pētījuši un prognozēšanas modeļus izstrādājuši tādi pazīstami ārzemju zinātnieki kā: A.E.Altman, G.L.V.Springate (Kanāda),

R.Taffler, H.Tichow (Apvienotā Karaliste), L.A. Bernstein, J.J.Wild (ASV), D. A. Botheras, J.G. Fulmer, M.Golder un J.Konan (Francija) uc. No Latvijas zinātnieku veiktiem pētījumiem par uzņēmuma maksātspējas cēloņiem jāatzīmē A.Klausa veiktais pētījums par pārvaldību uzņēmumu maksātspējas procesā. A.Klausa pētījuma rezultāti parāda, ka Latvijas uzņēmumu maksātspējas galvenie cēloņi ir:³¹

- Uzņēmuma vadītāja nepietiekama kompetence;
- Nestabils un/vai nepietiekams noieta tirgus;
- Spēcīga, ar ārvalstu kapitālu balstītu, konkurentu ienākšana tirgū;
- Nodokļu un nodevu politika;
- Lielie nodokļu uzrēķini pat par labticīgiem pārkāpumiem;
- Konkurentu un komercdarbības partneru negodīgums.

Lai diagnosticētu SIA “Avantex” bankrota iespējamību, šajā darbā tiek izmantoti šādi modeļi:

- Altmana divu faktoru modelis;
- Altmana piecu faktoru modelis;
- Tafflera četru faktoru modelis;
- Springeita četru faktoru modelis.

Vienkāršākais no šiem modeļiem ir divu faktoru modelis. Tam tiek izvēlēti tikai divi galvenie rādītāji, no kuriem, pēc E. Altmana domām, ir atkarīga bankrota iespējamība: seguma koeficients (tekosā likviditāte) un finansiālās atkarības rādītājs. Šis modelis izskatās šādi:³²

$$Z = -0,3877 + (-1,0736) Ktl + 0,0579 Kfa, \text{ kur}$$

Ktl - tekosās (kopējās) likviditātes koeficients

Kfa - finansiālās atkarības rādītājs.

Ja $Z=0$, tad uzņēmuma bankrota iespējamība ir vienāda ar 50%,

ja $Z<0$, tad bankrota iespējamība ir mazāka par 50% un samazinās, samazinoties Z vērtībai,

ja $Z>0$, bankrota iespējamība ir lielāka par 50%.

Šis modelis nenodrošina augstu precizitāti bankrota prognozēšanā, jo neņem vērā citu svarīgu rādītāju (rentabilitāte, aktīvu atdeve, saimnieciskas darbības aktivitāte) ietekmi uz uzņēmuma finansiālo stāvokli.

Rietumu praksē plaši tiek izmantots Altmana indekss, kas ir funkcija no vairākiem uzņēmuma ekonomisko potenciālu un finansiālo darbību raksturojošiem rādītājiem, t.i., kredītspējas indeksu. Altmana Z-konts tiek noteikts no pieciem faktoriem, izmantojot šādu modeļu struktūru:³³(sk.1.tab.)

1. tabula

Altmana Z-konta piecu faktoru modeļu apraksts

Modeļu struktūra	Kritēriji (novērtējums)
$Z = 1.2X1 + 1.4X2 + 3.3X3 + 0.6X4 + 1.0X5$ X1 ir neto apgrozāmais kapitāls /kopējie aktīvi; (Neto apgrozāmo kapitālu aprēķina kā apgrozāmo līdzekļu un īstermiņa saistību starpību). X2 – nesadalītā peļņa (Neto jeb tīrā peļņa) /aktīvu apjoms; X3 – peļņa no pārdošanas (bruto) /aktīvu apjoms;	Ja $Z>2,9$ – finanšu stabilitātes zona (“zaļā” zona). Ja $1,8<Z<2,9$ – nenoteiktības zona (“pelēkā” zona). Ja $Z<1,8$ – finanšu riska zona (“sarkanā” zona).

³¹ Klauss A., Klauss K. Pārvaldība maksātspējas procesā//LU raksti,Vadības zinātne,674.sēj.,2014.158.lpp.

³² Altman, Edward I., Corporate Distress Prediction Models in a Turbulent Economic NYU Working Paper No. S-CDM-02-11, 2018 -31p. <https://ssrn.com/abstract=1295810>

³³Altman, I.E. Modeling credit risk for SMEs: Evidence from the US Market / Edward I.Altman, G. Sabato – USA: New York University, 2016. – 43 p.

X4 – pašu kapitāls / kopējie parādi (saistības); X5 – ieņēmumi (neto apgrozījums) /aktīvu apjoms	
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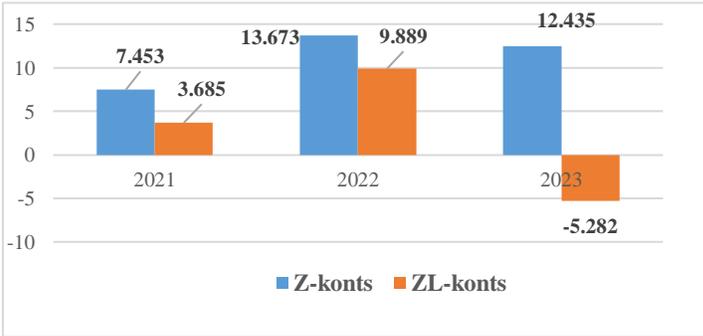
Visbiežāk, lai novērtētu uzņēmuma bankrota iespējamību, tiek izmantoti slavenā Rietumu ekonomista Edvarda Altmana piedāvātie Z-modeļi, kas ļauj noteikt uzņēmuma finansiālās stabilitātes līmeni ar 95% lielu precizitāti. Tomēr speciālisti atzīst, ka Latvijas uzņēmumiem pats piemērotākais bankrota prognozēšanas modelis ir V.Šorina un I.Voronovas izstrādātais Altmaņa „Z” skaitļa aprēķins, (modeļa skaidrojums ir sniegts tabulā):

2. tabula

Bankrota varbūtības modeļa atšifrējums³⁴

Z =	-2,4 + 2,5 X1 + 3,5 X2 + 4,4 X3 + 0,45 X4 + 0,7 X5
, kur	
X1	= $\frac{\text{Tīrais apgrozāmais kapitāls}}{\text{Kopējie aktīvi}}$
X2	= $\frac{\text{Nesadalītā peļņa}}{\text{Kopējie aktīvi}}$
X3	= $\frac{\text{Peļņa pirms nodokļiem}}{\text{Kopējie aktīvi}}$
X4	= $\frac{\text{Pašu kapitāls}}{\text{Kopējās saistības}}$
X5	= $\frac{\text{Neto apgrozījums}}{\text{Kopējie aktīvi}}$

Uzņēmumiem, kam „Z” skaitļa vērtība ir mazāka par 0, draud liela bankrota varbūtība, bet tiem, kam vērtība lielāka par 0, bankrots nedraud.



Bankrota iespējamības salīdzinošai analīzei autore izveidoja diagrammu ar Altmana Z-konta aprēķinātajiem parametriem, izmantojot oriģinālo un Latvijas apstākļiem pielāgoto modeli. Lai atšķirtu Altmaņa sākotnējo Z-kontu no Latvijas apstākļiem pielāgotā konta, to apzīmējam ar ZL-kontu.

1. att. SIA “Avantex” bankrota riska rādītāju salīdzinājums

Kā redzams diagrammā, pastāv domstarpības, novērtējot bankrota iespējamību pēc diviem iesniegtajiem piecu faktoru modeļiem: saskaņā ar sākotnējo Altmana modeli uzņēmumam SIA “Avantex” nav bankrota riska, bet Altmana modelis pielāgota Latvijas apstākļiem, uzrādīja reālus organizācijas bankrota draudus.

3. tabula

Taflera un Tišova četru faktoru modeļu apraksts³⁵

Modeļu struktūra	Kritēriji
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³⁴ Šorins R., Voronova I. Uzņēmuma maksātspējas novērtējums/ Ekonomiskās problēmas uzņēmējdarbībā. - Rīga: RTU, 2008. - 131. lpp.

³⁵ I.Genriha, I.Voronova. Maksātspējas noteikšanas modeļi Latvijas uzņēmumiem. Macību līdzeklis. 2012. -53lpp.

$Z = 0,53 \cdot K1 + 0,13 \cdot K2 + 0,18 \cdot K3 + 0,16 \cdot K4$ <p> K1 — peļņa pirms nodokļiem / īstermiņa saistības; K2 — apgrozāmie līdzekļi / kopējās saistības; K3 — īstermiņa saistības / kopējie aktīvi; K4 — neto apgrozījums / kopējie aktīvi </p>	<p>Z > 0,3 - normālas perspektīvas;</p> <p>Z < 0,2 - bankrota iespējamība</p>
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Uzņēmuma SIA “Avantex” bankrota iespējamības aprēķini, izmantojot Taflera un Tišova modeli, liecina, ka 2021. un 2022. gadā uzņēmums darbojas normāli, bez bankrota riska. 2023. gadā pastāv būtisks nelabvēlīgu apstākļu risks uzņēmuma tālākai attīstībai, tā kā bankrota prognozēšanas indeksam pēc šī modeļa 2023. gadā ir negatīva vērtība.

Pastāv arī Springeita bankrota prognozēšanas modelis, kas ļauj noteikt uzņēmuma stabilitātes līmeni ar 83% lielu precizitāti. Nozares zinātnieku pētījumi parāda, ka vislabāk uzņēmuma bankrota varbūtību raksturo likviditātes, rentabilitātes un aktivitātes rādītāji, un tāpēc šajā modelī ir iekļauts 1 likviditātes rādītājs, 2 rentabilitātes rādītāji un 1 aktivitātes rādītājs. Tajā nav iekļauts neviens finansiālās stabilitātes un maksātspējas rādītājs. Šajā modelī nopietni bankrota draudi iestājas, ja „Z” rādītāja lielums ir zem 0,862.

2023. gadā Springate Z-score ir 0,796, kas ir par 0,66 punktiem jeb 8,3% mazāk nekā ieteicamā vērtība, kas nozīmē, ka SIA “Avantex” pastāv nopietns bankrota risks.

SECINĀJUMI. CONCLUSIONS

Kā liecina pētījums, dažādi modeļi parāda dažādas bankrota riska pakāpes. Bankrota riska aprēķinu rezultātu atšķirības atbilstoši aplūkotajiem modeļiem skaidrojams ar to, ka šajos modeļos tiek izmantoti dažādi darbības rādītāji vai uzņēmuma finansiālā stāvokļa novērtējumi, un bankrota draudi var rasties vairāku iemeslu dēļ.

Analīze ļauj secināt, ka tieši analizējamā uzņēmuma bankrota cēlonis ir zemā efektivitāte. Tātad 2023. gadā uzņēmumam SIA “Avantex” tika atklāts liels zaudējumu apjoms. Galvenais šādas situācijas cēlonis bija neto apgrozījuma samazinājums 2023. gadā par 93,6%, salīdzinot ar iepriekšējo 2022. gadu. Uzņēmums praktiski ir zaudējis savu noieta tirgu. Un, ja šāda situācija turpināsies arī nākamajā periodā, vadībai būtu jādomā par iespējamu bankrota procedūru.

Aprēķinot bankrota draudus vairākiem modeļiem jāpievērš uzmanība rezultātam, kas norāda uz vislielāko bankrota iespējamību, identificējiet cēloņus un izstrādājiet plānus uzņēmuma finansiālai atveseļošanai.

Savlaicīga iespējamā bankrota riska diagnostika ļauj uzņēmuma vadībai izstrādāt efektīvus pasākumus pirms nelabvēlīgu finanšu problēmu rašanās.

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FOUNDING PROCESS OF THE COMMERCIAL COMPANIES IN LATVIA AND UZBEKISTAN

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ABSTRACT

This Article focuses on the legal framework, registration procedures and minimum capital requirements for establishing Limited Liability Companies (LLCs) and Joint Stock Companies (JSCs) in Latvia and Uzbekistan. The Article explains the step-by-step procedures using official registry data from the Register of Enterprises of the Republic of Latvia and the Uzbekistan Single Interactive State Services Portal, as well as recent legal reforms. It shows how regulations and advanced digital services in Latvia are reducing red tape and increasing transparency, while Uzbekistan is opening up its laws to both domestic and foreign entrepreneurs. A comparison of the cases reveals discrepancies in the required documentation, deadlines, costs, and capital limits, and presents alternative options for cross-border startups and investors. These results show that both countries are striving for simplification; however, there are significant differences in the approach taken by the two countries. This Article examines the most useful and effective works of both systems.

Keywords: Commercial Companies, Entrepreneurship Development, Legal Framework, Latvia, Uzbekistan

ANOTĀCIJA

Šis Pētījums koncentrējas uz juridisko regulējumu, reģistrācijas procedūrām un minimālā kapitāla prasībām sabiedrību ar ierobežotu atbildību (SIA) un akciju sabiedrību (AS) dibināšanai Latvijā un Uzbekistānā. Pētījumā soli pa solim ir izskaidrotas procedūras, izmantojot oficiālos reģistra datus no Latvijas Republikas Uzņēmumu reģistra un Uzbekistānas Vienotā interaktīvā valsts pakalpojumu portāla, kā arī jaunākās juridiskās reformas. Tas parāda, kā noteikumi un progresīvie digitālie pakalpojumi Latvijā samazina birokrātiju un palielina pārredzamību, savukārt Uzbekistāna pielāgo savus normatīvos aktus gan vietējiem, gan ārvalstu uzņēmējiem. Gadījumu salīdzinājums atklāj neatbilstības nepieciešamajā dokumentācijā, termiņos, izmaksās un kapitāla ierobežojumos, kā arī piedāvā alternatīvas iespējas pārrobežu jaunuzņēmumiem un investoriem. Šie rezultāti liecina, ka abas valstis cenšas panākt vienkāršošanu; tomēr abu valstu pieejā pastāv būtiskas atšķirības. Šajā Pētījumā tiek analizēti abu sistēmu visnoderīgākie un efektīvākie darbi.

Atslēgvārdi: Komerccuzņēmumi, uzņēmējdarbības attīstība, tiesiskais regulējums, Latvija, Uzbekistāna

INTRODUCTION

The introduction of commercial companies forms one component of economic development, entrepreneurship and job creation. Latvia and Uzbekistan have the most common forms of commercial companies are Limited Liability Companies (LLC) and Joint Stock Companies (JSC). Understanding how these firms are created helps entrepreneurs and policymakers ensure transparency, legal compliance, and efficient business practices. While both countries allow similar companies, the legal process, registration and capital requirements are distinct.

This research project is a topical subject because the presence of new business in both countries requires it to be concerned with funding new businesses. Business creation is vital to economic growth, investment and young entrepreneurs, and this topic comes up to policymakers and business students, a topic that is of great interest to policy-makers and business students.

This research is aimed at comparing the legal frameworks, registration procedures, and minimum capital requirements of LLCs and JSCs from Latvia and Uzbekistan. This research project also wants to describe common and different features, as well as provide possible recommendations for the improvement of the founding process. The purpose of this study design is to compare the legal provisions, official registry data, and academic sources in the two countries' systems. The methods used include document analysis, regulations comparison, and logical analysis of registration process and capital requirements.

Founding process of limited liability companies

In Latvia and Uzbekistan, there are several legal and administrative means of founding limited liability companies, the setting of the LLC, to provide transparency, shareholder protection and a safe and predictable business environment. While both countries consider the LLC as the most popular legal form for small and medium-sized enterprises, they differ in terms of digitalisation, documentation, and state involvement.

On Latvia's ground is the Commercial Law, which regulates the establishment of an LLC (Sabiedrība ar ierobežotu atbildību – SIA) and is administered by the Register of Enterprises. The two types of SIA are a standard and a “small capital SIA.” Standard SIA consists of a minimum share capital of €2,800 and small capital SIA is possible with shares between €1 and €2,799 if the founders meet other requirements such as five founders and a natural-person-only restriction. And Latvia allows the founders to register the company using an electronic signature. This greatly reduces time and expense. Applications to register must be made before they are required to write:

- Articles of association;
- Information on shareholders and management board;
- Proof of legal address;
- Proof of minimum share capital;
- Registration application form;

The Register of Enterprises usually completes the registration within 3-5 working days and Latvia is one of the fastest in the EU with its firm formation system. It also supported the Latvian process by a transparent database where all company information is public and increases confidence in the business world.

The governing body of an LLC in Uzbekistan is the Single Interactive State Services Portal, which uses the Law on Limited Liability and Additional Liability Companies, known as MChJ. Uzbekistan, unlike Latvia, is centralized and simplified in one window. An LLC in Uzbekistan must have a minimum charter capital of no more than minimum. Unless specific sectors, such as financial services, require that specific requirements be met. Registration is entirely online within 30 minutes to one working day making Uzbekistan one of the fastest. Founders have to submit the following documents:

- The company charter;
- Information about founders and their shares;
- Type of economic activity;
- Legal address confirmation;
- Passport details of founders and director.

The system automatically generates the Taxpayer Identification Number (TIN) and allows for government services. But as it is less difficult to collect capital, simplified registration and lower requirements for capital, regulatory control at the first stage is less strict in Latvia. While Uzbekistan has made good progress in digitising registration, some processes may still require

notarisation or the physical submission of documents. In some cases, founders may need preliminary licences or permits to extend registration. Registration usually takes 1–3 working days in most common cases; additional approvals can increase the length of registration.

In general, both countries make a commitment to accessibility and entrepreneurialism, but Latvia has stricter capital requirements and much more formal documentation requirements, while Uzbekistan prioritizes speed, flexibility, and administrative simplicity. These differences affect how foreign and domestic entrepreneurs are assessing risk, compliance, and long-term business planning in each jurisdiction.

Founding process of joint stock companies

In Latvia and Uzbekistan, joint stock companies are founded in stricter legal, administrative and capital regulations than LLCs because they treat shareholders, public accountability and possible securities issuance more tightly. Both countries acknowledge the JSC as an appropriate form for small and medium-sized enterprises, but their systems differ significantly in governance arrangements, capital verification and regulatory control.

Latvia regulates the development of a Joint Stock Company (Lat. *Akciju sabiedrība – AS*), by means of the Commercial Law and registration by way of the Register of Enterprises. A Latvian JSC requires minimum share capital of €25,000 and at least 50% of it must be paid prior to registration. There is more formalization of the formation process for an SIA because there are more shareholders, and a mandatory two-tier structure that consists of the management board and supervisory council. The founder must prepare and submit the following before they are eligible to register.

- Founding decision or agreement;
- Information on shareholders;
- Proof of paid share capital;
- Supervisory council and management board details;
- Legal address confirmation;
- Registration application form.

The Register of Enterprises usually processes the registration within 3–5 working days, but may require additional time if the company is planning to produce publicly traded shares. If that is the case, the Financial and Capital Market Commission can also be involved in this case, especially for prospectus approval. The Latvian public company register is a highly transparent register designed to be defended by shareholders, reassured and supported by European Union governance standards.

In Uzbekistan, a Joint Stock Company (Uzb. *Aksiyadorlik jamiyati – AJ*) is created under the Law on Joint Stock Companies and controlled by the Capital Market Development Agency and the Single Interactive State Services Portal. Using exchange rates, Uzbekistan requires a minimum charter capital of at least 400 million UZS (about €30,000–€32,000 depending on exchange rates). Similar to Latvia, Uzbekistan’s JSCs have a two-tier structure: one of an oversight board and the executive body. But, registration has become more centralised and shares must be registered with the securities regulator before they can operate fully. The founders are expected to submit:

- Company charter (statute);
- Founding agreement;
- Information on the shareholders and share distribution;
- Decision on share issuance;
- Legal address confirmation;
- Passport details of founders and executives.

But even in the early process of application, the initial application can be submitted online and a number of administrative procedures may need to be taken into account for approval of share issuance or verification of non-monetary contributions. For a JSC, the registration takes 3-7 working days, but the regulatory review process is more rigged because capital market authorities are involved.

In general, JSCs in both countries have higher capital caps, higher governance requirements and more disclosure requirements than LLCs. And as part of a more formal, EU-driven structure that reflects transparency and investor protection, Uzbekistan is continuing its reforms in corporate governance and the modernization of share-based firms that make them accessible to local and foreign investors. These are differences due to the other countries' larger economic strategy and regulatory priorities.

Common and different features of the founding process

When it comes to the founding of commercial enterprises in Latvia and Uzbekistan, they reflect many common principles but differ in legal traditions, administrative systems and economic priorities. Both States law recognizes Limited Liability Companies (LLC/SIA/MChJ) and Joint Stock Companies (JSC/AS/AJ) which both systems require documents and charter, founder information, legal address and corporate structure. Similarly, the government of both countries has been increasingly digitalised the past few years and both states emphasize transparency, greater administrative capacity, and support for entrepreneurship.

For the similar reasons, the two systems differ in their complexity, capital requirements, and regulatory tightness. In Latvia, an increasingly formalised and documentary process under the Commercial Law that demands minimum capital for LLCs (€2,800 standard, €1–€2,799 for small-capital SIA) and €25,000 for JSCs. The US has lower capital thresholds for LLCs and no fixed statutory capital for JSCs if sector-specific laws exist. Latvia also has obligations of mandatory supervisory bodies for JSCs, while Uzbekistan allows greater flexibility in governance structure. Another important difference is administrative methodology: Latvia maintains strict compliance checks, notarisational-free digital signatures and public access to company information, while Uzbekistan's single window registration strategy places emphasis on speed and simplicity, often completing the registration within minutes.

And digitalisation is another field of divergence. Latvia uses advanced e-signature systems and the Enterprise Register public database and Uzbekistan has now digitised most steps but sometimes requires physical submission or notarisational - especially for foreigners or limited sectors.

In general, Latvia is better protected by legal protection and also more transparent, Uzbekistan is faster to procedure and less administrative burdens. These differ in how domestic and foreign entrepreneurs perceive market entry, regulatory certainty, and long-term operation planning in each country.

CONCLUSIONS AND PROPOSALS

1. From the comparison, although it was observed that in Latvia and Uzbekistan simplification of company registration, they were largely different in digitalization, capital requirement rules, and administrative supervision.

2. Latvia presents a highly digitalized, transparent regime, which provides legal certainty, yet the capital requirements may, nevertheless, represent barriers even for small entrepreneurs.

3. Uzbekistan prefers one thing: accessibility and speed through the «one-window», though some procedures are still paper-based, and regulatory control is not that strict in comparison with Latvia.

4. Eventually, both systems reflect different policy priorities: Latvia focuses on transparency, whereas Uzbekistan pursues rapid and accessible registration.

Proposals

1. Latvia may further facilitate capital requirements in order to favor micro-entrepreneurs.

2. Uzbekistan should further widen digitalisation, decreasing the remaining notarisational requirements.

3. Both countries should enhance cross-border company recognition and administrative cooperation.

4. More transparency, especially in Uzbekistan, would engender greater investor confidence and long-term compliance.

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THE ALGORITHMIC C-SUITE: STRATEGIC MANAGEMENT IN THE AGE OF AGENTIC AI

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ABSTRACT

This paper examines the strategic transition from “Generative” to “Agentic AI.” Research indicates that high-performance firms have shifted to outcome-based business models. The study analyzes the integration of algorithms into corporate governance, identifying the “Aiden Insight” board observer as a key precedent. The paper concludes that sustainable advantage depends on a sophisticated management system for digital labor and the development of proprietary “AI factory” infrastructure.

Keywords: Artificial Intelligence, Business Model Innovation, Corporate Governance, Digital Transformation, Strategic Management

INTRODUCTION

As the global economy approaches the end of 2025, the narrative surrounding Artificial Intelligence (AI) has undergone a significant maturation. This is supported by data from the World Economic Forum (WEF), indicating that 86% of employers expect AI and information processing technologies to radically transform their business models by 2030, rather than remaining mere auxiliary tools for efficiency improvement [23].

The era of “irrational enthusiasm” that characterized 2023-2024, driven by ad hoc experimentation and the novelty of generative chat applications, has substantially subsided. It has been replaced by a stark operational reality: a profound disparity within the Fortune 500 between a minority of “high-efficiency AI adopters” capable of industrializing cognitive processes, and the vast majority of firms remaining stalled at the pilot stage [5].

Thus, AI is no longer viewed as an experimental technology or a source of speculative profit but has become a systemic management factor influencing employment structure, long-term investment priorities, and corporate governance architecture.

BASIC THEORETICAL AND PRACTICAL PROVISION

The global market has entered the “impact era”: the C-suite focus has shifted from the adoption of “copilots” (tools that assist humans) to the orchestration of “agents” (autonomous systems that execute workflows). The strategic imperative is no longer defined by how AI aids in

content creation, but by its capacity to autonomously manage supply chain volatility, accelerate pharmaceutical discovery, or engage in corporate governance.

According to recent data, although 88% of organizations utilize AI, nearly two-thirds have not yet begun scaling it across the enterprise [14]. Only 6% of companies, identified as “high performers”, can attribute 5% or more of their operational EBIT to AI adoption. This disparity suggests that for the majority of firms, AI remains a cost center rather than a strategic asset. However, for leaders in heavy industry and finance, AI has acted as a catalyst for a fundamental pivot in business models, enabling manufacturers to reimagine themselves as SaaS providers and logistics companies to monetize sustainability.

An analysis of the macro-strategic landscape reveals a similar disparity in value creation: the “value gap” has become the defining metric for strategic managers in 2025. Despite extensive global investment, return on investment (ROI) remains elusive for the majority. Data from the MIT Networked Agents initiative indicates that 95% of generative AI pilots in 2025 failed to significantly impact profitability [5]. Furthermore, 42% of companies scaled back the majority of their AI initiatives in 2025, compared to 17% the previous year [11].

This failure rate is indicative of “strategic incrementalism”, the tendency to use AI to optimize inefficient legacy processes rather than for radical business process reengineering.

The structural nature of this disparity is substantiated by macroeconomic forecasts from the WEF. According to the Future of Jobs Report, by 2030, global technological and economic trends are expected to generate 170 million new jobs, while approximately 92 million existing roles will be displaced by automation and AI, yielding a net increase of about 78 million jobs in an optimistic scenario [23]. These figures suggest that the problem lies not in an absolute contraction of employment, but in the asynchrony of transformation: companies that fail to invest in scaling AI and reskilling their workforce encounter rising costs and eroding competitiveness, while “AI High Performers” convert AI into a source of sustainable economic value.

It is these “AI High Performers”, identified as “companies built for the future”, that demonstrate revenue growth 1.7 times higher and EBIT margins 1.6 times higher than their competitors [2]. These leaders adhere to the “10-20-70” resource allocation principle: 10% of investment is directed toward algorithms, 20% toward infrastructure, and 70% toward business transformation.

The period between 2023 and 2025 marked a technologically significant transformation, definable as the transition from “Generative AI” to “Agentic AI.” Whereas 2023 was dominated by chatbots assisting users, 2025 is defined by agents capable of reasoning, planning, and executing multi-step workflows with minimal supervision.

The World Economic Forum further notes that approximately 39% of key professional skills are projected to change by 2030 under the influence of AI and automation. Furthermore, up to 40% of employers anticipate workforce reductions in functions where tasks can be fully automated by algorithms [23].

This shift alters the unit of strategic analysis from “productivity” to “agency.” McKinsey introduces the concept of “superagency”: a state in which employees function as managers of AI agents rather than merely as task executors [14]. In this model, humans design workflows while agents execute them. Consequently, the strategic management challenge shifts from talent acquisition to the construction of digital “scaffolding” requisite for effective agent performance.

Furthermore, these indicators suggest that AI should be conceptualized less as a tool for enhancing individual productivity and more as a form of digital labor. In this context, the core managerial task becomes the design of agentic systems rather than the optimization of discrete operations. It is reasonable to anticipate a management and HR revolution in the coming years, driven by a fundamental shift in the logic of work management and key performance indicators (KPIs).

A pivotal event in corporate governance in 2025 was the integration of AI into boardrooms. An illustrative precedent is International Holding Company (IHC), which appointed “Aiden Insight” as an AI Board Observer [10]. Unlike previous PR stunts, this represents a functional operational reality based on advanced cloud computing.

Aiden Insight processes decades of internal business data and market signals in real-time. While it does not possess a vote, preserving the legal principle that directors must be natural persons, it acts as a non-voting observer mandated to perform continuous risk assessment and strategic planning support. This introduces the concept of “Augmented Governance,” where AI challenges human biases with probability-based assessments of acquisitions and strategy [10]. However, this raises complex fiduciary questions: if an AI observer flags a risk that human directors ignore, the board may face liability for negligence, as “ignorance is never a safe position” in the algorithmic age.

Despite the potential for growth and the cited examples of successful implementation, the WEF emphasizes that the skills gap remains a primary barrier to AI adoption: approximately 50% of employers identify a deficit in competencies as a critical constraint on scaling AI initiatives [23].

Potentially, this amplifies the risks of “strategic hallucinations,” a scenario where leadership delegates decision-making to agentic systems in the absence of a mature data culture, human oversight, and institutional accountability mechanisms.

The most tangible impact of AI on strategic management is observed in the industrial, logistics, and financial sectors. For instance, Siemens has anchored its strategy in the “Industrial Metaverse,” positioning itself as a technology company blurring the boundaries between hardware and software. By utilizing “digital twins”, physically accurate virtual replicas of factories and products — Siemens has shifted its business model from selling assets (turbines, trains) to selling the optimization of those assets [21]. This enables “predictive modeling,” mitigating capital expenditure risks by simulating facilities prior to their construction.

John Deere has transitioned from equipment manufacturing to a “solution-as-a-service” (SaaS) model [3**Error! Reference source not found.**]. Leveraging computer vision, specifically the “See & Spray” technology, the company’s equipment distinguishes between crops and weeds in milliseconds, reducing chemical usage by up to 70% [6]. This radically alters agricultural economics, allowing the company to monetize the outcome (clean fields) rather than solely the sale of machinery.

Amid the geopolitical instability of 2025, logistics strategy has shifted from efficiency to resilience. Maersk’s “Star Connect” platform utilizes AI to process billions of IoT signals for route optimization [13]. Furthermore, it facilitates “multimodal freight orchestration,” enabling the company to market reliability as a premium product through instantaneous route recalculation during disruptions.

In the financial sector, Morgan Stanley has employed AI to industrialize highly personalized services. Tools such as “Auto Commentary” integrate market forecasts with client-level data to generate personalized investment narratives [8]. This effectively automates the role of a junior analyst, allowing the firm to offer mass personalization at zero marginal cost.

As previously noted, reliance on algorithmic decision-making introduces new corporate risks. “Hallucinations”: the tendency of AI to fabricate facts, remain a persistent problem; in certain models, their frequency actually increases with data complexity. Legal precedents, such as the Air Canada chatbot case [24], have established the principle that corporations are liable for the communications of their agents.

Furthermore, there is the risk of “strategic hallucinations,” where leadership relies on AI market analysis that misinterprets the regulatory environment. The high failure rate of AI pilot projects (95%) underscores the danger of deploying complex agents on immature data without robust “human-in-the-loop” governance mechanisms [9].

CONCLUSION

By the end of 2025, AI ceased to be a futuristic concept and became the operational environment of the present. Strategic victors are those who have moved beyond the novelty of generative chat tools and embraced the mechanics of agentic execution.

To succeed in strategic management in this new era, executives must shift to a “digital labor” mindset, where the metric of success is the volume of fully completed tasks, rather than time saved. Corporate governance must evolve to include a company “AI Constitution” that ensures interpretability and accountability. Finally, organizations must view data as raw material for the “AI factory,” recognizing that sustainable advantage lies not in commoditized models, but in proprietary infrastructure and the “scaffolding” that manages them. The time for experimentation has ended; the time for architectural integration has begun.

Data from the World Economic Forum for 2024-2025 confirms that AI is becoming not merely a technological trend, but a factor in the redistribution of global economic value and employment. Companies that view AI exclusively as a means of cost optimization risk falling into the “laggard” category, whereas organizations investing in agentic architecture, workforce reskilling, and corporate AI governance are forging a long-term competitive advantage.

In conditions where tens of millions of jobs will be transformed, strategic management in the era of agentic AI requires a transition from the logic of experiments to the logic of institutional building — of AI factories, digital labor, and augmented corporate governance.

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STRATEGY FOR ENHANCING EMPLOYEE RETENTION IN SRI LANKAN RETAIL ORGANISATIONS THROUGH THE IMPLEMENTATION OF ORGANIZATIONAL MENTAL HEALTH PROGRAMS

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ANOTĀCIJA

Raksts analizē, kā organizāciju garīgās veselības programmas var uzlabot darbinieku noturēšanu mazumtirdzniecībā Šrilankā, īpaši Keells uzņēmumā. Pētījumā konstatēts, ka strukturētu atbalsta sistēmu trūkums veicina kadru mainību. Izmantojot jauktu metožu pieeju, tiek izstrādāta praktiska OMHP stratēģija, kas uzlabo labbūtību, iesaisti un organizācijas stabilitāti.

Atslēgvārdi: Darbinieku noturēšana, Garīgā veselība, Mazumtirdzniecība, Keells, Labbūtība

ABSTRACT

This paper discusses why organizational mental health initiatives are effective in employee retention within the Sri Lankan retail sector with reference to Keells. One of the factors that promote turnover is the absence of a structured mental health support, as identified in the study. The proposed research applies the mixed-method approach to the creation of a practical retention strategy grounded on OMHP, which enhances the well-being, engagement, and organizational stability.

Keywords: Employment Retention, Mental Health Programs, retail sector, Keells, Well-being

INTRODUCTION

The retailing industry in Sri Lanka has evolved very fast as a result of urbanisation, changing consumer demands and increasing competition among the chains such as Keels, Cargills and Arpico. Such demands have put pressure on work, role overload, and customer contact and volatile shifts by frontline employees, making retail workers one of the most psychologically stressed groups in the country [5].

The problem of high turnover, burnout, and work-life conflict has become widely spread, but well-organized mental health programs are still insufficient. This forms a critical mismatch: the absence of formal organisational mental health programmes (OMHPs) among retailers like Keels is part of the reason why these organisations have low levels of psychological safety, escalating levels of stress, and high rates of employee turnover [3].

Turnover is an issue that Keells should focus on as a strategic retention measure as it interferes with the quality of service, increases recruitment expenses, and diminishes organisational knowledge. Evidence on an international level indicates that EAPs are one of the most effective interventions that enhance employee engagement and retention, MHFA training, PSC frameworks and flexible work systems are among the methods, but these are not localised to Sri Lanka.

Research question

What is the relationship between organizational mental health and employee retention at Keells Holdings Plc?

Research aim

To examine the relationship between organizational mental health practices and employee retention at Keells Holdings Plc.

Thus, the research strategy is to work out the strategy to improve employee retention in the Sri Lankan retail based on the effective implementation of OMHP. The mixed-methods design was adopted with the survey of 200 employees at Keells and the qualitative analysis of the HR policies, exit interviews and national labour reports. The triangulation enhanced validity, which showed that mental health support has a critical influence on employee commitment and long-term retention factors in the retail industry.

BASIC THEORETICAL AND PRACTICAL PROVISION

Organisational Mental Health Programs (OMHPs) is based on the JD-R Model and Psychosocial Safety Climate (PSC) to elucidate the effect of stressors at work on retention [1]. Primary prevention measures, which are job redesign, flexible schedules, and better work environments, as illustrated in Figure 1.1 minimize job demands and avoid strain.

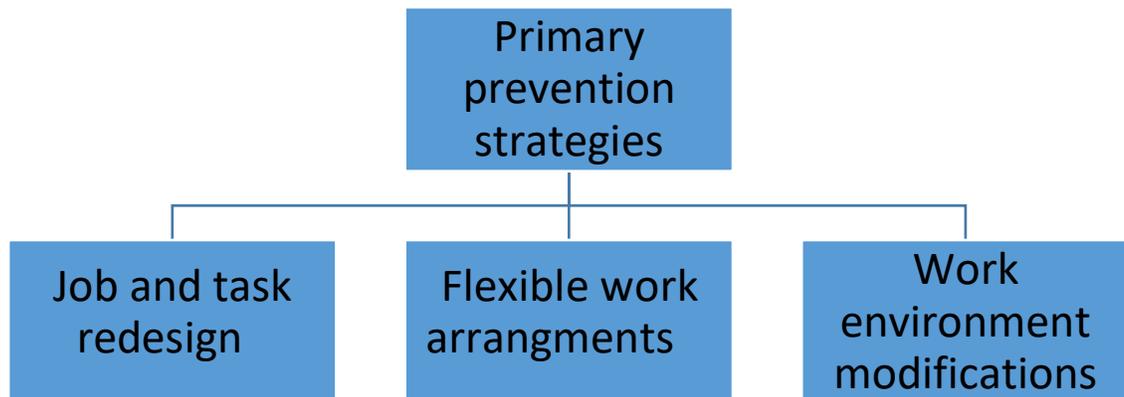


Figure 1. 1. Elements of primary prevention in organizational mental health (Developed by the author, source: (Schaufeli & Bakker, 2004))

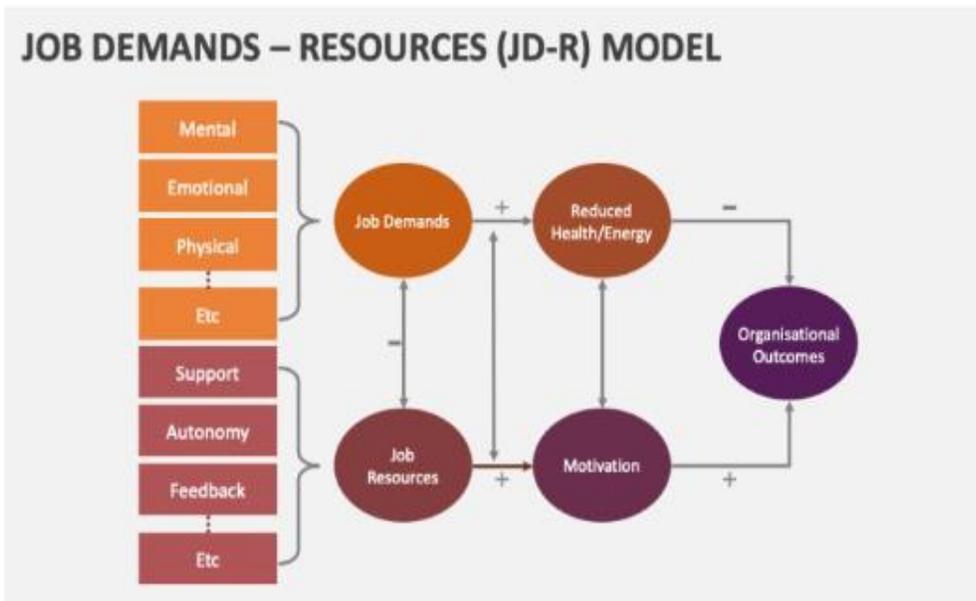


Figure 1. 2. Job demands- resources (JD-R) model (Conway & Briner, 2005)

Figure 1.2 (JD-R model) depicts that excessive demands cause burnout whereas job resources facilitate engagement and retention. As it has been shown by the PSC framework, the existence of psychological safety which is facilitated by the leadership commitment, supportive policies, and open communication allows OMHPs to operate successfully.

These theories combined indicate that properly designed mental health initiatives enhance the well-being of employees, commitment, and turnover within the retail setting like Keells is greatly reduced.

RESEARCH RESULTS AND THEIR EVALUATION

The results of this study are good indications that organizational mental health variables are some of the strongest factors that affect employee engagement and consequently retention at Keells Holdings PLC. Demographic trends include the fact that the workforce of the organization is mostly young and at the early stages of their careers with 75 percent of employees being younger than 35 years. The group is generally more vulnerable to work-life imbalance, unpredictable shifts as well as lack of support-factors that expose them to burnout. Employing an overpopulated employee base in Sales and Store Operations additionally increases the dose of customer stress, emotional labour, and physically challenging jobs, which supports the necessity of interventions in mental health specific to this case.

The table 1.1 the model summary (Developed by the author)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.878 ^a	.772	.769	.4607936207

a. Predictors: (Constant), Career Development Opportunities, Work-Life Balance , Leadership Support, Job Satisfaction

These demographic observations are supported by regression findings. The model shown above has a value of $R = 0.878$ and an $R^2 = 0.772$, indicating that the work factors related to mental health explain the variation in employee engagement more than 77% together. This is a very high degree of explanatory power of behavioral study, which implies that the involvement in the Keells Holdings PLC is heavily influenced by job satisfaction, the support of leaders, working-life balance, and career development. These results are directly consistent with the JD-R model, which supposes that job demands are compensated by job resources and increase motivation.

Table 1.2 ANOVA table (Developed by the author)

ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	211.692	4	52.923	249.248	.000 ^b
	Residual	62.638	295	.212		
	Total	274.330	299			

a. Dependent Variable: Employee Engagement

b. Predictors: (Constant), Career Development Opportunities, Work-Life Balance , Leadership Support, Job Satisfaction

The results of ANOVA prove the overall significance of the model ($F = 249.248$, $p < 0.001$). This shows that the predictors set, which is a core of dimensions of OMHPs, has a significant and valid impact on engagement. This means that mental health is not a fringe HR issue, but is proven to be a statistically significant predictor of employee performance in Keells Holdings PLC.

Table 1.3 coefficient table (Developed by the author)

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.080	.110		-.727	.468
	Job Satisfaction	.238	.064	.240	3.697	.000
	Leadership Support	.323	.060	.311	5.427	.000
	Work-Life Balance	.302	.061	.267	4.912	.000
	Career Development Opportunities	.154	.059	.128	2.598	.010

a. Dependent Variable: Employee Engagement

Moreover, the coefficient analysis indicates that the strongest predictor is the leadership support ($b = 0.311$) and then the job satisfaction and work-life balance. This means that workers are motivated better by supervisors who are helpful, understanding and flexible schedules, which are all necessary elements of good OMHPs. Although smaller in impact, career development is still important and supports the need of growth opportunities to enhance long-term retention.

Combined, these evidences prove the fact that mental health interventions are measurably, and significantly effective at affecting engagement and also play a critical role in the creation of an effective retention strategy at Keells Holdings PLC.

CONCLUSION

This paper has shown that organizational mental health programs (OMHPs) are very important in reinforcing staff retentions within the retail organisations like Keells. The results indicate that high job demands, low levels of emotional support, and poor psychosocial safety climates are some of the factors that lead to stress, burnout, and turnover intentions. On the other hand, supportive leadership, flexible working hours, effective communication, and mental health service are of great support and will assist in keeping the employees committed to the organisation.

Relied on these findings, it can be suggested that Keells should introduce a structured OMHP model, which involves Employee Assistance Programs, Mental Health First Aid (MHFA) training of managers, participatory wellness strategy, and strong communication habits. The additional measures to help long-term retention will be to strengthen career development pathways and gender-inclusive policies. Nevertheless, the research does not lack limitations. The study is also restricted to the employees working in one geographical region, and this will limit the generalizability to all Keells stores throughout Sri Lanka. Self-reported survey data can also be biased even though anonymity is expected. Longitudinal data, inter-company comparisons, and qualitative interviews need to be researched in future to enhance the knowledge on how particular OMHP components contribute towards retention in the long-term. On the whole, the study confirms the strategic significance of mental health as a key to the workforce stability and organizational sustainability.

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**FINANSES UN EKONOMIKA ILGTSPĒJĪGAI
NĀKOTNEI**

**FINANCE AND ECONOMICS FOR
SUSTAINABLE FUTURE**

ARTIFICIAL INTELLIGENCE (AI) IN FINTECH AND BANKING: PROS AND CONS

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ABSTRACT

This article analyzes the impact of artificial intelligence on the financial technology sector and the banking industry. It examines the economic impact of AI technology implementation, the transformation of professional roles, and the systemic risks of digitalization of financial services. It presents quantitative forecasts for AI market growth in fintech, estimates of potential reductions in operating expenses, and changes in the employment structure. Particular attention is given to a comparative analysis of the benefits and risks of AI transformation, which requires the development of a balanced strategy for managing the technological transition.

Keywords: Artificial intelligence AI, FinTech, banking industry, digital transformation, automation, labor market, quantum banking, agent-based models, hyperpersonalization, quantum-native finance

"AI will be smarter than entire humanity by 2029"

Elon Musk

INTRODUCTION

Artificial intelligence (AI) is one of the most transformative technologies of the past few years, influencing not only economic processes but also social institutions, legal systems, and cultural patterns. The banking and financial sectors, traditionally early adopters of technological innovation, are at the forefront of these transformations.

According to a PwC study, AI could add up to 15,7 trillion USD to the global economy by 2030, exceeding the combined GDP of China and India [1,10,11,12]. The past three years (2023–2025) provide an opportunity to conduct a preliminary analysis of the benefits and risks of implementing AI in FinTech and the banking industry, as well as assess the socioeconomic consequences of the ongoing transformation.

The market for AI solutions in the financial technology sector is demonstrating exponential growth. According to Market Data Forecast, the global fintech market will grow from 209,74 billion USD in 2024 to 1583,05 billion USD by 2033, with a compound annual growth rate (CAGR) of 25.18% [2,3].

For the banking sector, forecasts are also optimistic, with McKinsey estimating that generative AI could generate up to 340 billion USD in additional annual value for the banking industry. These figures demonstrate AI's transformation from a niche solution to a core technology platform for the financial industry.

Even over the past three years, it's clear that banking institutions and fintech companies are moving from pilot operations to mass implementation and system integration [4,5,6]:

- 92% of banks are using AI in at least one key function;
- 78% of organizations are already using AI in business functions;

- 75% of UK financial services companies have implemented AI, with another 10% planning to do so in the next three years;

- 91% of financial services companies are evaluating or have already implemented AI in their products .

Increasingly, companies and banks are defining themselves as "AI-native organizations".

The most obvious benefit of AI technologies is increased operational efficiency. McKinsey & Company estimates that artificial intelligence has the potential to reduce banks' operating costs by 22% by 2030, equivalent to savings of approximately 1 trillion USD globally. This study shows that AI could increase banks' pre-tax profits by 12-17% by 2027, adding approximately 180 billion USD to their total profits [7,8,9].

This effect is achieved through:

1. automation of data processing and document flow;
2. optimization of transaction timing;
3. reduction in operational errors;
4. improved forecasting and risk management accuracy.

A study by the Bank of England and the FCA showed that 75% of UK financial companies have already implemented AI (compared to 58% in 2022 and 14% in 2019), with another 10% planning to do so in the next three years. Among insurance companies, the figure reaches 95%, and among international banks, 94% [5,6].

The technologies themselves and their development are quite expensive, creating the risk of monopolization by a group of large market players to whom these technologies (algorithms, Big Data, and computing power) are available, and "others" to whom the technologies will become available as they become cheaper. This creates the conditions for:

1. increasing economic inequality between leading and lagging companies;
2. widening the gap between qualified AI specialists and the rest of the workforce
3. formation of oligopolies in the fintech sector.

Technological leadership in AI is becoming a factor in geopolitical dominance, including through state-owned banking corporations and the provision of Big Data technologies, algorithms, and capabilities to financial institutions (which may be largely centralized, as in China).

Accordingly, in this area (AI implementation), intense competition will arise at the state and corporate levels for:

1. control over data and computing resources;
2. development of global AI standards;
3. attracting talent in the field of artificial intelligence.

The financial sector, as critical infrastructure for the economy of any independent state, finds itself at the center of this competition. Differences in regulatory approaches, technological capabilities, and ethical standards could lead to the fragmentation of the global financial system. While the simplest solution over the past decade and a half was to ban certain operations or activities in FinTech or the DeFi world, technological advancement and the power of AI have now reached such a level that a technological race of sorts is emerging in this area. This is evident in politicians' statements about crypto assets, in the actions of regulators (the active implementation of CBDCs and the development of the legislative framework MiCA, DORA, the EU AI Act, and so on), in the industry's capitalization, and in expert engagement. Woe to those who missed out on this train.

ChatGPT, which gained widespread adoption in early 2023, became a hyper-popular tool in just a few months, giving rise to a whole host of similar tools developed by their creators to solve more specialized problems. Currently, there are dozens of such solutions.

At the same time, according to experts at consulting firms, this tool is a kind of Henry Ford "Model T," and the transformation into a modern BMW, Porsche, or Tesla will be significantly

faster than the same evolutionary process in the 20th century. We're talking about years, not decades. And it's quite possible that in the coming years, "Industry 6.0" will be announced, based on quantum computing.

Are experts in various fields (including banking and finance) prepared not only for the scale of possible transformations, but also for the dynamics of these changes, as AI will rewrite civilization. The implementation of AI affects fundamental aspects of the functioning of society: methods of learning, communication, decision-making, the formation of meanings and cultural values, as shown in Table 1. In the context of financial services, this manifests itself in a radical rethinking of business models, operational processes, and professional competencies.

Table 1

AI will rewrite Civilisation	
Value Creation	Human Identity
Productivity Jumps	How we will learn
Restructuring entire professions	How we will communicate
Value shift to those who own AI, data and computing power	How we will make decisions
	How we will form meaning and culture
Legal Systems	Geopolitical Dominance
Re-engineering:	Autonomous drones
- Laws	Autonomous cyber attacks
- Values	Real-time battlefield intelligence
- Rights	
- Governance	

Source: PWC (2025). The Luxembourg Mind Geopolitical Symposium 2025. Dariush Yazdani, Partner, PwC Luxembourg

One possible response, in terms of influence or, conversely, lack of influence in the legal field, could be the European Commission report "Industry 5.0: Towards a sustainable, human-centric, and resilient European industry," published several years before the active promotion of AI solutions.

The general idea of this study was that humanity is entering a new stage, "Industrial Revolution 5.0," the main difference being a paradigm shift: from technology for the sake of developing further technology to technology for people and the planet. While Industry 4.0 sought to replace humans with technological solutions where possible (digitalization and automation of existing processes), Industry 5.0 aims to create synergy between human capabilities and the growing capabilities of technology (a harmonious combination of technological processes, human needs, and environmental sustainability).

The report highlights three key characteristics [13]:

1. Human-centricity – industry should serve people, not the other way around. This includes improving working conditions, developing worker skills, and creating jobs that complement human capabilities with technology.
2. Sustainability – industrial production should adhere to planetary boundaries, utilize circular business models, and strive for carbon neutrality.
3. Resilience – the ability to adapt to crises and unexpected changes, as demonstrated by the COVID-19 pandemic.

A comparison of the characteristics of Industrial Revolution 5.0 with previous stages is presented in Table 2.

Table 2**Comparative Characteristics of Industrial Revolution 4.0 vs Industrial Revolution 5.0**

Characteristic	Industrial Revolution 4.0	Industrial Revolution 5.0
Timeframe	2010s – present	2020s – future
Core Concept	Digitalisation and production automation	Human-centric production with sustainable development
Key Technologies	IoT, AI, big data, cloud computing, robotics, 3D printing, blockchain	Collaborative robotics (cobots), augmented AI, biotechnology, quantum computing, neural interfaces
Focus	Efficiency, automation, system connectivity	Sustainability, personalisation, human wellbeing
Human Role	Partial human replacement by machines	Human-machine collaboration, augmentation of human capabilities
Production Goals	Mass production, process optimisation	Customised production, circular economy
Environmental Aspect	Energy efficiency as by-product	Sustainable development as main goal
Social Direction	Technological progress	Addressing social problems and improving quality of life
Human-Machine Interaction	Humans operate smart machines	Human-machine symbiosis
Production Model	Smart factories, digital twins	Adaptive, flexible production ecosystems
Innovation Approach	Technological innovations	Socio-technological innovations
Data Management	Big data collection and analysis	Ethical data usage considering privacy
Personalisation	Mass customisation	Complete product and service personalisation
Economic Model	Digital economy	Sharing and sustainability economy
Skills of Experts	Digital and technical competencies	Creativity, emotional intelligence, systems thinking

Source: Author's development [13, 14]

Thus, according to the authors, Industry 5.0 should not replace Industry 4.0, but rather a complementary development that brings new values. And of course, European industry, including banking and financial services, should become leaders not only in technology but also in the humanistic approach to its application. But is this true when it comes to implementing advanced technologies and AI?

It was assumed that both Industry 4.0 and, even more so, Industry 5.0 would replace routine, arduous tasks. However, as practice shows, the professions most at risk of complete replacement are those requiring relatively high qualifications and education (professional training to an expert level requires 2-3 years of study and several years of professional work in the field):

1. Accountant;
2. Operations Control Specialist and Back Officers
3. Risk Manager

4. Compliance Control
5. Market Analyst
6. Investment Project Manager
7. Project Manager

The scale of potential job losses is a serious concern. This is why, in March 2023, the Future of Life NGO published an open letter calling for more accountability and control over the implementation of AI, and perhaps a pause in the deployment of advanced AI systems to allow for the ability to predict scenarios, risks, and consequences. The letter was signed by hundreds of experts and business leaders, including Apple co-founder Steve Wozniak and Tesla founder Elon Musk. The letter's overall message can be summarized as follows: "Modern AI systems are capable of competing with humans at some tasks, and we must ask ourselves these questions... Should we automate all jobs?" [15].

The Norwegian Sovereign Wealth Fund issued a similar appeal, calling for a responsible approach to the threats posed by the widespread adoption of AI. The fund stated that systems must be created "consistent with people's values and intentions" and that the potential "long-term impact on jobs and human capital management" must be responsibly assessed [16]. Looking at the situation globally, the World Economic Forum's forecasts indicate that over the next five years, AI implementation will eliminate 83 million jobs, creating 69 million new ones (i.e., 14 million fewer than it will destroy) in 2023. And the new more optimistic scenario in 2025: global technological and economic trends are expected to generate 170 million new jobs, while approximately 92 million existing roles will be displaced by automation and AI [17,18]

According to a Bloomberg Intelligence survey conducted in early 2025, based on a survey of CIOs and CTOs at 93 major banks, AI could eliminate up to 200,000 jobs at global banks within 3-5 years. Goldman Sachs predicts automation, followed by AI replacement, of over 300 million jobs [19]. On average, banks expect a 3% workforce reduction, with nearly a quarter of respondents predicting deeper cuts of 5-10% [6,20].

A Citigroup study shows that 54% of banking roles are at high risk of automation, more than in any other sector. Another 12% could be partially automated or augmented by AI. As noted, the most vulnerable positions are in back-office, middle-office, and operational functions, as well as in customer service and compliance [20].

Accenture estimates that 73% of US bank employees' time could be impacted by generative AI [4].

JPMorgan Chase CEO Jamie Dimon emphasizes the need to develop competencies that AI cannot replace:

1. Critical thinking;
2. Emotional intelligence;
3. Communication skills.

The positive aspect is that along with the reduction comes a transformation, but not a complete job destruction. According to McKinsey research, 44% of banking tasks will be reimaged by 2030 [8,9].

Employees are being redeployed from routine operations to solving complex problems:

1. Lawyers are moving from document analysis to strategy development;
2. Analysts are shifting their focus from data preparation to data interpretation;
3. Call center operators are focusing on complex queries instead of FAQs;
4. Compliance & AML officers are focusing on analyzing the essence of cases rather than analyzing primary documents.

Researchers from the Massachusetts Institute of Technology have expressed a positive assessment of the prospects, pointing out that AI will make work faster and more productive rather than completely eliminating human involvement. Their research showed that the use of AI can

speed up programmers' coding work by 56%, while professional writing will become 40% faster and 18% better quality [21].

At the same time, new professional roles are emerging: AI trainers, AI ethicists, prompt engineers, and data managers.

But given the number of potentially lost jobs (highly skilled specialists) and the time needed for retraining, potential social problems are unavoidable. Added to this is the aging population, one of the downsides of which is the greater time and energy required to retrain people aged 60 and older.

This is confirmed by the fact that the precariat is beginning to transform: increasingly, this new class includes people with higher education and high qualifications. By the precariat (precarious – unstable, unsustainable, combined with the definition of the proletariat), British economist Guy Standing, who coined the term, defines a new class characterized by a lack of permanent employment, truncated social guarantees, and civic rights.

Furthermore, most experts are highly skeptical about the ability of educational systems and corporate training programs to adapt to the pace and depth of technological change.

Continuing with the topic of the legal component in the development of AI in finance, it can be noted that, in addition to legal ones, ethical norms are also being added to the relationship between humans, AI, and the banking business. The implementation of AI requires a radical rethinking of the legal framework:

1. mechanisms for attributing responsibility for algorithmic decisions;
2. regulating the use of personal data;
3. ensuring the transparency and explainability of AI systems;
4. preventing algorithmic discrimination.

Regulators in different jurisdictions offer different approaches, from the precautionary principle in the EU to the laissez-faire approach, which creates risks of regulatory arbitrage and fragmentation of the global financial market.

A full analysis is impossible without considering technological aspects and the opportunities and risks they create. The introduction of AI is catalyzing the emergence of fundamentally new approaches to financial services, which impact the industry not only through the development of new financial instruments and products, but also through fundamentally new business models. These include:

1. Hyper-personalization. Machine learning algorithms enable the creation of individualized financial products tailored to the specific needs, behavioral patterns, and risk profiles of clients. Experts expect that banks will transform from a "single product" format into an anagram of personalized services, customized by AI for the client. This AI will generate "financial avatars" (LLM models that simulate client behavior and optimize their finances). Clearly, personalized pricing and budgeting will come under control, as will tools that meet the current client's interests (loans, investment portfolios, insurance policies).

2. RegTech and AI compliance. AI-powered regulatory technologies provide automated, continuous compliance monitoring, suspicious transaction detection, and regulatory risk management in real time:

- AML, Compliance (KYC and so on) based on biometrics and behavioral models;
- Self-driving compliance: control systems detect regulatory risks and alert the financial institution and/or client.

It is expected that 80-90 percent of false alerts will disappear thanks to models with deep internal analysis.

3. Banking-as-Code. The "banking-as-code" paradigm implies a modular architecture for financial services, allowing banking functions to be embedded into arbitrary digital ecosystems via APIs and programmed. Thus, in the near future, clients will likely be able to:

- Set up automated investment portfolio formation and management;
- Automate the rules of their financial behavior (risks, budget, etc.);
- Use personal financial advisors – bots.

4. Autonomous markets. Agent-based models based on AI are transforming financial markets, enabling algorithmic trading without human intervention and creating new pricing and liquidity mechanisms. The most fundamental transformations are expected to affect the stock market:

- Most transactions (experts indicate over 80%) will be generated by AI systems, not humans;
- Exchanges will implement AI platforms to monitor manipulation and systemic risks;
- Regulators will move from post-factum reporting to real-time supervision. During these transformations, financial markets will become networks of autonomous agents interacting with each other. This will primarily change the role of humans—professional traders and analysts—into professionals who will perform their professional activities in conjunction with AI. The next generation of AI will not simply predict prices; it will make decisions independently, using algorithmic analysis based on fundamental, news, and social parameters. McKinsey estimates that by 2030, more than 50% of all hedge funds will be managed entirely by autonomous agents [8,9].

Table 3

Agentic AI vs Gen AI in Finance

Feature	Generative AI	Agentic AI
Primary role	Creates content like reports or summaries	Executes finance tasks autonomously
How it works	Responds to prompts using language models	Uses logic, memory, and reasoning to act on goals
Finance example	Drafts a budget commentary	Fixes reconciliation issues proactively
Limitations	Needs human input and context	Works independently, with oversight
Best fit	Report writing, virtual assistants	Cash forecasting, close, anomaly detection

Source: Soumi Sarkar (2025) Agentic AI in Finance: Everything You Need To Know [22]

Thus, by this time, financial systems will become ecosystems of AI agents, where humans set goals and AI executes them autonomously. Banks will then act as platforms that act as custodians of capital, providers of necessary licenses and regulatory-required infrastructure, in other words, primarily as operational services. Humans themselves will be augmented by AI assistants: AI as investment agents; AI as personal finance and budgeting agents; AI as insurance agents, etc.

Clearly, the growth of technology creates a similar risk of frauds. It must be acknowledged that, despite living and working outside the law, representatives of this "industry" are highly skilled professionals who pose a corresponding level of threat. Statistics on the growth of targeted fraud and the use of AI in such cases are alarming:

1. Voice and video fraud [23, 24, 25]:

- More than 70% of cases involving biometric (voice) fraud confirm that they were unable to distinguish a voice generated by fraudulent AI from a real voice
- The number of registered cases of voice fraud increased by more than 600% from 2023 to 2024.

- According to experts, the cost of generating a "clone voice" similar to the original has significantly decreased to 1-5 USD, and the time for such generation has decreased to 30 seconds.

- 2024 was a record year for damages from video fraud. Losses in the corporate sector exceed 1 billion USD, according to estimates from the insurance and cybersecurity industries.

- More than 100,000 new fake videos appear online every month, more than 85% of which are created for fraudulent purposes. The most common are statements from socially recognizable and significant individuals (politicians, executives of large businesses, or financial institutions) who are used to advertise or make deliberately false forecasts. Losses from such fraud amount to tens of millions of US dollars.

2. Financial and banking AI fakes and fraud. Fraudsters are using AI in social engineering: phishing schemes, where requests or emails are generated by AI based on an analysis of the potential victim's social media profile, etc. Experts estimate that such schemes account for at least 35% of all "social engineering" fraud and continue to grow rapidly [26].

A separate element of AI-based fraud is the attempt to bypass compliance and AML controls. Experts claim that one in three banks in the US and Europe has encountered such cases (generating false information, fake videos and voices using stolen documents, and much more).

Classic, systemic risks are also growing, given the increasing automation of financial markets and banking operations:

1. Autonomous cyberattacks. AI systems can be used to conduct adaptive cyberattacks capable of bypassing traditional defense mechanisms.

2. Algorithmic opacity. The "black box" nature of complex machine learning models complicates decision auditing and attribution.

3. Systemic failures. Interconnected AI systems can cause cascading failures and flash crashes in financial markets.

4. Disappearance of traditional checks. The automation of the role of traders and analysts eliminates the human factor, which traditionally served as a buffer against irrational decisions.

5. Systemic "hallucinations" of AI, which often take the form of independently generated information that is not truthful or verified. This risk has already led to litigation. The reason for this is primarily the very logic of AI development, which actively utilizes all the information provided by the internet and available Big Data providers, often unverified.

This is why, in one of his interviews, Elon Musk, a champion of innovative technologies, expressed his concern about the uncontrolled development and use of AI. In his view, powerful breakthrough technologies always carry risks if they rely on distorted data: AI grows and develops on information from the internet and absorbs falsehoods as easily as real facts. Because of this, systems confuse reality and draw conclusions that can be not only irrelevant but often dangerous. In his opinion, safe AI systems must rely on three fundamental pillars: truth, aesthetics, and curiosity about how the world works. AI should strive to understand reality and help people, not push technology toward destruction [27].

This is one reason why the uncertainty surrounding so-called convergent technologies, which will apparently underpin Industry 6.0, is both curious and troubling. It will likely be a combination of AI and other breakthrough technologies, particularly quantum computing [28].

If AI makes information instantaneous, cheap, and distributed, then quantum computing and the AI built on it will enable the simultaneous analysis of millions of combinations.

It's difficult to predict how, for example, the traditional stock market will be transformed, even if it is largely comprised of AI agents. Clearly, analysis time will be reduced, analysis could be more multifactorial (as will risk management), and it's quite possible that this format will allow for the discovery of relationships inaccessible to modern investment banking and the construction of speculative models based on them. The derivatives market will become more predictable and potentially less risky.

It can be assumed that such a symbiosis will effectively shift risk control and stress testing into real-time, changing the functionality of bank treasuries and the work of regulatory bodies.

At the same time, the emergence of such solutions also carries obvious risks, among which experts highlight:

1. hacking of existing cryptographic systems and standards (causing vulnerabilities in banking systems, SWIFT, etc.);
2. a qualitative leap in the speed and complexity of financial modeling;
3. the emergence of unpredictable systemic effects (hallucinations, incomprehensible algorithms, lack of transparency in quantum models, etc.)
4. the risk of unequal access to technology (government – financial institution – client)
5. the risk of a full spectrum of cyber threats
6. the unpreparedness of regulators for this business format (as well as a lag in response to issues of using AI and cryptoassets)

At the same time, experts estimate the timeframe for the emergence of quantum-native finance to be 2035-2040. And it is quite possible that we will quite quickly enter the age of Industry 7.0, where a “financial singularity” will occur, when AI will overtake humans in its capabilities.

CONCLUSION

Artificial intelligence in fintech and banking represents more than just a technological upgrade, but a fundamental transformation of the industry with far-reaching socioeconomic consequences, some of which are difficult to predict.

The obvious benefits of AI include increased efficiency, cost reduction, and the creation of innovative products and services. Projected savings of 1 trillion USD by 2030 and market growth to hundreds of billions of dollars create powerful incentives for continued AI transformation. The prospects for financial use are more than obvious, even without taking into account the aspects – issues – identified by the author in Table 1.

All of these advantages are accompanied by serious systemic and non-systemic risks:

1. structural unemployment and institutional unwillingness to counter it. The decline of the middle class (including skilled and highly skilled experts) to the precariat;
2. the concentration of economic power, uneven access to technology;
3. A critical increase in AI-enabled fraud;
4. Systemic vulnerabilities and the need to rethink legal and ethical frameworks. Legal services at the level of intergovernmental institutions, government agencies, and financial institutions are clearly lagging the scale and speed of transformations due to AI implementation;
5. The scale of potential job losses (up to 200,000 in the global banking sector) and the share of automated roles (54%) require proactive transition management strategies.

The uncertainty of converging technologies (quantum computing in banking), which are likely to become a reality in the coming years as part of Industry 6.0, also raises a high level of concern. This is why leading business leaders and experts are proposing a more thoughtful and regulated implementation of technology in human life (in terms of approach, timing, and legally sound and binding actions). Successful integration of AI into the financial sector requires a balanced approach that combines technological innovation with social responsibility, economic efficiency with inclusiveness, and the pursuit of competitive advantage with the management of systemic risks.

At the level of government regulators:

1. Developing adaptive regulatory frameworks;
2. Requirements for the explainability of AI systems;
3. Standards for testing, implementation, and auditing of algorithms;

4. International regulatory coordination.

At the societal level:

1. Reforming education systems;
2. Creating effective social protection mechanisms;
3. Public dialogue on AI ethics (legally formalized and at the level of a "social contract");
4. Ensuring inclusive technological development.

At the level of financial institutions:

1. Investing in employee retraining programs;
2. Developing a culture of responsible AI use (including ethical standards);
3. Ensuring transparency of algorithmic decisions;

To minimize the risks and maximize the benefits of AI transformation, actions are needed that seem completely obvious, but are impossible to implement in the short term. The average regulatory development time (1-3 years) lags behind innovation cycles (6-12 months).

The lack of technical expertise, fragmented legislative approaches, and legal uncertainty regarding intellectual property, liability, and cross-border data management all, contribute to the pessimism about rapid response and the dynamism of implementation that won't harm people.

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DECENTRALIZED FINANCE (DeFi): PROMISING SOLUTIONS AND CONTEMPORARY RISKS

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ABSTRACT

The article analyzes the stages of development of the Decentralized Finance (DeFi) sector and the factors that make DeFi attractive for investment. The purpose of the study is to examine how DeFi has evolved from an experimental area of the blockchain economy into an important element of the global financial system. Particular attention is paid to the risks that accompany the process of DeFi's transformation.

The DeFi sector is of interest for two reasons. The first reason is technology. The second reason is the scale of investment and the presence of a high-tech, rapidly growing infrastructure. As with any emerging technology, DeFi demonstrates rapid growth alongside significant risks.

In the course of the study, the structure of DeFi is examined at the architectural level, key areas of DeFi integration with the financial sector are identified, and the reasons for the growing interest of investors in DeFi are analyzed.

The article provides an analysis of the specific risks of the industry in conjunction with the stages of development of decentralized finance (2017–2025) and proposes trends aimed at risk mitigation and the further development of the industry.

DeFi is defined as an important investment sector of the financial infrastructure, considered not as an alternative to the existing financial system, but as a technological foundation for its gradual transformation, provided that risk management mechanisms and regulation continue to develop.

Keywords: decentralized finance DeFi; financial infrastructure; tokenization; systemic risk; regulation; blockchain, Total Value Locked (TVL), DEX, RWA, Regulation on Markets in Crypto-Assets (MiCA), DAO, TradFi

INTRODUCTION

Decentralized Finance (DeFi) can be defined as a system of financial applications built on public blockchains, in which core financial functions — such as trading, lending, settlement, and asset management — are performed through smart contracts rather than centralized intermediaries. Within this model, ownership rights, enforcement of obligations, and risk management are encoded directly into software, while transparency and accessibility are ensured by the public nature of the underlying ledger [5].

Over the past five years, DeFi has ceased to be merely an experiment within the cryptoasset industry. It has become a noticeable component of the financial system, as evidenced by growing

performance indicators. Total Value Locked (TVL) — the aggregate value of assets locked in DeFi protocols — has increased, new protocols have emerged, and major market participants have begun testing DeFi capabilities.

According to various sources, the size of the decentralized finance market amounted to:

- USD 46.6 billion in 2024, with a projected increase to USD 78.5 billion by 2029, at a compound annual growth rate of over 10.9% (2024–2029) under the baseline scenario [6];
- USD 71 billion in 2024, with expectations of growth to USD 457 billion by 2032, reflecting significant potential for the technological and institutional integration of DeFi into the financial agenda [7].

The overall dynamics based on the TVL indicator can be presented in tabular form:

Table 1.

Dynamics of sector growth and integration

	2017 - 2019	2020 - 2021	2022 - 2023	2024 - 2025
TVL, USD billion	Less than 1	More than 200		100 - 150
Technologies and integration	Pilot operation of DeFi	Hypergrowth. Decentralized exchanges, lending protocols, and yield programs	Market downturn, stablecoin-related issues, and reduced liquidity	Mature stage

Source: compiled by the author based on data from [5,7,14,19]

Traditionally, the United States holds leading positions, accounting for approximately 36% of the market share of the DeFi technology market by value [7]. With regard to the European Union, statistics for this bloc indicate that Total Value Locked (TVL) in DeFi protocols increased from EUR 45 billion in December 2023 to nearly EUR 114 billion by the end of 2024, reflecting a rapid growth in capitalization.

All of this underscores that DeFi is perceived not only as a speculative component but also as financial infrastructure [5]. The DeFi sector is often referred to as an alternative to traditional finance and, at times, as a source of heightened risks and instability. Such a perspective frequently deters potential investors, as it does not always explain why DeFi continues to grow and attract

capital even amid crises, hacks, and regulatory pressure. For this reason, investors consistently face the question of which characteristics of DeFi currently make this sector attractive for investment and which aspects should be treated with caution.

This analysis is particularly important given that, in recent years, DeFi has increasingly begun to integrate with the traditional financial sector. Decentralized exchanges, on-chain lending markets, and the tokenization of real-world assets are being used more frequently in institutional experiments and within regulatory frameworks. The Monetary Authority of Singapore (MAS) is testing DeFi mechanisms within the framework of Project Guardian [17]. The Bank for International Settlements (BIS) analyzes systemic risks associated with DeFi in its quarterly reviews, while the European Union, through MiCA (Regulation on Markets in Crypto-Assets, adopted in April 2023), is establishing a legal framework for integrating real-world assets (RWA) and stablecoins into its financial system.

At the same time, international organizations such as the International Monetary Fund (IMF), the Financial Stability Board (FSB), the International Organization of Securities Commissions (IOSCO), as well as financial regulators, increasingly view DeFi as a potential source of systemic risk.

In order to identify and highlight the defining characteristics of DeFi that, first, enable this sector to develop and attract investors, and, second, determine which risks emerge as DeFi scales, it is necessary to systematize and examine the main pathways of DeFi integration into the financial sector and to compare the dynamics of DeFi development with changes in key risks. A critical task is the development of proposals and solutions aimed at controlling and mitigating emerging risks.

Only such analysis and understanding will allow a potential investor to assess the level of risk, determine the risk–return ratio, and make a responsible investment decision.

BASIC THEORETICAL AND PRACTICAL PROVISION

Decentralized Finance (DeFi), as already emphasized, is a distinct sector of the crypto industry in which financial instruments — trading, lending, settlement, and asset management — are developed. All these instruments operate through technological solutions built on smart contracts and blockchains rather than through centralized institutions. This constitutes the fundamental difference between DeFi and the conventional financial system. Unlike traditional finance, where functions are rigidly tied to specific institutions, DeFi represents a structure of multi-layered, interconnected protocols that can be combined with one another (a property commonly described as “composability”) [13]. Interaction among these layers generates both innovation and systemic risk, which is why an understanding of the architecture—even at a high level — is critically important.

Let us imagine the DeFi architecture as a nine-layer system Fig. 1:

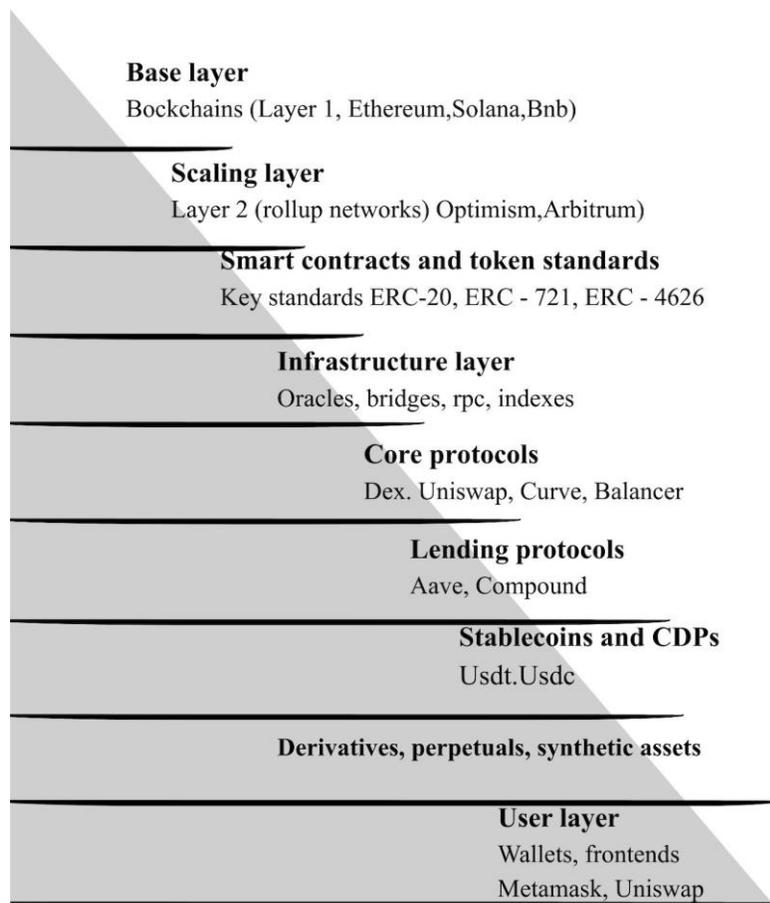


Fig.1 Decentralized Finance DeFi architecture [9]

Each architectural layer requires brief description:

1. Base layer: public blockchains. The base layer plays a role analogous to that of central securities depositories and payment systems in traditional finance [13]. However, unlike proprietary infrastructures, public blockchains provide universal access and transparent settlement rules. At the same time, congestion, limited throughput, and fee volatility at the base layer directly affect the performance and usability of higher-level DeFi applications.

DeFi is built on permissionless public blockchains such as Ethereum, Solana, and BNB Chain. These networks provide consensus, transaction ordering, final settlement, and data availability. Ethereum remains the dominant base layer for DeFi in terms of total value locked and developer activity, largely due to its mature smart contract ecosystem, extensive tooling, and first-mover advantage [12]. Other blockchains, such as Solana, emphasize high throughput and low latency, making them attractive for trading-intensive applications.

2. Scaling layer: Layer 2 networks and rollups. To address the scalability challenges of Layer 1 blockchains, DeFi increasingly relies on Layer 2 (L2) solutions, such as Optimism, Arbitrum,

and zero-knowledge rollups. These systems execute transactions off-chain and periodically submit compressed proofs or batches of transactions to the base layer. As a result, they inherit the security guarantees of the underlying blockchain while significantly reducing transaction costs and latency.

From an architectural perspective, L2 networks introduce an additional layer of abstraction that improves performance but also adds complexity. Liquidity fragmentation across multiple rollups, reliance on sequencers, and asset transfers via bridges create new coordination and security challenges. These characteristics are particularly important for understanding cross-chain risks and the emergence of bridge vulnerabilities, which are discussed later in the article.

3. Smart contract and token standards layer. The functional core of DeFi is implemented through smart contracts, primarily written in Solidity or similar languages. These contracts encode financial logic such as pricing formulas, collateral requirements, liquidation rules, and governance procedures [16]. Token standards, including ERC-20 for fungible tokens, ERC-721 for non-fungible assets, and ERC-4626 for tokenized vaults, ensure interoperability across protocols.

This standardization constitutes a central element of DeFi composability. Assets and positions created within one protocol can be seamlessly reused as inputs in another, enabling complex strategies such as leveraged yield farming or cross-protocol arbitrage. However, composability also introduces dependency risk: failures or vulnerabilities in a single contract can rapidly propagate across interconnected systems.

4. Infrastructure layer: oracles, bridges, and indexing services. DeFi protocols are unable to access information outside the blockchain environment. As a result, they depend on external infrastructure components to function correctly [22]. Oracles supply price data, interest rates, and reference information required for lending, derivatives, and liquidation logic. Bridges enable the transfer of assets and messages between heterogeneous blockchains and rollups. Indexers and RPC providers facilitate data access, analytics, and user interaction.

This infrastructure layer represents one of the most significant sources of systemic risk in DeFi. Oracle failures or manipulation can trigger large-scale liquidations, while bridge exploits have historically resulted in some of the largest losses within the crypto ecosystem. Unlike base blockchains, these components often rely on smaller validator sets or off-chain trust assumptions, thereby introducing vulnerabilities into an otherwise decentralized system.

5. Core financial protocols layer. Above the infrastructure layer reside the core financial primitives of DeFi. Decentralized exchanges (DEX) employ automated market makers to facilitate spot trading [21]. Lending protocols algorithmically match borrowers and lenders while enforcing collateral constraints. Stablecoin systems provide units of account and liquidity anchors. Derivatives platforms offer perpetual contracts, options, and access to synthetic assets.

Taken together, these protocols replicate many functions of traditional financial markets, but operate under fundamentally different constraints. Risk management is embedded *ex ante* within smart contracts rather than exercised at the discretion of institutions. As a result, market stress manifests through automated liquidations and price feedback loops rather than through human intervention.

6. User and governance layer. At the top of the DeFi stack lies the user and governance layer. End users interact with protocols through non-custodial wallets, web interfaces, aggregators, and automated agents. Governance is typically conducted through Decentralized Autonomous Organizations (DAOs), where token holders vote on protocol parameters, upgrades, and treasury management. Although governance mechanisms are designed to decentralize control, empirical

evidence indicates that voting power is often concentrated in the hands of a small number of participants. This creates tension between decentralized execution and centralized decision-making, a phenomenon frequently described as the “illusion of decentralization”.

At the foundation of the entire system are public Layer 1 and Layer 2 blockchains, which provide consensus, security, and transaction finality. At this level, the technical basis for all subsequent financial operations is established.

Above this lies the smart contract layer and the token standards layer; it is smart contracts and token standards that ensure the interoperability of assets and protocols.

The next layer is the data and interaction infrastructure layer. This infrastructure includes oracles, cross-chain mechanisms, and data access services. While infrastructure connects on-chain systems with external markets and the broader economy, it also introduces new vulnerabilities. Above the infrastructure layer are the core financial protocols, which implement the key functions of DeFi.

Four categories of protocols should be distinguished:

1. decentralized exchanges (DEX). Decentralized exchanges enable on-chain trading and liquidity provision without central intermediaries;
2. lending protocols. Lending protocols create markets for borrowing and deposits, where rules are encoded in software and operate autonomously;
3. real-world assets (RWA) tokenization. Tokenization of real-world assets transfers conventional financial instruments into an on-chain environment and enables new forms of collateralization and settlement;
4. settlement and clearing mechanisms. Settlement and clearing mechanisms make transactions atomic — meaning that all actions occur simultaneously — and experiment with new models of financial interaction.

These categories are the most attractive from an investment perspective; therefore, they are examined in the greatest detail.

This multi-layered architecture helps explain both the strength and the fragility of DeFi. Innovation at higher layers is enabled by improvements at the base and infrastructure layers, while failures or weaknesses at lower layers can propagate upward and disrupt the entire system. As DeFi becomes increasingly integrated with traditional finance, understanding these architectural dependencies becomes essential for assessing systemic risk and regulatory relevance.

To examine the impact of changes in architecture and the institutional environment on the level of Decentralized Finance (DeFi) integration into the financial sector, as well as the evolution of key risks, this study employs a structural–logical analysis based on a comparative approach (comparing key DeFi segments and elements across successive stages of development).

The dynamics of the evolution of decentralized finance make it possible to distinguish several stages — time periods, each of which requires separate consideration.

STAGE I (2015–2020). Emergence and early DeFi protocols. The conceptual roots of DeFi are closely linked to the emergence of Bitcoin, which demonstrated that digital assets can be transferred and stored without reliance on a central authority. However, Bitcoin’s scripting language was intentionally limited and did not support complex financial logic. The launch of Ethereum in 2015–2017 represented a critical turning point, as it enabled developers to encode complex financial contracts directly on the blockchain. As a result, the first DeFi protocols emerged

during the period from 2017 to 2020, establishing foundational design principles that continue to shape the ecosystem. The MakerDAO project introduced the concept of a crypto-collateralized stablecoin (DAI) and demonstrated that credit creation and monetary stability mechanisms can be implemented algorithmically without traditional banking infrastructure [16]. The lending protocol Compound extended this logic by creating algorithmic money markets in which interest rates automatically adjust based on the supply and demand for liquidity [22]. Subsequently, the decentralized exchange Uniswap transformed on-chain trading by introducing automated market makers (AMMs), eliminating the need for order books and enabling continuous, permissionless liquidity provision [16].

Together, these protocols defined several core principles of DeFi:

1. First, permissionless access allows any user or developer to interact with financial contracts without prior approval.
2. Second, composability enables protocols to function as interoperable building blocks — often described as “DeFi legos” — that can be combined into increasingly complex financial strategies.
3. Third, transparency ensures that contract logic, collateral positions, and transaction histories are publicly accessible and auditable in real time.

Early academic studies portrayed DeFi as a radically open alternative to institution-centric finance, emphasizing its potential to eliminate intermediaries and enhance financial accessibility. However, subsequent research has shown that these design choices also introduce new forms of vulnerability [13]. Dependence on volatile collateral, automated liquidation mechanisms, external data oracles, and governance tokens creates feedback loops that differ fundamentally from those observed in traditional financial systems. Importantly, these vulnerabilities are not incidental but are tightly intertwined with the very characteristics — openness, programmability, and composability — that make DeFi innovative.

Thus, even the early evolution of DeFi already contained the seeds of its current development trajectory. The same architectural features that enabled rapid innovation and experimentation also contributed to the emergence of channels of systemic risk and attracted the attention of regulatory authorities. Therefore, an understanding of these conceptual foundations (architecture, technology, and related aspects) is of critical importance for analyzing both the prospects and the limitations of DeFi as it transitions from a crypto-oriented experiment to a component of the global financial infrastructure.

STAGE II (2019–2022). This stage was characterized by an explosive growth in Total Value Locked (TVL), aggressive token-based incentive schemes, and the proliferation of highly composable but fragile financial applications [22, 6]. This early phase of expansion revealed both the innovative potential of DeFi and its structural vulnerabilities, as evidenced by recurring security incidents, liquidity crises, and governance failures.

STAGE III (2022–2023). Following the market downturn of 2022–2023, DeFi entered a phase of consolidation and structural reassessment. Within this relatively short period, the ecosystem underwent a process of selective “maturation,” marked by the survival of core protocols, the emergence of risk-mitigation standards, and a gradual move away from purely speculative use cases. At the same time, notable changes occurred in the composition of DeFi participants: global asset managers, banks, payment networks, and regulators began engaging with blockchain-based financial infrastructure through pilot projects, tokenization initiatives, and regulatory frameworks [17, 6, 7].

STAGE IV (current stage). This stage is characterized by the active involvement of regulatory authorities and key institutional players, including U.S. and EU financial regulators such as the U.S. Securities and Exchange Commission (SEC), the U.S. Commodity Futures Trading Commission (CFTC), the European Securities and Markets Authority (ESMA), and the European Banking Authority (EBA). The introduction of regulatory frameworks has enabled the establishment of unified operational formats combining oversight with technological decentralization. In the European Union, the implementation of the Regulation on Markets in Crypto-Assets (MiCA) introduced clear requirements for stablecoin issuers and crypto-asset service providers. These requirements immediately affected the DeFi market: algorithmic stablecoins lost regulatory support, while fully collateralized stablecoins gained institutional recognition [10, 11]. Thus, it can be concluded that the growth of DeFi shown in Table 1 is driven not by deregulation, but by the introduction of new rules.

It is precisely these stages of development and the current state of DeFi (Stage IV) that raise the fundamental research question motivating this article: to what extent can the analyzed architectural innovations of DeFi — namely programmability, composability, and real-time settlement — provide sustainable solutions to the structural shortcomings of traditional finance, while remaining compatible with financial stability, investor protection, and evolving regulatory regimes?

To answer this question, it is necessary to move beyond prevailing narratives of disruption or replacement (often characteristic of regulatory discourse) and to undertake a more detailed analysis of how specific DeFi functions interact with established financial systems. For this reason, within the scope of this study, DeFi is considered not as a “monolithic” alternative to traditional finance, but as a heterogeneous ecosystem whose components exhibit varying degrees of maturity, adoption, and institutional compatibility.

For the purposes of this analysis, we define the following DeFi use cases:

1. decentralized exchanges (DEX);
2. blockchain-based lending;
3. tokenization of real-world assets (RWA);
4. programmable settlements;
5. stablecoins and payment rails

On the development timeline from 2017 to 2025, we assess their transformation from experimental applications into elements of hybrid financial architectures.

The data summarized in Table 2 demonstrate how DeFi has gradually entered the financial sector at different stages. Table 3 presents the main categories of risks, their real-world manifestations, and mitigation mechanisms.

Table 2.

Comparative Dynamics: Key Directions of DeFi Integration into the Financial Sector (2017–2021 vs 2024–2025)

DeFi segment	2017–2021: Experimental and expansion phase	2024–2025: Integration and consolidation phase	Empirical trend and interpretation
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Decentralized Exchanges (DEXs)	DEXs operated as experimental trading venues with fragmented liquidity and high volatility. Volumes were cyclical and strongly correlated with speculative market phases. AMM models (Uniswap, Curve) enabled permissionless trading but remained secondary to centralized exchanges.	DEXs function as stable liquidity venues, particularly for long-tail assets. Blue-chip pools on Ethereum and Layer-2 networks provide depth comparable to mid-tier centralized exchanges. DEX prices are increasingly used as reference points.	Transition from experimental AMMs to structurally important market infrastructure. DEXs now play a persistent role in price discovery and liquidity provision.
On-chain lending and credit markets	Lending protocols grew rapidly but primarily served leveraged trading and yield strategies. Credit was overcollateralized and dependent on volatile crypto assets. Usage resembled short-term “crypto repo” markets.	Lending protocols operate as programmable credit layers with automated collateral management, interest accrual, and liquidation logic. Concentration increases around large protocols (Aave, Maker, Compound). Early integration with fintech and payment networks emerges.	Shift from speculative leverage tools to infrastructure-like credit markets with broader financial relevance.
Real-world asset (RWA) tokenization	Tokenization consisted mainly of small-scale pilots and sandbox projects. Interaction with DeFi was minimal, and volumes were measured in millions rather than billions.	RWA tokenization reaches a multi-billion-dollar scale. Tokenized money-market funds and government securities are issued on public blockchains and used as collateral in DeFi and centralized venues. Institutional actors dominate issuance.	RWA tokenization evolves from proof-of-concept to a recognized institutional asset class integrated into on-chain financial workflows.
Programmable settlement and clearing	Settlement experiments were isolated DLT projects within individual institutions, largely disconnected from public blockchains and DeFi protocols. Systemic impact was limited.	Cross-institutional pilots (e.g. MAS Project Guardian) test programmable settlement for funds, FX, and bonds. Atomic settlement is demonstrated using tokenized assets and smart contracts.	Movement from internal experimentation toward hybrid settlement architectures combining DeFi primitives with regulated financial infrastructure.
Stablecoins and payment rails	Stablecoins were primarily crypto-native tools used for trading and DeFi liquidity. Limited interaction with traditional payment systems.	Stablecoins become relevant for cross-border payments and institutional settlement. Payment networks and banks integrate stablecoins into existing infrastructure under regulatory oversight.	Stablecoins transition from internal DeFi liquidity instruments to components of global payment and settlement systems.

Source: compiled by the author based on [5,12,9,14,10,11].

Table 2 shows that decentralized exchanges and lending protocols have proven to be the most resilient segments. In the period from 2017 to 2021, decentralized exchanges appeared as small

platforms with limited liquidity. By 2025, however, decentralized exchanges operate as fully fledged trading venues, particularly for low-liquidity assets. Lending protocols have also evolved. Previously, they functioned primarily as instruments for speculative leverage. At present, lending protocols have become specialized liquidity markets, used, among others, by professional market participants [17, 9].

The tokenization of real-world assets deserves special attention. The data indicate that until 2021 tokenization was limited to isolated pilot projects. In 2024–2025, tokenized Treasury bonds and tokenized money market funds grew to several billion US dollars. Tokenized money market funds have now become an important component of the on-chain ecosystem. These tokenized funds are used both as collateral and as settlement instruments [7, 20].

Let us briefly analyze each segment.

1. Decentralized exchanges (DEX). At the early stage of DeFi development (2017–2021), decentralized exchanges remained primarily crypto-native platforms used by experienced traders and liquidity providers. By 2024–2025, the role of decentralized exchanges (DEX) has changed significantly. Empirical data from DeFiLlama and related analytical platforms show that DEX now account for a stable and substantial share of on-chain trading activity, while “blue-chip” liquidity pools on Ethereum and major layer-two networks offer liquidity depth comparable to mid-tier centralized exchanges. For long-tail assets, DEX often serve as the primary venue for price discovery. This shift indicates that DEX have transitioned from experimental infrastructure to a functional component of the global cryptocurrency market architecture [16].

2. On-chain lending and credit markets. On-chain lending protocols such as MakerDAO, Compound, and Aave expanded rapidly between 2019 and 2021, with the total value locked in lending markets reaching tens of billions of US dollars at the peak of the 2021 cycle. However, usage during this period was largely oriented toward leveraged trading, yield strategies, and short-term arbitrage. Lending functioned mainly as a form of “crypto repo,” dependent on volatile collateral and high market liquidity.

In the 2024–2025 period, lending protocols remain predominantly overcollateralized, but their functional role has expanded. Lending markets now operate as programmable credit layers, where collateral management, interest accrual, and liquidation are executed entirely on-chain. Empirical data show that a small number of large protocols dominate this segment, reflecting increasing concentration and risk stratification. At the same time, partnerships with fintech companies and payment networks indicate an early stage of integration of DeFi lending mechanisms into non-crypto financial processes, particularly through credit and liquidity management in stablecoins [5, 6].

3. Tokenization of real-world assets (RWA). Asset tokenization represents one of the most direct channels through which DeFi intersects with traditional finance. During the 2017–2021 period, tokenization efforts were largely limited to small pilot projects, often conducted on permissioned blockchains or within regulatory sandboxes. Public DeFi played only a marginal role, and volumes remained constrained.

By contrast, in 2024–2025 RWA tokenization has evolved into a multibillion-dollar segment. Tokenized money market funds, government bonds, and short-term fixed-income instruments are increasingly issued on public blockchains. A prominent example is the BUIDL fund launched by BlackRock, which accounts for a significant share of the tokenized US Treasury market. These assets are not only held on-chain but are increasingly used as collateral in both decentralized and centralized trading environments. This development indicates that tokenization is no longer an experimental initiative but constitutes a new asset class with institutional backing [7, 20].

4. Programmable settlements and clearing. The use of blockchain-based systems for settlements and clearing demonstrates the deepest level of integration between DeFi and traditional finance (TradFi). Prior to 2021, most initiatives in this area consisted of isolated experiments with distributed ledger technology (DLT) conducted within individual institutions. These projects rarely interacted with open DeFi protocols and had limited systemic relevance.

In the 2024–2025 period, institutional pilot projects have become larger in scale and more interconnected. Within initiatives such as Project Guardian led by the Monetary Authority of Singapore, banks and asset managers are testing programmable settlement mechanisms for funds, foreign exchange, and fixed-income instruments. These pilots demonstrate atomic settlement, whereby asset transfer and payment occur simultaneously on-chain, reducing counterparty risk and settlement delays. Although such systems often operate in permissioned environments, they rely on DeFi-inspired primitives such as tokenized assets, smart contracts, and automated settlement logic [17].

The comparative risk analysis presented in Table 3 shows that the most acute DeFi vulnerabilities emerged in 2021–2022, when hacks and losses reached their peak. Technical risks, bridge-related risks, and stablecoin instability became the primary sources of systemic disruptions. Data for 2023–2025 indicate that both the frequency and scale of such incidents have declined. This trend is associated with the introduction of stricter audit practices, protocol constraints, and improved monitoring tools [8][9].

Based on historical loss data, regulatory scrutiny, and their relevance for institutional integration, the author and experts identify the following categories as the most significant risks:

1. smart contract and technical risks;
2. stablecoin risks;
3. cross-chain bridge risks;
4. regulatory and compliance risks.

Table 3.

Major DeFi Risks and Established Mitigation Practices (2019 – 2025)

Risk category	Empirical evidence and major incidents	Mitigation mechanisms developed (2019–2025)
Smart-contract and technical risks	Peak losses in 2021–2022 exceeded USD 3.1 billion due to exploits of lending, DEX, and infrastructure protocols. Major incidents include Wormhole and Euler exploits.	Multi-layer security audits, formal verification, continuous on-chain monitoring, circuit breakers, capped protocol parameters, and large-scale bug-bounty programs (e.g. Immunefi).

Stablecoin risks	The collapse of TerraUSD (UST) in 2022 erased approximately USD 50 billion in market value and caused systemic contagion across DeFi and centralized markets. Temporary de-pegging of USDC in 2023 highlighted reserve transparency risks.	Shift toward fully backed or overcollateralized models, proof-of-reserves and reserve attestations, diversified collateral, and regulatory frameworks such as MiCA that exclude algorithmic stablecoins from regulated categories.
Cross-chain bridge risks	Large-scale exploits of Ronin, Wormhole, Poly Network, and BNB Chain bridges resulted in cumulative losses exceeding USD 2 billion. Bridges represent a disproportionate share of total DeFi losses.	Transition to light-client and zk-proof-based bridges, use of MPC cryptography, rate limits on transfers, decentralized validator sets, and on-chain insurance or recovery mechanisms.
Regulatory and compliance risks	Increasing regulatory scrutiny by BIS, ESMA, OECD, and national authorities. Risk of legal uncertainty, enforcement actions, and exclusion from institutional participation.	Development of compliant DeFi architectures, permissioned pools, on-chain identity and credential systems, transparent governance frameworks, and research into embedded supervision models by central banks.

Source: compiled by the author based on [1,8,11,20]

Based on the presented data, it can be concluded that as decentralized finance has increased in scale and systemic relevance, its risk profile has evolved from isolated protocol-level vulnerabilities into a complex, multidimensional risk landscape with potential systemic implications. Unlike traditional finance, where risk management is largely institutional and discretionary in nature, DeFi embeds risk controls directly into code and protocol design. This feature provides transparency and automation but also amplifies failures when the assumptions encoded in smart contracts prove incorrect [1, 8].

We briefly analyze each of the selected risk categories.

Smart contract–related risks peaked during the 2021–2022 period, when, according to data from Chainalysis, more than USD 3.1 billion was stolen from DeFi protocols within a single year [8, 9]. These losses exposed the limitations of isolated audits and informal security practices. In response, the ecosystem shifted toward multilayered audit processes, formal verification, continuous monitoring, and large-scale bug bounty programs.

Stablecoin-related risks became systemic following the collapse of TerraUSD (UST) in May 2022, which resulted in the loss of approximately USD 50 billion in market capitalization and triggered contagion across both DeFi and centralized cryptocurrency markets [14, 15]. This event highlighted the fragility of undercollateralized and algorithmic stablecoins. Subsequent responses included stricter reserve requirements, the implementation of proof-of-reserves mechanisms, a shift toward overcollateralized or fully collateralized models, and regulatory interventions — most notably the MiCA framework — which effectively excludes algorithmic stablecoins from the category of regulated stablecoins within the European Union.

Bridge-related risks represent one of the most concentrated sources of losses in the DeFi ecosystem. Major attacks involving Ronin Network, Wormhole, Poly Network, and the BNB Chain bridge resulted in cumulative losses exceeding USD 2 billion [9]. These incidents exposed structural weaknesses in validator-based and multisignature bridge architectures. In response, the industry has increasingly shifted toward more robust designs, including light-client-based bridges, zero-knowledge proof verification, multi-party computation (MPC), rate limits, and the on-chain integration of insurance mechanisms.

Regulatory and compliance risks have intensified as DeFi increasingly intersects with traditional finance. Initially operating outside formal regulatory boundaries, DeFi is now subject to growing scrutiny from global regulators. Policy responses have focused on compliant DeFi architectures, verifiable on-chain identity, transparent governance processes, and research into “embedded supervision,” whereby regulatory compliance is partially enforced at the protocol level. These developments signal a shift from regulatory avoidance toward selective institutional alignment [6, 10].

Taken together, these risk mitigation measures suggest that DeFi is gradually adopting risk management practices comparable to those used in institutional finance, while preserving a degree of openness and programmability that differentiates it from traditional systems.

A category of risks present, to varying degrees, across all examined stages consists of financial and economic risks. Economic risks in DeFi primarily arise from leverage, collateral volatility, and cyclical liquidation mechanisms. During market stress events — particularly the 2022 cryptocurrency market crash — liquidations occurred within compressed timeframes, amplifying downward price movements and creating feedback loops between lending markets, derivatives, and liquidity pools.

Liquidity risk further exacerbates these dynamics. Unlike bank deposits, liquidity in DeFi is not guaranteed: liquidity providers can withdraw capital instantaneously, and lending pools may become fully utilized under stress. Evidence from multiple stress episodes indicates that liquidity fragmentation and shallow pools increase both price volatility and susceptibility to manipulation.

Mitigation strategies increasingly emphasize conservative collateral parameters, liquidation penalties, incentives for liquidity concentration, and prioritization of high-quality collateral, such as stablecoins and tokenized government securities.

In summary, it can be stated that within the framework of the Phase IV development stage identified herein, DeFi is undergoing a phase of structural transformation, the outcomes of which are expected to become evident in the near future.

This naturally tempts any researcher to speculate on potential trend forecasts for the development of this technology-finance-economy sector. However, the objective here is not to make speculative predictions regarding the future size or market capitalization of DeFi. The

primary focus is on structural factors that will influence the formation of the next stage of DeFi evolution.

Given the sector’s relative immaturity and its strong dependence on regulatory, technological, and macroeconomic conditions, and based on a comparative analysis of market data, institutional pilot projects, regulatory publications, and protocol-level developments observed between 2019 and 2025, we identify four key factors that are likely to determine DeFi’s future trajectory:

1. regulatory clarity (transparency and formalization for all market participants);
2. institutional demand;
3. technological maturity;
4. macroeconomic conditions.

Regulatory clarity has become a critically important factor driving development. During the early stages of DeFi (2019–2021), regulatory uncertainty acted both as a catalyst for innovation and as a barrier to institutional participation. The absence of formal rules allowed rapid experimentation but limited access for regulated financial entities. In contrast, the period 2023–2025 is characterized by the gradual emergence of structured regulatory frameworks, such as MiCA, Singapore’s Guardian project, and guidance from the Bank for International Settlements and the OECD. These initiatives do not eliminate risks but reduce legal uncertainty and define permissible boundaries for institutional interaction with blockchain-based systems. Notably, regulation is increasingly focused on functions and risks rather than the technological designation “DeFi” itself.

Institutional demand for programmable financial infrastructure represents a significant structural shift. Unlike early DeFi growth, which was largely retail-driven, recent adoption is increasingly motivated by asset managers, banks, and payment networks seeking operational efficiency, real-time settlements, and automated collateral management. Tokenized money market funds, on-chain collateral networks, and stablecoin-based settlement pilots demonstrate that DeFi projects are selectively implemented where they provide clear advantages in cost, speed, or transparency compared to legacy infrastructure. This demand is utilitarian rather than ideological, favoring architectures that can be integrated into existing compliance and governance systems.

Technological maturity of the DeFi infrastructure significantly alters the sector’s risk and return profile. Early DeFi systems were characterized by experimental smart contracts, fragile oracle constructs, and insecure cross-chain bridges. Although these vulnerabilities have not entirely disappeared, the ecosystem has developed mitigation mechanisms such as modular protocol architectures, formal verification, multi-layer audits, and so forth. Thus, the driving force behind technological development is not purely innovation, but the standardization and strengthening of existing foundational elements, enabling their reuse in institutional contexts at higher stakes.

Macroeconomic conditions and global liquidity cycles continue to shape DeFi adoption patterns. Periods of excess liquidity generally amplify speculative use cases, whereas tighter monetary policy exposes weaknesses in highly leveraged systems with fragile infrastructure. Concurrently, high inflation, capital controls, and currency instability in certain jurisdictions support demand for stablecoins and blockchain access to U.S. dollar-denominated assets. This dual role of macroeconomic conditions highlights that DeFi adoption is neither purely cyclical nor purely structural, but rather an interaction of both factors.

Taken together, these factors indicate that the future development of DeFi is unlikely to be linear or uniform. Instead, the sector evolves through selective integration, where certain DeFi

functions — such as settlements, collateral management, and liquidity provision — are adopted more rapidly than others. Understanding these factors is crucial for assessing which DeFi applications are likely to remain relevant in the long term and which will remain predominantly speculative.

CONCLUSION

It can be reasonably argued that over the past decade, decentralized finance (DeFi) has transformed from a crypto experiment operating at the periphery of the financial system into a new form of financial organization built on publicly accessible blockchain infrastructure. In this model, financial contracts, market coordination, and settlements are executed through open-source code rather than centralized intermediaries. Unlike earlier waves of financial digitization, which primarily focused on front-end innovation and incremental efficiency improvements within existing institutional structures, DeFi offers a reconfiguration of core financial functions at the infrastructural level. Trading, lending, collateral management, settlements, and even governance elements are embedded directly into programmable protocols that operate continuously and transparently on public ledgers.

Having undergone several stages of transformation during the period 2017–2025, DeFi has evolved from a niche crypto experiment into an increasingly significant component of the global financial infrastructure. While in Phases 1–2, DeFi was positioned as an alternative to traditional finance, the transformational changes of Phase IV indicate a more nuanced trajectory: DeFi is integrating into core financial markets through a limited number of mature, infrastructure-oriented use cases. In this article, DeFi is examined as a form of programmable financial infrastructure, with emphasis on four segments where integration has progressed the furthest:

1. decentralized exchanges (DEX);
2. on-chain lending markets;
3. real-world asset tokenization (RWA);
4. programmable settlement and clearing mechanisms.

A deep analysis of decentralized finance as a modern element of the financial system is of particular interest, as it combines classical finance, regulation, and innovative technologies. This interconnection creates fundamentally new systemic risks. It is therefore critical to understand the logic of DeFi's architecture, as it provides insight into the relationships among components and their mutual influence.

Understanding the risks associated with the architecture of decentralized finance, in combination with an analysis of development dynamics across key financial domains, allows for forecasting DeFi's prospects and, to some extent, answering the question of the extent to which the most advanced DeFi use cases provide sustainable solutions to structural shortcomings of traditional finance, such as limited market access, slow settlements, and operational opacity, as well as identifying emerging risks as DeFi is adopted within regulated financial systems.

The analysis shows that DeFi successfully implements core financial functions — trading, lending, liquidity management, asset tokenization, and settlements — on the basis of public blockchains and smart contracts. As such, the sector is attractive for investment.

The study demonstrates that by 2024–2025 (Phase IV), DeFi ceased to be exclusively an experimental environment and began to be adopted by institutional participants, primarily in the segments of decentralized exchanges, on-chain lending, and real-world asset tokenization.

Decentralized exchanges (DEX) increasingly serve as alternative venues for liquidity provision, particularly for long-tail assets. On-chain lending protocols operate as programmable credit layers with automated collateral management and liquidation logic. Risk-weighted asset tokenization (RWA) has reached multi-billion-dollar scale, facilitated by institutional participation and the representation of money market and government securities instruments on-chain. Programmable settlement and clearing mechanisms are currently being tested by Tier 1 financial institutions, demonstrating the feasibility of atomic settlements for funds, foreign currency, and fixed-income instruments.

This is confirmed by the growth in TVL (Table 1), the resilience of individual protocols, and the participation of major financial organizations in pilot projects.

At the same time, the scaling of DeFi is accompanied by the accumulation of specific risks. These include smart contract vulnerabilities, reliance on oracles and cross-chain infrastructure, concentration of governance powers, and the instability of certain stablecoin models. Technological risks remain an embedded element of the DeFi infrastructure. Bridges and oracles, as shared infrastructure components used by multiple protocols, are particularly significant. These components act as “risk amplifiers”: a failure or attack at a single node can trigger cascading effects across multiple market segments.

At the same time, in response to industry development, practices for mitigating technological risks are evolving concurrently: multi-level audits, formal verification, protocol limits, emergency stop mechanisms, and a shift toward more secure bridge architectures.

It is important to note that economic risks in DeFi are closely linked to the use of collateral and leverage. During price declines, automatic liquidations intensify market pressure, creating cyclical feedback loops. Large protocols with conservative parameters and highly liquid collateral demonstrate greater resilience compared to experimental platforms. Thus, some risks are essentially comparable to those present in traditional financial markets.

The findings indicate that DeFi is unlikely to replace traditional finance, but increasingly forms a hybrid DeFi–TradFi architecture, in which public blockchains serve as programmable settlement, collateral, and market infrastructure under expanding regulatory oversight.

Analysis of regulatory initiatives shows that the response of supervisory authorities is not aimed at eliminating DeFi as a phenomenon but at limiting systemic and consumer risks through requirements for reserves, transparency, and compliant architecture. A clearly positive factor is that regulatory initiatives are increasingly becoming functional in nature. Rather than attempting to regulate DeFi as a single entity, regulators now focus on specific sector functions, such as the regulation of stablecoin issuance, settlements, and custodial services. Initiatives such as MiCA and Project Guardian demonstrate that regulators aim to integrate compliance and oversight functionality while not hindering protocol innovation.

Regulatory and governmental attention highlights the serious engagement of authorities with these technologies, the growth of professional competencies among their staff, and overall acceptance of the technologies and their prospects. For this reason, DeFi should be viewed not as an alternative to the existing financial system but as a technological foundation for its gradual transformation, provided that risk management mechanisms and regulatory frameworks continue to develop. It is not a hype-driven, temporary speculative phenomenon, nor an inevitable replacement for traditional finance, but an emerging infrastructural layer whose long-term impact depends on the balance between innovation, risk containment, and adaptation to regulation.

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UKRAINE' EQUITY MARKET & COUNTRY FORTHCOMING ECONOMIC DEVELOPMENT

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ANNOTATION

The Ukrainian equity market represents the system of capital formation through ownership stakes in Ukrainian companies, spanning public equity, private equity, and venture capital. Historically shaped by post-Soviet privatization, limited institutional investors, and governance challenges, the market has remained shallow in public trading but increasingly dynamic in private capital segments.

ABSTRACT

Ukraine extraordinary tasks are: insuring country economic growth, stimulating the economy & fostering growth with respect to following inevitable challenges such as: damages of physical infrastructure like roads, bridges, buildings, and factories, disrupted production, transportation, and basic services; human capital loss – decrease of workforce and innovation potential; financial draining - reconstruction requires significant funding; social and political instability - aggravated social tensions and political instability; obstructed long-term planning and investing. At the same time country ought to search for prospects such as: after war resilient demand for goods/services, stimulating production and job creation; using latest advances in construction, technology, and infrastructure development; rebuilding ties with international community for financial and technical assistance; insure market growth that attracts foreign and local investments including equity financing.

Keywords: PFTS, Ukrainian Exchange, Raiffeisen Bank, Centerenergo, Donbasenergo, Krukivsky Carriage Works, UKRENERGYMACHINES, Ukrtelecom, Warsaw Stock Exchange, London Stock Exchange, Amsterdam Stock Exchange, DCF, NAV, Equity risk premium (ERP), MSCI Ukraine Index, CEIC, FRED, WBG (World Bank Group), OVDP, LSE, WSE, Horizon Capital, Dragon Capital PE, ICU, Concorde, InVenture, CEE, IRR

INTRODUCTION

Undertaken study is dedicated to future of Ukraine subject – using equity to build new national economy as a result received damages and losses during Russian war against Ukraine and present rationality for economic expansion, as well as range of direct agents responsible for further economic growth. Research structured in seven consecutive and logically detected each other blocks aimed to define state of Ukrainian equity, appraisal of the Ukrainian equity, scale and scope of the Ukrainian equity, who finances Ukrainian equity, who are Ukrainian equity finance recipients', return on Ukraine equity investment, risk on Ukraine equity investment, risk/return strategies for Ukraine equity investors, and future of Ukraine equity market.

BASIC THEORETICAL AND PRACTICAL PROVISION

Purpose of the Article. To perform qualified research on mentioned subject (using equity for country economic growth) with respect to a fit object (Ukraine). Having a sense of that purpose, develop comprehensive professional as well as scholar knowledge, based on existed and personal judgements for that matter, provide gathered information, and sources of works. Methodology statement. Set of allied intellectual enquiry methods for quantitative research, data gathering with use of data extraction, data analysis, case studies; qualitative & factual research - historical

analogies, comparative dynamic, ethnographical, cultural absolute and relative business advances. Literature review and output conditions. Criteria for accuracy, reliability, authority, objectivity, fairness and coverage for evaluating information from given information sources part “references”.

RESEARCH RESULTS AND THEIR EVALUATION

1. appraisal of the Ukrainian equity

Ukrainian equity market ought to be referred as a type of frontier/emerging one with very low liquidity; standing as constrainedly operational during period of war; dominated by government promises in form of liability instruments (up to 98% of exchange turnover) while the rest ~ 2% can be stated as equities. Infrastructurally market operates on two foremost exchanges — PFTS (1) and Ukrainian Exchange (2) even though thirteen exchanges have respective market making licenses (3). Equity investable space can be considered with limited number of domestically listed companies, for instance PFTS Index enlisted six companies (Raiffeisen Bank, Centerenergo, Donbasenergo, Krukivsky Carriage Works, UKRENERGYMACHINES, Ukrtelecom with daily trade results of up to \$9mln (4); many major Ukrainian corporates list abroad (Warsaw Stock Exchange, London Stock Exchange, Amsterdam Stock Exchange). Further evaluation contemplations suggest limited traditional multiples, thin trading distorts P/E, EV/EBITDA, and P/B, so better method is DCF with scenario-weighting or NAV for asset-heavy issuers; taking into account Equity risk premium (ERP) specifically ought to take into consideration following portions such as war premium, political/regulatory risk, FX instability & volatility, additional liquidity discount with cumulatively resulting correction of required returns for supplementary more than 20–30% for investors. Sector by sector appraisal reviles four major economic subdivisions for possibly growing equity market, among them agriculture, energy & utilities, metals & heavy industry, IT & technology. Important detail is that all of those divisions have strong historical roots and at some extend might be characterized as sustainable ones in terms of long-term market adaption but need further accelerated further transformation on ground of new technological level. Although each of them has own pros & cons, for instance, pros for agriculture might be viewed as global competitiveness, export-oriented, strong cost advantage existence of large holdings in sugar, grain, oilseeds areas and all of the have historically proved profitable track of records; at the same time agribusiness carries logistics risk (Black Sea access) and infrastructure vulnerability, so sector fetches high upside high operational/logistics risk. Pros for energy & utilities sector is about anticipated massive reconstruction investment afterwar capex's, supplementary tariff modifications and EU integration with paralleled risks such as regulatory instability (example is Zaporizhzhia Nuclear Power Station among the 10 largest in the world but currently under Russia occupation), infrastructure devastating war damage; thus, sector has long-term in performance sector with strong external financing tailwinds. One of the oldest economic sectors (metals & heavy industry) delivers historically robust income from export considerably has potentials for post-war transformation, unfortunately carries major asset risks because many of that assets located in front-line zone or occupied areas, also enormous capital expenditures are needed; thus, high risk comes from depends on security conditions. IT & technology business equity advantage comes as a rule based on stable currency position from export services and products in stable currencies, low physical-asset risk per se, continuously solid international demand for Ukrainian tech gifted workers; so, we have possibility risk of talented people draining effect as “talent migration” with inadequate domestic listing options, most operate privately or as offshore business entities’. On a background contemporarily Russian/Ukraine war, formed relatively new rapidly growing area connected to some swiftly scaling with global dual-use applications such as war drones, but that that area for some reasons is not the object of research in this case study.

2. who finances Ukrainian equity

In the pre-war (2016–2021) period foreign private capital (FDI + PE) was stronger, domestic business groups were large but not dominant, IFIs (International Financial Institutions) were active but not leading the flow, stock markets had low but non-zero activity. Over intensified wartime (2023–2025) domestic capital now provides the majority of equity, IFIs stepped up dramatically as stabilizers and de-riskers, private foreign investors reduced exposure sharply, public markets nearly inactive.

3. who are Ukrainian equity finance recipients’

Ukrainian equity financing flows to five main groups of recipients: offshore listed Ukrainian corporations, private companies backed by PE/VC funds, companies receiving money from IFIs (EBRD, IFC, DFC, EIB) equity or quasi-equity, large Ukrainian corporate groups, and early stage startups & innovation cosystems. Offshore listed Ukrainian corporations (main public equity recipients), these companies are incorporated not necessarily in Ukraine, they have assets in Ukrainian but raise capital abroad (London, Warsaw, Amsterdam, New York/Nasdaq exchanges); probably the biggest of them recipients Ferrexpo - iron ore producer (LSE - London Stock Exchange), MHP (Myronivsky Hliboproduct) - poultry & agrifood (LSE - London Stock Exchange), Astarta - agriculture & sugar (WSE - Warsaw Stock Exchange), IMC (Industrial Milk Company) - agriculture (WSE - Warsaw Stock Exchange), Ovostar - egg producer (WSE - Warsaw Stock Exchange), Agroton - agriculture (WSE - Warsaw Stock Exchange), Kernel – agriculture/vegetable oils (WSE - Warsaw Stock Exchange), JKK Oil & Gas – energy (AIM/LSE - AIM - The London Stock Exchange's market for small and medium size growth companies). What unites all those corporations as investment recipients, all of them have large capexes, need investors trust toward foreign listing standards, they offer real liquidity and corporate governance, thus these companies receive the majority of public-market Ukrainian equity financing.

Private companies backed by PE/VC funds, since domestic exchanges are low on equity financing, funding primarily goes to private Ukrainian companies through private equity (PE) and venture capital (VC) firms. Recipients in PE majorly presented on mid cap market and seted in such sectors as food processing companies, manufacturing and industrials, logistics and warehousing, export-oriented, SMEs (small and medium-sized enterprises) & renewable energy assets, healthcare and consumer companies, thus all those companies financed by Horizon Capital, Dragon Capital PE, ICU, Concorde, InVenture, CEE private funds Recipients in VC (tech & innovation); to this segment should be added IT outsourcing firms, AI and machine-learning startups, cybersecurity, defense tech, fintech SaaS/software exporters for examples Grammarly, GitLab (Ukrainian engineering roots), Preply, Ajax Systems, MacPaw, Reface, AirSlate...of early-stage tech startups funded by AVentures, TA Ventures, ICU Ventures, etc.; research show that private companies, especially tech and export SMEs are the biggest recipients of actual equity flows.

4. return on Ukraine equity investment

Because of data limitations and extraordinary risk/market conditions, we approach this query as indicative only, not precise. We know main public-equity benchmark in Ukraine, the PFTS Index (on the PFTS Stock Exchange, also can be used as a benchmark UX index) started at a base value of 100 on 1 October 1997. As of February 2025 the index value was approximately 502.6, so respective calculations can be performed; although calculating a meaningful “return” suppose to be very difficult due to extremely low market liquidity, many listed companies have negligible trading, the index does not reflect what a real investor could easily buy/sell, many of the largest “Ukrainian companies” are traded abroad (Warsaw, London, Amsterdam, Frankfurt, New York) so ththose transactions are not in custody in the domestic indexes, war, currency volatility,

geopolitical risk, destruction of assets, etc., all mean that historical returns may not reflect future potential or risk; also data coverage is limited, dividends, free-float adjustments, corporate actions may well be ailing, many investments are private (PE/VC) rather than public stock, public index returns omit much of the real equity investment universe, thus approximation of long term return given the base value of 100 in 1997 and approximately 502.6 in 2025 implies a cumulative growth of $5.026 \times$ (ignoring dividends & currency & other adjustments) if you invest 1UAH in year 1997 in index, the value of 1UAH is 5.026 in year 2025 what gives as $5.026^{(1/28)} - 1$ roughly 6.4% per year nominal. Once again, that is a very rough figure and misses many adjustments (dividends, currency, reinvestment, real vs nominal return); also, this figure is before losses from war/time periods where returns were strongly negative (e.g., during 2008 crisis, 2014 war, etc.); realistically, the actual risk-adjusted return once investor account for war risk, liquidity premium, FX risk — may be much lower, or even negative, depending on *timing*.

5. risk on Ukraine equity investment

Ukrainian equity carries one of the highest risk profiles in the global frontier/emerging-market universe and falls into five most important groups: geopolitical, macro/FX, market structure, corporate, and liquidity/exit. Geopolitical & security risk presented by ongoing full scale war with Russia standing to direct physical risks to assets, logistics, energy infrastructure, production interruptions, territory loss, or occupation risk, insurance markets often unavailable or enormously expensive; next one is strategic uncertainty referred to price long-term equity cashflows when war duration and outcomes are uncertain and high discount rates (starting from 25%) required; reconstruction depends on political & military developments and delays in aid, as well as delays in corporate recovery. Macroeconomic and currency risk arise in major three layers such as FX risk for UAH volatility, hryvnia historically weak and sensitive to external financing, even if equities rise in UAH, foreign investors can lose return in USD/EUR terms, inflation spikes dilute real returns & monetary instability during war increases financing costs. Dependence on external aid, IMF/EU/US support is essential, any disruption affects equity valuations. Market Structure & Liquidity Risk is determined by extremely shallow domestic stock market, near-zero market liquidity, impossibility to accumulate or exit positions at fair prices, small free float & no institutional depth, limited investor base and wide bid-ask spreads, equity prices sooner might be theoretical rather than tradeable, many Ukrainian “equities” are actually offshore-listed, and domestic index does not represent the real investable universe. Corporate governance gaps related party transactions weak disclosure, limited minority shareholder protections, occasional oligarchic control issues, regulatory uncertainty connects to that rule of law is still developing and not comprehensive, legal processes slow or unpredictable and extremely corrupted, taxes, tariffs, export rules are objects to sudden and illogically continuous changes.

6. risk/return strategies for Ukraine equity investors

Ukrainian equity investment requires deliberate strategies that balance extreme risk with potentially exceptional upside. The goal is to convert high geopolitical uncertainty into a controlled opportunity set. Below are the seven most effective risk/return strategies, each evaluated for practicality, effectiveness, and investor suitability. First one is “sector selective strategy”. The second one is about geographic risk diversification, choosing companies with assets in safer regions, taking into account low-risk regions (western Ukraine, central corridors, Kyiv region relatively are stable) and high-risk regions (East, South, and areas near active front lines, industrial cities with former soviet infrastructure. Third one is around offshore listed Ukrainian equities (buy Ukrainian companies abroad). Fourth strategy is about investing through PE/VC funds with local expertise. Some sound advantages here are local teams understand risk, politics, logistics, portfolio diversification, better governance enforcement, access to proprietary deals, PE/VC in Ukraine

historically produced high IRR 20–25% on average. Fifth co-investment with IFIs (EBRD/IFC/DFC) strategy. Sixes strategy is “timing & optionality” strategy based on idia to buy the reconstruction upside aiming to invest before full normalization, respectively capturing market rerating, risk-premium compression, FX stabilization, equity multiples expansion; major return drivers over heir are GDP rebound, foreign capital inflows, infrastructure boom, corporate restructuring; thus this strategy is high beta strategy for upside seekers and requires strong risk appetite and patience. Seventh and final one is about hedging foreign investor strategy, so hedge FX & buy offshore Ukraine, basically for those who undestends FX hedging tools such as NDFs (Non-Deliverable Forwards), options, basket hedges and extrimly important, who has access to that tools (mostly all of them separate bank products; thus strategy is the most sophisticated one, protects against UAH depreciation, which historically destroys USD-based investor returns, suatable for advanced market players and can be excellent for foreign funds.

7. future of Ukraine equity market

In our forward looking opinion, over next five years equity market structure for Ukraine, ought to significantly change due to upcoming dynamic reconstruction, active participation of EU continues, redaction in risks. Thus our estimations for sources to finance ukrainian equity in five years might look as following (numbers are ballpark, not precise predictions). The main idea behind given prediction is that Ukraine suppose to shift from crisis-driven IFI + domestic capital to a more balanced equity market structure with strong foreign private and functioning public market, domestic business groups remain powerful but are no longer the only serious money, foreign private capital (strategic investors, PE, VC) becomes the main growth engine in infrastructure, energy transition, logistics, and tech, IFIs move from “we finance because nobody else will” to “we de-risk and crowd in others”.

CONCLUSION

Scale of ukraine equity market is small with market cap a few percent of GDP, a narrow set of liquid names, tiny turnover; scope is about two domestic exchanges, equity playing a marginal role versus government debt, with serious liquidity and governance constraints; wartime disruption now, but potential for growth if post-war reforms, reconstruction projects, and EU integration create both issuers and investors. Return on equity market depends on many parametrs how to valuate it veries from different equity classes, in a fact no current single "market return" benchmark for Ukrainian equity. Investments are purely strategic, demanding the possibility of multi-fold capital appreciation in a post-war scenario to compensate for the significant probability of significant or total loss. Sector exposure dramatically changes equity risk profiles The core risks of Ukrainian equity investment are geopolitical war risk, currency & FX volatility, market illiquidity, corporate governance issues. Risks justify required returns of 20–35% and plus for investors deploying equity capital into Ukraine, depending on sector and exposure. Overall risk rating from very high to extreme. But this high risk is also the reason for investors perceive large potential returns during reconstruction and post-war stabilization.

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SKAIDRAS NAUDAS IZMANTOŠANAS PERSPEKTĪVAS EKONOMIKAS DIGITALIZĀCIJAS KONTEKSTĀ

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ANOTĀCIJA

Rakstā analizētas skaidras naudas izmantošanas perspektīvas straujās ekonomikas digitalizācijas apstākļos, balstoties uz ECB, Latvijas Bankas, OECD un BIS 2020. - 2025. gada datiem, kā arī aptauju par Latvijas iedzīvotāju maksājumu paradumiem. Pētījums atklāj, ka, neskatoties uz digitālo maksājumu izplatību, skaidrai naudai joprojām ir būtiska loma finanšu drošības, privātuma un sociālās iekļaušanas nodrošināšanā. Aptaujas rezultāti liecina par sabiedrības piesardzīgu attieksmi pret pilnīgu pāreju uz digitāliem maksājumiem un uzsver nepieciešamību saglabāt līdzsvarotu maksājumu infrastruktūru nākotnē.

Atslēgvārdi: digitalizācija, finanšu drošība, maksājumu sistēmas, privātums, skaidra nauda

ABSTRACT

This article analyses the future prospects of cash usage in the context of rapid economic digitalization, drawing on data from the ECB, the Bank of Latvia, the OECD and the BIS for the years 2020. - 2025., as well as a survey on the payment habits of Latvian residents. The findings reveal that despite the growing prevalence of digital payments, cash continues to play a significant role in ensuring financial security, privacy and social inclusion. The survey results indicate a cautious public attitude toward a fully digital payment environment and underscore the need to maintain a balanced payment infrastructure in the future.

Keywords: cash, digitalization, financial security, payment systems, privacy

IEVADS. INTRODUCTION

Straujā ekonomikas digitalizācija būtiski mainījusi maksājumu paradumus Eiropa Savienībā (ES) un Latvijā, īpaši pēc COVID-19 pandēmijas, kas paātrināja bezkontakta un attālināto norēķinu pieaugumu. Eiropas Centrālās bankas (ECB) pētījuma Study on the payment attitudes of consumers in the euro area (SPACE (2024)) dati rāda, ka vairāk nekā 60% mazumtirdzniecības darījumu eirozonā jau tiek veikti digitāli [4]. Arī Latvijā bezskaidrās naudas izmantošana sasniedz 78%, tomēr 68% iedzīvotāju skaidru naudu joprojām lieto regulāri [9]. Vienlaikus ES Anti-Money Laundering Regulation (EU 2024/1624) ievieš jaunus ierobežojumus skaidrai naudai, bet ECB izsrtādā digitālā eiro ieviešanu līdz 2029.gadam, kas aktualizē diskusijas un bažas par sabiedrības finanšu privātumu un uztraudzības risku palielināšanos [3,6].

Nemot vērā šos procesus, aktuāls kļūst pētījuma jautājums: kādas ir skaidras naudas izmantošanas perspektīvas un vai sabiedrība ir gatava pilnīgai pārejai uz digitāliem maksājumiem?

Pētījuma mērķis ir noteikt, kādas ir skaidras naudas izmantošanas perspektīvas digitalizācijas kontekstā, un novērtēt, vai sabiedrība ir gatava pilnīgai pārejai uz digitāliem maksājumiem. Pētījumā izmantota kombinētā metode, kurā apvienotas vairākas analītiskās pieejas. Vispirms veikta salīdzinošā analīze, izmantojot ECB, Latvijas Bankas, Ekonomiskās sadarbības un attīstības organizācijas (OECD) un Starptautiskā norēķinu bankas (BIS) statistiskos rādītājus par

maksāšanas instrumentu izmantošanu par 2020. - 2025. gadu. Lai novērtētu sabiedrības paradumus un attieksmi, veikta kvantitatīva aptauja Latvijas iedzīvotāju vidū.

SVARĪGĀKĀS ATZIŅAS TEORIJĀ UN PRAKSĒ. BASIC THEORETICAL AND PRACTICAL PROVISION

Klasiskajā ekonomikas teorijā nauda pilda trīs pamatfunkcijas — tā ir vērtības mērs, apmaiņas līdzeklis un uzkrājuma instruments (Samuelson & Nordhaus, 2010). Tieši fiziskā nauda pilnībā nodrošina visas šīs funkcijas, un to var izmantot anonīmi, neatkarīgi no tehnoloģijām, interneta vai starpnieku infrastruktūras. ECB dati apstiprina, ka skaidras naudas aprite eirozonā saglabājas augsta, un pat laikā, kad digitālo maksājumu īpatsvars pieaug, fiziskās naudas daudzums apgrozībā turpina pieaugt, īpaši kā uzkrājuma un finanšu drošības rezerve [4].

Eiropā un citviet pasaulē digitalizācija pēdējo gadu laikā būtiski mainījusi maksājumu sistēmas. Bezkontakta maksājumi 2020.2024. gadā pieauga līdz 74% no visiem karšu maksājumiem, bet mobilie maksājumi pieauga par vairāk nekā 230%, kas norāda uz strauju tehnoloģisko risinājumu ieviešanu ikdienas finanšu praksē [4]. Tomēr skaidra nauda kā galvenais maksāšanas veids saglabājas iedzīvotājiem ar ierobežotu digitālo piekļuvi, zemu ienākumu grupām, vecāka gadagājuma cilvēku vidū un reģionos, kur digitālā infrastruktūra vēl nav pietiekami attīstīta. OECD (2025) norāda, ka 24% Eiropas iedzīvotājiem nav drošas vai regulāras piekļuves digitālajiem finanšu pakalpojumiem, kas var radīt sociālekonomisku nevienlīdzību, ja skaidras naudas pieejamība tiktu būtiski ierobežota [10].

Sociālajos un mediju telpās parādās arvien vairāk vērtējumu, ka ES pamazām virzās uz sabiedrību ar minimālu vai gandrīz pilnīgu atteikšanos no skaidras naudas. Dažos medijos tiek pausti apgalvojumi par iespējamu “finanšu revolūciju” līdz 2027. gadam, ieviešot digitālo eiro un skaidrsa naudas lietošanas ierobežojumus, kas novestu pie skaidras naudas un privātuma būtiskas sašaurināšanas [1]. Un tas ir pretrunā ar ECB sabiedrības aptaujas rādītājiem, ka 60% eiropiešu kā primāro vērtību maksājumu sistēmās min privātumu [7]. Jo tieši skaidrai naudai ir tā svarīgākā priekšrocība kā anonimitāte. Atšķirībā no digitālajiem maksājumiem, kur tiek ģenerēti detalizēti transakciju dati, skaidras naudas maksājumi neatstāj izsekojamas pēdas.

Pēc ECB preses relīzes ap 2027. gadu varētu sākties digitāla eiro ieviešanas pilota fāze. Ja ES likumdevēji pieņems regulu 2026. gada laikā, digitālo eiro varētu ieviest līdz 2029. gadam. Digitālais eiro būs skaidras naudas digitālā forma - elektronisks mazumtirdzniecības maksājumu līdzeklis, ko emitēs ECB [7]. Svarīgi uzsvērt, ka centrālo banku digitālās valūtas, tostarp digitālā eiro koncepcija, tiek veidotas kā papildinājums skaidrai naudai, nevis tās aizstāšanas instruments. ECB sava 2024. gada pārskatā uzsver, ka digitālais eiro saglabās svarīgas skaidras naudas īpašības, tostarp noteiktu privātuma līmeni un iespēju veikt „offline” maksājumus [6]. Neskatoties uz ECB apgalvojumiem, digitālo maksājumu sistēmu privātuma riski tiek plaši diskutēti akadēmiskajā un tiesību zinātnē. Eiropas Datu aizsardzības uzraugs brīdina, ka digitālās valūtas var radīt būtisku risku personu datu drošībai, jo finanšu transakcijas var kļūt pilnībā izsekojamas un analizējamās, tādējādi radot iespējas veidot pilnus patērētāju uzvedības profilus [8].

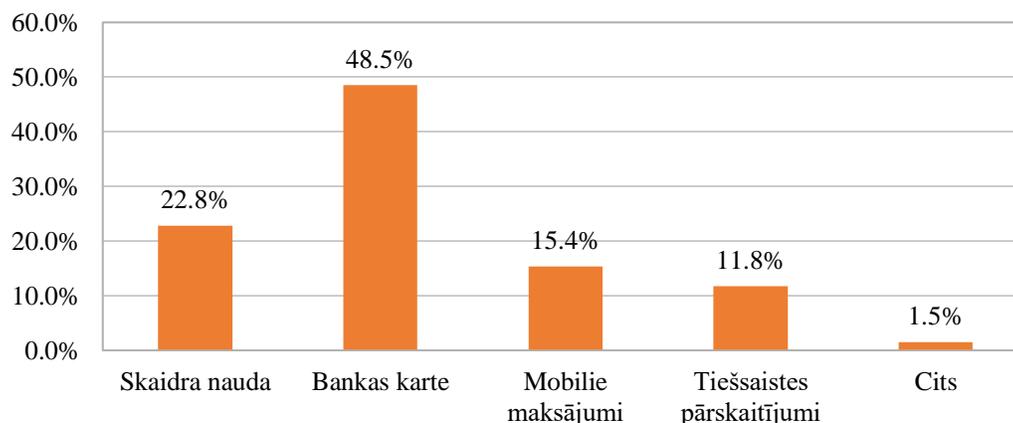
Tajā pašā laikā Eiropas Savienība pēdējos gados ieviesusi virkni normatīvo aktu, kas ierobežo skaidras naudas izmantošanu. 2024. gadā pieņemtā Anti-Money Laundering Regulation (EU) 2024/1624 nosaka vienotu skaidras naudas darījumu sliexsni komercdarījumos visās ES dalībvalstīs, skaidras naudas sliexsni, no kura obligāta identitātes pārbaude, un paplašinātas prasības tirgotājiem un pakalpojumu sniedzējiem par aizdomīgu darījumu ziņošanu [3]. Papildus ES līmeņa regulējumam katra valsts papildus nosaka vēl savus sakaidras naudas regulējumus, līdz ar to vairākas valstis, tādas kā Francija, Beļģija un Itālija noteikušas vēl stingrākus nacionālos skaidras naudas ierobežojumus un limitus valsts rezidentiem [5]. Akadēmiskie pētījumi (Springer,

2025) norāda, ka šie ierobežojumi rada jautājumus par proporcionalitāti un ietekmi uz finanšu brīvību, īpaši iedzīvotāju grupām, kuras atkarīgas no skaidras naudas [11].

Kopumā teorētiskā un praktiskā analīze liecina, ka skaidrai naudai joprojām ir fundamentāla loma: tā nodrošina finanšu autonomiju, privātumu, pieejamību un sistēmisko noturību. Vienlaikus digitalizācija ievieš jaunus izaicinājumus un iespējas, bet ES regulējums un nacionālā politika ievērojami ietekmē skaidras naudas nākotnes perspektīvas, ieviešot ar vien jaunus skaidras naudas lietošanas ierobežojumus. Digitalizācijas radītie jaunie riski un ierobežojumi rada nepieciešamību nodrošināt sabalansētu pieeju, kurā tiek veicināta inovācija, bet vienlaikus aizsargātas sabiedrības tiesības uz izvēli, privātumu un finanšu brīvību.

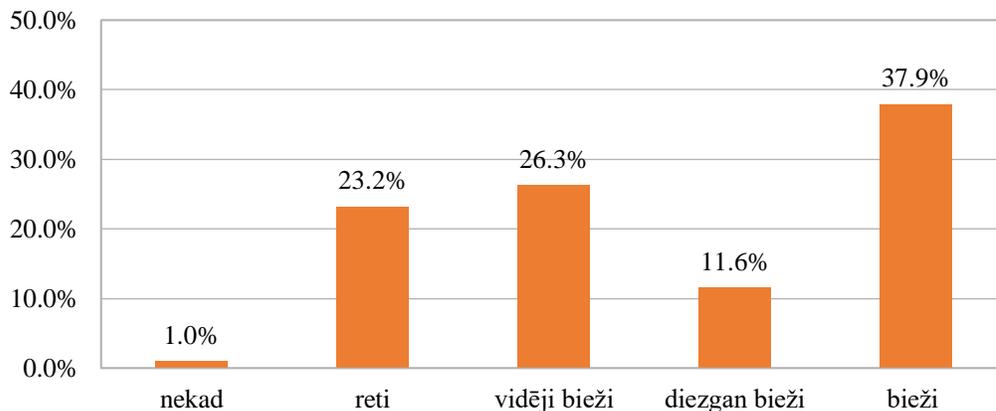
PĒTĪJUMA REZULTĀTI UN TO IZVĒRTĒJUMS. RESEARCH RESULTS AND THEIR EVALUATION

Šī pētījuma kantitatīvajā aptaujā tika analizēti 99 respondenta atbilžu rezultāti par Latvijas iedzīvotāju maksājumu paradumiem un attieksmi pret skaidras naudas izmantošanu un tās lomas saglabāšanu nākotnē digitalizētas ekonomikas apstākļos, kas tika salīdzināti ar Latvijas Bankas un ECB, OECD un BIS pieejamiem datiem.



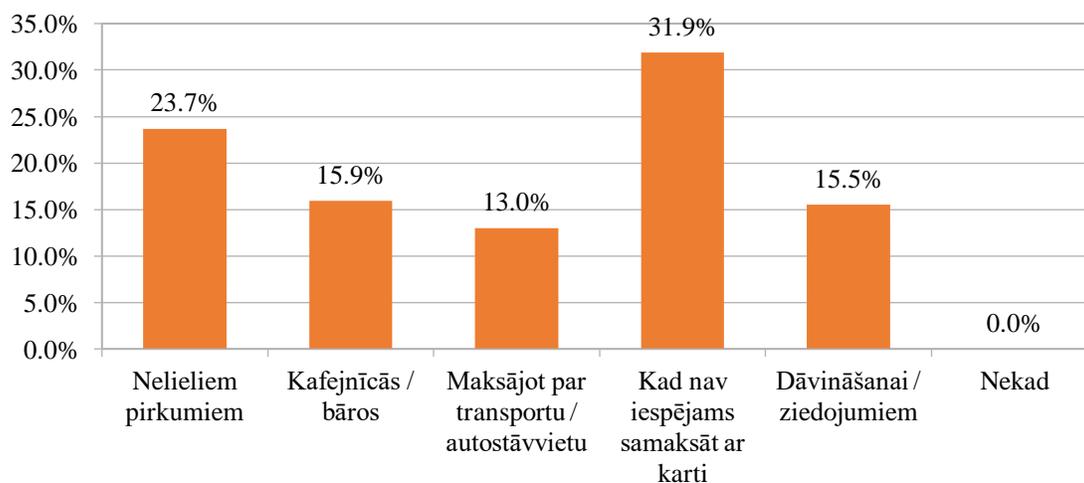
1.attēls. Ikdienā visbiežāk izmantotie maksājuma veidi
(autores veidots, *VisiDati.lv*, 13.11.2025)

Aptaujas dalībnieki kā dominējošo maksāšanas instrumentu izmanto bankas karti (48,5%). Šis rādītājs apliecina bezskaidras naudas maksājumu vadošo lomu ikdienas ekonomiskajā apritē un sakrīt ar Latvijas Bankas novērotajām makroekonomiskajām tendencēm, kas rāda pastāvīgu karšu maksājumu īpatsvara pieaugumu [9]. Tomēr ievērojams ir arī tas, ka 22,8% aptaujāto visbiežāk maksā tieši skaidrā naudā, kas liecina par stabilu šī norēķina veida klātbūtni.



2.attēls. Skaidras naudas maksājumu biežums
(autores veidots, VisiDati.lv, 13.11.2025)

Aptaujas rezultāti liecina, ka, neraugoties uz digitālo maksājumu plašo izmantošanu, skaidra nauda joprojām saglabā būtisku funkciju iedzīvotāju ikdienas norēķinu paradumos. Vairāk nekā puse respondentu norādīja, ka skaidru naudu izmanto regulāri - 37,9% to dara bieži, savukārt 26,3 % – vidēji bieži, kas nozīmē, ka vairāk nekā puse iedzīvotāju to lieto regulāri. Šie rezultāti atklāj, ka skaidras naudas loma nav reducējama tikai uz situatīvu vai epizodisku lietojumu - tā saglabājas kā būtiska maksājumu sistēmas daļa, un šī tendence atbilst ECB norādēm par skaidras naudas funkcionālo un sociālo nozīmi pat augstas digitalizācijas valstīs - 59% eirozonas iedzīvotāju regulāri izmanto skaidru naudu [4].

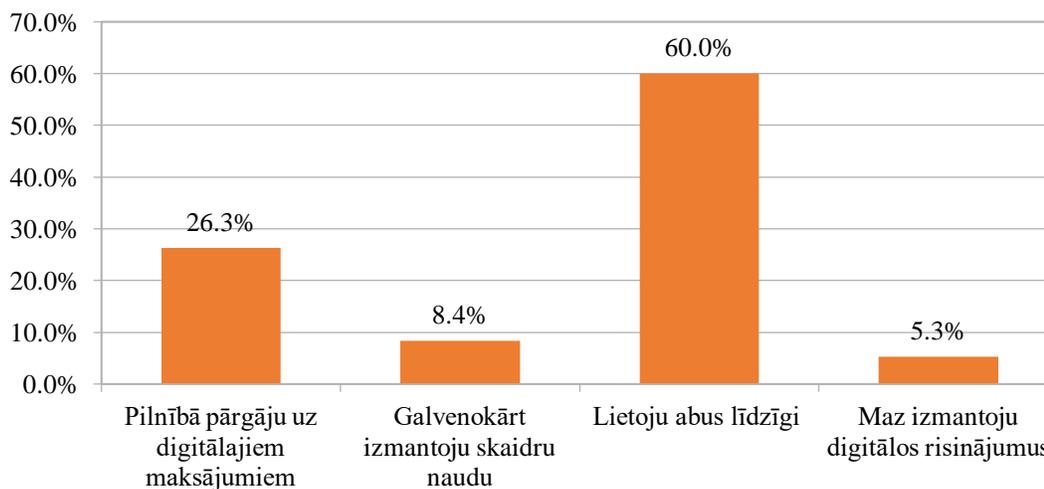


3.attēls. Situācijas, kurās respondenti dod priekšroku skaidras naudas izmantošanai
(autores veidots, VisiDati.lv, 13.11.2025)

Analizējot situācijas, kurās respondenti dod priekšroku skaidrai naudai, analīze padziļina izpratni par situācijām, kurās skaidra nauda tiek izvēlēta apzināti. Visbiežāk minētais iemesls ir nespēja norēķināties ar karti, ko atzīmējuši 31,9% respondentu. Tas norāda, ka skaidra nauda joprojām kalpo kā būtisks rezerves maksājumu līdzeklis infrastruktūras vai tehnoloģisku ierobežojumu gadījumos. Būtiska loma skaidrai naudai saglabājas arī ikdienas mazajos darījumos - nelieliem pirkumiem to izmanto 23,7% aptaujāto. Tāpat atsevišķas sociālas un kultūras situācijas

- norēķini kafejnīcās un bāros (15,9%), kā arī naudas dāvināšana un ziedojumi (15,5%) - saglabā tradicionālu saikni ar fizisku naudu. Nav neviena respondenta, kurš būtu norādījis, ka nekad nedod priekšroku skaidrai naudai, kas papildus apliecina šī instrumenta praktisko nenozūdāmību sabiedrības maksājumu paradumos. Šie rezultāti saskan ar ECB SPACE 2024 pētījumu, kurā konstatēts, ka skaidra nauda visbiežāk tiek izmantota maza apjoma pirkumiem un privātiem maksājumiem starp fiziskām personām, kas nav saistīti ar preču vai pakalpojumu iegādi [4,10].

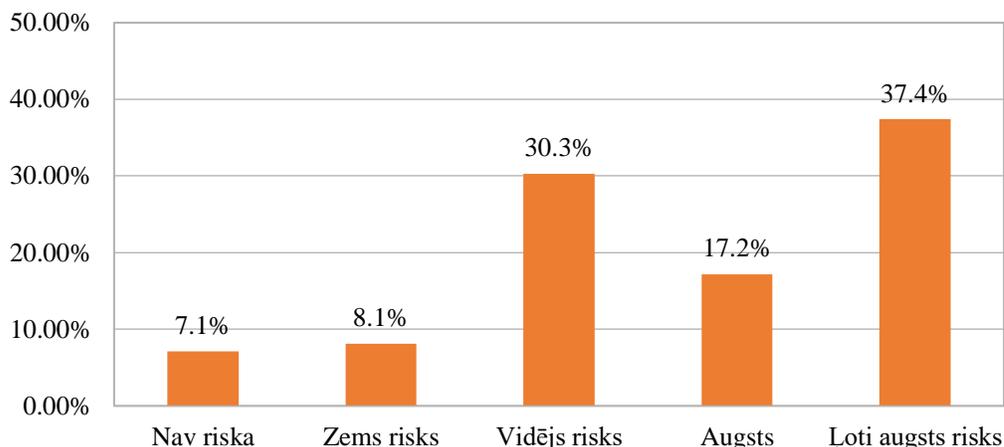
Respondenti atvērtajās atbildēs par skaidras naudas izmantošanu, to visbiežāk pamatoja ar privātumu (28%), ieradumu (13%) un praktiskumu, īpaši nelieliem pirkumiem (22%) vai situācijās, kad elektroniskie norēķini nav pieejami (15%). Savukārt digitālie maksājumi tika saistīti ar ērtību un ātrumu (79%). Šis līdzsvars starp ērtību un drošības izjūtu raksturo Latvijas sabiedrībai tipisku maksājumu uzvedību – hibrīdmodeli, kurā abas maksājumu formas pastāv paralēli un papildina viena otru. Šo hibrīdpraksi apstiprina arī jautājuma rezultāti, kurā respondenti novērtēja savu pāreju uz digitāliem maksājumiem pēdējo trīs gadu laikā (skat. 4.attēlu.).



4.attēls. Respondentu pašvērtējums par pāreju uz digitālajiem maksājumiem pēdējo trīs gadu laikā

(autores veidots, VisiDati.lv, 13.11.2025)

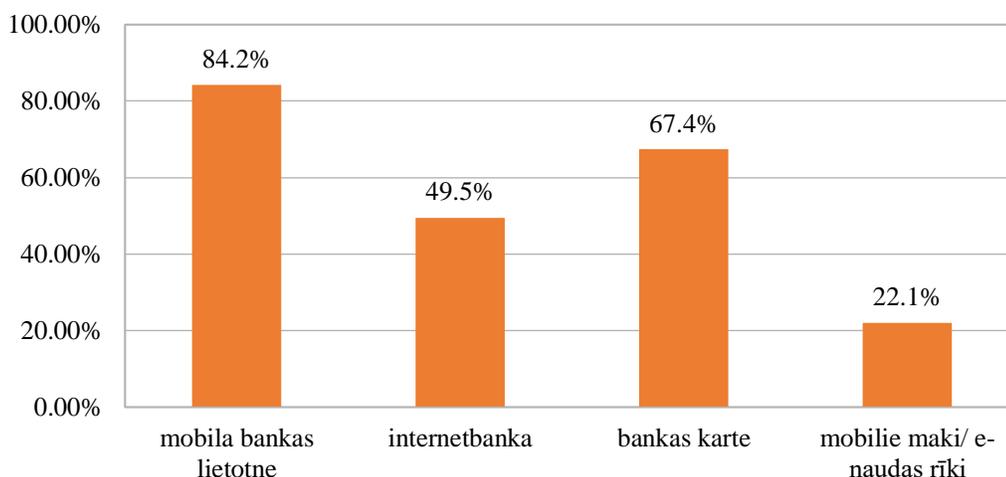
Lielākā respondentu daļa (60%) norādīja, ka lieto abus maksāšanas veidus līdzīgi, kas nozīmē, ka, neskatoties uz digitālo maksājumu izplatības pieaugumu, skaidras naudas izmantošana nav būtiski samazinājusies un iedzīvotāju maksāšanas ieradumi nav mainījušies. Šie rezultāti norāda uz iedzīvotāju salīdzinoši mērenu un pragmatisku attieksmi pret digitalizāciju - digitālo risinājumu ieviešana notiek, bet ne izstumjot skaidro naudu, drīzāk integrējot to jaunā maksājumu paradumu līdzsvarā. Līdzīga tendence redzama visā eirozonā - ECB SPACE 2024 dati rāda, ka lielākā daļa iedzīvotāju kombinē skaidru un bezskaidru naudu atkarībā no situācijas [4]. OECD dati arī apliecina, ka sabiedrības pāreja uz digitalizāciju nenotiek vienlaicīgi visās demogrāfiskajās grupās, bet veidojas pakāpeniski, integrējot dažādus maksājuma risinājumus vienlaikus [10].



5.attēls. Risku novērtējums pilnīgas skaidrās naudas atteikšanās gadījumā
(autores veidots, *VisiDati.lv*, 13.11.2025)

Svarīga aptaujas daļa bija respondentu attieksmes analīze pret iespējamu pilnīgu pāreju uz digitāliem maksājuma veidiem. Dati liecina, ka 71,5% respondentu paustu satraukumu, ja valstī vairs nebūtu iespējams norēķināties skaidrā naudā: 42,9% atbildējuši “jā, ļoti uztrauktu”, bet 28,6% - “drīzāk jā uztrauktu”. Šīs bažas kļūst vēl uzskatāmākas, analizējot jautājuma rezultātus (skat.5.attēlu), kas vērtēja iespējamus riskus gadījumā, ja skaidra nauda valstī pilnībā tiktu izņemta no apgrozījuma. Rezultāti rāda, ka kopējais uztvertais risku līmenis ir augsts: 37,4% respondenti uzskata riskus par ļoti augstiem, 17,2% - par augstiem, 30,3% - vidēji augstiem riskiem, kas norāda, ka sabiedrības vērtējumā, pilnīga digitalizācija ir saistīta ar augstu risku intensitāti, un lielākā daļa sabiedrības šos riskus uztver kā būtiskus.

Šo tendenci papildina arī respondentu viedokļi par to, kā digitālās maksājumu vides attīstība varētu ietekmēt sabiedrības nevienlīdzību. 62,2 % aptaujāto norādīja, ka pāreja uz pilnībā digitāliem maksājumiem, visticamāk, veicinās nevienlīdzības pieaugumu, izslēdzot no maksājumu sistēmas noteiktas sabiedrības grupas. Šie dati norāda, ka bažas par digitālo norēķinu riskiem ir ne tikai saistītas ar teorētisku iespēju pilnībā atteikties no skaidras naudas, bet arī ar praktisku nedrošības izjūtu ikdienas digitālās maksājumu sistēmas lietošanā. Šis rezultāts būtiski saskan ar BIS pētījumiem, kuros norādīts, ka valstīs, kur digitālā finanšu infrastruktūra kļūst dominējoša, sabiedrībā pieaug bažas par datu drošību, kibernetisku risku, tehnoloģisko kļūmju ietekmi, sociālās nevienlīdzības saasināšanos [2]. ECB SPACE 2024 dati arī uzsver, ka 75% eirozonas iedzīvotāju uzskata skaidru naudu par būtisku drošības instrumentu ārkārtas situācijās [4].

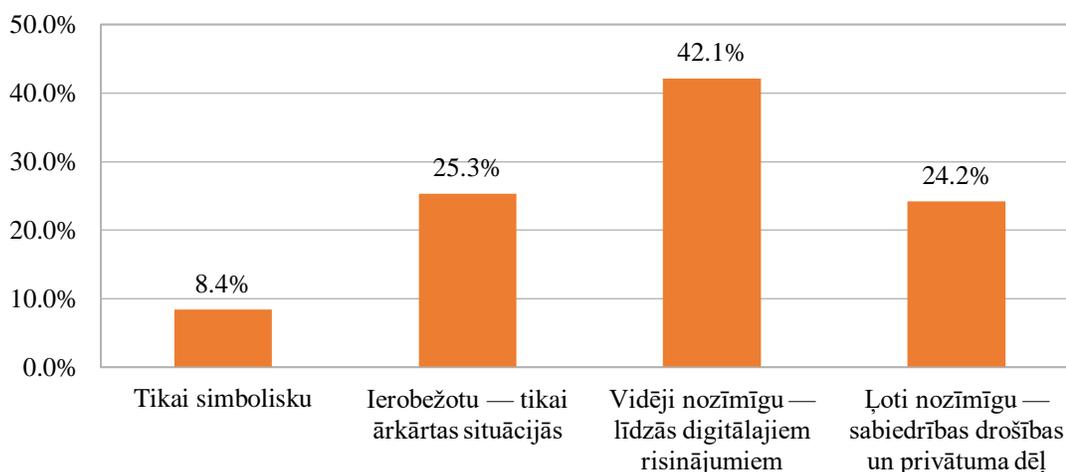


6.attēls. Bieži izmantoto digitālo maksājumu rīku isplatība sabiedrībā
(autores veidots, *VisiDati.lv*, 13.11.2025)

Vienlaikus jāuzsver, ka, neraugoties uz sabiedrībā pausto ievērojamo satraukumu par iespējamu pilnīgu atteikšanos no skaidras naudas nākotnē, 85,7% respondentu tomēr izmanto mobilo bankas lietotni, 48,4% bieži izmanto internetbanku, 67% bieži lieto bankas karti, un 23,1% aktīvi izmanto mobilos makus vai e-naudas rīkus (piemēram, PayPal vai Revolut), kas apliecina augstu digitālās infrastruktūras izplatību, tomēr tas nenozīmē pilnīgu uzticēšanos pilnīgi digitālai finanšu videi (skat.6.attēlu). Līdz ar to var secināt, ka, lai gan digitālā transformācija maksājumu jomā ir notikusi strauji, sabiedrība nav gatava atteikties no skaidras naudas kā stabilitātes un uzticamības instrumenta.

Svarīga aptaujas daļa bija izvērtēt sabiedrības attieksmi par skaidras naudas nozīmi mūsdienās un tās iespējamo lomu nākotnē. Kopējais respondentu vērtējums par skaidras naudas nozīmīgumu sasniedz 4,19 punktus no 5, kas norāda uz augstu skaidras naudas vērtējumu sabiedrības uztverē un apliecina tās turpmāko nepieciešamību maksājumu sistēmā.

Šī attieksme atklājas arī respondentu ikdienas rīcībā — ievērojams vairākums jeb 86,9% aptaujāto glabā mājās skaidras naudas uzkrājumu. No tiem 35,4% to dara regulāri, savukārt 51,5% uztur nelielu skaidras naudas rezervi drošības nolūkos. Šie dati parāda, ka sabiedrība turpina uzticēties skaidrai naudai kā drošības mehānismam, kas paredzēts lietošanai ārkārtas situācijās. Tas apliecina, ka sabiedrība skaidru naudu uzskata ne tikai par tradicionālu maksāšanas līdzekli, bet arī par svarīgu finanšu stabilitātes instrumentu. BIS Red Book norāda, ka skaidras naudas uzkrāšana kā drošības rezerves mehānisms pieaug pat augsti digitalizētās ekonomikās [2].



7.attēls. Skaidras naudas nākotnes lomas novērtējums digitālizācijas attīstības apstākļos
(autores veidots, *VisiDati.lv*, 13.11.2025)

Respondentu priekšstats par skaidras naudas nākotnes nozīmi šos secinājumus papildina vēl skaidrāk. 90% uzskata, ka fiziskajai naudai saglabāsies nozīmīga vai daļēji nozīmīga loma, kas ir augstāks rādītājs par eirozonas vidējo (ECB SPACE 2024 - 78%) [4]. 25,3% to redz kā ierobežoti pieejamu, bet kritiski nepieciešamu krīzes apstākļos, 42,1% prognozē skaidras naudas vidēji nozīmīgu lomu līdzās digitālajiem maksājumu veidiem; savukārt 24,2% uzskata, ka fiziskā nauda arī nākotnē saglabās ļoti būtisku nozīmi kā privātuma un individuālās finanšu autonomijas garants.

KOPSAVILKUMS. CONCLUSION

Pētījuma rezultāti atklāj, ka Latvijas iedzīvotāju maksājumu paradumos dominē digitālie norēķini, taču neraugoties uz straujo maksājumu digitalizāciju, skaidras naudas izmantošana joprojām saglabā nozīmīgu vietu ikdienas praksē. Aptaujas dati rāda, ka skaidra nauda tiek lietota regulāri un mērķtiecīgi, īpaši nelieliem pirkumiem, privātiem norēķiniem un situācijās, kad digitālie maksājumi nav pieejami. Šī tendence saskan ar ECB un BIS atziņām, kas uzsver skaidras naudas funkcionālo un sociālo nozīmi pat augsti digitalizētās ekonomikās.

Analizējot attieksmi pret digitālo maksājumu izplatību, konstatēts, ka sabiedrība aktīvi izmanto dažādus elektroniskos finanšu rīkus, tomēr tas neizslēdz piesardzīgu nostāju pret pilnīgu pāreju uz digitāliem norēķiniem. Respondentu vērtējumos izteikti uzsvērti riski, kas saistīti ar datu drošību, kiberapdraudējumiem, tehnoloģisko traucējumu ietekmi un potenciālu sociālās nevienlīdzības padziļināšanos — šīs bažas pilnībā atbilst OECD un BIS pētījumos identificētajiem riskiem.

Vienlaikus skaidra nauda tiek uztverta kā uzticams drošības un autonomijas instruments, īpaši ārkārtas situācijās, ko apliecina arī tās klātbūtne mājāsaimniecību uzkrājumos. Rezultāti norāda uz stabilu hibrīdmodeli, kur fiziskā un digitālā nauda pastāv komplementāri, nodrošinot gan ērtību, gan finanšu drošību.

Turpmāko perspektīvu vērtējumā 90% respondentu prognozē skaidras naudas saglabāšanos nozīmīgā vai daļēji nozīmīgā lomā, tostarp kā ārkārtas situāciju un privātuma nodrošināšanas instrumentu. Kopumā pētījums atklāj sabiedrības pragmatisku pielāgošanos digitalizācijai, saglabājot līdzsvaru starp inovāciju pieņemšanu un tradicionālo finanšu instrumentu nozīmi.

Apkopotie rezultāti uzsver nepieciešamību uzturēt līdzsvarotu maksājumu vidi, kur digitālie risinājumi attīstās, vienlaikus saglabājot uzticamu un pieejamu fiziskās naudas apriti, nodrošinot finanšu stabilitāti un sabiedrības tiesības uz izvēli digitalizācijas procesos.

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DIGITAL TRANSFORMATION AND ECONOMIC PERFORMANCE: THEORETICAL FOUNDATIONS AND EMPIRICAL EVIDENCE FROM LATVIA

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ABSTRACT

Digital transformation has become a fundamental economic stimulator, massively changing the production systems, labor forces in countries, competitiveness and growth prospects. The article, Digital Transformation and Economic Performance: Theoretical Foundations and Empirical Evidence in Latvia, explores the impact of digitalization on the macroeconomic performance of Latvia between 2018 and 2025. The study uses secondary data in the form of DESI, Eurostat, OECD, World Bank and the Central Statistical Bureau of Latvia, based on the Solow model of technological progress and the models proposed by Romer and Schumpeter regarding endogenous growth and creative destruction. The results show that there is a close positive relationship between digital transformation and GDP growth, and ICT value-added and labor productivity are steadily increasing within the period under study. The scores on DESI got better, the number of digital public services has grown, and the level of ICT-facilitated employment has grown, but the outcome also indicates a conversion gap: infrastructure development has outpaced the digital adoption of SMEs, penetration of advanced skills and maturity of innovation ecosystems. Latvia is in the process between preparedness and total digital conversion but little less so than Estonia because of lower absorption capacity at the enterprise level. The conclusion of the paper is that the future competitiveness of Latvia lies in the ability to turn the digital capacity into ubiquitous utilization by designing the skills into deeper and further by means of innovation and enterprise digitalization.

Keywords: Digital Transformation, GDP Growth, ICT Development, Labour Productivity, Latvia

INTRODUCTION

Nowadays, digital transformation is a source of economic development. It goes way beyond hardware installation or software deployment and is becoming more of a dynamic ecosystem characterized by cloud integration, automation through algorithms, public governance by digital mechanisms and architectures of cross-border data-exchange [1]. The economies of countries that can incorporate digital processes into production networks grow at a faster rate and are less sensitive to crises. Latvia is one such economy that is going the digitally mediated way of development. Latvia is a good research case as a member of the EU with good broadband connectivity and a growing ICT sector. The rate of acceleration in digitalisation increased in the post-2018 period, especially in and after the COVID-19 pandemic, when physical contact was no longer the main mode of economic continuity, and digital operations became the main one. The major aim of the given research is to investigate the impact of digital transformation on the GDP of Latvia, the labour productivity, restructuring of the sector and macroeconomic competitiveness.

Theoretical Framework

The Technological Progress Model forwarded by Solow assumes that an economy will be performing better when technology is increasing the efficiency of the output in comparison to capital and labour, that is, when technology increases the product output [2]. This mechanism is observed in the Latvian development of automation, e-governance, and data-based coordination approaches, which minimize obstacles to production and enhance the delivery of services. The Endogenous Growth Theory postulated by Romer recognizes knowledge accumulation as the source of continuous growth in the long run [3]. The increased ICT professionalism, coding skills formation, fintech services and distance learning systems in Latvia depict such knowledge-based growth. The concept of Schumpeterian Creative Destruction views digitalisation as a reorganizing policy that replaces outdated jobs and creates new jobs based on technology [4]. The transformation was verified by the fact that Latvia has stopped working on routine clerical positions, and currently, the country deals with cybersecurity, software engineering, and data analytics. All these frameworks provide a theoretical background of the connection between digitalisation and economic performance.

Review of Literature

The digitalisation process of the Latvian economy has been one of the most popular topics in recent policy and scholarly literature. Rupeika-Apoga et al. emphasize that Latvian SMEs are well connected but less advanced in their digital adoption due to a lack of skills, funding, and low innovation preparedness. Their research attests to the fact that infrastructures cannot guarantee productivity gains unless the business enterprises become proactive in applying the digital tools in the business process [5]. This is also supported by the European Commission Digital Decade Report of 2024, which indicates that, although the DESI indicators of Latvia have been improving, the country still has a significant skills gap, with less than half of the population possessing basic digital skills, which thus slows down the rate of digital maturity [6].

An associated assessment on digital skills at the EU level indicates that the Latvian workforce potential is lower than the EU average, and this will limit the pace at which digital systems are being adopted in the various sectors, especially in the manufacturing and services sectors [7]. In its country review, OECD highlights that the process of digital transformation in Latvia is uneven, with significant development of infrastructure and state-provided digital services and slower adoption within SMEs and regions. In the report, it is emphasized that the major missing links between digital capacity and economic performance are human capital development and enterprise adoption [8]. To add to that, the OECD Economic Survey (2024) acknowledges that digitalisation has boosted the GDP and productivity in Latvia but is also evident that further adoption of data technologies, cloud technology, and an innovation culture are required to maintain competitiveness in the long term [9]. Research of the European SMEs also indicates that the stronger the digital intensity, the greater the productivity and the opportunities to export, which means that Latvia can enhance its performance by reducing the gap in adoption and facilitating digital preparedness at the enterprise level [10].

Kahveci presents the DASAT model, showing that the digital awareness, strategy formulation, adoption, and transformation must go through stages of SMEs before the actual economic benefits are realized. This is applicable in the case of Latvia, where SMEs tend to be at the awareness level even though favorable infrastructures are in place [11]. According to the national report of Latvia on the national digitalisation progress, there are also similar gaps, such as that regional differences and low penetration rates with advanced skills still make the benefits of digital transformation available only to urban but not rural areas [12]. On another level, Nordic-Baltic regional studies also indicate a presence of digital territorial disparities, despite the high

connectivity of the rural territories, lower-level tools are embraced, leading to the unequal digital and economic performance [13].

IMF evaluations underscore the fact that Latvia, in its digitalisation must be accompanied by robust cybersecurity, investment in innovation and the policies guiding digital adoption towards the SMEs in order to have sustainable growth. The report substantiates that digital sectors have enabled economic resilience, particularly in the recovery phase of post-pandemic [14]. Comparative scores of DESI in the Baltic states show that Estonia is the leader, as it is characterised by a high level of enterprise digital integration, and Latvia is the last, as the cloud and AI uptake amongst SMEs in the country is lower [15]. A study on digital finance and innovation in the Baltics also reports that Latvia is experiencing an emerging fintech activity but requires more robust innovation ecosystems to capitalise on digital transformation to gain competitiveness [16].

The European Commission DESI methodological documentation confirms that digital performance needs to be considered, which means connectivity, human capital, integration of digital technologies, and digital public services should be integrated as a single entity in support of the structural interpretation utilised in the studies of Latvia [17]. The OECD and DG Reform experience of employer-based skills development in Latvia evidence that employers tend not to invest in digital training, which restricts their productivity increase due to the adoption of technology [18]. Lastly, the bibliometric analysis of the EU-wide can attest to the increased attention to the issue of digitalisation and economic performance, which places the Latvian experience into the larger European initiatives aimed at evaluating digital transformation outcomes [19].

Research Gap and Significance

Although the literature on digitalisation in the EU is widely defined, country-specific evidence regarding Latvia is relatively insufficient. Most of the scholarly work addresses the policy frameworks, but few works relate the statistical relation of DESI progression with GDP, labour productivity or structural changes of employment [20]. The study bridges the conceptual gap and empirical gap by connecting theoretical arguments and numerical data, as well as doing comparative analysis at the regional level. The information derived from this study is relevant to policy makers, economists, digital developers and enterprise strategists seeking to bring Latvia to the stage of complete digital maturity.

Objectives of the Study

1. To analyse the impact of digital transformation on Latvia’s economic performance, including GDP growth and labour productivity, during 2018–2025.
2. To examine the extent of digital adoption in Latvia, especially among SMEs and identify the gap between digital capacity and actual digital conversion.

Methodology

The secondary quantitative methodological design was chosen and uses official datasets retrieved in DESI, Eurostat, OECD, World Bank and CSB Latvia in the period of 2018-2025. Descriptive trend analysis was used to estimate the relationships between digital readiness and macroeconomic performance. The research focuses on ICT-GDP contribution, labour productivity levels, SME-level adoption of digital technology and digital employment dispersion.

Results and Analysis

Table 1: DESI & GDP Growth Trends in Latvia (2018-2025)

Year	DESI Score	GDP Growth %
2018	48.2	4.3%

2019	50.1	2.6%
2020	51.7	-3.1%
2021	54.8	4.5%
2023	56.9	2.7%
2024	57.4	2.9%
2025*	58.2 (est.)	3.1% (est.)

(Source: Researcher's compilation from DESI, Eurostat, OECD, World Bank and Central Statistical Bureau of Latvia.)

The descriptive trend shows clearly an upward trend in the values of DESI throughout the period analysed. The interim shrinkage in the GDP in 2020 is in line with the pandemic disruption, but quick digital adaptability helped in achieving one of the fastest bounces in the Baltic area in 2021. The fact that the trajectory between DESI and GDP trends is positive is an indication of structural compatibility, which supports the thesis that better digital preparedness leads to economic resilience and the acceptability of new experiences even after a crisis.

Table 2: ICT Sector Contribution and Labour Productivity in Latvia

Year	ICT Share of GDP	Labour Productivity Growth %
2018	5.8%	2.1%
2020	6.4%	1.6%
2022	7.2%	3.0%
2024	7.8%	3.5%

(Source: Compiled by the researcher from multiple secondary data sources.)

The ICT share of GDP was growing consistently, and it heralds the heightening digital value-creation intensity. The growth of productivity varied in the first years of the study but started picking up with the increase in digital diffusion. The similar trend of both indicators upwards supports the propositions of Solow and Romer that the production and knowledge accumulation of technology produce quantifiable productivity dividends.

Table 3: Baltic DESI Benchmark (2023 Comparative Profile)

Country	DESI 2023	SME Cloud/AI Usage	ICT Employment Share
Estonia	65.1	32%	8.4%
Lithuania	57.5	24%	7.6%
Latvia	56.0	18%	7.2%

(Source: Researcher's analysis based on DESI and international statistical databases.)

Estonia is ahead of the regional digital scenario, which is propelled by a high level of enterprise-digital integration and high levels of cloud-AI adoption. Latvia has a competitive score in DESI which is lagging in terms of commercial utilisation and intensity of innovation. The fact that there is a digital capacity-conversion gap is verified by this table, strong infrastructure, and slower enterprise-scale adoption.

Discussion

It can be analysed that Latvia is not at the stage of digital infancy but is not yet at the transformation depth that is as deep as in Estonia. Connection statistics are well, but successful conversion is impossible without the migration of abilities, culture of innovation support and public display of SME-sector digital acceleration. Digital adoption that was brought about by the pandemic revealed scalability capabilities, showing that technological ecosystems have the potential to stabilise economic shocks. Nonetheless, digital benefits are also skewed. The adoption is concentrated in the cities, strengthening the inequality in terms of the territory, and the transition

in the working force continues to keep up with the progress of technology. The potential of the long-term transformation in Latvia is based on the combination of infrastructure power and workforce capacity, integration and growth of the enterprises and innovation ecosystems.

Policy Implication Narrative

The way forward for Latvia should not just increase network space but also develop human capability to exploit new infrastructures. Formalised University courses must be offered in AI, robotics, cybersecurity and data systems. The SME support structures should shift away from an awareness programme to an adoption accelerator that is financially supported. On the national level, digital trust, which is based on cybersecurity, e-identity safety, and data protection, should be enhanced to provide scalable involvement across the economic segments. The digitally mature Latvia can only be made possible once the connectivity is accompanied by competence, maturity on productivity and innovativeness.

CONCLUSION

The economic data proves the fact that digital transformation is structurally integrated into the Latvian growth framework. DESI-flow, ICT-GDP growth, productivity modernisation and employment re-organisation all testify to the fact that digital evolution is a growth multiplier. The next way forward is not infrastructural development, where Latvia has been performing well, but a change of capacity into conversion, use and innovation. Having focused strategic attention on the formation of skills, SME digitalisation, and the creation of the knowledge economy, Latvia will be able to transform itself into a digitally developing country and become a recognised leader in the Baltic region with a significant competitive edge on the global market.

Limitations of the Study

Though the research provides important information on the digital transformation in Latvia, it is important to note that there are several limitations. To begin with, the study does not use any primary data, only secondary data collected by DESI, Eurostat, OECD, World Bank, and national databases; thus, the study has the limitation of the quality, timeliness and methodological differences in the sources. Second, the research fails to make use of econometric modelling, which restricts the possibility of determining causal links between the indicators of digital transformation and the macroeconomic performance. Third, the SME-level digital adoption is reflected using aggregated datasets, which fail to reflect intra-sector variations, regional variations, and variation in behaviour at the firm. In addition, the time frame of the study, 2018-2025, contains the COVID-19 pandemic period, in which the digital adoption began to increase atypically, which may bias long-term trend interpretations. Finally, the paper uses mainly quantitative indicators and lacks the use of qualitative input by players in the industry, which could have given greater contextual insight.

Scope for Further Research

The empirical knowledge around Latvian digital transformation can be improved and extended by new studies in the future. One possible direction is the econometric or structural equation modelling (SEM), which would be used to estimate the impact of digital readiness on the growth of GDP, labour productivity, and restructuring of the sectors. Surveys and interviews with SMEs at the firm level may provide useful information on behavioural barriers, lack of skills and trends in innovation adoption that cannot be seen in aggregate statistics. The comparative analysis, such as in Estonia, Lithuania, or EU-wide standards, can also highlight any contextual variations in policy inefficiency, enterprise responsiveness and diffusion of digital capabilities. Also, the

researchers may assess how the new technologies can influence the Latvian productivity environment, AI, cloud infrastructure, robotics, and fintech ecosystem. Policy relevance would also be enhanced by exploring the problems of digital inclusion, such as rural-urban differences, issues of labour market transition, and demographic factors. It will also be necessary to have longitudinal studies that are post-2025 to determine whether Latvia is succeeding in translating its digital capacity into full economic maturity.

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ANTI-MONEY LAUNDERING SYSTEM THROUGH THE LENS OF NIKLAS LUHMANN'S SYSTEMS THEORY

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ABSTRACT

Based on Niklas Luhmann Systems Theory, economical and legal systems are separate, independent systems, operating under their own codes. This does not mean that such systems ignore the existence of the other, or the environment that surrounds them however, due to differing operational logics, miscommunication may occur. The subject of this article is to analyze how the legal and economic systems interact and how they do so through the lens of Niklas Luhmann Systems Theory. This paper explores the concepts of AML/CTF and supervision coupling between financial institutions and supervisory authority, grounded in Luhmann's Systems Theory.

Keywords: anti-money laundering, Luhmann, Systems theory, compliance, management

INTRODUCTION

The growing complexity of global financial systems has heightened the risk of money laundering and terrorist financing (ML/TF), requiring not only advanced detection and risk assessment tools, but also effective communication between financial institutions and supervisory authorities. From Niklas Luhmann's Systems Theory perspective, ML/TF prevention is an autopoietic response of distinct functional systems (i.e., financial and legal) to external disturbances that threaten their internal stability.

ML/TF consequences such as economic disruption, social instability, and political insecurity are understood as system-specific perturbations, constructed through the unique communicative codes of each system (e.g., legal/illegal, profitable/unprofitable). A critical yet often overlooked factor in ML/TF prevention efforts is the quality of communication between financial institutions and supervisory authorities. However, due to differing operational logics, miscommunication may occur, leading to non-compliance or ineffective implementation of control mechanisms. To be effective, these systems must operate within a communicative framework that ensures mutual understanding.

Building on this foundation, theoretical perspectives, particularly those based in Systems Theory, offer valuable insights into how financial institutions and supervisory authorities communicate. ML/TF prevention depends on continuous dialogue between financial institutions and supervisory authorities, as compliance is a dynamic, inter-systemic process maintained through structural coupling.

The investigative problem of this paper is expressed through the question, how can Luhmann's Systems Theory explain the effectiveness of ML/TF prevention systems within the context of an autonomous financial system. *The objective* is to present illustrative examples of recent Anti-Money Laundering/ Countering the Financing of Terrorism (AML/CTF) regulatory breaches, following a discussion about how these examples explain miscommunication between financial institutions and legal system, resulting in non-compliance. *Research object* is AML/CTF compliance, and methods used in the article are scientific literature review, systematic, comparative analysis, and generalization.

BASIC THEORETICAL AND PRACTICAL PROVISION

General Principles of the Theory. In social science, systems theory conceptualizes economy and law as functionally differentiated systems. These systems are characterized by autonomy, maintained through operational closure meaning that no single system can govern the others, and are distinguished by their own internal binary coding (e.g., legal/illegal). One of the key concepts of Luhmann's theory is a biology-based self-reproduction process called *autopoiesis*. Autopoiesis refers to the capacity of a system to produce and reproduce the elements necessary for its own functioning, thereby sustaining the operational closure characteristic of each distinct system. Luhmann constructs his theory through adapting this approach with the assumption that a similar process also exist in social systems, and autopoietic systems interact with the environment by processing self-reference in their internal operations. [Cankurtaran and Akçay, 2014; Valentinov, 2014; Gerim, 2017; Dong-hyu, 2025; Rybárová, 2025].

Luhmann explored how the institutions of law and economics are independent systems and actually closed off from environment to some extent and their behaviour is governed by a set of internal constructs known as *communications* that are unique to each system. Nothing external can enter a system unless it is first translated into the system's internal code. For example, in the context of AML/CTF compliance, it is expressed that AML/CTF is a function system with the communication code of compliance/not compliance. [Cankurtaran and Akçay, 2014; Valeo and Underwood, 2015; Gerim, 2017; Kaya, 2021; Rybárová, 2025].

Communication as the Primary Element of the System. Luhmann emphasized the role of communications which serve to establish a boundary around the particular institution and to make sense of the environment. That is, each system engages in self-regulation, or self-reference, and is continuously in the process of trying to make sense of its environment and maintain internal order and consistency through a process of creating communications. Communications in each particular system, be it law or economics, use a different code specific to that system. This difference between codes makes each system unique and partially closed off to other institutional systems. [Valeo and Underwood, 2015]. Knowing the codes in the system is vital to understand the system itself and is the key to understanding why a system behaves the way it does. When one system comes up against another system, the codes of the system link these communications to each other that limit and curtail communications from other systems with different codes from entering. [Brans, 1997; Valentinov, 2014; Valeo and Underwood, 2015; Dionysios and Allen, 2016; Wagner, 2022].

Another key point drawn by Luhmann, is the statement that communicative operation becomes a part of a social system only with understanding, otherwise, there is always possibility of a communicative failure. In this respect, Luhman distinguishes three possible improbabilities regarding communication: (1) information; (2) utterance; (3) understanding. Luhmann states that communication is particularly determined through the last and the objective of communication is not to establish consensus but to increase the probability of successful communication. [Johnson and Leydesdorff, 2015; Gerim, 2017; Hakobyan, 2024].

Luhmann's Concept of Structural Coupling. Luhmann introduced *structural coupling* as a central aspect of autopoiesis. Structural couplings do not dictate a system's operation but instead provide irritations (or stimuli) to it and activate the system's resonance through the structural coupling. The concept of structural coupling emphasises selectivity, i.e., the system *channels* (or narrows down) the range of environmental influences while excluding others not directly pertinent to the system's operations as autopoietic systems cannot exist in an environment to which they are not adapted [Valentinov, 2014; Germin, 2017; Valentinov and Pies, 2018; Dong-hyu, 2025].

Building on this foundation, the relationship between financial institutions and supervisory authorities is characterised by structural coupling. While supervisory authorities establish the conditions for financial institutions' operations, they do not dictate the meaning that financial

institutions extract from the regulatory outputs. Financial institutions maintain their autonomy to determine what is relevant, relying on their interpretative frameworks. While this dependence allows financial institutions to tailor their AML/CTF programmes to their specific business models and ML/TF risk exposures it also brings vulnerabilities and risks of non-compliance. [Dong-hyu, 2025].

RESEARCH RESULTS AND THEIR EVALUATION

Structural Coupling in Practice. This paper employs a qualitative multiple case study approach to explore the interaction between financial institutions and supervisory authorities in the context of AML/CTF compliance. The method was chosen to align with the interpretive nature of Luhmann's Systems Theory, which emphasises communication processes, system autonomy, and structural coupling. The empirical material consists of publicly available supervisory reports, issued by supervisory authority, i.e. Bank of Lithuania, in recent years.

This section presents three cases of non-compliance with AML/CTF requirements identified during on-site inspections. The cases reflect AML/CTF shortcomings, as well as reveals deeper systemic misalignments that challenge the efficacy of regulatory communication within the financial sector.

Case 1: financial institution delegated critical AML/CTF processes to its electronic money distributors but failed to establish oversight mechanisms to ensure AML/CTF compliance. Significant shortcomings were identified in risk assessments, internal audits, and due diligence processes. The institution did not adequately examine the nature of its customer base, the risk profile of distributors' business models, or the origins of customers funds, including those related to crypto assets. Furthermore, transaction monitoring systems were inadequate, and human resources allocated to AML/CTF compliance functions were insufficient. The institution also failed to ensure that the purpose and intended nature of business relationships were adequately established or documented by its intermediaries [Bank of Lithuania, 2023].

Case 2: financial institution which operated entirely through intermediaries, failed to conduct AML/CTF risk assessments, apply due diligence measures, or evaluate reputation or operational capabilities of intermediaries. The institution did not implement control mechanisms to oversee how these intermediaries implemented AML/CTF measures, nor did it ensure compliance with legal obligations such as staff training, internal audits, or customer identity verification. Information systems lacked the functionality to track end-user data and transaction volumes. The institution also failed to conduct effective real-time and retrospective transaction monitoring, did not consistently report suspicious transactions to authorities. Sanctions compliance processes were inadequate or entirely absent [Bank of Lithuania, 2023].

Case 3: financial institution failed to identify customers, beneficial owners, or representatives in accordance with legal requirements. In some instances, the institution allowed for the creation of anonymous virtual accounts, thus facilitating potentially illicit financial activity. The monitoring of transactions was either non-existent or ineffective, with no mechanisms to ensure that customer behaviour aligned with declared business models or risk profiles. Suspicious activity was not adequately reported to the supervisory authorities, and the institution's systems for detecting terrorism financing or applying international financial sanctions were non-functional [Bank of Lithuania, 2023].

In the cases presented above, AML/CTF regulations though formally implemented were functionally decoupled from actual institutional behavior. This reflects what Luhmann would describe as *structural coupling failure*, i.e., the legal system attempted to influence the financial institutions, but the operational systems of those institutions did not adequately respond within the legal communication code. Delegation of critical AML/CTF functions without accountability,

absence of real-time monitoring, and non-existent internal compliance controls illustrate that legal norms alone were insufficient to steer organizational behavior, particularly when institutions operated according to different functional codes (e.g., efficiency, cost reduction, technological scalability).

Furthermore, the volume and complexity of AML/CTF compliance measures in these institutions may have exceeded their internal capacity to process such complexity – a situation Luhmann describes as *hypercomplexity*. In such conditions, legal requirements become mere formalities rather than operational imperatives, leading to compliance as symbolic rather than functional communication.

CONCLUSION

From the perspective of Niklas Luhmann's Systems Theory, these cases highlight the failures in communication between the legal system, understood as a normative communicative framework (i.e., a system of communication structured by legal norms and rules) and the operational logic governing financial institutions. Luhmann conceptualized law as an autopoietic social system that processes societal complexity through a binary code legal/illegal, thus structuring and guiding the system's communication according to normative rules.

The case studies support Luhmann's argument that law functions through normative expectations rather than direct causality, and its effectiveness relies on the successful integration (or coupling) with other systems. Where such integration is weak or absent, legal communication loses its systemic resonance, resulting in persistent non-compliance and heightened systemic risk. Therefore, the challenge lies in developing communication interfaces that can translate legal norms into operationally meaningful procedures for organizations incorporated in distinct functional systems.

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THE IMPACT OF AI TECHNOLOGY AND DYNAMICS OF WORKFORCE REDUCTION ON A BUSINESS'S NET PROFIT

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ABSTRACT

The integration of artificial intelligence (AI) into corporate operations is transforming organizational structures, workflows, and profitability. Understanding this relationship is essential for assessing the economic value of AI technologies and the strategic implications of workforce restructuring. Video-technology companies—whose workflows producing on editing, tagging, quality control, and customer support—represent an especially context for AI-driven optimization. This study investigates the relationship between AI adoption, workforce reduction, and net profit in firms operating in technology-intensive sectors. This paper examines two core strategies for AI integration within business (1) acquisition of AI-focused companies to internalize technological capabilities and (2) incremental implementation of external AI tools. Using theoretical frameworks of technological adoption, digital transformation, and automation economics, the paper evaluates how each strategy affects cost structures, labor realignment, innovation potential, and long-term profitability. Findings indicate that AI adoption can substantially increase net profit by reducing labor expenses, improving process efficiency. However, the financial gains depend on strategic implementation, including workforce reallocation, process redesign, and change-management practices. Firms that align AI deployment with human resource strategy achieve the highest profitability while maintaining organizational adaptability. The study contributes to understanding the economic and organizational dynamics of AI adoption and provides practical guidance for managers seeking to optimize returns from technological investment.

Keywords: Artificial intelligence (AI) adoption, Cost optimization, Labor cost reduction, Workforce automation

INTRODUCTION

Artificial intelligence (AI) has emerged as a transformative technology across global industries. From predictive analytics to autonomous process automation, AI is reduce the roles of human labor, organizational workflows, and financial performance. Firms adopting AI technologies often aim to reduce operational costs, improve quality, and increase scalability, yet the mechanisms through which AI adoption translates into net profit remain underexplored. Workforce reduction is a common consequence of AI integration, as automated systems replace repetitive or knowledge-intensive tasks previously performed by humans. While labor displacement can reduce costs, it also introduces organizational challenges, including employee retraining, role redesign, and potential resistance to change. Understanding the interplay between AI implementation, workforce dynamics, and profitability is critical for firms seeking to maximize the value of technological investment.

Company operates at the intersection of media technology, enterprise communication, and digital education, offering video management, streaming, analytics, and interactive video solutions. As video consumption rises and customer expectations grow, the company faces increasing pressure to deliver scalable, efficient, and cost-effective services. Artificial intelligence has

emerged as a transformative technology capable of automating many labor-intensive processes inherent to video production and distribution.

However, the adoption of AI raises complex questions about the impact on Company's workforce and net profit. While AI may reduce operational costs through automation, it may also require significant upfront investment, organizational change, and long-term technological maintenance. This paper explores how AI and workforce reduction dynamics interplay to influence Company's profitability and how the company can navigate this transition strategically.

The Role of AI in business Existing Workflows

Company's ecosystem involves large volumes of video that must be ingested, transcoded, captioned, indexed, distributed, and analyzed. Many of these tasks are traditionally performed by human workers, often supported by external service providers. Across all sectors, maintaining efficiency, reliability, and high-quality experience is critical—and this is where AI can bring transformative benefits. With AI, features such as automated transcription, real-time translation, intelligent video indexing, and predictive quality control can be handled by machines with far greater speed and consistency. This reduces operational costs significantly.

However, integrating AI into Company's operations also introduces short-term challenges. First, the initial investment in AI infrastructure, whether through purchasing technology, acquiring an AI-focused company, or integrating third-party tools—can be costly. These expenses may temporarily reduce profits before long-term gains are realized. Second, workforce reduction or role changes create internal and ethical complexities. Employees whose roles become automated may face displacement. This can lead to lower morale, resistance to technological change, and potential reputational concerns if not managed responsibly. Company must therefore balance the efficiency benefits of automation with thoughtful talent management strategies, such as retraining programs or transitioning staff into new, more specialized positions.

Workforce dynamics are central to understanding the broader impact of AI on Company's profitability. While AI reduces the need for certain types of labor—particularly repetitive or routine tasks, it increases the need for higher-skill labor in areas such as data science, AI system maintenance, product innovation, and advanced analytics. Fewer employees may be required in traditional operational roles, but more may be needed in specialized technical positions. The financial impact of this shift tends to be positive: AI reduces low-skill labor costs while allowing the company to invest in fewer, but higher-value, roles that drive innovation and competitive advantage. This dynamic aligns with trends across the broader technology sector, where automation frees up human workers for strategic, creative, and supervisory tasks.

Strategy One: Acquiring an AI Company

The first potential strategy for company is to acquire an AI company with expertise in video analysis, natural language processing, generative media, or real-time monitoring. While such an acquisition requires significant capital investment, it provides the company with immediate access to proprietary models and experienced AI engineers. Owning the technology allows Company to integrate AI deeply into its core Video Platform and Virtual Events Suite, offering intelligent features that materially differentiate its products from competitors. For instance, Company could deliver advanced lecture summarization tools for universities, smart editing and clipping features for media organizations, or predictive analytics that help enterprises optimize engagement in live

events. Over time, this level of integration can lead to substantial cost reductions because the company no longer needs to license expensive AI services externally. More importantly, it strengthens long-term competitiveness by giving Company complete control over innovation and customization.

Strategy Two: Incremental Integration of External AI Tools

The second strategy, incremental integration of external AI solutions, is more financially conservative and easier to implement in a short time. Using third-party APIs for speech-to-text, translation, video insights, or content recommendations allows the company to introduce new features quickly without expanding its engineering workforce or restructuring its business. This approach fits well with company's modular, cloud-based architecture, allowing AI functionality to be added layer by layer. Universities, for example, could immediately benefit from improved automatic captions, while corporate clients could gain enhanced analytics without major platform changes. The drawback, however, is that long-term costs may grow, as video usage scales, and external vendors may not meet the highly specialized needs of company's diverse customer base. Reliance on external providers also limits differentiation, as competing platforms can easily adopt the same AI services.

Impact on Labor Costs and Profitability

In terms of labor optimization, both approaches provide clear benefits. AI-powered automation reduces repetitive work across several departments: transcription teams, support teams, content management specialists, and live event technicians. Under an acquisition model, these reductions occur more quickly because AI capabilities become part of the platform's core infrastructure. With incremental integration, the changes are slower and more distributed over time. These forms of automation translate into a measurable reduction in operating expenses. As AI takes over manual and routine tasks, the number of hours required for production support, video processing, and customer service decreases. Even if Company maintains some human oversight, the scale and speed of AI tools allow the company to operate with smaller teams or reassign employees to higher-value roles. The reduction in contracted labor—particularly for captioning and technical monitoring—can produce some of the most significant cost savings, since these services represent recurring, volume-based expenses.

Beyond reducing direct labor costs, AI enhances profitability through improved efficiency and product performance. AI systems minimize human error, reduce delays, and increase the consistency of output, which lowers the expensive “redo” and troubleshooting workflows that often burden support staff. Faster, smoother operations lead to a better customer experience, higher satisfaction rates, and lower churn. Because Company is a subscription-based provider, retaining clients can have a powerful cumulative effect on net profit.

A Hybrid Strategy for Sustainable Growth

Financially, both strategies contribute to higher profitability, though on different timelines. Acquisition offers higher long-term gains through ownership of proprietary technology and advanced product capabilities that can command premium pricing. External integration provides immediate improvements with minimal financial risk, allowing Company to validate AI-driven enhancements before making larger commitments. For a company that serves thousands of institutions and enterprises, a hybrid strategy may provide the most effective balance: deploy

external AI tools first to capture quick wins and assess demand, then transition toward acquisition once the strategic direction is clear and the benefits are measurable.

Comparative Analysis

Factor	Acquisition	Incremental Integration
Upfront Cost	High	Low
Long-Term Cost Efficiency	High	Medium
Customization	High	Limited
Time to Differentiation	Fast	Slow
Vendor Dependency	None	High
Labor Automation Speed	Fast	Gradual
Risk Level	Medium	Low
Strategic Advantage	Strong	Moderate

CONCLUSION

AI presents a transformative opportunity for company to enhance its video platform, reduce operational costs, and improve customer experiences. Both primary strategies—acquisition and incremental integration—offer compelling advantages. Acquisition provides deep technological ownership and long-term strategic differentiation, while incremental integration minimizes risk and enables rapid deployment. However, a hybrid approach delivers the best of both worlds. By first adopting external AI tools and later acquiring an AI-focused company, the company can achieve immediate efficiency improvements while building a sustainable competitive advantage. Ultimately, AI adoption will allow Company to strengthen its market position, optimize its workforce, and increase profitability in an increasingly AI-driven digital landscape.

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GRĀMATVEDĪBAS PAKALPOJUMU ĀRPAKALPOJUMU ATTĪSTĪBA LATVIJĀ

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ANOTĀCIJA

Grāmatvedība ir ļoti nozīmīga ekonomikas apakšnozare, kuras galvenais uzdevums ir uzskaitīt saimnieciskos līdzekļus un to rašanās avotus, kā arī to izmaiņas saimnieciskās darbības ietvaros. Komercesabiedrību darbība nevar būt bez pilnvērtīgas grāmatvedības uzskaites kārtības. Kopš 2022. gada 1. janvāra Latvijā stājas spēkā Grāmatvedības likums. Grāmatvedības likuma pārejas noteikumos bija paredzēts, ka ārpalpojuma grāmatveži ir tiesīgi turpināt grāmatvedības pakalpojumu sniegšanu bez licences ne ilgāk kā līdz 2023. gada 1. jūlijam. Ārpalpojumu grāmatvežu darbības licencēšanu veic Valsts ieņēmumi dienests un vienlaikus ir izveidots ārpalpojumu grāmatvežu Publiskais reģistrs. VID dati liecina, ka ārpalpojumu grāmatvedības pakalpojumus sniedz aptuveni 7200 personu. Analizējot un apkopojot informāciju no dažādiem avotiem par uzņēmumiem, kas sniedz grāmatvedības ārpalpojumus, var izdarīt secinājumus par licencēšanas nepieciešamību, un tiem, kas sniedz ārpalpojumus, pastāvīgi jāuzlabo savas zināšanas, prasmes, jāseko līdzi izmaiņām likumdošanas sfērā. Par darbību bez licences grāmatvedim ir noteiktas soda sankcijas. Licenci izsniedz uz 5 gadiem, uzraugot arī tās pagarināšanu, apturēšanu vai anulēšanu. Licencēšana sniedz lielākas garantijas uzņēmējiem kvalitatīvu grāmatvedības pakalpojumu saņemšanai un iespēju pārbaudot grāmatveža kompetenci publiskajos reģistros.

Atslēgvārdi: grāmatvedības ārpalpojumi, grāmatvežu kvalifikācija, licencēšana

ABSTRACT

Accounting is a very important sub-discipline of economics, whose main task is to account for economic resources and their sources, as well as for their changes within an economic activity. The activity of commercial companies cannot be complete without keeping proper accounting records. The transitional provisions of the Accounting Law provided that outsourced accountants were entitled to continue providing accounting services without a licence until 1 July 2023 at the latest. The licensing of outsourced accountants is carried out by the State Revenue Service and a Public Register of Outsourced Accountants has been established at the same time. According to the SRS, there are approximately 7200 persons providing outsourced accounting services. Analysing and compiling information from various sources on companies providing outsourced accounting services, one can draw conclusions on the need for licensing, and those providing outsourced services should constantly improve their knowledge, skills and keep abreast of changes in the legislative sphere. There are penalties for an accountant acting without a licence. The licence is issued for a period of 5 years, with supervision of its renewal, suspension or revocation. Licensing provides greater guarantees for entrepreneurs to receive qualitative accounting services and the possibility to verify an accountant's competence in the public registers.

Keywords: accounting outsourcing, qualification of accountants, licensing

IEVADS. INTRODUCTION

Grāmatvedība ir ļoti nozīmīga ekonomikas apakšnozare, kuras galvenais uzdevums ir uzskaitīt saimnieciskos līdzekļus un to rašanās avotus, kā arī to izmaiņas saimnieciskās darbības ietvaros. Visu komercsabiedrību darbība nevar būt bez pilnvērtīgas grāmatvedības uzskaites kārtības.

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par ārpakalpojumu grāmatvedi bez atbilstošas profesionālās kvalifikācijas varēs strādāt līdz 2025. gada 1. jūlijam. Pārejas periods tika ieviests, lai grāmatvedības ārpakalpojuma sniedzēji bez steigas un kaitējuma savam biznesam varētu apgūt nepieciešamās zināšanas un iegūt vajadzīgo apliecinājumu [7]. Pēc 2023. gada 1. jūlija tie ārpakalpojuma grāmatveži, kuri nesaņēma licenci, vairs nevar sniegt pakalpojumus. Ārpakalpojuma grāmatveža funkcijas var veikt specialisti, kuriem ir pirmā līmeņa profesionālo augstāka izglītība (koledžas izglītība) vai arī akadēmiskā augstākā izglītība (vismaz bakalaura grādu) grāmatvedības, ekonomikas, vadības vai finanšu jomā un tam ir vismaz triju gadu pieredze grāmatvedības jomā (pieredzes prasība attiecas tikai uz atbildīgo ārpakalpojuma grāmatvedi).

Ārpakalpojumu grāmatvežu darbības licencēšanu veic Valsts ieņēmumi dienests (VID). Gandrīz puse no VID uzraudzībā esošajiem Noziedzīgi iegūtu līdzekļu legalizācijas, terorisma un proliferācijas finansēšanas novēršanas likuma subjektiem ir ārpakalpojuma grāmatveži.

Lai grāmatvedības ārpakalpojumu ņēmējs varētu pārliecināties par pakalpojumu sniedzēja tiesībām sniegt ārpakalpojumu grāmatvedību, tiks nodrošināta iespēja normatīvajos aktos noteiktā tīmekļvietnē piekļūt VID uzturētajam ārpakalpojumu grāmatvežu reģistram.

SVARĪGĀKĀS ATZIŅAS TEORIJĀ UN PRAKSĒ. BASIC THEORETICAL AND PRACTICAL PROVISION

Mūsdienu grāmatvedība ir profesionālās darbības nozare uzņēmējdarbībā ar vairākām darbības jomām: algots grāmatvedis, sabiedriskajā praksē strādājošs grāmatvedis, izglītības jomā strādājošie, zvērīnāti revidenti, ārpakalpojuma grāmatveži.

Kas tad ir grāmatvedība? Šim jēdzienam ir vairākas definīcijas:

1 – Grāmatvedība ir process, kas nosaka, mēra un dara zināmu finansiālo informāciju, lai dotu iespēju šīs informācijas lietotājiem pieņemt lēmumus un spriedumus [13].

2 – Grāmatvedība ir uzņēmuma nepārtrauktas savstarpēji saistītas saimnieciskās darbības atspoguļošanas sistēma, kas pamatojas uz dokumentiem ar dažādiem mērītājiem [6].

3 – Grāmatvedība ir tautsaimniecības uzskaites veids.

4 – Grāmatvedība ir māksla un process, kas hronoloģiski un sistemātiski reģistrē naudas vienībās un analizē uzņēmuma darījumus un notikumus, kuri vismaz daļēji ir finansiāla rakstura, kā arī tos apkopo, sastāda pārskatus un skaidro minēto darījumu rezultātus.

5 – Grāmatvedības uzskaites dati sniedz pagātnes darbības atspoguļojumu, kas nepieciešams pašreizējās situācijas izpratnei un kalpo nākotnes saimniecisko situāciju salīdzināšanai [6].

Grāmatvedības galvenie uzdevumi ir:

- paredzēt un kontrolēt uzņēmuma ieņēmumus un izdevumus attiecīgajā laika periodā, rezultātā nosakot peļņu vai zaudējumus;

- nodrošināt uzņēmuma vadību ar informāciju saimnieciska rakstura lēmumu pieņemšanai;

- nodrošināt kontroli pār uzņēmuma materiālo, darbaspēka un finanšu resursu izmantošanu un īpašuma saglabāšanu;

- nodrošināt finanšu pārskatu lietotājus (ieguldītājus, akcionārus, piegādātājus, pircējus, kreditorus, bankas, valsts institūcijas un citus lietotājus) ar patiesu un pilnīgu informāciju par uzņēmuma saistībām, saimnieciskās darbības rezultātiem un finanšu stāvokli;

- nodrošināt pareizu nodokļu aprēķināšanu;

- nodrošināt valsts likumu, normatīvo aktu un līgumu ievērošanu un izpildīšanu [6].

Grāmatvedība ir riskantākais un visdārgākais segments jebkurā kompānijā. Ir gadījumi, kad, trešās puses speciālista ar nevainojamu profesionāļa reputāciju, grāmatvedības konsultācijas ir nepieciešamas nepārvaramas varas apstākļu dēļ: pašu grāmatvedis pēkšņi uzrakstīja atlūgumu vai rīkojās nekorekti, nodokļu dienesti piemēroja soda sankcijas, atklājās grāmatvedības personāla ļaunprātības. Samazināt šādu risku skaitu uzņēmumam, var noslēgt līgumu ar grāmatvedības firmu,

kas piedāvā kompleksu pieeju nodokļu, juridiskajiem un IT aspektiem, sniedz uzņēmīgu speciālistu pakalpojumus, kuri orientējas tajā vai citā biznesa jomā.

Grāmatvedības outsorsings, jeb citiem vārdiem, līguma noslēgšana ar grāmatvedības biroju, kurā strādā eksperti-praktiķi ar iestrādātām iespējām, daudzos gadījumos samazina izmaksas, jo finanšu lietu nodošana ārpalpojuma atver piekļu inovatīvām tehnoloģijām, kuru izmantošana daudzām kompānijām ir par dārgu.

Kas ir grāmatvedības ārpalpojumi? Ņemot vērā likumu, var secināt, ka grāmatvedības ārpalpojumi ir pakalpojumi, kurus pamatojoties uz rakstveida līgumu (izņemot darba līgumu) sniedz persona, kura atbilst noteiktām prasībām.

Ārpalpojums tas ir uz līguma balstīta uzņēmuma konkrētas funkcijas nodošana citām uzņēmumam, kas specializējas vēlamajā jomā [15]. Sabiedrībai, kurai ir nepieciešami grāmatvedības pakalpojumi, slēdz uzņēmuma līgumu ar citu sabiedrību – grāmatvedības pakalpojumu sniedzēju. Līgumā paredz abu pušu tiesības, pienākumus, dokumentu apriti, samaksu par pakalpojumiem, vietu, kur tiek glabāti dokumenti un citus jautājumus. Faktiski tā ir sadarbība starp diviem uzņēmumiem.

Atšķirībā, no grāmatveža – uzņēmuma darbinieka, kurš darba pienākumus parasti veiktu, atrodoties uzņēmuma telpās, ārpalpojumu grāmatvedis darbu pamatā veiks ārpus uzņēmuma telpām.

Grāmatvedības ārpalpojumu veidi:

1. Grāmatvedības ārpalpojumi pilnā apmērā. Šādā gadījumā nav nepieciešams grāmatvedis - darbinieks, jo ārpalpojumu sniedzējs veic visus ar grāmatvedību saistītos darbus.
2. Ārpalpojumi daļējā apmērā. Piemēram, ārpalpojumu sniedzējs aprēķina algas, apkopo iegrāmatotos datus, lai sagatavotu pārskatus, deklarācijas, iesniedz un sagatavo deklarācijas. Piemēram, vairumtirdzniecības uzņēmumā darbinieks izraksta pavadzīmes. Dati par pavadzīmēm tiek uzkrāti grāmatvedības vai citā programmā. Ārpalpojumu grāmatvedis periodiski saņem datus, apstrādā tos, sagatavo un iesniedz nepieciešamos pārskatus.
3. Grāmatvedības konsultācijas. Neregulāri, rodoties jautājumiem, tiek saņemtas konsultācijas. Šāds pakalpojumu veids nav tik izplatīts. Var izmantot, ja rodas nepieciešamība salīdzinoši ātri saņemt

Attālinātos grāmatvedības pakalpojumus aizvien plašāk izmanto gan mazā, gan vidējā, gan arī lielā biznesa pārstāvji.

2020.gada novembrī rakstā „Ārpalpojumi – mūsdienīga kontu pārvaldības tendence” (Outsourcing – The Modern Trend of Accounts Management) autori pietiekami detalizēti apraksta, kas ir ārpalpojumi un kā tas radās, kā tas darbojas un kāpēc uzņēmumi to izvēlas, apraksta grāmatvedības pakalpojumu ārpalpojumus, priekšrocības un ieguvumus, un kam jāpievērš uzmanība, izvēloties šos pakalpojumus [4]. Arī rakstā autori aplūko ārpalpojumu tirgu Indijā, cilvēkresursu pieejamību un attīstības perspektīvas.

Raksta autori norāda, ka ārpalpojumi pirmo reizi tika atzīti par biznesa stratēģiju 1989. gadā un kļuva par neatņemamu sastāvdaļu uzņēmējdarbības ekonomikā 1990. gados. Daudzās valstīs pastāv nopietnas domstarpības par ārpalpojumu izmantošanu. Tie, kas iebilst, apgalvo, ka tas ir radījis zaudējumus vietējās darbavietas. Atbalstītāji saka, ka tas rada stimulu uzņēmumiem piešķirt resursus tur, kur tie ir visefektīvākie, un tas ārpalpojumi palīdz saglabāt brīvā tirgus ekonomikas būtību globālā mērogā.

Raksta noslēgumā aplūkotas pašreizējās un nākotnes tendences, kas ietekmēs ārpalpojumu tirgu.

Rakstā ar nosaukumu „Grāmatvedības procesa raksturlielumu ietekme uz grāmatvedības ārpalpojumiem – mākoņdatošanas grāmatvedības informācijas sistēmu lietotāju un nelietotāju salīdzinājums” (Impact of accounting process characteristics on accounting outsourcing - Comparison of users and non-users of cloud-based accounting information systems) autori

salīdzina grāmatvedības procesa ietekmi attiecībā uz lēmumiem par ārpalpojumu izmantošanu tradicionālās un mākoņdatošanas grāmatvedības lietotājiem [1]. Koncentrējoties uz grāmatvedības procesu ārpalpojumu izmantošanu starp mazajiem un vidējiem uzņēmumiem, autori pēta piecu biznesa procesu raksturlielumu ietekmi (biežums, cilvēka aktīvu specifika, nenoteiktība, informācijas intensitāte un nepieciešamība pēc klienta kontaktpersona) par lēmumu par ārpalpojumu izmantošanu.

Autoru mērķis bija izpētīt atšķirības starp mākoņa lietotājiem un lietotājiem, kas nav mākoņa pakalpojumi, viņi meklēja procesa raksturlielumus, kas atbilstu mākoņdatošanas siatēmas īpašībām. Šeit autori izskatīja tādas problēmas kā mērogojamība (biežums), informācijas intensitāte un sasniedzamība (saziņa ar klientu). Pētījumi ir parādījuši, ka mākoņdatošanas sistēmas var nodrošināt uzņēmumiem vairākas priekšrocības salīdzinājumā ar tradicionālākajām informācijas sistēmām, tostarp vieglu piekļuvi uz pieejamām informācijas sistēmām, kurām ir uzlabotas datu apstrādes iespējas, uzlabotas pieejamība un reāllaika sadarbības funkcijas. Šī raksta pēdējās sadaļās autori sniedz interpretācijas pētījumu rezultātiem un paplašina diskusiju par procesa īpašībām un mākoņdatošanas sistēmas loma grāmatvedības ārpalpojumos.

Jebkuram pakalpojumam, tostarp ārpalpojumiem, ir savi riski. Par to uzrakstīts rakstā „Ārpalpojumu riski un ieguvumi” (The risks and benefits of outsourcing) [2].

Kad uzņēmums vēlas koncentrēt savus resursus uz fundamentāliem iespējās, viņi pieņem lēmumu izmantot ārpalpojumus dažiem saviem pakalpojumiem, kas nav īpaši izdevīgi. Organizācijas, kas izvēloties izmantot ārpalpojumus, ļoti saprātīgi jāapsver ieguvumi un riski. Bieži ārpalpojumu piemēri darbības sastāv no: pārdošanas un mārketinga pakalpojumiem, IT pakalpojumi, cilvēkresursu pakalpojumi, piegāde, loģistika un izplatīšanas pakalpojumi, finanses un grāmatvedība pakalpojumiem un iepirkumu pakalpojumiem. Ārpalpojumu darbība ir kļuvusi par vienu no visplašākās un ienesīgākās jomas pasaulē.

Riski ir jāņem vērā ikvienam uzņēmums, kas nolemj daļu no tā izmantot ārpalpojumu sniedzējiem jo neveiksme var būt ļoti kaitīga. Ārpalpojumu priekšrocības: uzņēmums var koncentrēties uz savu galveno darbību, kas nodrošina vislielāko peļņu, piekļuvi kvalificētiem resursiem, zemākas izmaksas, ātrāki un labāki pakalpojumi ar iespēju izvēlēties pakalpojumu sniedzēju. Ārpalpojumu trūkumi: vadības kontroles zaudēšana, draudi uzņēmuma drošībai un konfidencialitātei, iespējamais faktisko izmaksu pieaugums. No visiem šiem trūkumiem var izvairīties sadarboties ar pareizo pakalpojumu sniedzēju. Pirms ārpalpojumu izmantošanu, uzņēmumiem ir jāņem vērā savas intereses, klientu un darbinieku intereses, un tikai pēc tam pieņemt apzinātu lēmumu [2].

Ārpalpojumi Latvijā sāka attīstīties 90. gados pēc neatkarības atjaunošanas. Tam veltīts raksts „Grāmatvedības ārpalpojumi Latvijā: problēmas un risinājumi” (ACCOUNTING OUTSOURCING SERVICES IN LATVIA: PROBLEMS AND POSSIBLE SOLUTIONS) [5]. Raksta autori veic pētījumus par grāmatvedības pakalpojumu attīstību Latvijā vēsturiskā kontekstā, veic grāmatvedības pakalpojumu tirgus analīzi, izpēta grāmatvedības pakalpojumu kvalitāti ietekmējošos faktoros un izstrāda iespējamus risinājumus šo pakalpojumu kvalitātes uzlabošanai.

Pētījumu rezultāti liecina, ka viens no svarīgākajiem kritērijiem, izvēloties ārpalpojumu sniedzēju, ir pakalpojuma kvalitāte, izdevīga cena, kompetence un iespēja optimizēt izmaksas. Lai izvērtētu grāmatvedības pakalpojumu attīstības iespējas, autori ir pētījuši kādus ārpalpojumus uzņēmēji izmanto Latvijā, kādas problēmas pastāv grāmatvedības pakalpojumu tirgū.

Saskaņā ar mūsdienu skatījumu jēdzienam “profesionāls grāmatvedis” ir ievērojami plašāka nozīme nekā tai bija profesijas sākotnējā attīstības posmā. Šodien profesionāls grāmatvedis ir speciālists, kurš ir studējis ekonomiku un grāmatvedību augstskolas izglītības iestādē un, pilnveidojot savas profesionālās zināšanas, ir specializējies auditā, grāmatvedībā vai nodokļos. Pētījumi liecina, ka līdz šim Latvijā ir bijis par maz pievērsta uzmanība grāmatveža profesijas nozīmei un grāmatveža kvalifikācijai. Viena no problēmām ir fakts, ka pastāv nepilnīgs regulējums

attiecībā uz grāmatveža profesionālā darbība Latvijā. Latvijas Republikas likums “Par grāmatvedību” paredz tikai to, ka par grāmatvedību atbild uzņēmuma vadītājs. Savukārt, noteikumus par grāmatvedību un tās organizēšanu pieņem Ministru kabinets, un attiecībā uz grāmatvedības uzskaites veicēju kvalifikāciju ir noteikta tikai viena prasība – profesionālos pienākumus pilda kvalificēti darbinieki.

Latvijā grāmatvedības pakalpojumu tirgus, salīdzinot ar citām Eiropas valstīm, nav regulēts, nav izstrādāti grāmatvežu profesionālās kvalifikācijas atzīšanas kritēriji. Atļaujot nodrošināt neprofesionālu pakalpojumi grāmatvedības jomā, Latvija kā valsts zaudē iespēju piesaistīt nepieciešamo ārvalstu investorus, valsts budžets zaudē iespējamus nodokļu ieņēmumus. Viens no problēmu risinājumiem varētu būt normatīvā regulējuma izstrāde par grāmatvedības jomā nodarbināto personu profesionālās kvalifikācijas atzīšanas kritērijiem, ņemot vērā starptautisko pieredzi un Latvijas Grāmatvežu asociācijas izstrādāto koncepciju.

Grāmatvedības pakalpojumu ārvalstu pakalpojumu attīstībai Latvijā ir tie paši posmi un problēmas kā kaimiņvalstī Lietuvā. Grāmatvedības ārvalstu pakalpojumiem Latvijā un Lietuvā nav bagātīgas pieredzes, jo pirmie uzņēmumi grāmatvedības pakalpojumus sāka sniegt pēc abu valstu neatkarības atgūšanas, un tas ir 1990.gadā. Tomēr 30 gadu laikā uzņēmumi ir ieguvuši labu reputāciju un klientus gan savā valstī, gan ārzemēs, nacionālie uzņēmumi ir kļuvuši starptautiski, starptautiski uzņēmumi ir paplašinājuši savu darbību. Rakstā „Grāmatvedības ārvalstu pakalpojumi Latvijā un Lietuvā” (CHALLENGES OF OUTSOURCING ACCOUNTING IN LATVIA AND LITHUANIA) veikts grāmatvedības pakalpojumu ārvalstu pakalpojumu problēmu izvērtējums Latvijā un Lietuvā [3].

Pētījumā tika izmantota aptauja, induktīvās un deduktīvās metodes, sistematizācijas, salīdzināšanas un informācijas apkopošanas metodes. Pētījuma objekts ir uzņēmumi, kas sniedz grāmatvedības ārvalstu pakalpojumus Latvijas Republikā un Lietuvas Republikā. Pamatojoties uz pētījuma rezultātiem, autori nonāca pie šādiem secinājumiem: lielākās problēmas ārvalstu pakalpojumu uzņēmumiem ir saistītas ar jauniem noteikumiem un standartiem, un ar tehnoloģiju attīstību. Abās valstīs ir līdzīgi uzskati par problēmām, ar kurām saskaras grāmatvedības ārvalstu pakalpojumu uzņēmumi, tomēr Lietuvas respondenti runāja par nopietnākām problēmām, piemēram, jaunu klientu piesaisti. Latvijas respondenti uzsvēra jauno noteikumu un standartu ievērošanas grūtības. Respondenti abās valstīs ir diezgan līdzīgi uzskati par sociālās sfēras iezīmēm. Pētījuma rezultāti liecina, ka Latvijā ir augstāks grāmatvedības ārvalstu pakalpojumu uzņēmumu darbinieku vecuma līmenis. Taču Lietuvas uzņēmumos bruto alga ir lielāka. Lielākā daļa darbinieku strādā nepilnu darba laiku abās valstīs. Turpmākus pētījumus var veikt laika perspektīvā.

VID dati liecina, ka 2021.gadā ārvalstu pakalpojumu grāmatvedības pakalpojumus sniedz aptuveni 7200 personu, un liela daļa no tām strādā, neregistrējot savu darbību. Ir arī uzņēmumi, kuriem ir pietiekami liels apgrozījums, bet nav grāmatvedības speciālista vai tas netiek algots ārvalstu pakalpojumā. Līdz ar to potenciālais nedeklarētais grāmatvedības pakalpojumu tirgus tiek novērtēts 22,10 miljonu eiro apmērā [14].

Latvijā kopš 1994. gada pastāv Latvijas Republikas Grāmatvežu asociācija (LRGA) [11]. LRGA ir vairāku nozīmīgu starptautisko institūciju biedrs: Eiropas grāmatvežu asociācija (EAA), Starptautiskā grāmatvežu zinātnes un izglītības darbinieku asociācija (IAAER) un Eiropas modernās vadības institūts (EIASM), Starptautiskās grāmatvežu federācijas (*International Federation of Accountants, IFAC*) un citi.

LRGA sāka brīvprātīgi sertificēt grāmatvežus 2000.gadā. Sertifikācijas programmu izstrādē bija iesaistīti gan Latvijas valsts akreditēto augstākās izglītības iestāžu mācībspēki, gan Starptautiskās grāmatvežu un skolotāju asociācijas konsultanti. Sertifikācijas programmas tiek izstrādātas saskaņā ar grāmatvežu profesionālās kvalifikācijas kritērijiem, kas pieņemti Apvienoto Nāciju Organizācijas Ženēvas starptautiskajā konferencē 1999. gadā, kā arī IAESB starptautiskiem izglītības standartiem un IFAC noteikumiem, principiem un starptautiskiem atzīšanas kritērijiem.

Līdz šodienai profesionālās zināšanas pilnveidojuši un sekmīgi nokārtojuši kvalifikācijas eksāmenus ap 700 grāmatveži, iegūstot profesionāla grāmatveža sertifikātu. Sertifikāta darbības termiņš ir 5 gadi, lai to pagarinātu, sertificētam grāmatvedim nepieciešams uzturēt profesionālo kvalifikācijas līmeni sertifikāta darbības laikā, atbilstoši LRGA resertifikācijas nolikumam [11].

Sākot ar 2021. gada 1. jūliju, VID izsniedz licences ārpalpojumu grāmatvežiem, un vienlaikus ir izveidots ārpalpojuma grāmatvežu Publiskais reģistrs [9]. Šāda kārtība palīdzēs pakalpojuma ņēmējiem identificēt kvalificētus pakalpojuma sniedzējus. Līdz šim, izvēloties ārpalpojumu grāmatvedi, nebija pieejams valstiski atzīts mehānisms, kas palīdzētu noskaidrot, kurš no pakalpojumu sniedzējiem ir kompetents un uzticams.

Un kopš 2023. gada 1. jūlija ārpalpojuma grāmatvedības pakalpojumus Latvijā drīkst sniegt tikai licencēti grāmatveži. To nosaka Grāmatvedības likums [7]. Līdz šim VID ir izsniedzis vairāk nekā 2800 licenču grāmatvedības ārpalpojuma sniedzējiem.

Ārpalpojuma grāmatvežu licencēšana ir valstiski atzīts mehānisms, kas pilīdz noskaidrot, kurš no pakalpojumu sniedzējiem ir kompetents un uzticams.

Tiem ārpalpojuma grāmatvežiem, kas ir sakārtojuši dokumentus, iesniegums licences saņemšanai jāaizpildā VID elektroniskās deklarēšanās sistēmā (EDS). Iesniegumā norāda: komersanti – uzņēmuma nosaukums un reģistrācijas numurs, atbildīgā ārpalpojuma grāmatveža vārdu, uzvārdu un personas kodu; pašnodarbinātā persona – vārdu, uzvārdu, personas kodu un nodokļu maksātāja reģistrācijas numuru. Iesniegumam pievieno šādus dokumentus: civiltiesiskās atbildības apdrošināšanas polises kopiju, atbilstoši normatīvajiem aktiem noziedzīgi iegūtu līdzekļu legalizācijas un terorisma un proliferācijas finansēšanas novēršanas jomā izveidoto iekšējās kontroles sistēmu, profesionālo kvalifikāciju apliecinājošo dokumentu kopijas un apliecinājumu par profesionālo pieredzi [8]. Par ārpalpojuma grāmatveža licences izsniegšanu vai pārreģistrāciju maksājama valsts nodeva 100 euro apmērā. Licence vai lēmums par atteikumu izsniegt licenci tiek nosūtīts elektroniski VID elektroniskās deklarēšanas sistēmā. Licenci izsniedz uz 5 gadiem, uzraugot arī tās pagarināšanu, apturēšanu vai anulēšanu.

Prasības licences saņemšanai nav grūti izpildīt. Bet maziem uzņēmumiem un īpaši fiziskām personām, kas grāmatvedības pakalpojumus sniedz kā saimnieciskās darbības veicēji, maz izpratne ir par iekšējo kontroles sistēmu (IKS), kurai ir jābūt jau desmit gadus. IKS grāmatvežiem un citiem NILLTPFN likuma subjektiem ir nepieciešama, lai pārvaldītu noziedzīgi iegūtu līdzekļu legalizācijas un terorisma un proliferācijas finansēšanas riskus, kā arī starptautisko un nacionālo sankciju riskus.

Daļai no pretendentiem grūtības sagādāja tieši izglītības prasības (vismaz pirmā līmeņa profesionālā augstākā izglītība (koledžas izglītība) vai akadēmiskā augstākā izglītība (vismaz bakalaura grāds) grāmatvedības, ekonomikas, vadības vai finanšu jomā. Bet viņiem bija doti divi gadi, lai uzsāktu mācības grāmatvedības jomā. Ja uzņēmumā gribi būt atbildīgais grāmatvedis un atbildēt par tā piedāvāto pakalpojumu kvalitāti, tad tev ir jābūt atbilstoši izglītībai. Bet atkal ir izņēmumi – pensionāri joprojām var strādāt bez attiecīgas izglītības, viņiem tika dots septiņu gadu pārejas periods. Lai uzņēmums varētu sniegt ārpalpojuma grāmatvedības pakalpojumus, atbildīgajam grāmatvedim jābūt vismaz trīs gadu pieredzei grāmatvedības jomā.

Informācija par jau izsniegtajām licencēm ir pieejamā VID tīmekļvietnes sadaļas „Publiskojamo datu bāze” apakšsadaļā „Licencēto ārpalpojuma grāmatvežu reģistrs” [9]. Ar to var iepazīties ikviens cilvēks, tajā skaitā ņēmēji, kuri uzticējuši kārtot savu grāmatvedību tieši ārpalpojuma grāmatvedim.

Par darbību bez licences Noziedzīgi iegūtu līdzekļu legalizācijas un terorisma un proliferācijas finansēšanas novēršanas likumā (78.panta 1.daļa) grāmatvedim ir noteiktas soda sankcijas – brīdinājums, soda nauda vai apturēta darbība, vai noteikts pagaidu aizliegums atbildīgajai personai pildīt pienākumus.

Soda sankcijas par licences neesamību un ne tikai, noveda pie situācijas, ka daži uzņēmumi, kas sniedz grāmatvedības pakalpojumus un kam pamatdarbības veids bija 69.20 – uzskaites, grāmatvedības un revīzijas pakalpojumi; konsultācijas nodokļu jautājumos, mainīja darbības veidu izreģistrējot šo VID EDS sistēmā vai pilnība pārtrauca savu darbību.

Dati no Lursoft IT datu bāzes [10] par kopējo uzņēmumu un likvidēto uzņēmumu sakītu laika periodā no 2020. līdz 2024. gadam pēc NACE klasifikatora 69.20 – uzskaites, grāmatvedības un revīzijas pakalpojumi; konsultācijas nodokļu jautājumos, darbības veidu:

1.tabula

NACE klasifikatora 69.20 uzņēmumu skaits

Gads	Skaits kopā	Likvidētie uzņēmumi
2024.	3006	53
2023.	3098	176
2022.	3143	316
2021.	3144	514
2020.	3111	690

Veicot uzņēmumu kopskaita analīzi var novērot, ka kopējais uzņēmumu skaits nav būtiski mainījies, neskatoties uz ievērojamo likvidēto uzņēmumu skaitu. Tas, visticamāk, nozīmē, ka daži uzņēmumi ir mainījuši savu pamatdarbību un vairs nesniedz grāmatvedības pakalpojumus. Ir arī gadījumi, kad ārpakalpojuma grāmatveži uz darba līguma pamata pārgāja strādāt apkalpotajos uzņēmumos.

Kā redzams Lursoft IT datu bāzē, uzņēmumu skaits, kas darbojas pēc NACE klasifikatora ar kodu 69.20, Latvijā ir 3006 uzņēmumi, Lietuvā – 4062 uzņēmumi un Igaunijā – 9343 uzņēmumi [10].

Bruto algas dati Lursoft IT datu bāzē ir norādīti pēc NACE klasifikatora kodu 69 – juridiskie un grāmatvedības pakalpojumi:

2.tabula

Strādājošo mēneša vidējā darba samaksa

Gads	Bruto (EUR)
2024.	1930
2023.	1739
2022.	1530
2021.	1435
2020.	1143

Pastāvīgā darba samaksas izaugsme ir saistīta ne tikai ar minimālās algas paaugstināšanu valstī, bet arī ar pieprasījuma pieaugumu pēc augstas kvalitātes grāmatvedības pakalpojumiem.

Lai veicinātu grāmatvežu profesionālās kvalifikācijas paaugstināšanu, progresīvās pieredzes popularizēšanu un apgūšanu, grāmatvedības uzskaites pilnveidošanu un attīstību, 2020.gadā 1.decembrī Latvijā reģistrēta Biedrība “Latvijas Republikas ārpakalpojuma grāmatvežu asociācija” (Biedrība LRĀGA) [12]. Biedrības mērķi aptver gan dalību likumdošanas priekšlikumu izstrādē un apspriešanā grāmatvedības, finanšu un nodokļu jomā, gan ārpakalpojuma grāmatvežu un biedru profesionālo interešu pārstāvniecību valsts un pašvaldību iestādēs, kā arī nevalstiskajās organizācijās.

Biedrība LRĀGA uz brīvprātības principiem, ar attiecīgo saimnieciskās darbības veicēju piekrišanu, veido un uztur licencēto ārpakalpojuma grāmatvežu sarakstu ar mērķi jebkuram jaunajam uzņēmējam redzēt ārpakalpojuma grāmatvedības pakalpojumu sniedzējus, lai izvēlētos sadarbības partneri. Saraksts sagatavots uz licencēto ārpakalpojuma grāmatvežu pieteikumu

pamata. Iekļaujot ziņas par saimnieciskās darbības veicēju šajā sarakstā, šī saraksta veidotāji vispirms pārliecinās par licences spēkā esamību VID uzturētajā Publiskajā ārpakalpojuma grāmatvežu reģistrā. Licencēto ārpakalpojuma grāmatvežu sarakstā iekļauti: 2 individuālie komersanti, 21 sabiedrība ar ierobežotu atbildību un 7 saimnieciskās darbības veicēji.

PĒTĪJUMA REZULTĀTI UN TO IZVĒRTĒJUMS. RESEARCH RESULTS AND THEIR EVALUATION

Pamatojoties uz šo pētījumu, var secināt, ka grāmatvedības nozare ir nozīmīga ekonomikas apakšnozare. Grāmatvedību Latvijā regulē Grāmatvedības likums un Ministru Kabineta noteikumi. Ārpakalpojumu grāmatvedis ir persona, kura pamatojoties uz rakstveida vienošanos un normatīvo aktu prasībām veic grāmatvedības uzskaiti un sagatavo grāmatvedības pārskatus. Atbilstoši Grāmatvedības likumam ārpakalpojuma grāmatvedim jābūt licencētam. Par licencēšanu atbild Valsts ieņēmumu dienests. VID arī kārtoti publisku ārpakalpojumu grāmatvežu reģistru. Licenci var pagarināt, anulēt vai apturēt. Licence tiek izsniegta uz ierobežotu laiku – pieciem gadiem. Par darbību bez licences grāmatvedim ir noteiktas soda sankcijas. Licencēšana sniedz lielākas garantijas uzņēmējiem kvalitatīvu grāmatvedības pakalpojumu saņemšanai un iespēju pārbaudot grāmatveža kompetenci publiskajos reģistros.

KOPSAVILKUMS. CONCLUSION

Grāmatvedības dokumentu un finanšu pārskatu kvalitāte viennozīmīgi ir atkarīga no personas, kas veic grāmatvedības kārtošānu, un tās kompetences. Licencēšana ļauj potenciāliem klientiem izvēlēties tikai pārbaudītus un garantētas kvalitātes pakalpojumus. Un tiem, kas sniedz ārpakalpojumus, pastāvīgi jāuzlabo savas zināšanas, prasmes un nepieciešamība sekot līdzi izmaiņām likumdošanas sfērā.

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TŪRISMA UN ATPŪTAS ORGANIZĀCIJA

**TOURISM AND RECREATION
ORGANISATION**

ANALYSIS OF THE SHARE OF KHOREZM IN THE DOMESTIC TOURISM MARKET OF UZBEKISTAN AND ITS DEVELOPMENT POTENTIAL

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ABSTRACT

This article analyzes the role of the Khorezm region in the domestic tourism market of Uzbekistan, its existing tourism potential, and opportunities for its development. The competitiveness of Khorezm in domestic tourism, the transport and logistics conditions of the region, existing problems in marketing policy and diversification of services and ways to solve them were shown. Also, proposals and recommendations were developed on the role and importance of Khorezm in the national tourism strategy, and the transformation of the region into a sustainable tourism center.

Keywords: domestic tourism market, tourism potential, tourism resources, sustainable tourism, tourism infrastructure, tourism marketing, regional competitiveness, tourism of Uzbekistan, tourism development strategy.

INTRODUCTION

The Republic of Uzbekistan has demonstrated one of the fastest rates of tourism recovery and growth in Central Asia after the COVID-19 pandemic. In 2024, the country welcomed over 7.2 million foreign tourists, representing a 20% increase compared to 2023, while domestic tourism exceeded 22 million trips [1]. Despite the overall positive dynamics, the regional distribution of tourist flows remains extremely uneven: Tashkent city and region, Samarkand, Bukhara and Jizzakh regions together account for approximately 78–82% of organized domestic and inbound tourism. Khorezm region, which possesses unique historical and cultural potential (the ancient cities of Khiva — Itchan Kala UNESCO World Heritage Site, as well as more than 300 registered monuments), currently occupies less than 3.5% of the total volume of organized domestic tourism in Uzbekistan and about 4.8–5.2% of inbound tourism [2]. This significant gap between the existing resource base and the actual share in the national tourism market indicates the presence of systemic constraints and untapped development potential. The research problem lies in the critically low share of Khorezm region in the domestic tourism market of Uzbekistan against the background of its outstanding historical-cultural and natural-recreational resources, insufficient level of tourism infrastructure development, weak marketing positioning and limited integration into national and regional tourism routes. The topicality of the study is determined by several factors: the strategic priorities of the “Uzbekistan — 2030” Strategy and the Concept for the Development of Tourism until 2029, which set the task of balanced regional development of tourism and increasing the share of regions in total tourist flow to 55–60% by 2030;

the rapid growth of domestic tourism in Uzbekistan (average annual growth of 18–22% in 2022–2025), which creates a real opportunity to redistribute flows in favor of less loaded historical regions;

the need to reduce seasonal and territorial concentration of tourism in order to ensure sustainable socio-economic development of the regions.

The goal of the research is to perform a comprehensive analysis of the current share of Khorezm region in the domestic tourism market of Uzbekistan, to identify key constraints and to substantiate priority directions and mechanisms for realizing its tourism potential in the medium term (2026–2030). To achieve this goal, the following research design and methods are applied: Desk research and statistical analysis — processing of official data of the Statistics Agency, the Ministry of Ecology, Environmental Protection and Climate Change, regional government of Khorezm, as well as reports of the World Tourism Organization (UNWTO) and the World Travel & Tourism Council (WTTC) for 2019–2025 [3].

Comparative analysis — comparison of key tourism indicators of Khorezm with leading regions (Samarkand, Bukhara, Tashkent) and regions with similar resource profile (Kashkadarya and Surkhandarya).

SWOT-analysis and PEST-analysis of the tourism sector of Khorezm region.

Sociological methods — analysis of existing surveys of domestic tourists (2023–2025, $n > 3000$) and expert interviews with representatives of regional tourism administrations and business (planned for the main part of the study).

Forecasting methods — calculation of three scenarios (inertial, basic and optimistic) of the development of domestic tourism in Khorezm until 2030 on the basis of multiple regression models and expert assessments.

BASIC THEORETICAL AND PRACTICAL PROVISION

Domestic tourism refers to travel activities undertaken by residents within their own country. In Uzbekistan's context, it plays a significant role in regional economic diversification, local employment, and cultural promotion. The competitiveness of a region in the domestic tourism market depends on its tourism resources, accessibility, service quality, and the ability of local tour operators to design attractive products.

Tour operators act as key intermediaries between tourism supply and domestic demand [4]. Their capacity to create market-oriented tourism packages, integrate local services (transportation, accommodation, catering, guided tours), and promote regional attractions directly influences a region's share in the national tourism market.

Khorezm possesses one of the most distinctive historical and cultural landscapes in Uzbekistan. Its main attraction, the city of Khiva and the Ichan-Qala architectural ensemble, is inscribed on the UNESCO World Heritage List. This historical core serves as the main driver of tourist flows to the region, attracting cultural travelers, heritage tourists, and short-term holiday visitors.

The region’s concentration of architectural monuments, traditional crafts, and preserved urban cultural heritage provides a strong foundation for tourism development. However, the scale of growth is heavily dependent on accommodation capacity, infrastructure conditions, and the diversification of tourism products beyond historical sightseeing.

RESEARCH FINDINGS

In this context, the current state and position of the social sector in our country are determined.

According to the official statistical report of the Khorezm Regional Department of Statistics, a total of 475.3 thousand visitors were recorded in 2023.

Domestic tourists: 357.3 thousand people

International tourists: 118.0 thousand people

These figures represent individuals placed in hotels, private accommodation, and specialized lodging facilities.

The domestic tourist figure is substantial for a single region. However, when compared to Uzbekistan’s national domestic tourism volume, Khorezm’s share remains moderate and has significant room for expansion. Growth is currently constrained by the region’s limited accommodation capacity and seasonal fluctuations in demand.

In 2023, Khorezm had[5].

85 accommodation facilities (hotels and similar establishments)
2.2 thousand rooms
4.4 thousand bed spaces

A total of 140.7 thousand people stayed in hotels, 49.6% of whom were domestic visitors. The accommodation capacity remains one of the major limiting factors for expanding domestic tourism. Although the bed capacity is sufficient for peak-season cultural tourism, the existing stock does not fully support year-round growth or diversified tourism segments such as wellness, family recreation, or business travel.

The 357.3 thousand domestic tourists reflect Khorezm’s solid standing in heritage-based domestic tourism; however, the figure is relatively small compared to the several million domestic trips recorded nationwide. Khorezm hosts tourists who typically spend more on guided tours, museum visits, handicrafts, and cultural services. This gives the region an advantage in value-added tourism compared to other areas where tourists primarily travel for recreation. Government development initiatives for 2024–2025 indicate significant investments in Khorezm’s tourism infrastructure and the goal to substantially increase domestic tourism flows. These ongoing projects highlight strong future growth potential.

Based on statistical and analytical findings:

Limited accommodation capacity restricts large-scale growth during peak seasons.

High seasonality due to climate and the dominance of cultural-historical tourism leads to uneven tourist inflows.

Insufficient diversification of tourism products limits the region's ability to attract non-heritage tourists.

Marketing gaps and limited collaboration between private tour operators and digital platforms reduce competitiveness in the domestic market.

The social sector plays a crucial role in establishing smart markets and is particularly significant as an element of market structure. This sector is recognized as a necessary component for creating a smart market [5]. Accordingly, the development status and potential opportunities of the social sector are determined by the following conditions and factors:

The following definitions of social sector managers describe strategic tasks and behavioral motivations for determining sustainability. They are effective and important for understanding the models of strategic actions of various entities: the state, regions, enterprises, and others. Therefore, there are two extreme limits that threaten the prospects of social development: on the one hand, strategic goals separated from the real possibilities of their implementation; on the other hand, the current misunderstanding and non-acceptance of certain measures of economic policy aimed at long-term results is widespread. In the social sphere, any management decisions, even if they are officially aimed at a long-term perspective, cannot be recognized as a strategy. Because if strategic goals that do not correspond to the capabilities of the subject do not ensure its development in the long term, this so-called "strategy" will be meaningless, because it denies the existence of its subject. The generalization of the given definitions forms the basis for formulating a unique definition of the concept of the social sphere from the point of view of economic science. Industrial sector is a long-term system of activities of the subject aimed at realizing the goal, tasks and fixed directions of economic reproduction, taking into account the influence of a complex of endogenous and exogenous factors.

Summarizing the research results, it can be said that currently there is no generally accepted and agreed definition of the concept of the social sphere. This category is complex and constantly modified. In modern economic literature, this definition is widely used. Some authors see it as a process of forming a system of long-term goals and choosing ways to achieve them, others only as "decision-making rules that guide the organization in its activities or a means of achieving goals." For us, the first interpretation of the concept of the social sphere is more logical, it includes both the process of forming long-term goals and the process of developing methods for their implementation. The required area is a general set of actions for the company that defines stable problems (enterprises, industry, region, territory, national associations), mission, main goals and allocation of resources to achieve them. Goals that show a certain direction of development and ways to achieve them will be formulated.

It should be emphasized that the regional development of the social sphere is aimed at increasing the goals of regional policy, the tasks and means of solving social problems, the level

of economic competence of a certain region, the efficiency of its economy, the profitability of business and the income of the population, as a result, creating conditions for the development of social standards, quality of life and a harmonious business environment. It defines the main tasks of local executive authorities and local self-governing bodies in the public sector aimed at fulfilling the established tasks.

The planning of the necessary sphere is a cyclical process consisting of many stages that must be followed by the stages of the budget process, including medium-term planning. According to his approach to budget planning, strategic planning is the first of the four stages of an effective budget management system.

Based on them, there are the following definitions of the social sphere. In particular, the social sphere of society is considered to be a system organized to meet the material and spiritual needs of a person. This sphere includes the following areas:

- educational institutions (kindergartens, schools, hobby groups, colleges and universities);
- health care organizations (hospitals, polyclinics, sanatoriums and laboratories);
- cultural institutions (museums, palaces and houses of culture, parks of culture and recreation, circuses, theaters, concert halls, botanical gardens and galleries);
- sports organizations (sports clubs, football and hockey leagues, sports schools, sections and centers);
- social security (organizations that provide material assistance to elderly citizens, disabled people, single mothers, the unemployed and people without a place to live);
- general nutrition;
- municipal and economic services of the district, city, region;
- passenger transport and communication.

So, thanks to many organizations, the social sphere of public life provides conditions for work and recreation, takes care of the physical development of a person, his health and education.

According to another approach, the social sphere is a demographic group of the population that differs from each other in age, gender and personal characteristics. At the same time, the social sphere of society includes: elderly people, children, adolescents, men, able-bodied citizens, women and pensioners.

The third definition has a universal meaning. That is, the social sphere of society is the sphere of activity of people united in various social communities. These groups differ from each other in education, income and access to power.

The main items of expenditure in the social sphere are divided into the following groups:

- healthcare;
- education;
- culture;
- housing and communal facilities;
- social programs for the protection and provision of citizens' rights.

The management of the social sphere is carried out by state institutions and state institutions located in their offices. In this regard, the objects that exercise control over the implementation of social programs and the organization of measures necessary to improve the quality of life of the country's population are divided into groups of regional or local institutions.

- The goals of social activity of state institutions are:
 - protection of the health and life of the country's population;
 - ensuring equal rights to education and work for all citizens of the country;
 - providing the country's population with affordable housing;
 - implementation of pension provision after a citizen retires;
 - ensuring the right to self-expression and creative development.

Depending on the degree of development of the socio-cultural sphere of the country, one can have an idea of the well-being of the citizens of the country. It is in this sphere that the quality of life of people is determined by such spheres as health care, education, social security, culture, physical education and sports. Thus, the social sphere occupies one of the leading places in the internal policy of the state, it ensures the well-being of the country's population.

However, there will be problems in the social sphere. Because the main problem of society is the inequality of incomes of the country's population. In connection with this, with the development of society, the following methods are used to solve this problem:

- to provide each member of society with equal opportunities to regulate their lives;
- to provide benefits to citizens of the country to ensure a decent life. Success here depends on the individual efforts and actions of the citizen.

Indeed, the development of the social sphere in our country today is given special attention. Therefore, this direction is considered one of the most priority. Because there are four spheres in society: economic, political, social and cultural. Among these sectors, the social sector stands out for its unique feature as a set of sectors that serve the basic social needs of the population. At the same time, this industry is distinguished by the education of children and adults, medical care, cultural and sports activities, socialization of youth and other complex aspects. Therefore, research in the social sphere stands out as a relevant issue.

The overall goal of developing the social sector is assessed by the quality of life of the population.

In this regard, the development of a modern education system through cooperation with higher education institutions in our republic is emphasized. Establishing a comprehensive system is a significant condition for Uzbekistan's development [6]. Overall, the digitization of education, housing and communal services, transport, and other sectors is being successfully implemented. This is because social stability is the primary outcome of the region's performance in the digital economy.

CONCLUSION

In general, the above subsystems will exist as an environment for the development and increase in the population of the country. Khorezm holds a notable but still expandable position within Uzbekistan's domestic tourism market.

With 357.3 thousand domestic tourists in 2023, the region demonstrates strong demand, especially in cultural tourism, but its infrastructure limits the scale of future growth.

The UNESCO-listed Ichan-Qala complex serves as the region's core competitive advantage. Nevertheless, reliance on a single tourism product leads to exposure to seasonality and limits market diversification. National and regional investment programs for 2024–2025 create substantial opportunities for growth. Strategic projects in accommodation, transportation, digital tourism, and culture-based events are expected to expand the region's domestic tourism share significantly.

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THE ROLE OF EMOTIONAL PSYCHOLOGY IN TOURISM ADVERTISING: A STUDY ON SRI LANKA'S TOURISM PROMOTION

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ABSTRACT

This paper examines how emotional psychology influences the effectiveness of tourism advertising in Sri Lanka. The purpose of the study is to understand how emotions, visuals, stories, and social media content shape tourist interest and decision-making. The research problem focuses on the limited understanding of how emotional strategies impact Sri Lanka's tourism image. The novelty of the study is that it brings together emotional psychology and tourism advertising in the Sri Lankan context, offering updated insights after recent changes in the tourism environment. The main findings show that emotional visuals, storytelling, personalized digital advertisements, and honest communication strongly affect tourist attitudes. The paper concludes that emotional psychology is a powerful tool for improving Sri Lanka's tourism promotion.

Keywords: Advertising, Emotions, Psychology, Sri Lanka, Tourism

ANOTĀCIJA

Šajā rakstā tiek pētīts, kā emocionālā psiholoģija ietekmē tūrisma reklāmas efektivitāti Šrilankā. Pētījuma mērķis ir izprast, kā emocijas, vizuālie materiāli, stāsti un sociālo tīklu saturs veido tūristu interesi un lēmumu pieņemšanu. Pētījuma problēma ir ierobežotā izpratne par to, kā emocionālās stratēģijas ietekmē Šrilankas tūrisma tēlu. Pētījuma novitāte ir emocionālās psiholoģijas un tūrisma reklāmas apvienojums Šrilankas kontekstā, piedāvājot aktuālus secinājumus pēc neseno pārmaiņu tūrisma nozarē. Galvenie rezultāti liecina, ka emocionāli vizuālie materiāli, stāstījums, personalizētas digitālās reklāmas un godīga komunikācija būtiski ietekmē tūristu attieksmi. Rakstā secināts, ka emocionālā psiholoģija ir spēcīgs instruments Šrilankas tūrisma popularizēšanai.

Atslēgvārdi: Emocijas, Psiholoģija, Reklāma, Šrilanka, Tūrisms

INTRODUCTION. IEVADS

Tourism is one of Sri Lanka's most important industries, and strong advertising is necessary to attract international visitors [2]. Modern advertising uses psychological strategies, especially emotional appeals, to influence attention, interest, and travel decisions [1; 3]. The research problem of this paper is the lack of understanding of how emotional psychology affects tourism promotion in Sri Lanka. Although Sri Lanka has used emotional themes in marketing, there is limited academic study explaining how emotions shape tourist behavior [5].

The topicality of the research comes from the global shift toward emotional and digital advertising, especially through social media [4]. Sri Lanka is rebuilding its tourism image, so understanding emotional influence is essential.

The goal of this research is to analyze how emotional psychology affects tourism advertising targeted at visitors to Sri Lanka. The research design is based on descriptive analysis and hypothetical survey-based data. The methods used include literature review, psychological theory analysis, and simple quantitative data collection [1; 2].

BASIC THEORITICAL PRACTICAL PROVISIONS. PAMATA TEORĒTISKIE UN PRAKTISKIE NOTEIKUMI

Basic Theoretical Provision:

- Emotional Psychology in Advertising

Emotional psychology studies how feelings influence human behavior. In advertising, emotions affect how people remember information, form attitudes, and make choices [3; 4]. Positive emotions like joy, relaxation, and excitement encourage tourists to imagine themselves in a destination [3].

- The Affect Heuristic

This idea explains that people often decide from how they feel rather than through logical thinking [1]. If an advertisement creates a good emotional feeling, tourists are more likely to choose that destination.

- Social Comparison Theory

People compare their lives with others. On social media, tourists see influencers enjoying Sri Lanka, which creates desire to have similar experiences and leads to strong emotional motivation [4; 5].

- Storytelling and Memory

Stories create emotional meaning. Advertisements with stories about local culture, nature, or personal travel experiences help tourists remember a destination better [3].

- Color and Visual Psychology

Colors and visuals influence emotions: blue seas and green forests often create calm and pleasure, while cultural images create curiosity and interest [1; 3].

Basic Practical Provision:

- Use of Emotional Images in Sri Lankan Tourism Ads

Sri Lanka's marketing often uses visuals such as beaches, wildlife, hill country, and ancient cities. These images create positive emotional reactions and help form a strong destination image [2; 5].

- Story-Based Promotional Videos

Tourism videos show experiences like train rides, cultural dances, and wildlife safaris. These short narratives help tourists imagine real adventures and increase memorability [3].

- Social Media Influence

Influencers and user-generated content on Instagram, TikTok, and YouTube play a major role in Sri Lanka's modern tourism promotion. Their posts provide social proof and emotional inspiration [4].

- Personalized Online Advertising

Travel websites and social media use algorithms to show personalized ads that match user interests. This increases emotional relevance and conversion rates [5].

- Transparency and Trust-Building

Clear and honest communication, including safety and practical information, increases trust in Sri Lanka as a travel destination [2; 5].

RESEARCH RESULTS AND THEIR EVALUATION. PĒTĪJUMA REZULTĀTI UN TO NOVĒRTĒJUMS

Research Findings or Data

- 72% felt more interested in Sri Lanka after seeing emotional images.
- 64% said colorful visuals made ads more memorable.

Story-based advertisements

- 65% said stories helped them imagine being in Sri Lanka.
- 58% felt Sri Lanka seemed more meaningful and authentic.

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Social media influence

- 69% were influenced by travel influencers.
- 54% said Instagram and TikTok were stronger than traditional ads.

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Personalized digital ads

- 61% reacted better to personalized advertisements.
- 72% adventure travelers preferred hiking and surfing ads.
- 68% cultural travelers preferred heritage ads.
- 70% nature lovers preferred wildlife/hill-country ads.

Safety and trust messages

- 57% felt more confident after seeing safety-focused ads.
- 49% said these messages reduced travel worries.

Ethical advertising

- 63% trusted Sri Lanka more when ads were realistic.
- 41% disliked overly emotional or exaggerated ads.

Evaluation of Research Results

The findings show that emotional psychology strongly affects tourist interest in Sri Lanka.

- Emotional visuals are highly impactful

The high percentage of positive response proves that visuals strongly influence tourists' decisions. Sri Lanka's natural beauty makes emotional visuals especially effective.

- Storytelling strengthens connection

Stories allow tourists to emotionally imagine themselves in Sri Lanka, increasing destination attractiveness.

- Social media has strong emotional power

Influencers and user-generated content create desire through comparison, making social media a key marketing tool.

- Personalization increases relevance

Different tourists respond to different emotional triggers. Personalized ads increase engagement and interest.

- Safety messages build trust

Tourists seek reassurance. Honest safety communication helps restore Sri Lanka's tourism confidence.

- Ethics matter for long-term success

While emotional advertising is effective, unrealistic exaggeration reduces trust. Ethical emotion-based promotion is important for sustainability.

CONCLUSION. SECINĀJUMI

The study concludes that emotional psychology plays a major role in tourism advertising for Sri Lanka. Emotional visuals, storytelling, social media influence, and personalized ads all have a strong impact on tourist behavior. The research shows that tourists react positively to honest, meaningful, and emotionally rich advertisements. For Sri Lanka to strengthen its tourism industry, it should continue to use emotional marketing strategies while ensuring transparency and ethical communication. The findings can support future campaigns and help tourism organizations create more effective promotional materials.

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THE ROLE OF PSYCHOLOGICAL FACTORS IN ENHANCING TOURIST EXPERIENCE IN RECREATION ORGANIZATIONS

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ABSTRACT

The purpose of this research is to empirically examine the role of psychological factors in enhancing tourist experience in recreation organizations. The research problem is related to the insufficient consideration of tourists' motivation, perception, and emotional engagement in experience-based tourism management. A quantitative research approach was applied using a structured questionnaire survey among visitors to recreation organizations. The novelty of the study lies in integrating key psychological variables with measurable tourist satisfaction outcomes. The research findings indicate that emotional engagement and perception have a very high influence on tourist satisfaction, highlighting the importance of psychologically oriented service design in recreation organizations.

Keywords: behaviour, motivation, perception, satisfaction, tourist experience

ANOTĀCIJA

Šī pētījuma mērķis ir empīriski izpētīt psiholoģisko faktoru lomu tūristu pieredzes uzlabošanā atpūtas organizācijās. Pētījuma problēma ir saistīta ar nepietiekamu tūristu motivācijas, uztveres un emocionālās iesaistes ņemšanu vērā pieredzē balstītā tūrisma pārvaldībā. Tika pielietota kvantitatīva pētījuma pieceja, izmantojot strukturētu anketēšanas aptauju atpūtas organizāciju apmeklētāju vidū. Pētījuma jaunums ir galveno psiholoģisko mainīgo integrēšana ar izmērāmiem tūristu apmierinātības rezultātiem. Pētījuma rezultāti liecina, ka emocionālajai iesaistei un uztverei ir ļoti liela ietekme uz tūristu apmierinātību, uzsverot psiholoģiski orientēta pakalpojumu dizaina nozīmi atpūtas organizācijās.

Atslēgvārdi: uzvedība, motivācija, uztvere, apmierinātība, tūristu pieredze

INTRODUCTION. IEVADS

In contemporary tourism studies, the focus has shifted from the provision of basic services toward the creation of meaningful and memorable experiences. Tourist experience is no longer determined solely by tangible infrastructure but is increasingly influenced by psychological factors such as motivation, perception, emotions, and satisfaction. Recreation organizations operate in environments where emotional engagement and psychological comfort play a decisive role in tourists' evaluations and behavioral intentions.

Despite the growing academic interest in experience-based tourism management, empirical research examining the role of psychological factors in recreation organizations remains limited. This research problem is especially relevant in the context of increasing competition among tourism destinations and the necessity to enhance tourist satisfaction through non-material value creation.

The goal of the research is to identify key psychological factors influencing tourist experience in recreation organizations and to evaluate their impact on tourist satisfaction. The research design is based on a quantitative approach using a structured questionnaire. The methods applied include survey analysis, descriptive statistical analysis, and comparative evaluation of research results.

BASIC THEORETICAL AND PRACTICAL PROVISION. SVARĪGĀKĀS ATZIŅAS TEORIJĀ UN PRAKSĒ

Tourist experience is a multidimensional concept shaped by both internal psychological factors and external service-related elements. Psychological factors determine how tourists perceive, interpret, and emotionally respond to tourism services and environments. Among these factors, motivation, perception, emotions, and satisfaction are considered the most significant in experience formation [2].

Motivation represents the internal driving force that influences travel decisions and participation in recreational activities. According to Kotler et al., tourist motivation affects expectations and determines the perceived value of tourism services [2]. Perception refers to the process through which tourists interpret service quality, environmental conditions, and staff behavior, directly influencing overall experience evaluation [4].

Emotions play a critical role in creating memorable tourism experiences. Positive emotional engagement enhances satisfaction, revisit intentions, and positive word-of-mouth communication [5, 6]. Satisfaction is defined as the result of a comparison between tourists' expectations and their actual experiences, serving as a key indicator of tourism service effectiveness [2].

From a practical perspective, recreation organizations can influence psychological factors through experience-oriented service design, staff communication skills, atmosphere management, and personalized service delivery. Integrating psychological considerations into management practices allows recreation organizations to enhance tourist satisfaction and long-term competitiveness.

Methodology

The empirical research was conducted using a quantitative research approach. Primary data were collected through a structured questionnaire distributed among tourists visiting recreation organizations. Convenience sampling was applied due to accessibility constraints. The research sample consisted of 60 respondents.

The questionnaire included closed-ended questions measured using a five-point Likert scale, where 1 indicated strong disagreement and 5 indicated strong agreement. The survey focused on four psychological variables: motivation, perception, emotional engagement, and satisfaction. The collected data represent the author's own empirical research.

Descriptive statistical analysis was applied to identify the relative influence of each psychological factor on tourist experience. The results were summarized using mean values to evaluate the strength of influence of each variable.

RESEARCH RESULTS AND THEIR EVALUATION. PĒTĪJUMA REZULTĀTI UN TO IZVĒRTĒJUMS

The present study examined the role of psychological factors in enhancing tourist experiences within recreation organizations, focusing on motivation, perception, emotions, attitude, and personality-related preferences. Both theoretical and empirical analyses confirm that these psychological factors significantly influence tourist satisfaction and behavioral intentions, including revisit intentions and recommendations.

The findings indicate that:

- 1. Psychological factors are critical determinants of tourist experience.**

Tourists’ motivations, perceptions, emotional engagement, attitudes, and personality-related preferences collectively shape their overall experience. Among these, **emotions and perceptions emerged as the strongest predictors** of satisfaction, highlighting the importance of creating experiences that are not only enjoyable but also emotionally engaging and well-organized.

2. **Tourist satisfaction strongly predicts behavioral intentions.**

The study found a significant positive relationship between satisfaction and intentions to revisit or recommend the recreation organization, demonstrating that enhancing psychological factors can directly contribute to organizational success and long-term customer loyalty.

3. **Practical implications for recreation organizations.**

Organizations that actively manage the psychological dimensions of tourism such as designing emotionally engaging activities, providing clear and pleasant environments, and considering tourists’ motivational and personality differences—are more likely to achieve higher levels of satisfaction and repeat visitation.

4. **Contribution to academic knowledge.**

This study contributes to tourism research by providing empirical evidence that psychological factors, rather than only physical or service-based factors, play a central role in shaping tourist experiences. It supports the integration of psychological insights into recreation management strategies.

5. **Limitations and Future Research.**

Although the study provides robust quantitative evidence, it is limited by its sample size, geographic scope, and reliance on self-reported measures. Future studies could adopt **longitudinal or experimental designs**, include **diverse cultural contexts**, and explore **mediating or moderating variables**, such as perceived service quality or social influence, to deepen understanding of how psychological factors interact with other determinants of tourist experience.

Furthermore, this research confirms that **tourist experiences in recreation organizations are significantly enhanced by psychological factors**. Recreation organizations that understand and integrate these factors into their service design and management practices can improve satisfaction, foster loyalty, and create lasting positive memories for visitors. The findings provide both theoretical support and practical guidance for tourism managers seeking to elevate the quality of recreational experiences.

The analysis of the survey data demonstrates that psychological factors significantly influence tourist experience in recreation organizations. Table 1 presents the mean scores of the evaluated psychological factors.

The table is compiled by the author based on the conducted survey results.

Table 1. Evaluation of Psychological Factors Influencing Tourist Experience [1]

Psychological factor	Mean score
Motivation	4.1
Perception	4.3

Emotional engagement	4.5
Satisfaction	4.4

To interpret the results, the following scale was applied:

- 1.0–2.0 – Low influence
- 2.1–3.0 – Moderate influence
- 3.1–4.0 – High influence
- 4.1–5.0 – Very high influence

The findings indicate that all examined psychological factors demonstrate a very high influence on tourist experience. Emotional engagement shows the highest mean value (4.5), indicating that emotional involvement plays a decisive role in shaping tourist satisfaction. Perception (4.3) and satisfaction (4.4) also demonstrate strong influence, confirming the interdependence between perceived service quality and emotional response.

The evaluation of results supports previous research findings, which emphasize the strong relationship between emotional experiences and tourist satisfaction [5, 6]. Tourists who reported higher emotional engagement also demonstrated stronger intentions to revisit and recommend the recreation organization, confirming the importance of psychological factors in experience-based tourism management.

CONCLUSION. KOPSAVILKUMS

The research confirms that psychological factors play a crucial role in enhancing tourist experience in recreation organizations. The empirical findings demonstrate that emotional engagement, perception, motivation, and satisfaction collectively influence tourists' evaluations and behavioral intentions. Emotional engagement was identified as the most influential factor affecting tourist satisfaction.

Recreation organizations that integrate psychological considerations into service design and management practices can achieve higher levels of tourist satisfaction and competitiveness. The study contributes to tourism research by providing empirical evidence on the role of psychological factors in recreation contexts. Future research should expand the sample size and apply advanced statistical methods to deepen the analysis.

RECOMMENDATIONS. IETEIKUMI

Based on the findings of this study, recreation organizations should prioritize **psychologically oriented service design** to enhance tourist experience. Special attention should be given to **emotional engagement**, as it was identified as the most influential factor in shaping tourist satisfaction. Managers are encouraged to create emotionally appealing environments, strengthen staff–visitor interactions through effective communication training, and design personalized recreational activities that align with tourists' motivations and perceptions. Additionally, incorporating regular feedback mechanisms can help organizations better understand tourists' psychological responses and continuously improve service quality. These practices will contribute to higher satisfaction, repeat visitation, and long-term competitiveness in the recreation tourism sector.

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DIGITAL TRANSFORMATION IN SRI LANKA'S TOURISM INDUSTRY

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ABSTRACT

Digital transformation is vital for strengthening Sri Lanka's tourism sector. This study examines the low adoption of advanced digital tools as the main research problem. The novelty lies in identifying gaps between basic digital use and smart-tourism readiness. Findings show that progress exists in online booking and marketing, but broader digital integration requires stronger skills, investment, and coordinated policy support.

Keywords: Competitiveness; Digitalization; Smart tourism; Tourism innovation; Tourism management

ANOTĀCIJA

Digitālā transformācija ir būtiska Šrilankas tūrisma nozares attīstībai. Pētījums analizē galveno problēmu — ierobežotu modernu digitālo tehnoloģiju ieviešanu. Jaunums ir atšķirības noteikšana starp pamatdigitalizāciju un gudrā tūrisma gatavību. Rezultāti rāda progresu tiešsaistes rezervēšanā un mārketingā, taču plašāka digitālā integrācija prasa lielākas prasmes, investīcijas un saskaņotu politiku.

Atslēgvārdi: Digitālā transformācija; Inovācijas; Konkurētspēja; Tūrisma attīstība; Viedais tūrisms

INTRODUCTION. IEVADS

The rapid pace of digital transformation has fundamentally reshaped global tourism systems, creating new expectations for efficiency, personalization, and accessibility. Modern travelers rely heavily on digital tools, from online booking platforms to real-time navigation and mobile-based services. As a result, destinations must adopt innovative technologies to remain competitive. Sri Lanka, recognized for its diverse natural and cultural attractions, faces increasing pressure to modernize its tourism infrastructure and digital capabilities. The purpose of this research is to analyze Sri Lanka's current level of digital readiness, identify gaps in implementation, and assess opportunities for smart tourism development.

The goal of this study is to assess the role and impact of digital transformation in strengthening Sri Lanka's tourism sector. The research design integrates qualitative and quantitative approaches. Secondary data from national reports, SLTDA statistics, and regional assessments were reviewed, while structured interviews with tourism operators provided industry-based insights. The Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) form the theoretical basis for analyzing behavioral patterns in digital adoption. This methodological approach enables a comprehensive evaluation of digital innovation across hotels, travel agencies, SMEs, and tourism service providers.

BASIC THEORITICAL PRACTICAL PROVISIONS. PAMATA TEORĒTISKIE UN PRAKTISKIE NOTEIKUMI

Digital transformation in tourism includes a wide range of technologies such as online distribution systems, AI-powered chatbots, virtual tours, automated property management systems, revenue management software, and data-driven customer relationship tools. The theoretical foundation emphasizes the impact of perceived usefulness, ease of use, and enabling conditions on adoption decisions. Practically, Sri Lanka has shown progress in digital marketing and online booking systems, with nearly all registered accommodations active on global platforms. Government initiatives like e-tourism portals and digital licensing also support modernization. However, gaps remain, especially in advanced digital solutions such as smart room technologies, IoT enabled services, and destination-wide digital integration. Limited digital literacy, infrastructure weaknesses, and financial constraints continue to slow progress.

RESEARCH RESULTS AND THEIR EVALUATION. PĒTĪJUMA REZULTĀTI UN TO NOVĒRTĒJUMS

The findings demonstrate considerable variation in digital adoption across tourism subsectors. Hotels with higher capital investment have implemented advanced technologies, while many SMEs still rely on basic digital tools. Approximately 92% of accommodation providers use online booking engines, whereas only about 40% have incorporated AI or automated management systems. Interviews reveal that stakeholders recognize the importance of digital transformation but require training, technical support, and funding. Sri Lanka's high mobile penetration rate and growing interest in digital entrepreneurship provide strong potential for smart tourism development. The evaluation suggests that the country is currently in a transitional phase, moving from basic digitalization toward more integrated smart solutions, though significant challenges remain.

CONCLUSION. SECINĀJUMI

Digital transformation is essential for strengthening Sri Lanka's tourism industry and improving global competitiveness. The research concludes that although digital tools are widely used for marketing and booking, advanced smart technologies remain underutilized. For sustainable progress, coordinated action between government institutions, industry stakeholders, and technology providers is needed. Investment in digital infrastructure, skills development, cybersecurity, and innovation ecosystems will accelerate Sri Lanka's transition to a smart tourism destination. These efforts will ultimately enhance visitor satisfaction, increase operational efficiency, and support long-term tourism resilience.

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DIGITAL TRANSFORMATION IN TOURISM: IMPACT OF ONLINE PLATFORMS ON TOURIST DECISION-MAKING IN SRI LANKA

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ABSTRACT

This paper investigates how digital platforms influence tourist decision-making behavior in Sri Lanka, with the employment of a mixed methods methodology, consisting of semi structured interviews and survey research. The research aims to investigate how mobile applications, review platforms, and social media content influence real-time tourist choice while visiting an attraction. The findings provide practicality in digital marketing strategy, service designing, and infrastructure planning for tourism service providers in Sri Lanka.

Keywords: mobile technology, observation method, online platforms, tourism behavior, tourist decision-making

ANOTĀCIJA

Šajā rakstā, izmantojot jauktu metožu metodoloģiju, kas sastāv no daļēji strukturētām intervijām un aptaujas pētījumiem, tiek pētīts, kā digitālās platformas ietekmē tūristu lēmumu pieņemšanas uzvedību Šrilankā. Pētījuma mērķis ir analizēt, kā mobilās lietotnes, atsauksmju platformas un sociālo mediju saturs ietekmē tūristu reāllaika izvēles, apmeklējot populārus galamērķus. Šiem atklājumiem ir praktisks pielietojums digitālā mārketinga stratēģijā, pakalpojumu dizainā un infrastruktūras attīstībā tūrisma pakalpojumu sniedzējiem Šrilankā.

Atslēgvārdi: mobilās tehnoloģijas, novērošanas metode, tiešsaistes platformas, tūrisma uzvedība, tūristu lēmumu pieņemšana

INTRODUCTION. IEVADS

With time, tourism has metamorphosed under the stronger influence of daily life and digital technologies. These days, tourists do not rely only on a traditional travel agent or the guidebook: they go on many digital platforms including mobile apps, social media, online reviews, and travel blogs to make an educated decision about where to visit, what to do, where to stay, and what to eat. This paradigm is evident in numerous parts of the globe and very much so for Sri Lanka, a nation rapidly emerging in the tourism sector while thrusting toward higher digital connectivity.

Problem Description: While the digital transformation of tourism is recognized worldwide, there still seems to be a lack of localized and evidence-based insight into how the digital platform influences Sri Lankan tourists in deciding their travel journey. The gap is aggravated when combining the behavioral and perceptual data-to-date, proven studies largely rely on surveys, thus neglecting the actual usage patterns in real life.

Research Question: How do digital platforms (Google Maps, Instagram, TripAdvisor, Booking.com, etc.) influence tourist decision-making behavior during travel in Sri Lanka?

The object of the research is tourist behavior during travel through Sri Lanka, and the subject of the research is the influence of digital platforms (Google Maps, Instagram, TripAdvisor, Booking.com, etc.) concerning food, transport, attractions, and services. Research aim is set to analyze the impact of digital platforms on tourist decision-making during travel in Sri Lanka by examining both observable behavior and self-reported attitudes. The following research tasks will be followed to achieve the aim of the research:

- To review existing literature on digital transformation in tourism and decision-making models.
- To identify commonly used digital platforms among tourists in Sri Lanka.
- To analyze tourist behavior in specific places with high traffic and to record the application of digital tools.
- To sketch, with due regard to tourists' motivations, preferences, and perceived impact of digital tools, and administer a survey.
- To analyze the data collected from observations and surveys to establish behavioral trends.
- To provide conclusions and practical recommendations for tourism stakeholders in Sri Lanka.

A Brief Description of Research Methods: This study employs a mixed-methods research design that integrates both qualitative and quantitative approaches. The primary methods include:

- A structured questionnaire survey, administered to 58 tourists, to collect numerical data on digital platform usage, travel planning behavior, and decision-making patterns. (Quantitative method)
- Semi-structured interviews with ten tourism-sector managers, providing in-depth qualitative insights into organizational perspectives, digital transformation challenges, and perceived impacts of online platforms. (Qualitative method)

This chapter outlines the methodological approach used to investigate how digital transformation and online platforms shape tourist decision-making in Sri Lanka. In accordance with the objectives of the study, a mixed-methods approach was adopted to integrate quantitative and qualitative insights. A structured survey was used to measure tourist behavior and platform usage patterns, while semi-structured interviews with tourism-sector managers provided a deeper understanding of industry perspectives, operational practices, and strategic responses to digital change. This methodological combination enabled triangulation, strengthened validity, and ensured that findings reflect both consumer and organizational sides of the phenomenon.

BASIC THEORETICAL AND PRACTICAL PROVISION. SVARĪGĀKĀS ATZIŅAS TEORIJĀ UN PRAKSĒ

The penetration of digital concepts has revolutionized the delivery, promotion, and overall experience of tourism services. Since the integration of mobile technologies, personalization, and real-time connectivity changed tourism into a new operational paradigm [6], the transformation has not been merely technological. It has affected the business arena, communication, and consumer patterns.

Digital platforms provide real-time decision-making support. Tourists consult them to compare destinations, evaluate services, and make their bookings. Research shows that user reviews play a major role in travel decisions, especially when the reviews pertain to an experience and are considered trustworthy [3; 5].

Social media, especially Instagram, TikTok, and YouTube, have been the heart for the creation of destination images and the stimulation of tourism choices. The visual content, above all that generated by influencers, evokes emotional responses including desires to embark upon a vacation [8].

The Theory of Planned Behavior and the Technology Acceptance Model have been recently adapted into tourism studies to explain digital adoption [4]. Zhang et al. stress that in tourism, perceived usefulness and trust in the platform do hold more sway than ease of use, especially amongst those travelers who are not as tech-savvy [9].

Mobile technologies allowed tourists to custom-fit timing and flexibility into travel planning. Touristic choices are made on the spur of the moment, selecting among live feeds of data such as reviews, photos, or geolocation information. According to Stankov and colleagues, mobile-based decision-making in urban tourism reflects a preference for spontaneity and real-time optimization [7].

Digital tourism is generally understood as the incorporation of digital technologies in every realm of tourism. It comprises online booking, virtual tours, user-generated content, and mobile decision-making. Scholars note that digital tourism is a shift to participatory and customized experiences [2].

Social media platforms are central to modern travel behavior. Tourists rely on user-generated content (UGC) to discover places, assess options, and gain insights from peer experiences. Research shows that UGC is trusted more than formal marketing content due to its perceived authenticity [3].

RESEARCH RESULTS AND THEIR EVALUATION. PĒTĪJUMA REZULTĀTI UN TO IZVĒRTĒJUMS

The ten semi-structured interviews conducted with tourism managers across hotels, travel agencies, tour operators, restaurants, and tourism-experience providers revealed several recurring themes about how digital transformation is reshaping tourist decision-making and organizational strategies in Sri Lanka. Although the managers represented different segments of the industry, their observations showed strong convergence across five major areas: platform influence, customer expectations, operational changes, challenges, and future trends.

Managers explained that these platforms serve as “the first point of contact” for most travelers and often determine where tourists choose to stay, eat, or visit. Visual content especially Instagram photos and TikTok travel reels was described as particularly powerful in shaping early interest and expectations. Managers repeatedly emphasized that digital platforms have not only changed the flow of information but have raised expectations for speed, transparency, and service quality. Interviewees noted significant internal shifts resulting from digital transformation. Many organizations now rely heavily on online reservation systems, digital payment tools, social media promotions and data-driven decision-making.

Daily operational routines increasingly center around monitoring reviews, updating content across platforms, managing online bookings, and responding to guest messages. Several managers stated that digital tasks now take up “as much time as traditional operational work.” Despite acknowledging the importance of digitalization, managers highlighted several barriers:

- Skill gaps among staff, especially older employees.
- High cost of new technologies, software subscriptions, and digital marketing.
- Difficulty keeping up with rapid platform changes.
- Occasional negative or unfair online reviews, which require careful handling.
- Dependence on external platforms, making some businesses feel “controlled by algorithms.”

The Need for Staff Training and Digital Skills: Most organizations are increasingly investing in staff training to improve digital literacy. Managers explained that employees must now understand how to handle online booking systems, how to respond professionally to online reviews, how to create engaging content and how to interpret analytics. Digital competence has become a core skill required in frontline tourism jobs. Many managers believe the next phase of digital transformation will include AI-driven customer service, more personalized travel recommendations, dynamic pricing, real-time updates on crowd levels and conditions, stronger

integration between platforms. Some noted that Sri Lankan tourism will need to adapt quickly to remain competitive internationally.

Empirical research (Table 1) provides key results that set forth a strong cause-effect relationship between being drawn onto digital platforms and tourist decision-making. The most used platforms and applications are Google Maps, TripAdvisor, and Instagram. Decisions are made in the moment, mostly in relation to food, directions, and sights. Social proof, aesthetic appeal, and perceived credibility are the primary causes.

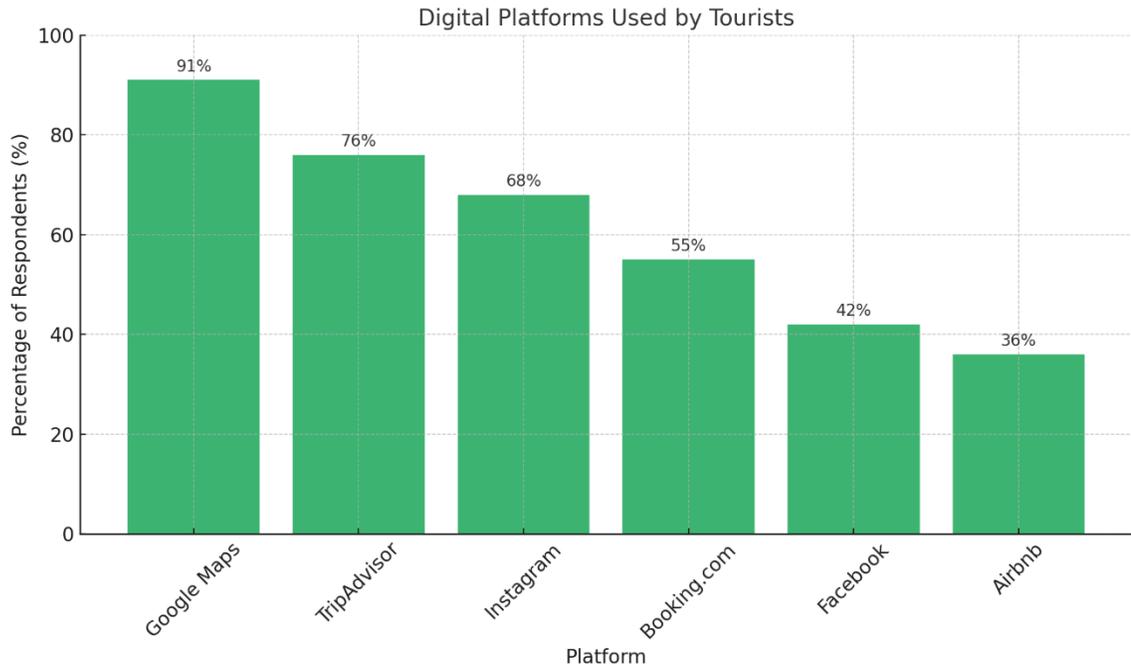


Figure 1: Digital Platforms Used by Tourists [1]

Table 1: Survey results [1]

Platform	Respondents
Google Maps	53
TripAdvisor	44
Instagram	39
Booking.com	32
Facebook	24
Airbnb	21

CONCLUSION. KOPSAVILKUMS

The study goes on to show that digital platforms greatly influence tourist behavior during travel in Sri Lanka. Tourists use mobile applications, review platforms, and social media actively for planning even as far as last-minute decision-making. The very peak of digital activity occurs during the 10 to 15 minutes just after an arriving at a destination. This is when tourists check maps, peruse reviews, or share their know-how.

Tourists are ultimately influenced and impacted more by user-generated content than anything else: images and reviews from their peers. Tourist preferences and choices are shaped by emotional and social proof much more than by official marketing. This study clearly shows how tourists use digital platforms to evaluate, adjust, and perfect their travel experiences in real time. The study thus fulfilled all the set objectives.

Recommendations:

1. The Colombo tourism industry must be very active and keep an updated presence on the sites most used by tourists (such as Google Maps, TripAdvisor, Instagram) by optimizing listing info, responding to reviews, and updating photos and content regularly.

2. Targeted digital marketing strategies can thus be developed, depending on the tourist demography. The younger tourists want more of an area into visual storytelling, whereas the older tourists go with more informative reviews with convenient features.

3. Digital workshops shall help in empowering small tourism operators. Omnibus training shall hence be provided to tourism operators and stakeholders across the country, considering they lack knowledge regarding these digital opportunities and are therefore presently unable to compete in the online market.

4. Tourism boards and municipalities will be tasked to upgrade and enhance digital infrastructure with particular attention to Wi-Fi availability in major tourist sites.

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FACTORS INFLUENCING TOURISTS' CHOICE OF SHARING ECONOMY ACCOMMODATION SERVICES: THE CASE OF DOMESTIC TOURISM IN UKRAINE

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ANOTĀCIJA

Šajā pētījumā tiek analizēti galvenie faktori, kas ietekmē tūristu izvēli par vienaudžu savstarpējās sadarbības (P2P) izmīnāšanas pakalpojumiem Ukrainas iekšzemes tūrisma tirgū. Pētījumā, balstoties uz intervijām un platformu datiem, tiek vērtētas ceļotāju motivācijas, uzticamības mehānismi, platformu lietojamība un atrašanās vietas nozīme. Rezultāti liecina, ka uzticamība, pieejamība un cena ir būtiskākie patērētāju uzvedības noteicēji. Pētījums arī piedāvā ieteikumus, kā uzlabot P2P izmīnāšanas platformu konkurētspēju un orientāciju uz lietotāju Ukrainā.

Atslēgvārdi: izmīnāšana, koplietošanas ekonomika, patērētāju uzvedība, P2P platformas, vietējais tūrisms

ABSTRACT

This study examines the key factors influencing tourists' choice of peer-to-peer (P2P) accommodation services in Ukraine's domestic tourism market. It analyses traveller motivations, trust mechanisms, platform usability and location preferences based on interviews and platform data. The findings show that trust, accessibility and price are the strongest determinants of consumer behaviour. The study also outlines recommendations to enhance the competitiveness and user-orientation of P2P accommodation platforms in Ukraine.

Keywords: accommodation, consumer behaviour, domestic tourism peer-to-peer platforms, sharing economy

IEVADS. INTRODUCTION

In recent years, the tourism industry has undergone a profound transformation driven by digitalisation, social change, and the global rise of the sharing economy. This new model, based on peer-to-peer (P2P) exchange, allows individuals to rent or share resources such as housing, transportation, and services through online platforms. [1]. Within the accommodation sector, services like Airbnb have become popular alternatives to traditional hotels, reshaping consumer behaviour and introducing new dynamics into the tourism market.

The relevance of this research lies in the increasing importance of the sharing economy within Ukraine's domestic tourism sector. As international travel has become more limited due to economic and geopolitical factors, Ukrainian tourists are showing a growing interest in exploring their own country. [2] In this context, accommodation choice plays a crucial role in shaping travel experiences, and P2P platforms have emerged as an affordable, flexible, and digital-friendly solution.

Despite the rapid growth of peer-to-peer accommodation services, there remains limited understanding of the key factors influencing Ukrainian tourists' decisions to use such platforms. While previous research [3] [4] highlights the importance of price, convenience, and trust, empirical studies specific to Ukraine's domestic tourism are scarce. This gap makes it difficult to assess how local tourists perceive and choose sharing economy accommodation options compared to traditional providers.

The aim of this study is to identify and analyse the main factors influencing tourists' decisions to use sharing economy accommodation services in the context of domestic tourism in Ukraine.

The object of the research is the behaviour of domestic tourists in Ukraine when selecting accommodation. The subject is the set of factors shaping tourists' preferences for peer-to-peer accommodation platforms.

This study employs desk research and qualitative methods, including the review of academic literature, analysis of digital platforms, and primary data collection through interviews with domestic tourists in Ukraine. The findings aim to contribute to a better understanding of consumer behaviour in the Ukrainian tourism sector and to support the development of sustainable and competitive sharing economy models.

SVARĪGĀKĀS ATZIŅAS TEORIJĀ UN PRAKSĒ. BASIC THEORETICAL AND PRACTICAL PROVISION

The development of sharing economy services has significantly influenced the transformation of the tourism accommodation sector, offering travellers flexible and cost-effective alternatives to traditional lodging. The theoretical foundations of this model are rooted in the concept of temporary access over ownership, digital intermediation, and the optimisation of underutilised assets, as described by Botsman and Rogers [5], who define the sharing economy as a socio-economic system enabling people to share resources via online platforms. Frenken and Schor [6] emphasise the peer-to-peer (P2P) nature of such exchanges, in which individuals provide temporary access to underutilised physical resources, often for monetary compensation. A consolidated definition, proposed by Schlagwein et al. [7], views the sharing economy as an IT-facilitated model supporting the commercial or non-commercial circulation of goods and services without transferring ownership. Within tourism, accommodation represents one of the most dynamic segments of the sharing economy. Research highlights that P2P accommodation platforms, such as Airbnb and national platforms, have expanded rapidly due to rising demand for personalised experiences, affordability, and authenticity in travel. Dolnicar [1] notes that these platforms have reshaped the lodging market by providing diverse, user-driven alternatives enabled by online reputation systems and digital intermediation tools that reduce transaction risks and increase consumer trust. Trust remains central in P2P transactions, with user reviews, ratings, and identity verification functioning as essential mechanisms that influence tourists' decisions to book accommodation.

While theoretical definitions highlight the conceptual foundations of the sharing economy, its practical advantages become clearer when compared with traditional hospitality models. The distinct value propositions offered by P2P accommodation can be summarised through a comparative assessment of the two approaches. Table 1. presents the main advantages of sharing economy accommodation in contrast to traditional hotels.

Table 1.1.

Advantages of Sharing Economy Accommodation vs Traditional Hotels

Criterion	Sharing Economy	Traditional Hotels
Cost of stay	Generally lower; flexible pricing models	Higher; fixed pricing
Authenticity	Located in residential areas; cultural interaction with locals	Often isolated; standardized experience
Accommodation formats	Wide variety: apartments, rooms, houses, unique stays	Standardized hotel rooms
Social interaction	Direct communication with host; local tips and immersion	Limited contact with hotel staff

Sustainability	Utilizes existing resources; lower environmental footprint	Requires new construction; higher resource use
Geographic availability	Available in rural and remote areas	Concentrated in tourist hubs
Local empowerment	Local residents act as hosts and earn income	Profits go to large companies or chains

Compiled by the authors based on the sources [8], [9], [10], [11]

The comparative analysis presented in Table 1 demonstrates the structural and functional distinctions between P2P accommodation and traditional hotel models. To further contextualise these differences, it is essential to summarise the core principles and operational features that define peer-to-peer lodging platforms. These characteristics not only differentiate P2P accommodation from conventional hospitality but also shape the specific value propositions perceived by contemporary travellers.

P2P accommodation functions as a digital two-sided marketplace in which hosts offer private residential spaces, and guests search, book, and communicate through platform interfaces. Transactions, availability management, and user interactions are fully digitalised, enabling seamless booking processes and secure online payments. A central element of this system is the reputation mechanism: user reviews and ratings serve as trust-building tools that reduce uncertainty and guide decision-making.

Unlike hotels, P2P listings are not standardised, resulting in a wide spectrum of quality, amenities, and service styles. While this heterogeneity may lead to inconsistencies, it simultaneously enhances diversity and personalisation. A distinguishing aspect of P2P accommodation is its orientation toward local immersion. As noted by Coca-Stefaniak et al. [12], many travellers are motivated by the opportunity to “live like a local,” seeking authentic and culturally embedded experiences that traditional hotels often do not provide. These features collectively explain the growing appeal of P2P accommodation among travellers who prioritise flexibility, affordability, and experiential authenticity.

While the structural and functional characteristics of P2P accommodation explain its growing presence in the tourism sector, they do not fully clarify why travellers choose such options over traditional lodging. Existing research highlights that accommodation decisions are shaped by a combination of economic, social, experiential, and psychological factors. According to Tussyadiah and Pesonen [8], understanding these motivations is essential for interpreting consumer behaviour within the sharing economy, as travellers increasingly prioritise affordability, authenticity, and flexible travel arrangements. Likewise, Moral-Cuadra et al. [13] and Medina-Hernandez et al. [14] emphasise that social interaction, cultural immersion, and emotional value play a significant role in shaping preferences. In addition, Zloteanu et al. [15] point to the central importance of trust and perceived safety in digital peer-to-peer environments. Taken together, these insights demonstrate that tourists’ accommodation choices are influenced by a complex interplay of financial considerations, experiential expectations, and personal characteristics, providing the basis for a more detailed examination of key decision-making factors.

Practical developments in the Ukrainian tourism sector demonstrate that peer-to-peer accommodation has become an increasingly visible component of the domestic travel market. The growth of internal tourism, combined with rising demand for flexible and cost-efficient lodging options, has contributed to the broader adoption of digital platforms facilitating short-term rentals. The Ukrainian P2P accommodation landscape is characterised not only by the presence of major global platforms such as Airbnb, but also by the active functioning of national services, most notably Doba.ua and Dobovo. These local platforms play a significant role in serving domestic travellers by offering extensive regional coverage, competitive pricing, and interfaces adapted to Ukrainian linguistic, economic, and cultural contexts. As a result, the structure of the Ukrainian

P2P accommodation market is shaped by an interaction of globally standardised digital solutions and locally oriented technological models, which together broaden the range of available lodging options.

The development of P2P platforms in Ukraine has followed patterns broadly consistent with global trends. The initial expansion of digital accommodation services reflected worldwide growth in sharing economy business models and increasing consumer interest in personalised and affordable lodging. During the COVID-19 pandemic, Ukraine—similarly to other countries—experienced a temporary surge in demand for short-term rentals, driven by preferences for isolated stays and non-hotel formats. This growth was followed by a pronounced decline as prolonged restrictions and mobility limitations reduced travel activity.

A new turning point occurred after the full-scale invasion by the Russian Federation in 2022. International tourism effectively came to a halt, and domestic tourism declined sharply due to security concerns, displacement, and infrastructural disruptions. The P2P accommodation sector was directly affected: listings decreased, hosts exited the market, and platform activity became strongly region-dependent. Despite the initial contraction, recent observations indicate a gradual reactivation of domestic travel. Starting from late 2023 and more visibly in 2024–2025, several regions—most notably Zakarpattia, Lviv, and Kyiv—began to show steady signs of recovery. Among these destinations, Lviv stands out as a leading example of revitalised domestic tourism activity. In 2023, tourism enterprises in the region served 82,349 visitors, marking a 12% increase compared to the previous year [16]. This upward trend further strengthened in 2024, when domestic tourists accounted for 85% of all visitors, primarily arriving from major urban centres such as Kyiv, Ternopil, Kharkiv, and Khmelnytskyi [17].

Travel behaviour in the region has also evolved: the average length of stay increased from 2–3 days in 2023 to 3–7 days in 2024, indicating heightened travel confidence and a growing preference for extended visits. In 2024, tourists visiting Lviv were more likely to stay in hotels (37%) compared to 2023 (26.2%). Rented apartments (29.6%) are the second most popular accommodation. The remaining accommodations are as follows: overnight stays at friends' or relatives' houses (21.7%) and hostels (9.3%) [18]. The broader recovery of Zakarpattia, Lviv, and Kyiv can be attributed to relatively higher levels of perceived safety, strong cultural attractiveness, and more stable transport accessibility compared to other regions. In these areas, both international and national P2P platforms have reported renewed growth in user engagement, reflecting a cautious but steady return of domestic travellers to digital booking channels.

Overall, the evolution of the Ukrainian P2P accommodation sector illustrates the combined influence of global technological diffusion, pandemic-related disruptions, and the profound socio-economic effects of the ongoing war. This practical context outlines the environment within which the empirical component of the present research was conducted and provides a foundation for analysing how Ukrainian tourists engage with sharing economy accommodation services under current conditions.

PĒTĪJUMA REZULTĀTI UN TO IZVĒRTĒJUMS. RESEARCH RESULTS AND THEIR EVALUATION

As part of the present research, an analysis was conducted of the three main peer-to-peer accommodation platforms operating in Ukraine—Airbnb, Dobovo, and Doba.ua—in order to assess their structure, functionality, and relevance for domestic travellers. These platforms constitute the core of the Ukrainian short-term rental ecosystem, integrating global digital standards with locally adapted service models. Examining their operational characteristics provides essential context for understanding how P2P accommodation functions within the broader landscape of domestic tourism in Ukraine.

Airbnb, the largest international platform, has maintained a strong presence in Ukraine since its introduction prior to the Euro 2012 football championship. Its success is underpinned by internationally standardised trust-building mechanisms, including secure payment systems, a robust review and rating infrastructure, and an intuitive interface. Airbnb's wide range of listings and emphasis on authentic, "live like a local" experiences have contributed to its popularity among both Ukrainian and foreign users. Following Russia's invasion of Ukraine in February 2022, Airbnb and its non-profit arm Airbnb.org launched an initiative to provide free short-term housing for up to 100,000 Ukrainian refugees [19]. The programme operated through a multi-stakeholder model, combining Airbnb's corporate support, donations to the Airbnb.org Refugee Fund, and voluntary host participation. At the same time, a global grassroots movement emerged in which people booked Ukrainian listings without intending to stay, generating nearly \$2 million from over 61,000 bookings within two days; Airbnb waived service fees to facilitate this support. These actions demonstrated how digital platforms can function as tools of crisis response and transnational solidarity.

In September 2023, Airbnb and the State Agency for Tourism Development of Ukraine signed a memorandum aimed at supporting the recovery of Ukraine's tourism sector [20]. The agreement includes data-sharing cooperation with the Lviv City Portal and collaboration with international NGOs, reflecting Airbnb's continued engagement in Ukraine's economic and social revitalisation.

Operating alongside Airbnb, two major national platforms play a central role in shaping Ukraine's domestic short-term rental market. Dobovo, founded in 2012, is currently the leading local platform, offering a broad selection of apartments and houses in major cities such as Kyiv, Lviv, Odesa, and Kharkiv. The company's mission is to provide a single place where customers could easily choose and book apartments in just a few minutes. To represent this, the platform was named "Dobovo", which in Ukrainian means "per day" or "daily" – reflecting the short-term rental focus of the service [20]. Its interface provides detailed descriptions, extensive filtering options, high-quality photos, and dedicated customer support. Dobovo places a strong emphasis on competitive pricing and locally relevant features—such as cash payment upon arrival, no-prepayment options, and filters by metro proximity—making it particularly attractive to domestic tourists.

The second major national platform, Doba.ua, established in 2009, positions itself as Ukraine's number one service for daily rentals directly from property owners [21]. Its model enables hosts to list their properties for a daily fee and encourages direct communication between hosts and guests, eliminating intermediary commissions. Offering approximately 42,000 active listings across more than 270 settlements, Doba.ua provides extensive geographic coverage and remains popular among price-sensitive travellers and those seeking authentic local accommodations.

In addition to these platforms, the Ukrainian market has also seen the emergence of smaller local services, such as MUSHROOM, which attempted to replicate Airbnb's model on a regional scale during the mid-2010s. Although no longer widely active, such initiatives demonstrate the continued local interest in developing Ukrainian-based solutions within the P2P accommodation sector.

A comparative analysis of these platforms enables a clearer understanding of their operational distinctions and competitive positioning. Table 2. summarises key characteristics of Airbnb, Dobovo, and Doba.ua, including their year of establishment, geographic coverage, pricing models, payment and communication systems, and platform-specific features.

Table 2.1.

A Comparison of Major Short-Term Rental Platforms in Ukraine

Metric	Airbnb	Doba.ua	Dobovo
Year Established	2008	2009	2012
Number of Listings (in Ukraine)	15000+	42000+	50000+
Language Support	Multiple languages	Ukrainian, Russian, English	Ukrainian, Russian, English
Platform/Mobile App	Available on iOS, Android, Web	Mobile-friendly website only	Available on iOS, Android, Web
Payment Methods	Credit cards, PayPal, Apple Pay	Credit cards, bank transfers, cash	Credit cards, PayPal, bank transfer
Customer Support	24/7 via chat, phone, email	Chat, phone, email	Chat, phone, email
Fees	Guest: ~14%, Host: ~3%	No guest fees	Guest: ~10%, Host: 5–10%
Platform Features	Review system, Superhosts, Experiences	Direct contact with hosts, no intermediaries	Superhost rating, review system, photo verification

The comparison highlights clear strengths and limitations of each platform. Airbnb is recognised for its international standards, strong trust mechanisms, and the widest range of listings, although it charges the highest service fees. Doba.ua appeals to price-sensitive travellers through fee-free guest bookings and extensive regional coverage, yet the absence of a mobile app and reliance on cash payments reduce convenience and perceived security. Dobovo distinguishes itself with verified listings and Ukrainian-language support, making it user-friendly for domestic travellers; however, its smaller inventory limits choice.

Despite positioning itself as Ukraine's leading short-term rental platform, Dobovo offers fewer listings than its competitors. For instance, a search for accommodation in Lviv for 9–10 October 2025 returned 560 listings on Airbnb, 231 on Doba.ua, and only 138 on Dobovo. These findings suggest that Airbnb maintains a dominant position in terms of supply, while Doba.ua holds a strong competitive presence in the local market. Dobovo's reduced inventory may reflect a smaller host base or slower expansion.

Overall, although Airbnb continues to dominate the Ukrainian market, national platforms play a significant role by offering localised customer support, flexible pricing, and services tailored to domestic users. Ukraine's short-term rental sector is therefore shaped not only by global digital platforms but also by the growing relevance of locally developed alternatives.

Interview data further illustrate how travellers navigate these options and what factors shape their accommodation choices in practice.

The interviews aimed to identify the main drivers of guest preferences and the barriers that limit the adoption of P2P services. Eight in-depth interviews were conducted with travellers of different ages, regions, and travel purposes; the key results are summarised in Table 3.

Table 2.2.

Key Findings from Interviews on Factors Influencing Tourist Preferences in P2P Accommodation in Ukraine

Interviewee (gender, age)	Platforms Used	Price Sensitivity:	Trust & Safety	Location & Accessibility	Personalized Experience	Platform Usability	Additional Factors
1.Female, 29	Airbnb, Dobovo	4/5	5/5	4/5	3/5	3/5	Preferred flexible cancellation policy

2.Male, 34	Airbnb	4/5	4/5	5/5	5/5	4/5	Interest in local experiences and tours
3.Female, 42	Doba.ua, Dobovo	5/5	3/5	3/5	4/5	4/5	Importance of eco-friendly accommodations
4.Female, 25	Airbnb, Doba.ua	5/5	5/5	2/5	4/5	5/5	Concern over hidden fees
5.Male, 38	Airbnb	2/5	4/5	4/5	4/5	5/5	Preference for direct communication with host
6.Female, 31	Dobovo, Airbnb	4/5	4/5	4/5	3/5	5/5	Interest in booking through mobile apps
7.Male, 45	Doba.ua	4/5	4/5	5/5	3/5	3/5	Desire for long-term rental options
8.Male, 56	Dobovo	5/5	4/5	5/5	4/4	3/5	Preference for central city locations

The interview data indicate that Trust & Safety, Location & Accessibility, and Price Sensitivity consistently emerge as the most decisive factors. Many travellers consider location even more important than price, especially when visiting Kyiv, Lviv, or the Carpathian region. This corresponds with previous research indicating that location and price are the strongest predictors of accommodation choice. Trust is similarly essential: all interviewees emphasised reliance on reviews, ratings, and verified host profiles. As one respondent noted, “Good reviews make me feel safe booking even in a new city.” Platform patterns also emerged: Airbnb users prioritise trust and platform guarantees, whereas users of Doba.ua and Dobovo emphasise affordability and direct host communication.

Demographic differences further influence preferences. Older travellers place greater emphasis on central locations and convenience, while younger and more tech-savvy users prioritise mobile usability, flexible cancellation, and app-based communication. Secondary preferences—such as sustainability, clear pricing, or mobile-friendly booking—often determine the final choice among similar listings.

Insights from industry professionals

Interviewed hosts highlight the importance of service quality and consistent property maintenance. As one Dobovo host explained: “Each new guest should feel like the first renter... The dishes, pans, and pots must shine as if they have just come from the store.” Another emphasised the importance of communication: “It must be treated as a job... you need to always be available and meet guests even at night.”

Hosts also value platform trust and reliability. Dobovo is praised for responsive support and user stability: “I like the service... fast reaction and responsiveness of Dobovo’s team.” Dobovo staff similarly stress the role of design and mobile usability. After a major redesign guided by mobile analytics, the platform reported a 12.5% increase in mobile conversion and a 35% rise in booking-page interactions, demonstrating that transparency and ease of navigation directly influence customer behaviour.

From the perspective of Doba.ua’s founder, Evgeniy Lavreniuk, the platform’s success comes from its owner-payment model: “We were the only site that offered apartment rentals in all cities of Ukraine... The main query ‘daily apartment rental Khmelnytskyi’ was already in the TOP-5 within two weeks” [22]. This early SEO advantage and national coverage supported rapid growth and enabled the company to recover its initial USD 3,000 investment within 1.5 years. Doba.ua

further strengthens trust through educational content for hosts and practical travel advice for guests, ensuring more transparent and informed use of the platform.

Barriers to the adoption of P2P accommodation in Ukraine

Despite growing interest, several challenges remain. A primary barrier is transaction security, particularly when booking through local platforms that rely on cash payments and offer fewer guarantees than Airbnb. Price transparency is another issue: hidden fees and additional charges reduce trust and deter cost-sensitive travellers. Inconsistent quality standards, due to the absence of mandatory inspections, lead to variability in guest experience. External factors—such as the ongoing war, regional infrastructure damage, fluctuating energy prices, and uneven accommodation supply—further restrict the availability and stability of the P2P rental market.

In summary, while affordability matters, trust and location remain the dominant drivers of tourist decision-making. Travellers prefer platforms that offer transparent information, strong trust signals, and intuitive, mobile-optimised booking systems. Hosts and platform employees reinforce these priorities through their emphasis on cleanliness, communication, pricing clarity, and user-friendly design.

KOPSAVILKUMS. CONCLUSION

This study examined the factors shaping tourists' preferences for peer-to-peer (P2P) accommodation services within Ukraine's domestic tourism market and assessed the role of major digital platforms in facilitating short-term rentals. Drawing on interview data and platform analysis, the research demonstrates that tourists' decisions are driven primarily by three core considerations: trust and safety mechanisms, location and accessibility, and price sensitivity. Digital trust—expressed through reviews, ratings and verified host information—plays a central role in reducing perceived risks and remains essential for both new and experienced users of P2P services. At the same time, travellers consistently emphasise the importance of convenient and accessible locations, often prioritising proximity to key attractions or transport links even over cost considerations.

The analysis of Airbnb, Dobovo and Doba.ua revealed a diversified and competitive P2P ecosystem in Ukraine, where global standards coexist with locally adapted features and pricing models. While Airbnb continues to dominate in terms of supply and trust infrastructure, national platforms maintain strong positions through localised support, flexible payment options and region-specific filters. Host and platform representative insights confirmed the importance of transparency, usability and consistent service quality in attracting and retaining guests.

Importantly, the findings must be viewed in the broader socio-economic context shaped by the ongoing war. The Russian invasion of 2022 caused a dramatic decline in both international and domestic tourism, significantly disrupting accommodation markets. However, by 2023–2024, signs of gradual recovery became evident—particularly in relatively safer regions such as Lviv, Zakarpattia and Kyiv, where P2P platform activity and domestic mobility increased. As Ukraine moves toward long-term reconstruction, it is expected that international tourism will eventually resume, bringing new opportunities and competitive pressures to the accommodation sector.

Preparing for this future requires strengthening trust mechanisms, ensuring transparent pricing, improving mobile usability, and supporting hosts through education and platform-driven quality standards. By addressing existing barriers and aligning services with evolving traveller expectations, Ukraine's P2P accommodation market will be better positioned not only to support domestic tourism recovery but also to compete effectively once international tourism rebounds.

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ANALYSIS OF PREMIUM ALCOHOL PROMOTION METHODS IN LATVIAN LEISURE VENUES

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ANOTĀCIJA

Šajā pētījumā tiek analizētas augstākās klases alkoholisko dzērienu veicināšanas metodes Latvijas izklaides vietās, tostarp naktsklubos, restorānos un kokteiļbāros. Pētījumā tiek izvērtētas bezcenu veicināšanas stratēģijas, piemēram, pasākumu mārketinga, vietas zīmolvēdība, komunikācija sociālajos tīklos un personāla ieteikumi. Rezultāti apliecina pieredzē balstītu un konsultatīvu pieeju efektivitāti premium zīmolu pozicionēšanas atbalstam un ilgtspējīgas vērtības radīšanai.

Atslēgvārdi: augstākās klases alkohola mārketinga, izklaides vietas, reklāmas metodes, patērētāju uzvedība, normatīvo aktu ievērošana

ABSTRACT

This study explores promotion methods for premium alcoholic beverages in Latvian leisure venues, including nightclubs, restaurants, and cocktail bars. The research evaluates non-price-based strategies such as event promotion, venue branding, social media communication, and staff recommendations. The findings highlight the effectiveness of experiential and consultative approaches in supporting premium brand positioning. The study concludes that experience-driven promotion methods are more suitable for the premium alcohol segment than price-based incentives and contribute to sustainable value creation.

Keywords: premium alcohol marketing, leisure venues, promotion methods, consumer behavior

IEVADS. INTRODUCTION

The premium alcohol market in Latvia creates a practical challenge for marketers and venue operators: how to effectively promote high-end products without relying on price-based incentives. Riga concentrates approximately 60–70% of Latvia's premium entertainment venues, highlighting a significant domestic demand for premium on-premise consumption experiences. [1]

In this context, the relevance of this research lies in identifying promotion strategies that align with the high value of the product. The paper examines five promotion methods applicable to three leisure venue formats: nightclubs, restaurants, and cocktail bars. These methods include event promotion, social media communication, venue branding, staff recommendations, and welcome drinks or tastings. [2]

The aim of this study is to synthesize venue-level data and financial context to identify which methods deliver optimal effectiveness. To guide this investigation, the following **research questions** are proposed:

- Which premium alcohol promotion method is considered most effective for Latvian leisure venues?
- What factors influence purchase decisions for premium alcoholic beverages in these settings?

SVARĪGĀKĀS ATZIŅAS TEORIJĀ UN PRAKSĒ. BASIC THEORETICAL AND PRACTICAL PROVISION

Theoretical Framework: Promotion Methods

Premium alcohol positioning emphasizes quality, craftsmanship, origin, exclusivity, and experiential value rather than price. Theoretical research on premium beverage consumption indicates that price-based promotion fundamentally undermines premium brand positioning. Reducing the price signals that products are interchangeable commodities rather than distinctive experiences.

Contrastingly, memorable experiences defined by sensory differentiation, story-based engagement, and environmental atmosphere generate higher consumer engagement and repeat visitation than price incentives. Experience-driven marketing strategies create emotional connections and loyalty in leisure markets. [3]

Furthermore, the role of staff is critical. Bartender or sommelier recommendations function as a key influence mechanism, particularly in on-premise settings where consumers may lack full product information. This "consultative selling" model leverages expert status and personal interaction to reduce information asymmetries and overcome price sensitivity. Additionally, event-based promotion creates "concentrated demand occasions" where premium alcohol consumption becomes socially expected and status-signalling, amplifying per-occasion spending. [4]

Venue Segment Definitions To ensure accurate analysis, the study categorizes venues into three distinct segments:

- **Nightclubs:** Late-night venues where bottle service and premium spirits generate the highest margins. The target demographic is typically ages 18–35.
- **Restaurants:** Food-centric venues where premium alcohol plays a complementary role, with sommelier or waiter recommendations serving as the key influence mechanism. The target demographic spans ages 25–55.
- **Cocktail Bars:** Drink-focused venues emphasizing mixology craftsmanship and bartender expertise, targeting ages 25–45. [5]

PĒTĪJUMA REZULTĀTI UN TO IZVĒRTĒJUMS. RESEARCH RESULTS AND THEIR EVALUATION

The analysis evaluated five promotion methods across the three venue types using a consistent measurement framework including seasonal applicability, cost level, and expected profit impact.

Venue Type	Most Effective Method	Profit Impact	Cost Level	Key Success Factor
Nightclubs	Event/party promotion	+20-45% premium sales	€500-3,000/event	VIP activation, social proof
Restaurants	Event/party promotion	+20-30% premium sales	€500-2,000/event	Fixed packages, repeat orders

Cocktail bars	Bartender recommendations	+18-30% premium spirits	€600-1,500 training	40-55% acceptance	upgrade
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Table 1: Promotion Effectiveness by Venue Type [6]

1. Nightclub Segment Findings. In the nightclub segment, event promotion emerges as the most effective method. Thematic events, such as New Year parties or tropical nights, generate the highest measurable impact, with a 20–45% premium spirits revenue increase on event nights. The success of this method is driven by concentrated demand occasions and VIP table activation, which sees 30–50% higher bookings on event nights. VIP tables provide 200–350% higher margins than single drinks. Cost-effectiveness is notably high during summer and major holidays, often generating a 3–5 times return on investment. Secondary methods in nightclubs include social media communication and venue branding. Sustained social media campaigns drive an 8–18% booking rate improvement on promoted nights. Venue branding delivers a 12–32% premium category share increase with an ongoing effect over 1–3 months. [7]

2. Restaurant Segment Findings. For restaurants, the most effective promotion method is themed wine or spirits dinners. These scheduled events produce a 20–30% increase in premium alcohol sales monthly. The impact mechanism relies on a fixed-price package structure that ensures high volume and high unit price simultaneously. Furthermore, post-event behavior analysis shows that 25–40% of attendees reorder featured brands during regular visits in the following 4–8 weeks. Welcome drinks and pre-dinner cocktails also show positive results. All-year aperitif programs drive a 10–20% increase in premium aperitif sales. Effectiveness is particularly strong for business lunches and celebrations where guests engage with sommelier-guided selections. [8]

3. Cocktail Bar Segment Findings. In cocktail bars, bartender recommendations and storytelling constitute the highest-value promotion tool. Following structured training on product knowledge and storytelling, venues experience an 18–30% increase in premium spirits sales. Well-trained bartenders achieve a 40–55% acceptance rate for premium spirit upgrades through expertise-framed suggestions, compared to less than 20% for aggressive questioning. Storytelling and engagement further increase the likelihood of additional orders by 15–25%. Social media campaigns remain relevant for this segment, driving a 12–22% walk-in and booking rate improvement through visually engaging content and behind-the-scenes bartender storytelling. [9]

Evaluation of Sales Promotions The analysis also highlights a critical caveat regarding sales promotions such as happy hours or "2 for 1" offers. While these promotions generate a 30–50% short-term volume increase, they result in substantial margin erosion and brand positioning damage. Price-sensitive customers acquired through such promotions demonstrate lower repeat visitation and lifetime value, which directly contradicts a premium positioning strategy. Consequently, data suggests that over 70% of premium cocktail bars have abandoned happy hour promotions because they do not make financial or strategic sense.

KOPSAVILKUMS. CONCLUSION

The analysis of premium alcohol promotion methods in Latvian leisure venues reveals a decisive shift toward experiential and consultative marketing. The research confirms that different venue types require distinct promotion hierarchies to maximize effectiveness.

For nightclubs, event and party promotion is paramount, delivering a 20–45% increase in premium sales. This success is driven by the creation of concentrated demand occasions and the activation of high-margin VIP tables. For restaurants, the most effective strategy is the

implementation of themed wine and spirits dinners, which achieve a 20–30% sales uplift through fixed-price packages and significant post-event repeat ordering. In the cocktail bar segment, the expertise of the staff is the primary driver of value; bartender recommendations generate an 18–30% increase in premium spirits sales through consultative selling.

Across all venue types, secondary methods such as social media communication and venue branding demonstrate consistent but moderate effectiveness, contributing 8–18% and 5–10% uplifts respectively.

The practical implications for venue operators are clear. Investment should be prioritized into staff training and retention, viewing bartenders and sommeliers as a primary competitive advantage. Operators should develop signature event programming aligned with seasonal demand and focus on creating "Instagram-optimized" experiences. The results support the conclusion that non-price promotion tools align better with premium positioning. Sales promotions that rely on discounts are shown to erode margins and damage brand equity, whereas experiential methods build long-term value.

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INDIGENOUS CULTURE AND ECOTOURISM: LESSONS FROM CAMEROON AND NIGERIA

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ANOTĀCIJA

Ekotūrisms veicina dabas aizsardzību un ilgtspējīgu attīstību, stiprinot vietējās kopienas un saglabājot pamatiedzīvotāju kultūru. Nigērijā un Kamerūnā progresu kavē tādi izaicinājumi kā nepietiekams finansējums, malumedniecība, vāja infrastruktūra un pamatiedzīvotāju zināšanu samazināšanās. Ekotūrisma un kultūras un dabas mantojuma saglabāšanai būtiski ir stiprināt kopienās balstītu tūrismu, veicināt kultūras saglabāšanu un iesaistīt vietējos iedzīvotājus lēmumu pieņemšanā.

Atslēgvārdi: Ekotūrisms, Ilgtspējīga attīstība, Kopienās balstīts tūrisms, Kultūras saglabāšana, Pamatiedzīvotāju kultūra

ABSTRACT

Ecotourism supports conservation and sustainable development by empowering host communities and preserving indigenous culture. In Nigeria and Cameroon, challenges such as poor funding, poaching, weak infrastructure, and declining indigenous knowledge hinder progress. Strengthening community-based tourism, promoting cultural preservation, and involving locals in decision-making are essential for sustaining ecotourism and protecting cultural and natural heritage.

Keywords: Community-Based Tourism, Cultural Preservation, Ecotourism, Indigenous Culture, Sustainable Development

INTRODUCTION

Ecotourism, in simple terms, is about travelling to natural places without spoiling them. It involves learning about nature and culture while ensuring that the environment is protected and local communities` benefit, and it should also help tourists develop better attitudes toward conserving nature (Eagles, 1992; Dixon et al., 1995). These days, the idea behind ecotourism is that people should travel in a way that doesn't cause harm. Many travelers who care about the environment try to stay in places that use fewer resources, avoid waste, and support conservation. Small actions like turning off light, reducing water use, or choosing low-impact accommodation all help. When ecotourism is properly managed, it supports local communities, brings money into the area, and encourages the protection of natural and cultural sites.

Nigeria has about 200 million people from almost 300 ethnic groups. The major ones are Yoruba, Hausa and Igbo. Each group has its own traditions. The Yoruba have a strong belief system centered on Olorun. The Hausa people, who have practiced Islam for many centuries, keep to their traditional dressing and social customs. The Igbo follow their traditional beliefs known as Odinani, even though many people now combine it with modern religion. Their dress, ceremonies and general way of life still reflect their culture.

In Cameroon, indigenous people are mainly grouped into forest communities (often called “Pygmies”) and the Mbororo. Ecotourism is growing there as a way of showing their natural and cultural heritage. The country benefits from its forest, wildlife and cultural diversity, which attract visitors. But the sector also faces problems, environmental pressure, security issues, and limited support for local communities.

Research Problem.

Even though Nigeria and Cameroon have strong cultural diversity and rich natural resources, ecotourism has not grown the way it should. There are issues like environmental damage, insecurity, and low community involvement. Many tourists also don't fully understand the purpose of ecotourism. Because of this, the results expected from ecotourism are not matching the actual situation on ground.

Why This Study Is Important.

The topic is relevant now because communities are struggling with climate change, loss of forests, and unemployment. Ecotourism offers one of the practical ways to protect the environment while also helping people earn income. Both countries are searching for better ways to support local communities, so looking at how culture connects with ecotourism is very timely.

Goal of the Research.

The main aim is to look at how indigenous cultural practices support ecotourism in Cameroon and Nigeria and to identify lessons that can help improve sustainable tourism in both countries.

Research Design.

The study uses a **comparative qualitative approach**, basically comparing how both countries handle ecotourism and the role culture plays in it.

Method Used.

The work is based on **document analysis** journals, books, reports, and case studies followed by content analysis to pick out the important ideas and patterns.

BASIC THEORETICAL AND PRACTICAL PROVISION

Basic Provisions.

This study is about how indigenous culture links with ecotourism in Nigeria and Cameroon. Both countries have a lot of different ethnic groups and also rich forests, rivers, and wildlife. But ecotourism is not very strong yet. Some reasons are lack of awareness, poor community involvement, and insecurity. The study wants to see how culture helps ecotourism work and what lessons can be learned. It also looks at challenges and what can improve the situation.

Theoretical Provisions.

There are some ideas behind the study. First, local knowledge is important. People in these communities have rules, taboos, and traditions that protect nature. For example, some forests are sacred and not touched. This helps wildlife and plants survive. Another idea is that ecotourism can only succeed if culture and nature are protected. Communities that care about their traditions are more likely to manage resources well. Also, the study assumes that involving people makes tourism better. When locals participate, they can earn money and keep their culture alive.

Practical Provisions.

On the practical side, the study looks at what can be done to make ecotourism better. First, communities should be part of tourism planning. Local communities ought to oversee tourist locations, direct visitors, and operate small enterprises. Additionally, infrastructure such as roads, signage, and modest accommodations is essential, but it must not negatively impact the environment. Cultural celebrations, holy places, and customs require safeguarding, and both governmental and non-governmental organizations should assist communities in their management.

RESEARCH RESULTS AND THEIR EVALUATION

Role of Indigenous Culture in Ecotourism.

From the materials studied, local culture affects ecotourism in Cameroon and Nigeria. Tourists are attracted to local festivals, traditional practices, and community rules for using forests and wildlife, which make the experience feel authentic rather than staged (Mbete & Fon, 2019; Ministry of Environment, 2021). In Nigeria, similar patterns occur, where local stories, handmade crafts, and community traditions enrich the tourist experience and allow visitors to understand both the natural environment and the way people live and preserve their history (Onwuka & Adeyemi, 2018; Kayode, 2020).

Local culture also helps protect the environment, as some Nigerian communities guard sacred forests and follow unwritten rules to prevent overuse, while taboos and traditional leaders play important roles in safeguarding the land-traditional practices that keep the environment healthy for tourists (Ezeonu, 2021; Ajayi, 2017).

Community Participation and Ecotourism.

Community involvement is very important. In Cameroon, when locals run projects, people get jobs, small businesses grow, and they help protect wildlife (Mbete & Fon, 2019). Still, problems exist. The government gives little support. Training is limited. Sometimes, communities fight over who benefits.

Nigeria faces similar challenges, as communities contribute culture, labour, and local knowledge, yet many projects still fail due to poor roads, weak infrastructure, and planning processes that overlook community input, while tourism contributes to the national economy but has far greater potential in rural areas (Onwuka & Adeyemi, 2018; National Bureau of Statistics, 2022).

Ecotourism and Conservation.

The effect of ecotourism on conservation varies, as it can support environmental protection when properly managed, but poor management can lead to negative impacts (Eagles, 1992; UNWTO, 2020).

In Nigeria, some protected areas have better wildlife monitoring because communities help (Kayode, 2020). In Cameroon, some parks have less poaching, but others face pressure from farms and nearby settlements (Ministry of Environment, 2021).

Comparison between Cameroon and Nigeria.

Looking at both countries:

- Cameroon has more community projects, but governance is a problem.
- Nigeria has many cultural and natural resources, but weak policies and poor infrastructure slow growth.
- Both use local knowledge, but Cameroon gives it more official recognition.
- Cultural heritage shapes what tourists expect and experience in both countries.

Evaluation of Findings:

Match with Existing Theories.

The results align with expert views, showing that ecotourism is most effective when communities are actively involved, and in both Cameroon and Nigeria, local culture and knowledge play essential roles in achieving sustainable tourism (Dixon et al., 1995).

Role of Indigenous Knowledge.

Local knowledge is highly important, as community rules and values contribute to effective environmental management, and combining these traditional practices with government

regulations could strengthen conservation, particularly in areas where government oversight is limited (Ezeonu, 2021; Ajayi, 2017).

Challenges.

Problems still exist:

- Policies overlap or are unclear, especially in Nigeria.
- Infrastructure is poor, making tourism hard in rural areas.
- Benefits from tourism are not shared fairly, causing tension.
- Training is limited, so communities cannot help fully.

These problems slow ecotourism and make both countries lag behind international standards (UNWTO, 2020).

Positive Outcomes.

Some good results appear:

- Cultural festivals and heritage sites still attract tourists.
- In Cameroon, community projects improve income and protect nature.
- In Nigeria, some protected areas improve because communities are involved.

Indigenous culture is not just for tourists. It also helps protect the environment and supports local people.

Policy Suggestions

From these findings:

- Include indigenous knowledge in tourism plans.
- Make benefit-sharing fair and clear.
- Governments should invest in roads, buildings, and support.
- Give communities training to manage tourism better.

CONCLUSIONS AND PROPOSALS

1. This study has highlighted how deeply indigenous culture is intertwined with ecotourism in Cameroon and Nigeria.
2. Across both countries, it is evident that local traditions, festivals, storytelling, and artisanal practices are not mere attractions, they form the backbone of authentic tourist experiences.
3. Communities contribute knowledge, labour and cultural resources, which not only enrich visitors' experiences but also reinforce the protection of natural habitats.
4. Sacred groves, taboos and locally enforced rules demonstrate that conservation can emerge from long-standing social norms rather than top-down regulations alone.
5. Integrate indigenous knowledge into tourism plans.
6. Ensure fair benefit-sharing mechanisms.
7. Invest in eco-friendly infrastructure.
8. Provide training for community-led tourism management.

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DIGITALIZATION AND THE EMERGING VULNERABILITIES OF TOURISM SERVICES IN LATVIA

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ABSTRACT

This study examines the impact of digitalization on tourism development in Latvia. The integration of online booking platforms, smart technologies, and data-driven solutions has transformed service delivery and business operations.

Keywords: digitalization, tourism, Latvia

ANOTĀCIJA

Šajā pētījumā tiek analizēta digitalizācijas ietekme uz tūrisma attīstību Latvijā. Tiesšaistes rezervēšanas platformu, viedtehnoloģiju un uz datiem balstītu risinājumu integrācija ir pārveidojusi pakalpojumu sniegšanu un uzņēmējdarbības darbību.

Atslēgvārdi: digitalizācija, tūrisms, Latvija

INTRODUCTION. IEVADS

Digitalization is having a tremendous impact on the economy today: technology provides 24/7 access to markets and enables fast payments for services and goods. Digitalization has had a particularly significant impact on the development of tourism, simplifying and making many business processes more reliable: from hotel bookings to business management using information systems. Digitalization in tourism encompasses the implementation and use of technology to improve aspects of tourism business operations. Thanks to new opportunities, digital products in tourism include not only online tour searches and virtual tour organization, but also specialized tools for managing company resources, as well as online training and professional development programs for tourism workers. [7]

BASIC THEORETICAL AND PRACTICAL PROVISION. SVARĪGĀKĀS ATZIŅAS TEORIJĀ UN PRAKSĒ

Tourism is one of those industries, that are mostly affected by modern technologies. Digitalization in tourism was a predictable transformational process. One of the important directions in business digitalization is the introduction of modern technologies in the field of international tourism, specifically, online bookings and virtual tours. [6]

Digitalization of tourism is the implementation of technologies (AI, Big Data, IoT, VR) for automation, personalization of services, and the creation of online booking platforms that significantly simplify travel planning. This includes the development of mobile apps, the use of smart hotel rooms, and customer behaviour analysis to create unique experiences, not just replacing humans with robots.

For tourists this means convenience of planning, personalization and awareness, as well as opportunity to see destination in advance and explore it in detail. For businesses, this means increased efficiency, process automation and new sales channels. [7]

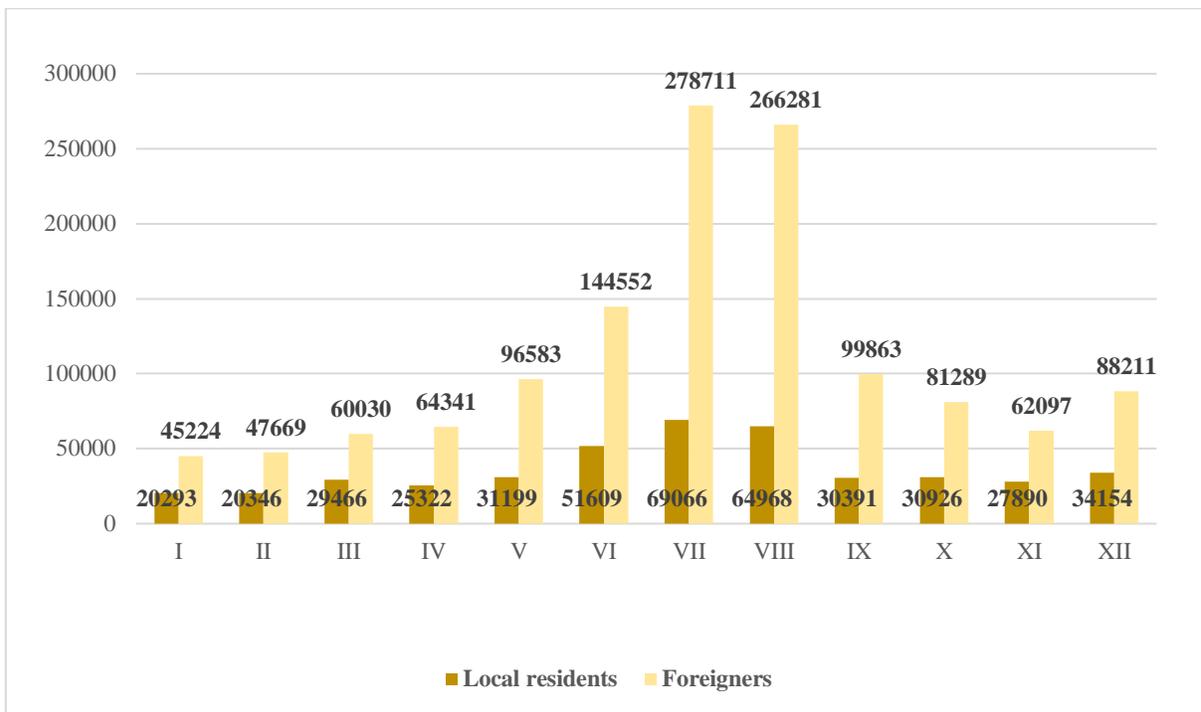
RESEARCH RESULTS AND THEIR EVALUATION. PĒTĪJUMA REZULTĀTI UN TO IZVĒRTĒJUMS

According to Central Statistical Bureau of Latvia in 2024 the number of guest nights booked on digital platforms in Latvia increased by 15.1%. In Latvia, 1.77 million guest nights were spent in 2024, booked on one of four digital platforms – Booking.com, Airbnb, Expedia Group and Tripadvisor, according to the latest data obtained in a cooperation project between the Central Statistical Bureau (CSB) and the statistical office of the European Union Eurostat. This is 15.1% more than in 2023, when the number of guest nights booked was 1.54 million, as well as 32.4% more than in 2019 before the pandemic, when the number of guest nights booked reached 1.34 million. Among the capitals of the Baltic States, Riga is still the leader in terms of the number of guest nights booked, followed by Tallinn and Vilnius. In 2024, 1.33 million or 75.4% of guest nights in Latvia were booked by foreign guests, while 435.6 thousand or 24.6% were booked by Latvian residents. [5]

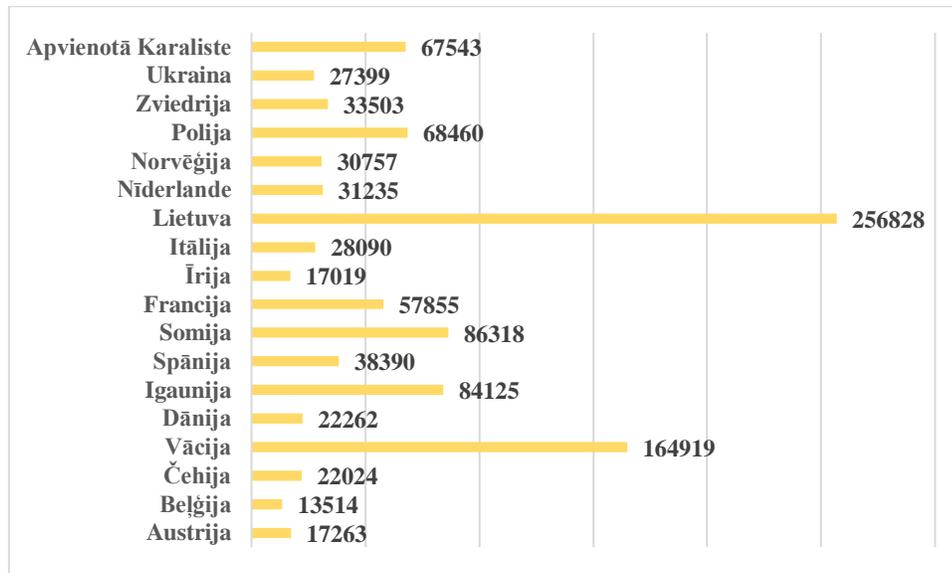


Graph 1. Nights booked on online platforms by foreign and domestic guests in 2019–2024 (in thousands) [8, created by the Author]

According to Graph 1 compared to 2023, the number of guest nights booked by both foreign guests (by 14.6%) and local guests (by 16.9%) increased. Compared to 2019, the number of nights booked by local guests increased 2.6 times, while the number of nights booked by foreign guests increased by 14.1%.



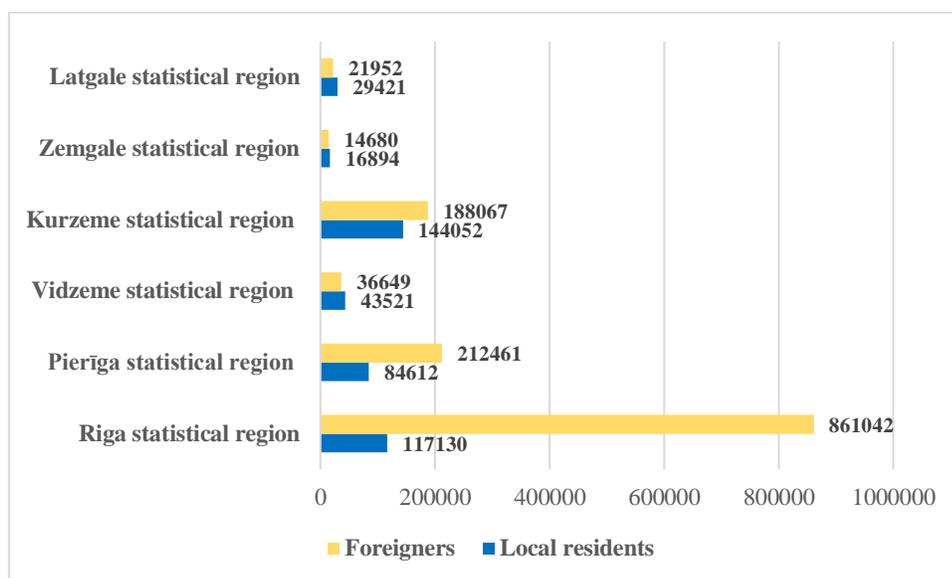
Graph 2. Nights booked on online platforms by foreign and domestic guests in the months of 2024 (in thousands) [8, created by the Author]



Graph 3. Foreign overnight stays in accommodation booked on online platforms, by country in 2024 (in thousands) (experimental statistics) [8, created by the Author]

According to Graph 3 the most overnight stays in Latvia were booked by foreign guests from Lithuania (256.8 thousand), Germany (164.9 thousand), Finland (86.3 thousand), Estonia (84.1 thousand), Poland (68.5 thousand), the United Kingdom (67.5 thousand), France (57.9 thousand), the United States (56.2 thousand), Spain (38.4 thousand) and Sweden (33.5 thousand).

The largest number of accommodations in Latvia is available on the Booking.com platform, where in June 2024 3 guests were offered around 4.1 thousand tourist accommodations of the appropriate type (apartments, guest and holiday homes, holiday homes, cottages, youth hostels, etc.), with around 28.9 thousand beds available⁴. Approximately 61% of the accommodations are apartments.



Graph 4. Guest nights spent in accommodation booked on online platforms, by region, city (experimental statistics) 2024 [8, created by the Author]

As it can be seen from Graph 4, digitalization in Latvian tourism is developing, but still faces slow implementation in regions, even though tourists are increasingly relying on digital tools. Another vulnerability is lack of (especially for entrepreneurs aged 50+). [4]

CONCLUSION. KOPSAVILKUMS

Digitalization can significantly improve the operations of tourism companies, providing broader opportunities to reach new audiences, improving customer service, and optimize resource utilization. [2] The Latvian tourism sector has undergone accelerated digital transformation, particularly after COVID-19. Online booking platforms, digital payments, cloud-based property management systems (PMS), customer relationship management (CRM), and algorithm-driven marketing are now core operational tools rather than optional add-ons. [10, 3] However, as tourism enterprises operate continuous, time-critical digital services cyber incidents directly affect bookings, payments, customer data, and international reputation. [1, 9]

The weaknesses of digitalization in Latvian tourism are related to the limited resources of small and medium-sized enterprises, slow adoption of modern technologies, insufficient use of data in decision-making, and regional differences in digital literacy. Tourists often lack a unified, convenient online booking system, which hinders the growth of the tourism industry.

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THE INFLUENCE OF COMMUNITY-BASED TOURISM IN SRI LANKA ON TOURIST PSYCHOLOGICAL WELL-BEING

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ABSTRACT

This article examines the psychological effects of community-based tourism (CBT) on foreign visitors to Sri Lanka. The purpose is to determine how visitors' mental health is impacted by interacting with local communities and authentic cultural experiences. The research problem focuses on understanding the non-economic benefits of sustainable tourism models in a post-recovery context. Using a mixed-methods approach, data were collected and analyzed from 127 international tourists who participated in CBT activities in Sri Lanka from January to June 2024. The study concludes that CBT activities in Sri Lanka significantly enhance feelings of connection, happiness, and personal fulfilment, while reducing stress. The main finding is that promoting CBT is beneficial for both local development and the psychological well-being of visitors.

Keywords: community-based tourism, psychological well-being, Sri Lanka, visitor experience, sustainable tourism

ANOTĀCIJA

Šajā rakstā tiek analizēta kopienās balstīta tūrisma (Community-Based Tourism – CBT) psiholoģiskā ietekme uz ārvalstu apmeklētājiem Šrilankā. Pētījuma mērķis ir noteikt, kā mijiedarbība ar vietējām kopienām un autentiskas kultūras pieredzes ietekmē apmeklētāju garīgo un emocionālo labklājību. Pētījuma problēma ir saistīta ar ilgtspējīgu tūrisma modeļu neekonomisko ieguvumu izpratni pēcatveseļošanās kontekstā. Izmantojot jaukto pētījuma metožu pieeju, dati tika iegūti un analizēti no 127 starptautiskajiem tūristiem, kuri laika posmā no 2024. gada janvāra līdz jūnijam piedalījās CBT aktivitātēs Šrilankā. Pētījuma rezultāti liecina, ka kopienās balstītā tūrisma aktivitātes būtiski veicina piederības sajūtu, laimes izjūtu un personīgā piepildījuma pieredzi, vienlaikus samazinot stresa līmeni. Galvenais secinājums ir, ka CBT veicināšana sniedz ieguvumus gan vietējās attīstības procesiem, gan apmeklētāju psiholoģiskajai labklājībai.

Atslēgvārdi: kopienās balstīts tūrisms, psiholoģiskā labklājība, Šrilanka, apmeklētāju pieredze, ilgtspējīgs tūrisms

INTRODUCTION. IEVADS

Sri Lanka's tourism sector is reviving with an increasing focus on sustainable and community-based models beyond traditional beach vacations, while travelers increasingly seek meaningful travel that enhances their wellbeing [1]. This research connects these trends by investigating the psychological impact of Community-Based Tourism (CBT) in Sri Lanka. Given Sri Lanka's positioning as a mindful travel destination, this research has high topicality.

The primary objective is to analyze the psychological effects of CBT experiences on the mental well-being of foreign tourists in Sri Lanka. The research problem addresses the gap in understanding how authentic social interactions in CBT, compared to traditional tourism models, directly enhance visitors' mental health [2].

The subject of this research is the psychological well-being of international tourists who have participated in structured CBT activities in Sri Lanka. The study focuses on their subjective experiences, emotions, and perceived mental outcomes resulting from these authentic, community-focused interactions. The research design involves a concurrent mixed-methods approach (qualitative and quantitative). Data were collected over a six-month period (January-June 2024) from international tourists who participated in CBT activities in Sri Lanka, incorporating a structured survey and semi-structured interviews [3].

BASIC THEORETICAL AND PRACTICAL PROVISION. SVARĪGĀKĀS ATZIŅAS TEORIJĀ UN PRAKSĒ

Community-Based Tourism (CBT) is a form of sustainable tourism where local communities invite tourists to visit their settlements, emphasizing local empowerment and cultural exchange [4]. Psychologically, such experiences can fulfil the need for relatedness, as described in Self-Determination Theory, by creating genuine human connections [5]. Examples in Sri Lanka include spice garden tours run by local families, village homestays, or traditional fishing expeditions.

This study employed a concurrent mixed-methods design. Quantitative data was collected via a structured online survey distributed through CBT cooperatives in Kandy, Ella, and the Sinharaja region. The survey included the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) and Likert-scale items measuring specific experience dimensions. A total of 127 valid responses were collected. Qualitative data was gathered through semi-structured interviews with 15 survey volunteers to gain deeper insight into their experiences [6].

RESEARCH RESULTS AND THEIR EVALUATION. PĒTĪJUMA REZULTĀTI UN TO IZVĒRTĒJUMS

Quantitative Results

Analysis of survey data from 127 international tourists revealed a significant positive shift in reported well-being following their Community-Based Tourism (CBT) experiences in Sri Lanka. The average post-experience WEMWBS score was 52.3, which falls within the "Good" level of mental well-being [7]. Notably, 81% of respondents achieved scores above 47, indicating that the majority reached a meaningful threshold of psychological well-being (Figure 1). To statistically validate this improvement, a paired-sample t-test was conducted comparing pre- and post-experience WEMWBS scores from a subset of 45 participants who completed both surveys. This analysis demonstrated a statistically significant increase ($p < 0.01$), providing strong confirmation that CBT experiences contribute directly to enhanced psychological well-being [7].

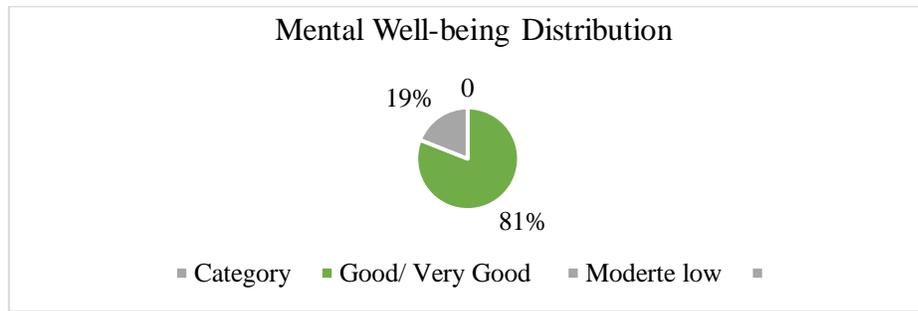


Figure 1. Distribution of WEMWBS Scores Among Tourist Well-being Scores After CBT Experiences

Source: Author’s Primary research data (Survey, 2024)

Note: The Warwick-Edinburgh Mental Well-being Scale (WEMWBS) ranges from 14-70, with scores above 47 indicating “Good” to “very Good” mental well-being [7].

Table 1. Mean Scores on Psychological Well-Being Constructs (Post-Experience)

Source: Author’s Primary research data (Survey, 2024)

Construct	Mean Score (out of 5)	Standard Deviation
Sense of Connection to Place & Hosts	4.42	0.61
Feeling of Personal Fulfillment	4.28	0.59
Perceived Authenticity of Experience	4.65	0.52
Overall Trip Satisfaction	4.51	0.55

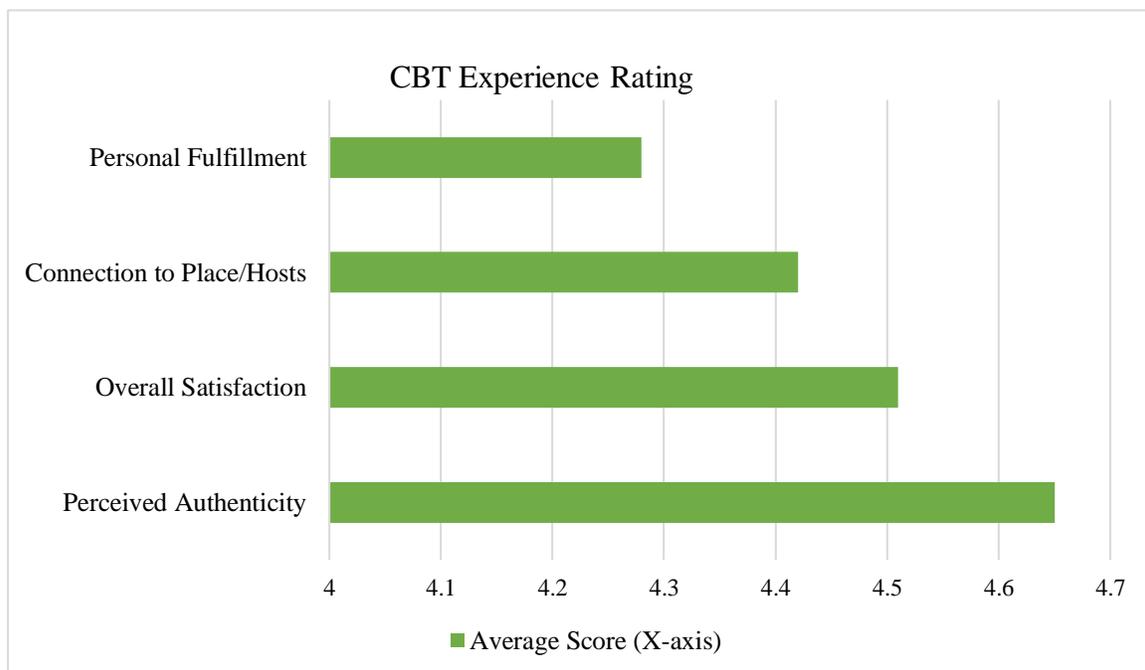


Figure 2. Average Tourist Ratings of CBT Experience Aspects (Sense of Connection, Fulfillment, Authenticity, Satisfaction)

Source: Author's Primary research data (Survey, 2024)

Note: Figure 2, which displays the average tourist ratings for key aspects of the CBT experience such as host interaction, cultural immersion, and activity engagement.

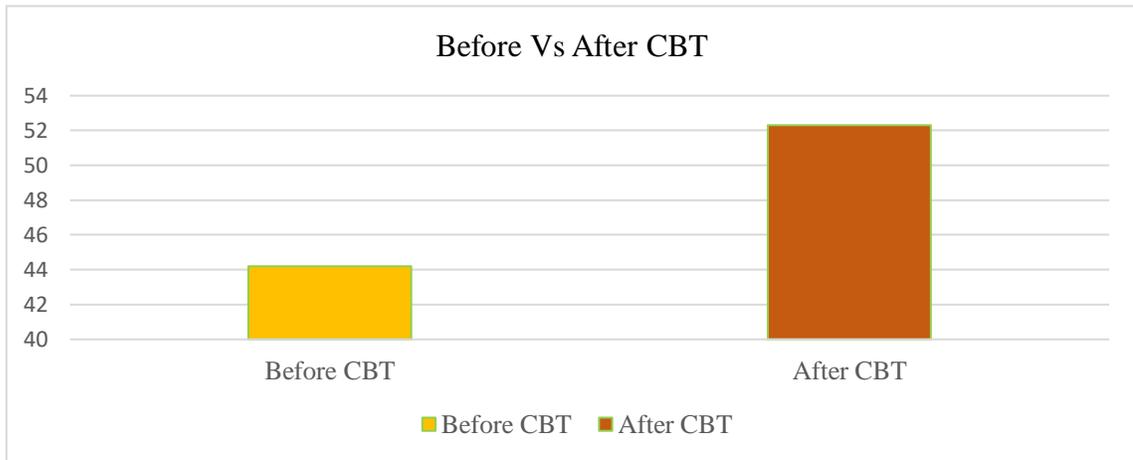


Figure 3. Well-being Improvement (WEMWBS Scores) Before and After CBT Experiences

Source: Author's primary research data (Survey, 2024)

Note: Statistical significance: $p < 0.01$ (99% confidence that improvement is real).

Qualitative Results

Table 2. Emergent Themes and Representative Quotes from Tourist Interview

Source: Author's primary research data (Interviews, 2024)

Theme	Core Concept	Representative Quote	(No. of Participant, Nationality, Age)	Psychological Implication
1. Transcending the Commercial Transaction	The shift from a buyer-seller dynamic to a guest-host relationship.	"I didn't feel like a walking wallet. When Tharindu's family shared their family album and asked about mine, it became a human exchange. That dignity is priceless."	(P04, Canadian, 29)	Fulfills need for relatedness (SDT); counters feelings of being an outsider.
2. Purposeful Participation & Ethical Ease	The satisfaction derived from knowing one's presence contributes directly and ethically.	"We helped prepare the meal with vegetables from their garden. Seeing exactly where my money went—to that family's kitchen, not a resort chain—removed that uncomfortable 'tourist guilt.' I felt like a good guest."	(P11, German, 34)	Reduces cognitive dissonance; enhances sense of purpose and moral satisfaction.
3. Immersive Flow & Cognitive Restoration	Deep engagement in a manual or cultural activity leading to mental absorption and stress relief.	"Learning to paddle the traditional raft required all my focus. For two hours, I wasn't thinking about emails or my next stop. My mind was just... there. It was incredibly calming."	(P07, Australian, 41)	Induces a state of 'flow'; provides a mental break and reduces anxiety.
4. Authenticity as Emotional Catalyst	The perceived genuineness of the experience triggering deeper emotional responses.	"The temple ceremony wasn't a show. We were invited to sit quietly at the back. The sincerity was palpable, and it created a moment of real peace I couldn't have planned."	(P13, British, 52)	Validates the search for 'realness'; deepens emotional impact and memorability.

Thematic analysis of semi-structured interviews with 15 tourists identified four key psychological mechanisms through which CBT enhances well-being. First, tourists described transcending the commercial transaction, moving from a buyer-seller dynamic to experiencing genuine guest-host relationships. Second, they reported feelings of purposeful participation and ethical ease, deriving satisfaction from knowing their presence contributed directly and ethically to local communities. Third, many experienced immersive flow and cognitive restoration, describing deep engagement in activities that provided mental absorption and stress relief. Finally, authenticity emerged as an emotional catalyst, with perceived genuineness triggering deeper emotional responses and creating memorable moments.

RESEARCH RESULTS AND THEIR EVALUATION. PĒTĪJUMA REZULTĀTI UN TO IZVĒRTĒJUMS

The triangulated data strongly supports the research objective, demonstrating that CBT experiences significantly improve tourists' psychological well-being. The consistently high quantitative scores—particularly for authenticity (4.65/5) and overall satisfaction (4.51/5)—combined with the qualitative themes explaining the mechanisms behind these effects, provide compelling evidence. These findings align with Self-Determination Theory, illustrating how CBT fulfills core psychological needs for relatedness, competence, and autonomy through authentic human connections and meaningful participation [5, 8].

The results indicate that CBT's value extends beyond economic benefits to include significant mental health advantages for tourists. By creating genuine human connections and opportunities for meaningful engagement, CBT effectively counters the impersonal nature of conventional mass tourism. This has important implications for Sri Lanka's tourism positioning, suggesting that promoting CBT can attract travelers seeking both cultural authenticity and personal well-being enhancement, potentially offering competitive advantages in the global tourism market.

CONCLUSION. KOPSAVILKUMS

This research set out to determine if CBT in Sri Lanka improves tourists' mental well-being. The evidence clearly supports that it does. Experiences like homestays and cultural workshops make tourists feel a stronger connection, greater purpose, more happiness, and lower stress. This occurs because CBT creates a genuine human exchange, fulfilling the psychological need to belong and feel valued [5].

For Sri Lanka, this shows that promoting CBT is not only good for local economies but is also a strategic way to attract modern travelers seeking meaningful trips. By offering these authentic experiences, Sri Lanka can build a stronger, more positive reputation as a travel destination.

Future studies could investigate the longevity of these positive effects and include a wider variety of tourist demographics.

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**EIROPAS DROŠĪBAS ĢEOPOLITISKIE UN
HUMANITĀRIE ASPEKTI**

**GEOPOLITICAL AND HUMANITARIAN
ASPECTS OF EUROPEAN SECURITY**

FEMALE GENITALIA MUTILATION

Cultural relativism - Human rights - Normative

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ABSTRACT

Female genital mutilation (FGM) represents a serious human-rights violation and a global public-health challenge: it is estimated that over 230 million women and girls worldwide have survived these practices. This paper adopts a multidisciplinary approach, combining a legal analysis with an anthropological perspective, to explore not only the physical and psychological consequences of FGM, but also the cultural, social, and identity-related meanings that sustain its persistence in many communities. The paper traces the historical and geographic origins and variations of FGM, outlines the four main types according to international classifications, and discusses the primary health, psychological and social impacts affecting affected women. It also analyzes relevant international and national legislation, highlighting the limitations of purely repressive approaches and the difficulties of enforcement in culturally complex contexts. Finally, it proposes a multilayered intervention model, merging human-rights protection, cultural awareness, and social sensitization, as a pathway to realistic and sustainable strategies that respect individual dignity and cultural diversity, and promote long-term communal change.

INTRODUCTION

Female genital mutilation (FGM) is a complex phenomenon situated at the crossroads between universal human rights, cultural relativism, and the interaction between law and traditional practices. Although widely condemned as a violation of the fundamental rights of women and girls by international organizations such as the United Nations, World Health Organization (WHO) and UNICEF, it is not enough to address the problem solely through criminalization. It is crucial also to examine the cultural and social roots that enable its persistence, in order to develop effective solutions that respect local realities. FGM is recognized by the United Nations as a serious human rights violation, and considered by WHO and UNICEF as a sexual and physical abuse that permanently harms the physical and psychological health of women. In 2012, the UN General Assembly adopted a historic resolution against FGM (UN resolution A/Res/67/146, 2012), urging intensified global efforts to eliminate it. Moreover, FGM is included in the 2030 agenda of the Sustainable Development Goals (SDGs) under target 5.3, which aims to end all harmful practices. However, these practices, embedded in complex cultural contexts, often elude legal simplifications that tend to ignore the symbolic and social meanings communities attach to them. An effective regulation of FGM requires a multifaceted approach that integrates a legal perspective with an anthropological understanding of the phenomenon. Anthropology, in fact, allows one to examine FGM not only as acts of violence, but also as ritualistic and symbolic practices linked to specific cultural systems. This approach enriches the normative debate by showing how FGM often represents a fundamental element in the construction of individual and collective identity. The lack of awareness about sociocultural context and the different forms of FGM has sometimes led to legislation incapable of having a concrete impact on the practice. Integrating cultural sensitivity with the protection of universal rights could make normative solutions more effective and acceptable to the communities involved. This approach, while crucial for African countries, is also relevant for Western ones, which face traditional practices in a context of growing cultural diversity.

Female Genital Mutilation: History, Types, Consequences and Social Impacts

Female genital mutilation (FGM) encompasses a range of traditional practices that mainly affect women and girls in Africa, but also in some regions of Asia and Latin America. These practices involve the partial or total removal, or alteration, of female genital organs for cultural reasons with no medical benefit. According to the classification of World Health Organization (WHO), FGM is divided into four main types. The “Sunna,” which consists of removal of the clitoral hood (prepuce) or partial removal of the clitoris, is frequently carried out on girls between about 4 and 14 years old, chiefly in some cultures of Eastern and Northern Africa. Another common form is “excision,” which entails removal of the clitoris and the labia minora, and is widespread in many African regions and some Middle Eastern areas. Infibulation, often known as “pharaonic circumcision,” is one of the most invasive forms of FGM. It involves removal of the clitoris and labia, followed by partial sewing shut of the vaginal opening, leaving a small hole for urination and menstrual flow. This practice is particularly prevalent in the Horn of Africa. Finally, there are other forms of mutilation, such as piercing, cauterization, stretching of the labia, or insertion of substances to narrow or alter the vaginal walls varying according to the specific cultural traditions of each community. These practices are not a recent phenomenon. Some historical sources trace them back to antiquity: for instance, there are records from ancient Egypt mentioned by ancient historians. Two prevalent theories try to explain the origins: the first suggests there is no single common source for these practices; the second points to the Horn of Africa, Egypt, or the Arabian Peninsula as possible regions of origin, from which the practices may have spread along trade routes. It is significant to note that similar practices have also been documented outside the African context: in Western societies, until the 19th century, clitoridectomy was performed for social and sexual-control motivations. Today, however, FGM is predominantly associated with migrant communities originating from Africa, where the practice remains deeply rooted in traditional cultures. Analysis of such phenomena therefore requires an approach that considers not only their health and legal dimensions, but also the cultural context that sustains their persistence. For many communities, FGM represents a fundamental rite of passage marking the transition from childhood to adulthood and conferring on young women a social status essential for marriage and acceptance within society. In this sense, FGM is not only a cultural expression, but also a condition for social integration and legitimacy within the community. From a health perspective, FGM leads to extremely serious consequences. In the short term, it can cause hemorrhage, infections and severe pain especially when performed under inadequate hygienic conditions and by unqualified practitioners potentially resulting in shock or death. Long-term, women may suffer chronic pain, urinary and menstrual difficulties, as well as obstetric complications during childbirth. Infibulation, in particular, significantly increases the risk of maternal and infant mortality; such physical complications are severe and heavily impact women’s quality of life, with a substantially increased risk of infections and other reproductive-health problems. The repercussions are not limited to physical health: many women experience psychological trauma linked not only to the procedure itself but also to the social pressure surrounding it. Anxiety, depression and post-traumatic stress disorder are frequent consequences, often exacerbated by social isolation. On the social plane, FGM produces devastating effects: women who do not undergo these practices risk stigmatization and exclusion from their communities, as they are considered not conforming to cultural ideals of femininity and purity. This stigma further aggravates mental-health problems, feeding a vicious circle of physical and psychological suffering.

Norms and Global Challenges

FGM is subject to international condemnation for reasons related to human rights, women's health, and child protection. This practice is considered a serious violation of fundamental rights, with harmful physical and psychological consequences for the women and girls who undergo it. The condemnation is rooted in key documents such as the Universal Declaration of Human Rights (1948), which through articles 2, 3, 5, 12 and 25 enshrines principles of equality, protection from torture, and the right to health. The Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW, 1979), even though it does not explicitly mention FGM, condemns discriminatory practices that violate women's rights. In 1980, a joint statement issued by World Health Organization (WHO) and UNICEF titled "*Female Genital Mutilation: A Joint WHO/UNICEF Statement*" denounced FGM as a harmful health practice and criticized its medicalization. That statement emphasized the serious physical and psychological risks associated with FGM, calling for an end to its spread and warning against treating it as a legitimate medical procedure. Over the years, additional important documents addressed the issue: the first report of the United Nations Working Group on Harmful Traditional Practices (1986) and the Convention on the Rights of the Child (CRC, 1990) recognized FGM as a violation of children's rights. Global conferences, such as those held in Cairo (1994) and Beijing (1995), further increased attention on FGM stressing the need to address it also in migratory contexts, where the practice has spread due to international mobility. In Europe, some countries were early in legislating against FGM. For example, Sweden was among the first Western nations to introduce a specific law against FGM in 1982, criminalizing not only the performance of FGM but also any participation or facilitation of it, regardless of where the act occurs (even abroad). This measure aimed to prevent the practice within the country and to protect women and girls from FGM. In recent years, other European countries such as France have also strengthened legal frameworks: France prosecuted its first FGM-related death in 1979 and introduced stringent penal code provisions, including life sentences for perpetrators, recognizing FGM as a violation of human-rights conventions. In many jurisdictions, national laws combine criminal prohibitions with preventive measures. In Italy, for instance, the criminalization of FGM dates back to the 2006 law prohibiting the practice, penalizing any form of FGM with prison sentences and often incorporating preventive actions such as awareness campaigns, training of health personnel, and community education. At the European level, institutions including the European Parliament have condemned FGM as a human-rights violation and called on Member States to harmonize or strengthen their legal frameworks where needed. The European Parliament has urged that FGM be criminally prosecuted regardless of the victim's consent, and that offences be punishable even when committed abroad. It has also recommended that efforts to combat FGM include social and educational strategies, healthcare support, community involvement, and asylum recognition for women and girls threatened with FGM. The Addis Ababa Declaration (1997) marked a milestone in the fight against FGM, defining it as a violation of universal human rights, including the right to life, bodily integrity, and protection from degrading treatment. That declaration inspired protocols and coordinated global actions for the prevention of harmful traditional practices recognizing that eliminating FGM requires global, coordinated initiatives. Since the 1980s, the United Nations system has played a central role in defining and classifying FGM as harmful to the physical and psychological health of women. Over time, FGM has come to be regarded globally as a human-rights violation and, in many cases, a form of torture, helping to establish an international normative framework that views the practice as unacceptable under any circumstances. An example of coordinated international intervention is the program Female Genital Mutilation/Cutting: Accelerating Change promoted by UNICEF and the United Nations Population Fund (UNFPA) aimed at accelerating the abandonment of FGM in many countries through a holistic approach combining cooperation with affected communities,

education, advocacy, health services, and social change. In 2012, the UN General Assembly formally proclaimed a global moratorium on female genital mutilation through resolution UN Resolution A/Res/67/146, reinforcing the international commitment to eliminate FGM worldwide.

The Legal treatment

The legal treatment of FGM presents a dual approach, characterized by the criminalization of such practices and by interventions aimed at sociocultural change. However, the effectiveness of the laws and strategies adopted is frequently called into question, also due to insufficient enforcement and a limited understanding of the practices and the cultural context in which they occur. In this scenario, the contribution of anthropology, with its distinctive methodological approach, can provide a more nuanced understanding of FGM and its meaning. The United Nations has adopted a standardized definition of FGM, describing them as procedures that violate women's physical integrity and human rights (Resolution A/RES/67/146, United Nations General Assembly, 2012). This definition, with its implicitly negative connotation in the term "mutilations," is based on the idea that FGM represent only a form of control over female sexuality and a perpetuation of gender discrimination. However, anthropology highlights the heterogeneity of these practices, both in terms of forms and cultural meanings, criticizing the international approach for its generalizations and simplifications. According to anthropologists, FGM are cultural practices linked to specific symbolic and social needs, embedded within a complex cultural system. As stated by Clifford Geertz (Interpretation of Cultures, 1973):

"Culture is a system of shared meanings that shapes human identity, filling the gaps of mere biological dimension."

In this context, female genital mutilations cannot simply be reduced to "barbaric" customs, but must be understood as part of an anthropopoietic process that is, the cultural construction of identity. Cultural practices, including FGM, are tied to meanings and values that go beyond the biological aspect. Ethnographic examples reinforce this perspective. For the Gikuyu of Kenya, the *irua* is a rite of passage that marks the transition to adulthood and completes identity construction. For the Dogon of Mali, clitoridectomy and male circumcision resolve the sexual undifferentiation at birth, stabilizing gender identity; among the Nilotic populations of northern Sudan, infibulation symbolizes fertility and protects the female generative capacity. Some African scholars, such as Leslye Amede Obiora, criticize the Western narrative that represents African women exclusively as victims of a patriarchal culture. Obiora emphasizes that FGM must be understood as part of a complex cultural practice, which does not necessarily imply control or repression of female sexuality, but may carry multiple meanings depending on the social and cultural context. As Obiora writes in her article titled "Bridging Society, Culture, and Law: The Issue of Female Circumcision," published in the *Case Western Reserve Law Review* (1997): "female genital mutilations are not simply a form of oppression, but are for many women an important part of their cultural and social identity."

Human Rights and Cultural Traditions

In the West, the predominant reaction to FGM is characterized by a firm condemnation, accompanied by the refusal to allow any form of perpetuation of the practice, even if alternative or symbolic. However, this stance, which seems absolute, is not always matched by an equally strong interest in the conditions of women in the countries where such practices are widespread. On one hand, this approach reflects adherence to a universal human-rights ethic; on the other, it implies a

form of cultural relativism, since it judges the same practice differently depending on the geographic context (the perception and response to these practices vary according to the culture, history, and geography of different societies). This raises questions about the ability of liberal institutions to address practices that, although considered by them to be abhorrent, are an integral part of the symbolic and social structures of other communities. Cultural relativism, in this context, does not necessarily justify the practice of FGM, but invites recognition of its meaning within its original context. This approach can serve as a basis for strategies of intercultural dialogue aimed at gradually dismantling the social foundations of the practice, rather than eliminating it through a top-down imposition that could generate resistance and conflict. The proposal for an alternative rite, one that is less invasive and more symbolic compared to traditional female genital mutilation, has been put forward by several activists and human-rights experts as a possible solution to reduce physical harm and facilitate social change without generating excessive cultural resistance. One of the main proponents of this idea is Nawal El Saadawi, an Egyptian writer and activist, who has emphasized the importance of an approach that reconciles women's rights with cultural traditions. The proposal entails the creation of a symbolic rite that could replace FGM, preserving the cultural meaning of belonging and maturity, but avoiding harmful physical and health-related consequences (El Saadawi, *The Nawal El Saadawi Reader*, 2007). For example, in some African countries, symbolic coming-of-age rites have been suggested that do not involve physical mutilation, such as using colors or temporary marks on the skin to symbolize the transition from girlhood to adulthood, or adopting verbal or educational ceremonies that celebrate maturation without damaging the body. The alternative rite should be designed to reduce physical harm and not alter the female body, focusing instead on the social and symbolic meaning of the rite, without introducing permanent physical damage. However, the proposal is controversial. The organization Equality Now, which defends women's rights, criticizes such practices, which, although less invasive, continue to perpetuate dynamics of social and sexual control over women, without addressing the root of the problem. Their position emphasizes women's right to physical integrity and equality, arguing that symbolic practices do not fully respect women's fundamental rights. Isaiah Berlin, in his famous essay *The Crooked Timber of Humanity* (1990), rejects the idea of a single, absolute hierarchy of values, highlighting the irreconcilability of different moral visions. While acknowledging that some perspectives are incompatible, Berlin calls for searching for common ground through dialogue and mutual recognition, avoiding the temptation to impose a superior order that would harmonize differences.

Cultural Relativism

This debate about women's rights and traditional practices, however, raises a broader question about the conflict between universal values and cultural diversity, as highlighted by the relativist perspective. The issue of FGM raises fundamental questions about the interpretation and application of human rights in different cultural contexts, particularly when traditional practices are confronted with Western standards. The American anthropological school has adopted a relativist approach regarding cultural diversity, arguing that moral judgments and values cannot be formulated outside of a specific cultural context. From this perspective, cultural relativism affirms that culture itself establishes the reference criteria, with each culture developing its own customs and values. The anthropologist Melville Herskovits, in his book *The Human Factor in Changing Africa* (1958), argued that moral judgments are relative to the experience and enculturation of each individual, highlighting how beliefs, including scientific ones, are influenced by the culture in which they arise. From this perspective, respect for human rights also implies respect for cultural differences, criticizing the universal conception of human rights and suggesting that a universal declaration must take cultural specificities into account. The debate about FGM is situated in a

complex context, where universal human rights and traditional cultural practices often come into tension. On one hand, FGM is commonly condemned as a serious violation of women's rights, with devastating physical and psychological consequences. On the other hand, these practices are rooted in cultural traditions that confer meaning and identity to the communities that practice them. This raises fundamental questions about how to balance respect for cultural traditions with the need to protect women's rights. Imposing universal values risks ignoring the legitimacy of cultural traditions, creating a fracture between international norms and local realities. It is important to recognize the traditional knowledge rooted in specific social contexts. Culture not only shapes the individual through interventions on the body, but can also deeply influence one's perception of personal identity and dignity. Isaiah Berlin, one of the main political philosophers of the 20th century, developed the concept of pluralism of values, which is central to his thought. According to Berlin, there is no single moral model or universal principle that can be imposed on all cultures and individuals, because human values are multiple, often incompatible, and rooted in different traditions and contexts. In his best-known work, *The Crooked Timber of Humanity*, Berlin emphasizes that dialogue and mutual recognition between different moral and cultural visions are essential to avoid imposing a superior order that could stifle individual and collective freedoms. In other words, his theory of pluralism suggests that the coexistence of different values is not only inevitable, but also necessary for a just society: "the recognition that there are many different ways in which human beings can live, and that none of them can be simply reduced to another, is the key to an understanding of the pluralism of values." This approach implies that respect for human rights and cultural differences should be promoted through dialogue and mutual understanding, avoiding the imposition of a universal vision of rights, but rather seeking solutions that respect cultural diversity while simultaneously protecting women's fundamental rights.

CONCLUSION

In conclusion, although this paper has attempted to provide a nuanced analysis of female genital mutilation (FGM), I acknowledge that some of the positions proposed have weaknesses. The tension between respect for cultural traditions and the protection of women's human rights is not yet fully resolved, and the risk of justifying harmful practices through cultural relativism cannot be ignored. Moreover, the proposal of alternative rites as a partial solution may not fully address the gravity of FGM and could perpetuate oppressive dynamics. Nevertheless, this paper offers a crucial reflection on the issue, striving to integrate legal, cultural, and anthropological perspectives. Although intercultural dialogue and partial solutions present challenges, I believe they represent a step toward greater awareness and a respectful sensitization of the communities involved. In the future, it will be necessary to further deepen these aspects in order to develop truly effective solutions that protect women's rights while at the same time respecting cultural diversity.

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OBSTRUCTION OF THE RIGHT TO STRIKE OR THE LAWFUL ACTIVITIES OF TRADE UNIONS

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ABSTRACT

Latvian Confederation of Free Trade Unions (LBAS) and the Ministry of Welfare (LM) have initiated an amendment to the Criminal Code, supplementing it with a new provision that provides for criminal liability for obstructing the right to strike or the lawful activities of trade unions or participation in a trade union, providing for a sanction of up to three years of imprisonment.

The aim of the Research is to provide insight into the provision of criminal liability for the right to strike or obstruction of the lawful activities of trade unions in the Criminal Law.

Research tasks:

- 1) to analyse the legal acts of the Republic of Latvia in the field of criminal and administrative liability for obstructing the right to strike or the lawful activities of trade unions;
- 2) to analyse the practice of the European Union countries;
- 3) to characterize the opinions of individual institutions and organizations;
- 4) to characterize the possible risks in providing such liability;
- 5) to evaluate possible alternatives to providing such liability.

Keywords: Administrative liability; Criminal liability; Strike; Trade unions; Violation of fundamental rights

ANOTĀCIJA

Latvijas Brīvo arodbiedrību savienība (LBAS) un Labklājības ministrija (LM) ir iniciējusi grozīt Krimināllikumu, papildinot to ar jaunu normu, kas paredz kriminālatbildību par tiesību streikot vai arodbiedrību likumīgās darbības vai līdzdalības arodbiedrībā kavēšanu, paredzot sankciju līdz trim gadiem brīvības atņemšanas.

Pētījuma mērķis ir sniegt ieskatu par kriminālatbildības par tiesību streikot vai arodbiedrību likumīgās darbības kavēšanu paredzēšanu Krimināllikumā.

Pētījuma uzdevumi:

- 1) izanalizēt Latvijas Republikas tiesību aktus kriminālatbildības un administratīvās atbildības paredzēšanas par tiesību streikot vai arodbiedrību likumīgās darbības kavēšanu jomā;
- 2) izanalizēt Eiropas Savienības valstu praksi;
- 3) raksturot atsevišķu institūciju un organizāciju viedokļus;
- 4) raksturot iespējamus riskus šādas atbildības paredzēšanā;
- 5) izvērtēt šādas atbildības paredzēšanas iespējamās alternatīvas.

Atslēgvārdi: Administratīvā atbildība; Arodbiedrības; Kriminālatbildība; Pamattiesību aizskārums; Streiks

INTRODUCTION

The Research topic is relevant and significant due to the fact that the Latvian Confederation of Free Trade Unions (LBAS) and the Ministry of Welfare (LM) have initiated an amendment to the Criminal Code, supplementing it with a new provision that provides for criminal liability for obstructing the right to strike or the lawful activities of trade unions or participation in a trade union, providing for a sanction of up to three years of imprisonment.

The Ministry of Justice (TM) has prepared a draft amendment to the Criminal Law, supplementing the Criminal Law with Article 146.¹, which provides for criminal liability for obstructing the right to strike or the lawful activities of trade unions.

The aim of the Research: to provide insight into the provision of criminal liability for the right to strike or obstruction of the lawful activities of trade unions in the Criminal Law.

Research problem: the issue is currently at the stage of inter-institutional coordination. Institutions and organizations do not agree on the necessity of providing for such criminal liability in the Criminal Law. Institutions and organizations have offered other – alternative – solutions for predicting liability.

Research methods: analysis of literature and information sources (content analysis), comparative and empirical method.

BASIC THEORETICAL AND PRACTICAL PROVISIONS

Analysed legal acts of the Republic of Latvia:

- 1) Article 102 of the Constitution of the Republic of Latvia (*the Satversme*): “Everyone has the right to form and join associations, political parties and other public organisations.”
- 2) Article 108 of the Constitution of the Republic of Latvia (*the Satversme*): “Employed persons have the right to a collective labour agreement, and the right to strike. The State shall protect the freedom of trade unions.”
- 3) Criminal Law;
- 4) Criminal Procedure Law;
- 5) Trade Union Law;
- 6) Labour Law;
- 7) Strike Law;
- 8) Administrative Liability Law.

Views of institutions and organizations:

1. The problem identified by the Latvian Confederation of Free Trade Unions (LBAS) regarding the possible lack of liability for certain violations of the right to strike, identified by the Latvian Confederation of Free Trade Unions (LBAS), was examined at the meeting of the Permanent Working Group on Administrative Liability Law of the Ministry of Justice on 1 of February 2024.
2. The Ministry of Welfare indicated that it does not see the added value of such a proposal (regulation of administrative liability) and does not consider it to be an appropriate or feasible solution. The Ministry of Welfare believes that the violation of fundamental rights is rather a criminal law issue.
3. The Permanent Working Group on Administrative Liability Law of the Ministry of Justice concluded that such violations are directly related to the restriction of a person's fundamental rights. Therefore, the Permanent Criminal Law Working Group of the Ministry of Justice was asked to assess the issue of establishing criminal liability for the violation of the right to strike.
4. Representatives from the Ministry of Justice, the Ministry of Interior, the Supreme Court, district courts, regional courts, the Prosecutor General's Office, the State Police, as well as invited representatives from the Ministry of Welfare and the Latvian Confederation of Free Trade Unions (LBAS) participated in the working group on 8 of May 2024.

Historical experience of the Republic of Latvia:

At one time, the Latvian Criminal Code included the Article 135 “Violation of Trade Union Rights”, which provided for criminal liability for obstructing the lawful activities of trade unions and their bodies – a fine of up to ten minimum monthly wages or dismissal from work.

Experience of other European Union countries:

In several European Union countries, there is criminal liability for interfering with trade union activities:

- Lithuania (forced labour, fine or imprisonment);
- Estonia (fine);
- Germany (imprisonment or fine);
- France (imprisonment and fine);
- Poland (fine or imprisonment).

Proposed wording of the amendment to the Criminal Law:

To supplement the Criminal Law with Article 146.¹ in the following wording:

“Article 146.¹. Obstruction of the right to strike or the lawful activities of trade unions

(1) For an act aimed at obstructing the right to strike or the lawful activities of trade unions or participation in a trade union, by using violence, threats, fraud, bribery or blackmail, – the punishment shall be deprivation of liberty for a term of up to one year or temporary deprivation of liberty, or probation supervision, or community service, or a fine.

(2) For the criminal offence provided for in the first part, if committed by a state official or a responsible employee of an enterprise (company) or organization, – the punishment shall be deprivation of liberty for a term of up to three years or temporary deprivation of liberty, or probation supervision, or community service, or a fine.”

Objections of Latvian Chamber of Commerce and Industry (LTRK):

- Employers' organizations are not involved in the development of the proposal, although the regulation directly concerns the relations between trade unions and employers. Promoting the proposal without the participation of employers does not contribute to a balanced assessment of interests and creates the basis for an incomplete legal regulation.
- Liability for obstructing the lawful activities of trade unions should be addressed at the administrative, not criminal law level. The introduction of criminal liability is not proportionate, since criminal law should be a last resort, not an instrument that compensates for unclear basic regulation.
- In practice, situations are often encountered where there are objective difficulties in determining to what extent a trade union actually represents the employees of a particular company.
- The description of a criminal offence contained in the text of the proposal contains risks that may lead to a broad and ambiguous interpretation.
- It is not clearly defined which persons should be held criminally liable. An official and a responsible employee of a company or organization are mentioned, but the criterion by which the person directing the proceedings would determine the status of such a person is not specified. It is not clear whether this category includes a lawyer, a personnel specialist, a clerk, a head of a structural unit or another responsible person whose duties include communication with a trade union. Such uncertainty creates a significant legal risk and may result in situations in which the threat of criminal liability becomes an instrument in resolving disputes, rather than providing for the prevention of illegal actions.
- Any amendments to the field of criminal law are permissible only after the basic regulation is in order and the participation of social partners is ensured. In the current situation, the proposal to supplement the Criminal Code with a new norm is not supported, as it is not proportionate, does not contribute to legal certainty and creates a disproportionate risk to the business environment.

RESEARCH RESULTS AND THEIR EVALUATION

The Author of the Research has achieved the Aim of the Research, has fulfilled the Tasks arising from the Aim of the Research, and has investigated the Research Problem. The Author of the Research provides conclusions and proposals arising from the conclusions.

CONCLUSIONS AND PROPOSALS

1. Currently, such liability is not provided for in either the Criminal Law, the Administrative Liability Law or other legal acts.
2. In several European Union countries, such as Lithuania, Estonia, Germany, France, Poland, there is criminal liability for interfering in the work of trade unions.
3. Institutions and organizations do not have a consensus on the provision of criminal liability in the Criminal Law.
4. It is not clearly defined which persons should be held criminally liable. An official and a responsible employee of a company or organization are mentioned, but no criteria are specified by which the person directing the proceedings would determine the status of such a person.
5. As an alternative solution, it is proposed to provide for administrative liability in the Administrative Liability Law.
6. The institutions and organizations involved should further analyse the practice of European Union countries in providing for liability for such violations.
7. In order to ensure a solution acceptable to all institutions and organizations involved, re-evaluate as an alternative the possibility of providing for such liability in other regulatory enactments, for example, in the Administrative Liability Law.
8. If necessary, make amendments to the Trade Union Law, the Labor Law and the Strike Law.
9. Clearly and unambiguously define which persons are to be held liable. Indicate the criteria by which the person directing the proceedings or the responsible official will determine the status of such a person.
10. Coordinate proposals with the employee representative organization – Latvian Confederation of Free Trade Unions (LBAS).
11. Coordinate proposals with employer organizations – Employers Confederation of Latvia (LDDK) and Latvian Chamber of Commerce and Industry (LTRK).

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VOLUNTEERING AS A TOOL FOR YOUTH EMPOWERMENT: INTERNATIONAL TRENDS AND OPPORTUNITIES FOR UKRAINIAN PUBLIC GOVERNANCE

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ABSTRACT

This article analyses volunteering as a powerful tool for empowering young people in Ukraine, highlighting its role in developing leadership skills, critical thinking and active citizenship. Drawing on national practice and the author's personal experience in working with young people and European programmes, the study shows how volunteering enables young people to take responsibility, participate in decision-making and increase their social engagement.

Keywords: volunteering, youth work, young people, youth empowerment, civic engagement

ANOTĀCIJA

Šajā rakstā tiek analizēts brīvprātīgais darbs kā spēcīgs instruments jauniešu iespēju paplašināšanai Ukrainā, izceļot tā nozīmi līderības prasmju, kritiskās domāšanas un aktīvas pilsonības attīstīšanā. Balstoties uz nacionālo praksi un autores personīgo pieredzi darbā ar jauniešiem un Eiropas programmām, pētījumā parādīts, kā brīvprātīgais darbs ļauj jauniešiem uzņemties atbildību, piedalīties lēmumu pieņemšanā un palielināt savu sociālo iesaisti.

Atslēgvārdi: brīvprātīgais darbs, darbs ar jaunatni, jaunieši, jauniešu iespēju paplašināšana, pilsoniskā līdzdalība

BASIC THEORETICAL AND PRACTICAL PROVISION

Volunteering is usually defined as the voluntary contribution of time, skills and effort to activities that serve the public interest, without financial reward. It is based on three fundamental principles: personal initiative, free choice and no material reward. However, volunteering should be seen not only as an act of assistance, but also as a powerful tool for youth development. Through participation in volunteer activities, young people form their civic identity, become more involved in important social processes and develop the ability to interact effectively with communities and government institutions [1].

Since volunteering covers a wide range of activities — youth centres, community organisations, media projects, sporting events, animal shelters and many others — it provides young people with the opportunity to acquire a variety of skills needed in the 21st century. These include communication and teamwork skills, leadership qualities, project management, digital literacy and creative problem solving. Volunteering also helps young people gain experience in organising events, creating content for social networks, and developing and implementing their own initiatives. As a result, it becomes a platform for personal growth and a path to more active participation in public life.

In many countries, volunteerism has become an integral part of national youth policy, rather than a spontaneous or isolated social phenomenon. Governments increasingly recognise volunteering as a strategic tool for promoting civic engagement, developing youth leadership skills, and strengthening democratic governance. As a result, national and international institutions are actively promoting programmes that encourage young people to participate in community life, gain practical experience, and contribute to social development.

The EU demonstrates a consistent and strategic commitment to youth development by actively creating opportunities for young people and integrating them into key societal processes. Guided by the EU Youth Strategy (2019-2027) [2], the European Union not only invests in education, employment, and social inclusion, but also ensures that young people play a central role in shaping the policies that affect them. Through initiatives built on the core principles of ‘Engage, Connect, Empower’ and based on 11 European youth policy goals co-developed by young people, the EU promotes meaningful youth participation in democratic life and decision-making. This approach illustrates that young people are seen not only as beneficiaries of policy, but also as important partners in building a more inclusive, innovative, and sustainable Europe.

European Solidarity Corps - an EU-funded program for young people aged 18-30 that provides opportunities for volunteering, traineeships, and jobs to benefit communities across Europe and beyond [3]. Projects can be short-term (two weeks to two months) or long-term (two to 12 months). The European Solidarity Corps offers young people substantial benefits by providing structured, meaningful, and ethically sound opportunities for personal and civic development. Its mission to build a more inclusive and supportive society enables young people to participate directly in addressing social challenges, while strengthening their sense of solidarity, responsibility, and empathy. By promoting core values such as human dignity, non-discrimination, pluralism and mutual respect, the programme helps to foster a generation of socially conscious young citizens who are ready to contribute constructively to the development of their communities. The ESC also creates a safe and supportive learning environment: participants receive clear task descriptions, training, language support, and respectful treatment that prioritises their well-being and personal dignity.

The author of this article has personal experience of participating in a short-term international volunteer project at a youth centre in Finland. This activity significantly broadened his horizons, facilitated considerable intercultural exchange, and contributed to the development of new personal and professional skills. This first-hand experience allows us to emphasise that, in practice, the European Solidarity Corps functions effectively and has a profound impact on the young people who participate in the programme.

Erasmus+ is the European Union's flagship programme dedicated to supporting education, training, youth, and sport in Europe [4]. With a budget of €26.2 billion for 2021-2027 – almost double that of the previous funding period – the programme reflects the EU's strong commitment to social inclusion, green and digital transformation, and youth participation in democratic life. Erasmus+ directly contributes to the implementation of key EU policy frameworks, including the European Education Area, the Digital Education Action Plan, the European Skills Agenda, the European Pillar of Social Rights, and the EU Youth Strategy 2019-2027. The overall objective of the programme is to improve the quality, accessibility, and innovation of education, youth work, and sport through transnational mobility and cooperation. This goal is achieved through three key actions: (1) supporting learning mobility for individuals; (2) promoting cooperation between organisations and institutions; and (3) strengthening policy development and cooperation at the

European level [4]. Through these mechanisms, Erasmus+ plays an important role in promoting lifelong learning and contributes to the educational, professional, and personal development of young people in Europe and beyond.

The author of this article is personally familiar with the Erasmus+ programme. Thanks to the opportunities provided by Key Action 1, she is currently studying on an exchange programme at the Baltic International Academy, which demonstrates the programme's significant contribution to the development and internationalisation of higher education. In addition, she actively participates in various non-formal education activities supported by Erasmus+, including training courses and youth exchanges, which are implemented under Key Action 2. In the author's opinion, these initiatives significantly improve young people's understanding of the world, provide access to new knowledge and diverse perspectives on thematic issues, expand social networks and enhance competitiveness in the labour market. Overall, participation in Erasmus+ activities clearly contributes to personal growth, self-development and the acquisition of the necessary competences for the 21st century.

The ability to build strong and democratic societies relies on the next generation. Besides developing leadership and appropriate skills, engaging the young in societal affairs and decision-making ensures that the needs in the next generation are addressed through pertinent policies. Quite a number of countries have realized this and put in place organized youth policies and initiatives that bring the government, society, and the young together.

In Europe, there has been the development of formal youth policies that entail institutions, opportunities for participation, and collaboration between the government and society.

The Estonian National Youth Council, working under the acronym ENYC/ENL, operates with the help and involvement of all the youth bodies in the nation and also assists in the development and formation of the local youth bodies [5]. The organization also assists the youngsters in making contact with the authorities in the counties and the municipalities. The organization has the advantage because it utilizes a local-control approach in association with the national development strategy. The “Youth Sector Development Plan 2021-2035” ensures that everything keeps on running in a stable manner [6].

In Latvia, the national priorities in the field are set by the Ministry of Education and Science, and the Latvian National Youth Council (LJP) [7], an umbrella organization for the NGOs, enables networking and representation on the national level. There are also youth offices, advisory bodies, and/youth specialists in the municipalities who enable the implementation of the local initiatives. The reason why this system is successful is that it provides a structured framework on all levels, as well as opportunities through volunteering, projects, and self-managed initiatives, in addition to formal ways of participation.

In Lithuania, the Lithuanian Youth Council (LiJOT) [8] serves as an NGO network coordinator and advocate on national policy issues, and there are also municipal youth councils and coordinators. One of the biggest advantages the Lithuanian system has is that there are distinct roles for the state, the municipality, and the organization in engaging the youth, and there are also non-formal education, volunteering, and entrepreneurship and community projects where the youth are involved.

In the case of Germany, the approach has multiple tiers, where there are youth councils, parliaments, and advisory boards. These range from the municipal to the federal tiers. There are

also bodies like the Federal Junior Council in Germany [9], among others, that promote and provide informal education and other aspects like volunteering and citizen participation. The reason why the approach succeeds in the German setting and elsewhere needs to be explored.

In Ukraine, the development of the participation framework takes the form of the Ukrainian Youth Councils Association, uniting the local youth councils in 24 regions and 74 municipalities, in collaboration with the Ministry of Youth and Sports, and other partners such as UNDP [10]. Engagements include setting up the youth council, volunteering, internship, civic education, and other forms of non-formal learning. In Ukraine, models include the Estonian model, where there is a national and local unified approach, Latvia, where the municipal institutions are quite strong, and the Lithuanian model, where there is a healthy mix between the government and grassroots, and the German model, where there are multi-levels in the council.

This approach is effective because it finds a way to mix structured systems with dynamic, youth-led initiatives. The formation of youth participation bodies and offices in different regions enables the involvement of the youth in decision-making and social initiatives, and there is also coordination on the national levels that ensures there are available services, training, and support. There are services such as Participatory Youth Policy, through which the youth play an important role in social, civic, and recovery initiatives. In conflict and displacement areas, there are initiatives through which the youth can engage in social volunteering and innovation.

CONCLUSION

The study emphasises that volunteering plays a key role in the development of today's youth, acting as one of the most effective mechanisms for their social maturation. By participating in various forms of volunteer activity, young people have the opportunity to try themselves in new roles, develop responsibility and strengthen their independent decision-making skills.

Volunteering contributes to the development of a wide range of competencies, including leadership, communication, critical thinking and civic awareness. These competencies are the basis for young people's active participation in social processes and their further professional growth. In addition, volunteering is an important channel for involving young people in decision-making processes, ensuring communication between young people and the authorities, and promoting trust between them.

As a result, the Ukrainian government and civil society are forming a stable and flexible system of support for young people, which contributes to the strengthening of democratic processes and the activation of civic participation. Using the best practices of European models and adapting them to Ukrainian realities, today's youth have the opportunity to make a real contribution to decision-making processes, as well as to the development and growth of Ukrainian society.

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THE RISE AND FALL OF CENTRAL ASIA'S KHANATES

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ABSTRACT

This paper explores the historical evolution of the Khiva Khanate, the Bukhara Emirate, and the Kokand Khanate in Central Asia, tracing their origins, political structures, cultural achievements, and eventual decline. By examining each khanate individually, the study highlights their distinct contributions to the region's history. The paper also conducts a comparative analysis to uncover the common factors that led to their eventual conquest by the Russian Empire. Ultimately, this research provides a comprehensive understanding of the khanates' legacy and their impact on Central Asian history.

Keywords: Central Asia, Khiva Khanate, Bukhara Emirate, Kokand Khanate, Russian Empire Conquest

ANOTĀCIJA

Šajā rakstā tiek pētīta Hivas hanata, Buhāras emirāta un Kokandas hanata vēsturiskā attīstība Centrālāzijā, izsekojot to izcelsmi, politiskajām struktūrām, kultūras sasniegumiem un galīgajam norietam. Izpētot katru hanatu atsevišķi, pētījumā tiek izcelts to atšķirīgais ieguldījums reģiona vēsturē. Rakstā tiek veikta arī salīdzinoša analīze, lai atklātu kopīgos faktorus, kas noveda pie to galīgās iekarošanas no Krievijas impērijas puses. Galu galā šis pētījums sniedz visaptverošu izpratni par hanatu mantojumu un to ietekmi uz Centrālāzijas vēsturi.

Atslēgvārdi: Centrālāzija, Hivas hanata, Buhāras emirāts, Kokandas hanata, Krievijas impērijas iekarošana

INTRODUCTION

Central Asia, the heart of the ancient Silk Roads, boasts a rich and complex history shaped by various khanates and kingdoms that rose to prominence during the medieval period[7]. Among these, the Khiva Khanate, the Bukhara Emirate, and the Kokand Khanate stand out as influential powers that significantly impacted the region's political, economic, and cultural landscapes[4][7].

This paper aims to provide a comprehensive exploration of these khanates, beginning with their origins and development, then moving through their cultural achievements and concluding with their eventual decline under the Russian Empire[7][10]. By examining each khanate individually, we will uncover the unique aspects that defined them and also explore the common threads that linked them together. Ultimately, we aim to shed light on their enduring legacy and the profound influence they've had on the historical tapestry of Central Asia and modern Uzbekistan.

The Rule of the Khiva Khanate

The Khiva Khanate was established in 1511 by Sultan Ilbars [5][7]. Strategically positioned along the Silk Road, Khiva quickly became a prominent center of trade and cultural exchange, fostering economic prosperity and cultural development. This prime location allowed Khiva to

establish sustainable trade routes by land and sea, including connections through the Caspian Sea and the remnants of the Silk Road [2][5].

In its early years, the Khiva Khanate focused on consolidating power and expanding its territories under Sultan Ibars and his successors [5]. A stable administrative system was implemented, laying the groundwork for Khiva's growth [2][5]. Culturally, Khiva flourished, producing remarkable architectural landmarks and vibrant arts. Its markets bustled with goods from across Asia, and its cities became renowned for their unique blend of cultures and traditions.

Economically, Khiva thrived as a trade center, connecting East and West and bringing significant wealth to the region through both land and sea routes. However, the Khiva Khanate faced challenges, particularly in the 18th and 19th centuries, with invasions and conflicts, notably from the Russian Empire [5][7]. The Russian Empire struggled to launch an attack on Khiva due to its natural barriers and the harsh terrain, which made it a challenging endeavor. Eventually, by 1873, Khiva became a Russian protectorate, marking the end of its independence [5][7]. Nevertheless, the Khiva Khanate's legacy endures, leaving a lasting impact on the cultural and historical fabric of Central Asia. Today, the remnants of its culture and its beautiful cities serve as a testament to its rich history, and the Republic of Uzbekistan continues to honor this legacy.

Rise and conquest of Bukhara Emirate

The Bukhara Emirate was founded in the early 16th century, emerging as a powerful state in Central Asia[4][8]. Positioned along key trade routes, Bukhara quickly became a center of culture, learning, and commerce. Alongside Samarkand, Bukhara was at the forefront of Islamic culture and architectural advancements, shaped by the Shaybanid dynasty and the Timurid Empire[4][7]. In its early years, the Bukhara Emirate focused on consolidating power under the Shaybanid and later the Manghit dynasties, which allowed it to become a flourishing political and economic center. Bukhara was renowned for its scholarly traditions, with numerous madrasahs, mosques, and libraries that attracted scholars from across the Islamic world [4][8]. The Bukhara Emirate also experienced conflicts with neighboring states, notably the Khiva Khanate [7]. These conflicts were comparable to modern geopolitical tensions, reflecting ongoing rivalries in the region. Ultimately, the Bukhara Emirate's decline came in the 19th century when it became a protectorate of the Russian Empire in 1868, marking a significant shift in its political landscape[4][7]. Despite these challenges, Bukhara's cultural and historical legacy endured, leaving a lasting influence on the region. Today, Bukhara and its neighboring cities, like Samarkand, stand as enduring symbols of Central Asian heritage, preserving their historical monuments and vibrant cultural traditions.

The first to Fall: Kokand Khanate

The Kokand Khanate was established in the early 18th century, emerging as a prominent state in Central Asia[6][7]. Located in the fertile Fergana Valley, Kokand quickly became a vibrant center of trade, culture, and political power. The khanate was known for its rich cultural heritage, flourishing arts, and significant architectural developments. In its formative years, the Kokand Khanate was shaped by the leadership of various dynasties, including the Ming dynasty's influence and local Uzbek rulers. This stability allowed Kokand to thrive as a political and economic hub, attracting merchants and scholars from across the region. Culturally, Kokand was celebrated for its vibrant traditions, including music, poetry, and intricate handicrafts. The khanate also played a crucial role in the Silk Road trade, facilitating connections between East and West[6][9]. However, the Kokand Khanate faced its own set of challenges, particularly from external powers and regional rivals[7][10]. Conflicts with the Bukhara Emirate and the Khiva Khanate were common, often driven by territorial disputes and political rivalry. These tensions mirrored the complex geopolitical

landscape of Central Asia. In the 19th century, the Kokand Khanate's power waned as the Russian Empire expanded its influence. By the mid-19th century, Kokand faced pressure from Russian forces, and by the 1870s, it was ultimately incorporated into the Russian Empire, leading to its decline [6][7]. Despite this, the Kokand Khanate left a rich legacy, influencing the culture and history of Central Asia. Today, the region of Kokand remains a testament to its historical and cultural significance.

Comparative Analysis of Central Asian Khanates: Culture, Commerce, and Conquest

Central Asia, the heart of the ancient Silk Roads, is renowned for its rich and complex history. Among the prominent powers that shaped the region during the medieval period are the Khiva Khanate, the Bukhara Emirate, and the Kokand Khanate. Each of these entities contributed uniquely to the political, economic, and cultural fabric of Central Asia.

Cultural Achievements and Traditions

The Khiva Khanate, established in 1511, became a beacon of cultural prosperity. Its architectural landmarks, vibrant arts, and bustling markets reflected a unique blend of cultures and traditions. Similarly, the Bukhara Emirate, flourishing from the early 16th century, was renowned for its scholarly traditions. Its madrasahs, mosques, and libraries attracted scholars from across the Islamic world, making Bukhara a center of learning and culture. The Kokand Khanate, emerging in the early 18th century, also celebrated its rich traditions, from music and poetry to intricate handicrafts.

Economic Foundations and Trade

Trade was the lifeblood of these khanates. Khiva's strategic position allowed it to become a major trade center, connecting East and West through both land and sea routes, including the Caspian Sea. Bukhara's location along key Silk Road routes facilitated a flourishing economy, and Kokand's position in the fertile Fergana Valley made it a vital hub for merchants and traders. Through these trade networks, these khanates not only amassed wealth but also facilitated cultural exchange, enriching the region's heritage.

Conflicts and Decline Under the Russian Empire

Despite their prosperity, these khanates faced significant challenges from external powers. The Khiva Khanate withstood Russian advances for a long time, thanks to natural barriers and tough terrain [7]. However, by 1873, Khiva became a Russian protectorate. The Bukhara Emirate similarly succumbed to Russian influence by 1868, and the Kokand Khanate was incorporated into the Russian Empire in the 1870s. These conquests marked the decline of their independence but also integrated their cultures into the larger Russian and, later, Soviet framework.

Enduring Legacy

Despite their decline, the legacy of the Khiva Khanate, Bukhara Emirate, and Kokand Khanate continues to shape the cultural and historical landscape of Central Asia. The monuments, traditions, and historical sites of these regions are testaments to their enduring influence and continue to be celebrated in modern Uzbekistan.

CONCLUSIONS

In exploring the Khiva Khanate, the Bukhara Emirate, and the Kokand Khanate, we uncover a rich tapestry of cultural, economic, and political developments that shaped Central Asia[7]. Each khanate brought its own unique contributions, from Khiva's architectural wonders and vibrant trade networks to Bukhara's scholarly legacy and Kokand's cultural richness. Despite their eventual decline under the Russian Empire, the enduring legacy of these khanates continues to resonate in modern Uzbekistan, enriching the region's identity and heritage [5][7]. Through this comparative analysis, we gain deeper insight into how these states navigated the complexities of their time, balancing prosperity with external pressures. Ultimately, the Khiva Khanate, Bukhara Emirate, and Kokand Khanate collectively contributed to the rich historical tapestry of Central Asia, leaving a lasting imprint that continues to inspire and inform.

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HISTORY AND DEVELOPMENT OF DIPLOMATIC RELATIONS BETWEEN LATVIA AND UZBEKISTAN: ANALYSIS OF KEY POINTS

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ANOTĀCIJA

Pētījumā aplūkoti teorētiskie un praktiskie aspekti, kas saistīti ar diplomātisko attiecību veidošanos starp Latviju un Uzbekistānu. Analizēti galvenie divpusējās sadarbības virzieni, tostarp tirdzniecības un ekonomiskās, transporta un loģistikas, izglītības un kultūras saiknes. Īpaša uzmanība pievērsta faktoru identificēšanai, kas veicina partnerības stiprināšanu, kā arī šķēršļu noteikšanai, kas kavē tās attīstību. Pētījuma gaitā izmantotas salīdzinošās un sistēmiskās analīzes metodes, statistiskie dati, oficiālie dokumenti, starpvaldību tikšanos materiāli un starptautisko organizāciju publikācijas.

Atslēgvārdi: Latvija, Uzbekistāna, diplomātiskās attiecības, sadarbība, tirdzniecība, investīcijas, izglītība, ilgtspējīga attīstība, analīze, starptautiskās saiknes

ABSTRACT

The study examines the theoretical and practical aspects of the formation of diplomatic relations between Latvia and Uzbekistan. It analyzes the main areas of bilateral cooperation, including trade and economic relations, transport and logistics, education, and cultural ties. Particular attention is paid to identifying the factors that contribute to strengthening the partnership, as well as the obstacles that hinder its development. The research employs comparative and systemic analysis methods, statistical data, official documents, materials from intergovernmental meetings, and publications of international organizations.

Keywords: Latvia, Uzbekistan, diplomatic relations, cooperation, trade, investment, education, sustainable development, analysis, international relations

INTRODUCTION

The dynamic development of diplomatic and economic relations between Latvia and Uzbekistan requires continuous analysis and strategic planning. Both countries strive to strengthen their presence on the international stage by expanding cooperation in areas such as trade, investment, logistics, education, and sustainable development. The relevance of the study is determined by the fact that, amid global economic transformations and increasing international competition, strengthening bilateral relations between countries with complementary economies and strategic interests becomes particularly important. The purpose of the study is to analyze the theoretical and practical aspects of the formation and development of diplomatic relations between Latvia and Uzbekistan, as well as to identify the factors that contribute to or hinder their further strengthening. The research is based on the application of systemic and comparative approaches, as well as on the analysis of statistical data, official documents, materials from intergovernmental meetings, publications of international organizations, and academic sources. Altogether, this comprehensive approach ensures an objective assessment of the current state of Latvian–Uzbek relations, which subsequently makes it possible to determine the strategic directions for their further development.

THEORETICAL AND PRACTICAL FOUNDATIONS

The study presents an analysis of the theoretical and practical aspects of the formation of diplomatic relations between Latvia and Uzbekistan. After Latvia regained its independence in 1991, its foreign policy course was directed toward integration into the European and Euro-Atlantic space. From the early years of independence, the country actively participated in international organizations and strengthened ties with neighboring states. Uzbekistan, on the other hand, after the dissolution of the USSR, faced the need to restructure its economic and social institutions. In other words, the country underwent a complex transitional period marked by the search for new partners and directions of cooperation [1]. For this reason, the establishment of diplomatic relations with Latvia was of particular importance for Uzbekistan, as it opened opportunities to access European markets and acquire technological experience.

In this context, the diplomatic relations between Latvia and Uzbekistan acquired a strategic character, reflecting the mutual interest of both sides in political and economic rapprochement. These relations were officially established on November 3, 1992, when embassies were opened in Tashkent and Riga. This marked an important step toward the institutionalization of cooperation. In the following years, reciprocal visits by presidents, ministers, and business representatives further strengthened mutual trust and set long-term development priorities [2].

Subsequently, in 1998, the Intergovernmental Commission was established, becoming a key mechanism for coordinating economic and educational projects, including issues of investment cooperation and academic exchange [3]. Thus, at the beginning of the 21st century, diplomatic relations between Latvia and Uzbekistan gained a more stable and institutionalized form. One of the significant milestones was the opening of direct air service between Riga and Tashkent, which strengthened transport connectivity and stimulated the development of business and cultural contacts. Educational initiatives, in turn, laid the foundation for long-term partnerships between universities of both countries. Gradually, cultural and humanitarian cooperation emerged as an independent direction of bilateral interaction [4]. Consequently, it can be concluded that the conceptual principles of diplomacy based on economic and cultural integration have been successfully embodied in the practical development of Latvian–Uzbek relations.

RESEARCH RESULTS AND THEIR EVALUATION

The study has established that trade relations between Latvia and Uzbekistan represent one of the most stable areas of bilateral cooperation. Despite differences in economic scale and geographical distance, both countries have developed interaction mechanisms that ensure a steady trade turnover and a positive dynamic in political relations. It is important to note that in 2023, Latvia's total exports to Uzbekistan amounted to €90.44 million, while imports from Uzbekistan reached €32.18 million [5]. Thus, Latvia maintains a positive trade balance, indicating a relatively high demand for Latvian goods in the Uzbek market. In other words, trade relations can be considered stable, although their share in the overall foreign economic structure of both countries remains moderate.

Overall, the dynamics of exports from Uzbekistan to Latvia during the period 2010–2022 demonstrate a wave-like development pattern. The lowest figures were recorded in 2013, followed by a significant increase in 2014, when export volumes nearly doubled — likely due to new trade agreements and growing demand for Uzbek products in EU countries (Fig. 1.1).

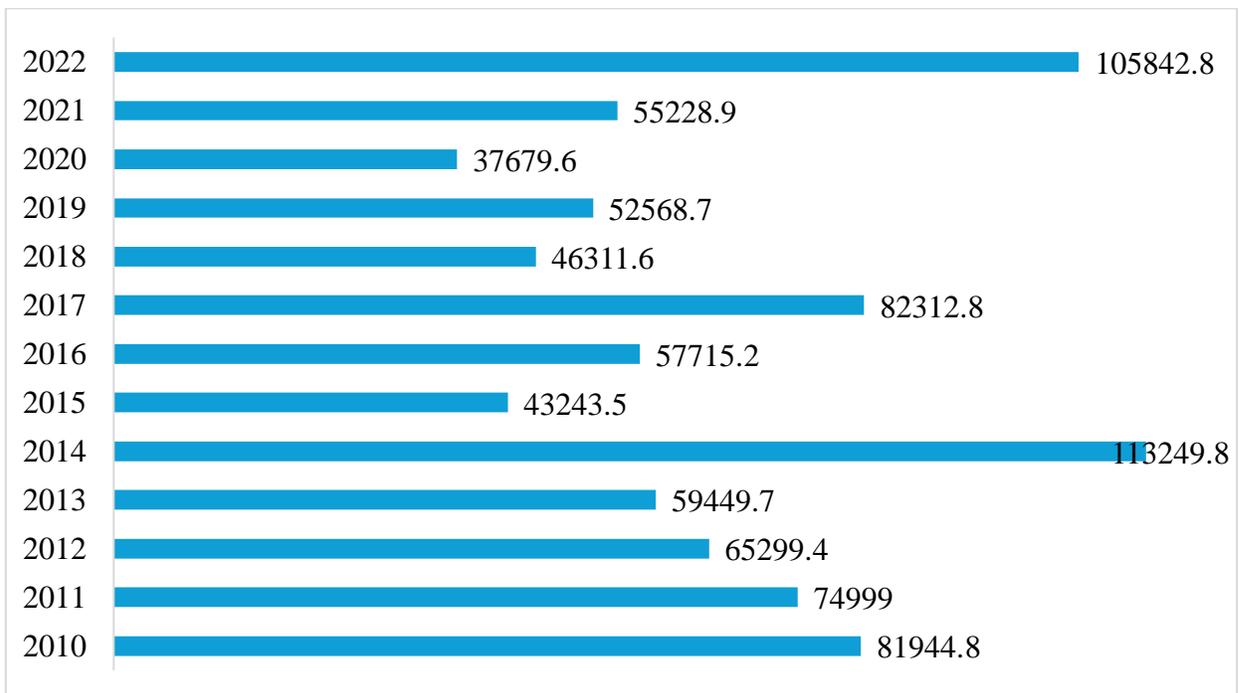


Fig. 1.1. Volume of exports of the Republic of Uzbekistan to Latvia, annual

This implies that Uzbekistan’s imports from Latvia during the same period show a somewhat different trend. Initially, there was a growth phase that peaked in 2018, when Latvian export deliveries exceeded €390 million [6]. Subsequently, a gradual correction occurred, and by 2022 imports had almost halved (Fig. 1.2).

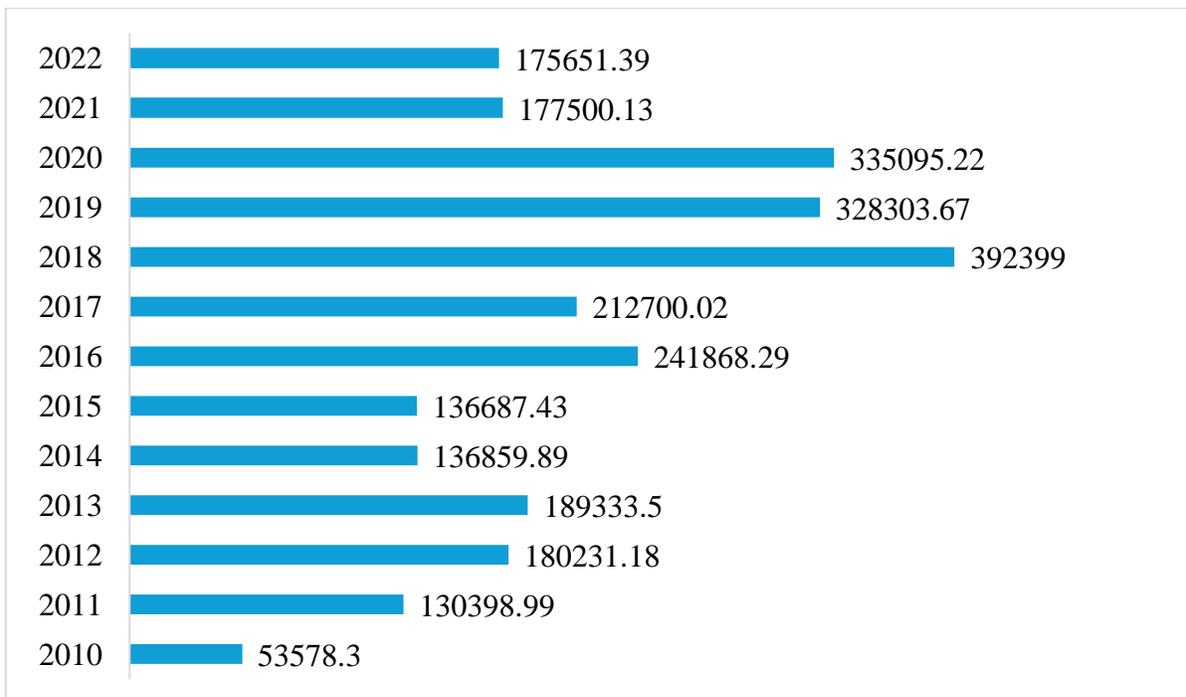


Fig.2.2. Volume of imports of the Republic of Uzbekistan from Latvia, 2010–2022

The data presented in Figures 1.1 and 1.2 reveal that the structure of trade demonstrates clear complementarity between the two economies. Latvian exports primarily consist of machinery,

equipment, chemical and pharmaceutical products, as well as wood-processing goods [7]. In turn, Uzbekistan exports textiles, agricultural and fruit-and-vegetable products, and certain categories of mineral goods to Latvia. The analysis suggests that this structure indicates the absence of direct competition in key sectors, reinforcing the mutually beneficial nature of trade.

As the author of the study notes, despite the positive dynamics of trade relations, certain obstacles still hinder further development. These include complex transport routes, administrative barriers, and differences in technical standards. Therefore, both sides attach particular importance to improving logistics infrastructure. In this regard, the activities of the Intergovernmental Commission and the representative office of the Investment and Development Agency of Latvia (LIAA) in Tashkent play a crucial role in addressing these issues.

Nevertheless, educational cooperation also plays a vital role in developing bilateral relations. The participation of Uzbek students in Latvian universities contributes to the formation of social and cultural capital, which later transforms into stable economic connections, facilitating interaction between business communities in both countries [8]. As a result, academic partnerships perform an indirect yet significant function in strengthening mutual trust and the business environment.

The analysis conducted shows that trade and economic relations between Latvia and Uzbekistan have evolved from occasional transactions into a stable system of exchange based on institutional support and mutual interest. Consequently, it can be concluded that with consistent efforts to eliminate transport and administrative barriers, bilateral trade turnover possesses substantial potential for further expansion and consolidation.

CONCLUSION

As a result of the conducted analysis, it can be concluded that the development of cooperation between Latvia and Uzbekistan is characterized by stable positive dynamics and the expansion of areas of interaction. In recent years, the partnership between the two countries has moved beyond traditional trade, encompassing the logistics sector, educational initiatives, and joint projects in the fields of sustainable development and climate adaptation. It is important to emphasize that the organization of economic forums, including “Made in Uzbekistan” in Riga, and the increased activity of the Intergovernmental Commission demonstrate both sides’ commitment to establishing long-term mechanisms of collaboration.

The author of the study also notes that the key priorities of bilateral cooperation include the modernization of transport corridors, which should lead to the optimization of customs procedures and, consequently, to the improvement of logistics chain efficiency. Despite the progress achieved, the analysis has identified several factors that still constrain the development of cooperation. These include significant geographical distance, differences in levels of economic development, administrative barriers, and inconsistencies in technical standards. Overcoming these limitations requires coordinated actions and the creation of flexible mechanisms for interdepartmental cooperation. In the author’s view, particular attention should be paid to simplifying visa procedures and digitalizing document exchange, as this would strengthen mutual trust and stimulate business activity between the two countries.

Thus, the prospects for the development of Latvian–Uzbek relations appear sustainable, and maintaining this trajectory may lead to the gradual advancement of bilateral cooperation and the establishment of a stable system of interaction aligned with current economic and political realities.

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**PROBLĒMAS MŪSDIENU PSIHOLOĢIJĀ:
TEORIJA UN PRAKSE**

**TOPICAL ISSUES OF PSYCHOLOGY:
THEORY AND PRACTICE**

GAMIFICATION AS A FACTOR IN THE DEVELOPMENT OF RESILIENCE AMONG STUDENT YOUTH

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ABSTRACT

The article examines gamification and transformational games as factors in resilience development among student youth under conditions of stress and uncertainty. The research problem is the need to strengthen psychological stability and adaptability in education. Novelty lies in combining interactive tools with digital psychology practices, including telepsychology and wearable technologies. Conclusions confirm that such integration enhances motivation, collaboration, and supports the development of resilience.

INTRODUCTION

Under Martial Law in Ukraine, student youth face the problem of heightened stress, social instability, and persistent uncertainty about the future, which undermine their ability to maintain psychological balance and effective learning. Developing resilience becomes a critical challenge, as young people must learn to overcome difficulties, adapt to rapidly changing conditions, and preserve social interaction. To address this problem, innovative approaches are required that strengthen motivation and engagement. Interactive tools and methods, particularly transformational games, provide a safe environment for modeling life situations, fostering self-reflection, communication skills, and inner stability. In combination with gamification, these practices can serve as effective means of building psychological resilience and supporting adaptation to stressful conditions.

The goal of the research is to examine the role of interactive methods and transformational games in development of psychological resilience among student youth.

This research employs literature analysis through the review and synthesis of scientific sources on resilience, gamification, and transformational games.

BASIC THEORETICAL AND PRACTICAL PROVISION

The idea of resilience development for young students is informed by motivational, engagement, and psychological flexibility theories, supported by interactive and game-based constructs that enrich learning. Studies on digital platforms, such as Kahoot [2] and Socrative [3], show that gamification and formative assessment tools enhance feedback, self-reflection, and communication. Similarly, existential paradigms for transformational games [1] emphasize symbolic enactments and metaphorical design as mechanisms for deep psychological transformation, authenticity, and inner balance. Collectively, these studies establish the theoretical premise for including interactive digital spaces and transformational practices within educational psychology, demonstrating their ability to develop resilience in times of stress and uncertainty. The proposed [4] Blind Time gamification scheme, inspired by the TV show Time Zone, integrates time management, emotional regulation, and cooperative problem-solving to deliver interactive learning experiences that support resilience. Unlike classic quiz or assessment tools, this format

immerses students in narrative-driven challenges that are competitive, collaborative, and focused on uncertainty management. Transformational games simulate symbolic scenarios, enabling self-observation and growth through experiential learning. Alongside these technologies, telepsychology, wearable devices, and ethical digital practices expand access and promote well-being. Used together, these methods balance technological novelty with psychological depth, providing students with opportunities to participate, regulate emotions, and overcome adversity in both classroom and broader social contexts.

RESEARCH RESULTS AND THEIR EVALUATION

The synergy of transformational games with interactive digital instruments leads to a multi-dimensional learning environment that combines psychological depth and technological integration. Engagement in these games offers opportunities and symbolic spaces for self-reflection, modelling of life situations and fostering authenticity as well inner balance, while also encouraging formative assessments through gamified tasks and instant feedback via interactive platforms like Kahoot or Socrative. Put together, these approaches reinforce each other: interactive devices keep individuals engaged and contributing, while transformational games build emotional resilience and enhance personal growth. This synergy enables teachers and psychologists to develop learning activities that are effective and transformative, which foster adaptability and psychological well-being in complex social environments.

CONCLUSION

The research confirms that combining interactive platforms, transformational games, and digital psychology practices creates a balanced framework for motivation, engagement, and psychological well-being of student youth. Looking ahead, our plans focus on expanding empirical studies that unite gamification tools with transformational approaches to measure long-term effects, developing pilot programs that integrate telepsychology and interactive learning in Ukrainian educational institutions, and creating methodological guidelines for educators and psychologists to balance innovation with ethical standards. Particular attention will be given to the gender dimension and the influence of students' living environments, ensuring that resilience-building strategies are sensitive to diverse social contexts. Together, these directions aim to advance the development of resilience as a core capacity for adaptation and sustainable growth in education.

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MOTIVATION OF PROSPECTIVE UNIVERSITY LECTURERS TO FORM TEST COMPETENCE

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ABSTRACT

This study explores the motivation of prospective university lecturers to develop test competence, emphasizing its role in ensuring effective assessment in higher education. The research examines psychological and pedagogical factors influencing engagement with test design, digital tools, and evaluative practices, aiming to identify strategies that foster intrinsic motivation and enhance professional readiness for accurate, competency-based student assessment.

Keywords: digital assessment, motivation, pedagogical competence, prospective university lecturers, test competence

INTRODUCTION

In contemporary higher education, the formation of test competence has become a necessary component of professional readiness for prospective university lecturers. The rapid integration of digital tools into assessment practices, together with changing expectations placed upon academic staff, intensifies the need to understand the psychological mechanisms that motivate students - future teachers to engage with test design and evaluation. Test competence is an integral part of the pedagogical competence (more specifically, a component of methodological competence) profile of university teachers, encompassing knowledge of assessment principles, analytical decision-making and the ability to design valid and reliable testing instruments [1; 4]. Studies that focus on subject-specific pre-service teachers indicate that test competence includes not only technical test construction skills but also contextual awareness of test tasks' cultural and didactic appropriateness, which further affects learners' motivation and assessment validity [4; 5].

Motivation plays a decisive role in whether future lecturers choose to invest cognitive and emotional effort in developing these skills. In the context of transformational processes in education, motivation is strengthened when learners perceive assessment literacy as professionally meaningful, personally beneficial and closely connected to their anticipated teaching roles [2]. Empirical evidence shows that achievement motivation and students' learning motivation correlate with assessment outcomes and institutional metrics (e.g., Grade Point Average (GPA) – the average score of the graduate's diploma), which suggests that motivation both influences – and is influenced by – assessment practices and expectations within institutions [6]. At the same time, according to the study that provides empirical evidence on how perceived trust (PT) and technology anxiety (TA) influence the intention to technology tools within higher education institutions (HEIs), using a modified UTAUT (the Unified Theory of Acceptance and Use of Technology) framework tailored to user-behavior contexts, the transition toward digital assessment environments requires future lecturers to overcome psychological barriers such as TA; perceived trust in digital platforms and reduced anxiety correlate positively with intention to use technology for assessment [8]. These psychological factors therefore mediate engagement with test competence and call for supportive learning conditions that enhance confidence, autonomy and

perceived self-efficacy [7]. Design-oriented models of learning highlight that student (and trainee) engagement increases when tasks are meaningful and when learners act as co-designers of assessment processes [3]. The growing complexity of digital testing systems and evaluative tools reinforces the need to explore how intrinsic motivation – underpinned by curiosity, mastery orientation and self-determination—can be intentionally cultivated within master’s and doctoral curricula.

BASIC THEORETICAL AND PRACTICAL PROVISION

A synthesis of current scholarship indicates that professional competence formation in higher education is influenced by interlocking psychological, pedagogical and technological dimensions. From the psychological perspective, **intrinsic motivation** emerges as a central determinant of engagement: prospective lecturers are more willing to develop test competence when they feel autonomous in decision-making, perceive assessment design as intellectually stimulating and recognise its importance for their professional identity [1; 2]. Domain-specific studies confirm that pre-service teachers’ readiness to engage with assessment design is strengthened by subject-relevant exemplars, scaffolded practice and reflection on test appropriateness [4; 5].

Practically, the development of test competence depends on structured opportunities to design assessment tasks, analyse student performance data and practice with digital testing systems. Teacher education that integrates active methods (workshops, microteaching, simulated testing) fosters both competence and motivation [2; 5]. The motivational climate is enhanced when training formats promote collaboration, constructive feedback and reflective practice – conditions associated with higher intrinsic engagement and reduced technology anxiety when combined with trustworthy digital tools [7; 8]. Laurillard’s design science framework underscores that motivation increases as learners assume the role of designers responsible for creating coherent, pedagogically grounded evaluative tasks, receiving rapid feedback and observing the impact of their design decisions on learning outcomes [3]. At the institutional level, evidence suggests that perceived institutional feedback loops (e.g., linkage between assessment, learning outcomes and grades) can either support or undermine motivation depending on transparency and fairness [6].

RESEARCH RESULTS AND THEIR EVALUATION

The cross-analysis of theoretical and empirical sources reveals that motivation to form test competence among prospective university lecturers is shaped by several interrelated psychological determinants:

1. **Intrinsic motivation and mastery orientation.** Enjoyment of intellectual challenge and a drive for professional mastery predict deeper engagement with assessment design tasks; discipline-specific training further reinforces perceived relevance. Pre-service language teacher research exemplifies how subject literacy and contextualized tasks stimulate intrinsic interest in test design [4; 5].
2. **Self-efficacy and perceived competence.** Belief in one’s ability to use assessment technologies and interpret results fosters persistence and experimentation; self-efficacy is enhanced by scaffolded practice, modelling and incremental successes [2; 3].
3. **Technology-related attitudes (trust vs. anxiety).** Intention to adopt digital assessment tools depends on perceived trustworthiness and low technology anxiety; recent models adapting UTAUT show perceived trust and anxiety as key predictors of use intention in higher education contexts [8].

4. **Achievement and institutional feedback.** Learners' motivation is responsive to institutional assessment cultures; studies linking GPA, entrance assessment results and learning motivation show that assessment practices create motivational climates that feed back into students' (and trainees') orientation toward mastering assessment skills [6].
5. **Social and contextual motivators.** Mentoring, peer support and opportunities for collaborative design increase relatedness and offer normative reinforcement for investing in test competence [1; 7].

Evaluation suggests that competence formation is most effective when curricula attend simultaneously to psychological needs (autonomy, competence, relatedness), subject specificity (authentic, discipline-aligned tasks), and technological trust (low anxiety, high perceived reliability). Interventions that combine microteaching in assessment design, reflective logs, and supervised practice with digital platforms are likely to produce measurable gains in both motivation and competence [2; 3; 5; 8].

CONCLUSION

The formation of test competence among prospective university lecturers hinges on psychological motivational factors—particularly intrinsic motivation and self-efficacy—while being shaped by pedagogical design and technological affordances. Subject-specific evidence demonstrates that contextualised practice increases both competence and motivation (notably in language teaching contexts) [4; 5]. Institutional assessment cultures and measurable indicators (e.g., correlations between GPA and motivation) further frame trainees' engagement with assessment literacy [6]. Finally, perceived trust in technology and reduction of technology anxiety are indispensable for the adoption of digital assessment practices [8]. Preparing future lecturers therefore requires an integrated strategy that combines motivational support, discipline-aligned assessment design opportunities, scaffolded digital training and institutional practices that reinforce the professional value of test competence [1–8].

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PSYCHOLOGY STUDENTS' ACCEPTANCE OF ARTIFICIAL INTELLIGENCE IN HIGHER EDUCATION: PERCEIVED BENEFITS AND RISKS

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ABSTRACT

The study examines psychology students' acceptance of artificial intelligence in higher education, focusing on perceived benefits, risks, and ethical concerns. A survey of 42 students combined quantitative ratings with thematic analysis of open-ended responses. Results reveal high perceived usefulness alongside fears of cognitive dependency and academic dishonesty. The findings highlight the need for clear institutional guidelines and critical AI literacy in psychology curricula.

Keywords: academic integrity; AI in education; learning effectiveness; psychology students; technology acceptance

INTRODUCTION

The rapid expansion of artificial intelligence (AI) technologies across educational contexts has generated a profound transformation in how students acquire, process, and evaluate knowledge. In higher education, AI-driven tools ranging from automated feedback systems to generative text models are increasingly embedded in everyday learning practices, prompting new psychological questions about student acceptance, trust, and perceived impact on learning outcomes. These issues become particularly salient in psychology education, where training emphasizes critical thinking, methodological rigor, and ethical awareness. Consequently, psychology students represent a unique group whose attitudes toward AI may not only reflect general digital literacy trends but also internalized disciplinary values concerning autonomy, responsibility, and evidence-based reasoning.

Recent research shows that university students overall demonstrate moderate-to-high acceptance of AI tools when they perceive them as useful, efficient, and supportive of comprehension (Tian et al., 2025). Within the well-established Technology Acceptance Model (TAM), perceived usefulness and perceived ease of use remain significant predictors of intention to use AI for academic purposes (Davis, 1989). However, psychological variables such as trust, epistemic vigilance, and academic self-efficacy increasingly shape how learners evaluate AI-generated outputs. Studies indicate that students tend to trust AI tools more when the information provided aligns with prior knowledge or appears internally consistent, yet they remain sceptical of

overly generic or unreferenced responses. This dynamic is especially pronounced in fields that require conceptual precision, such as psychology, where inaccuracies or oversimplifications may reinforce misconceptions rather than support deep learning (Holmes, & Porayska-Pomsta, 2022).

At the same time, concerns regarding academic integrity and overreliance on automated assistance are growing. Research shows that students worry about the potential misuse of AI for completing assignments without genuine comprehension, which can undermine both learning quality and academic fairness (Cotton et al., 2024; Kasneci et al., 2023). Psychology students, who are routinely trained to reflect on cognitive processes, biases, and ethical decision-making, may experience heightened tension between the efficiency offered by AI tools and the risk of diminished analytical engagement. This ambivalence reflects broader societal debates around AI: while it is framed as an innovative and supportive educational technology, it simultaneously evokes anxieties about loss of agency, authenticity, and evaluative skills (Williamson & Piattoeva, 2022).

Despite increasing empirical work on AI acceptance in higher education, relatively few studies investigate the attitudes of psychology students specifically. Given the discipline's focus on understanding human cognition, behaviour, and learning, examining psychology students' perceptions is essential for designing responsible AI-integrated curricula. Their attitudes may serve as early indicators of how future psychologists will engage with AI in professional contexts, including clinical decision-support systems, psychometric evaluation tools, and digital mental health interventions (Topol, 2019; Luxton, 2016).

The present study aims to address this gap by exploring psychology students' acceptance of AI in higher education and evaluating perceived benefits and risks associated with its academic use. The research focuses on identifying the psychological factors shaping positive or cautious attitudes, including trust in AI-generated content, concerns regarding academic dishonesty, and beliefs about the impact of AI on cognitive engagement and skill development. Through a mini empirical study integrating quantitative and qualitative data, the article seeks to contribute to a nuanced understanding of the psychological mechanisms underpinning AI adoption among psychology students and to inform pedagogical strategies that support ethical and meaningful integration of AI tools into psychology education.

BASIC THEORETICAL AND PRACTICAL PROVISION

The integration of artificial intelligence into higher education is best understood through established theoretical models that explain how learners evaluate and adopt new technologies (Holmes, et al., 2025). One of the most influential frameworks, the Technology Acceptance Model (TAM), posits that perceived usefulness and perceived ease of use are central determinants of whether individuals will engage with a technological system (Davis, 1989). Subsequent extensions of the model emphasize additional factors such as perceived enjoyment, subjective norms, and system quality, all of which shape users' attitudes and behavioural intentions (Venkatesh & Bala, 2008). In the context of AI in education, these constructs form the foundation for understanding the psychological mechanisms that drive student acceptance or resistance.

From a cognitive standpoint, students' interactions with AI tools involve processes of evaluation, verification, and epistemic vigilance. Epistemic vigilance refers to the cognitive strategies individuals use to assess the reliability of information sources (Sperber et al., 2010). When engaging with AI-generated outputs such as summaries, explanations, or practice items students must decide whether the information aligns with established knowledge, appears logically coherent, and is supported by appropriate evidence. Research indicates that students often experience uncertainty regarding the accuracy of AI responses, leading them to rely on cross-checking strategies or revert to traditional learning materials (Holmes, & Porayska-Pomsta, 2022).

This psychological tension highlights the need for critical thinking skills and metacognitive awareness when integrating AI tools into academic workflows.

Ethical considerations also play a significant role in shaping perceptions of AI in education. Concerns about academic integrity, plagiarism, and the potential erosion of autonomous learning have been widely documented (Cotton et al., 2024). Generative AI tools, while capable of producing coherent and structured responses, may inadvertently encourage superficial engagement with material or promote shortcut behaviours among students who are under pressure or lack confidence. For psychology students in particular, whose curriculum emphasises responsible research practices and ethical decision-making, these concerns intersect directly with disciplinary values. Educators have noted that students often express ambivalence: they appreciate AI's ability to scaffold learning but worry that it may undermine the development of independent analytical skills (Kasneci et al., 2023).

On a practical level, AI offers substantial pedagogical benefits that can enhance the learning experience for psychology students. AI-driven platforms can provide immediate feedback, generate personalized study materials, simulate case analyses, and support comprehension of complex theoretical concepts (Zawacki-Richter et al., 2019). These tools can supplement traditional instruction by offering multiple explanations of a difficult topic, creating self-paced quizzes, or modelling examples of psychological reasoning. Such features may reduce cognitive load and increase motivation, particularly for students who struggle with dense theoretical texts or require additional clarification (Chen et al., 2020). Furthermore, AI systems can help students practice essential skills such as hypothesis formation, diagnostic reasoning, or research design by generating illustrative scenarios or prompting reflective dialogue.

However, the practical use of AI in psychology education raises meaningful pedagogical questions. One challenge concerns the risk of overreliance on AI-generated content, which may limit opportunities for deep learning and reduce students' proficiency in constructing arguments, evaluating evidence, or synthesizing information independently. Another issue relates to the variability in AI output quality: while some explanations are accurate and pedagogically useful, others may contain errors, conceptual oversimplifications, or culturally biased assumptions (Williamson & Piattoeva, 2022). Educators must therefore consider how to scaffold AI use in ways that preserve academic rigor while supporting student engagement.

An additional practical consideration involves the psychological experience of learning with AI. Research has shown that AI tools can influence students' academic self-efficacy their belief in their ability to accomplish learning tasks (Bandura, 1997). Students who view AI as a supportive tool may experience increased confidence in navigating complex material, whereas those who fear dependency or misuse may experience heightened anxiety or decreased motivation. For psychology students, this dynamic is particularly relevant, as their professional identity is closely linked to analytical proficiency, ethical responsibility, and self-regulated learning.

RESEARCH RESULTS AND THEIR EVALUATION

The empirical component of the study involved 42 psychology students enrolled in the Master's Programme from Kharkiv region. Participants completed an anonymous online questionnaire consisting of Likert-scale items and open-ended questions that assessed perceived usefulness of AI, trust in AI-generated responses, perceived risks, and ethical concerns. Quantitative results were analysed using descriptive statistics, while qualitative responses were examined using thematic analysis (Braun & Clarke, 2006).

Overall, the data indicate a generally positive though cautious orientation toward AI-supported learning. Of the 42 respondents, 32 students (76.19%) reported that AI tools improved their learning efficiency by helping them organize information, clarify complex theories, or

generate practice materials. Similarly, 29 students (69%) agreed or strongly agreed that AI enhances their understanding of psychological concepts, especially when preparing for examinations or writing assignments.

However, concerns were also prominent. When asked whether AI use might weaken independent analytical skills, 22 students (52.38%) expressed agreement, noting that the availability of ready-made explanations might reduce their engagement with foundational texts or critical reasoning processes. Additionally, 20 students (47.62%) perceived a moderate to high risk of academic dishonesty associated with AI tools, particularly in relation to completing written assignments without genuine comprehension.

Trust in AI-generated content appeared relatively mixed. Only 14 students (33.3%) stated that they trust AI responses without additional verification, while 28 students (66.6%) reported that they routinely cross-check AI outputs against scientific sources, lecture materials, or peer-reviewed articles. This finding aligns with recent studies suggesting that students often rely on parallel verification strategies when engaging with generative AI tools (Holmes, & Porayska-Pomsta, 2022).

When asked about emotional responses to AI use, 17 students (40.48%) reported increased confidence in navigating complex theoretical content, whereas 11 students (26.19%) reported feelings of uncertainty or anxiety linked to concerns about potential inaccuracies or overreliance.

Thematic analysis of open-ended responses yielded three dominant categories reflecting students' nuanced perceptions of AI in psychology education.

AI as a Facilitator of Comprehension and Academic Support

Students frequently described AI as a helpful resource that provides immediate clarification, alternative explanations, and structured summaries of theoretical material. Examples included statements such as:

"AI helps me understand theories more quickly, especially when I'm stuck."

"It feels like having a personal tutor available anytime."

This theme supports empirical findings that AI-based tools can enhance perceived learning effectiveness and reduce cognitive load (Zawacki-Richter et al., 2019).

Concerns About Cognitive Dependency and Reduced Analytical Engagement

Many students articulated fears that reliance on AI may undermine key academic skills:

"I worry that I think less deeply because answers come too easily."

"Sometimes I depend on AI summaries instead of reading the full theory."

These concerns mirror theoretical discussions on the potential erosion of critical thinking and epistemic autonomy in AI-mediated learning environments (Kasneci et al., 2023).

Ethical Tensions and Ambivalence About Academic Integrity

Students expressed awareness that AI-generated text could be misused in ways that compromise ethical academic behaviour. Several responses reflected an internal conflict between efficiency and authenticity:

"It's tempting to use AI for writing tasks, but I know it's not really my work."

"AI can make studying easier, but it also makes cheating easier."

This ambivalence is consistent with broader academic concerns regarding the impact of generative AI on plagiarism, authorship, and assessment validity (Cotton et al., 2024).

Evaluation of the Findings

Taken together, the results indicate a complex psychological negotiation between the advantages and limitations of AI-supported learning. Students show strong appreciation for AI's pedagogical value, particularly in simplifying complex concepts and providing feedback. At the same time, their concerns about overreliance, skill degradation, and academic integrity highlight the importance of clear institutional guidelines and sustained digital literacy training.

The coexistence of enthusiasm and caution reflects broader trends in the literature, which emphasize that AI acceptance is rarely unidimensional but shaped by trust, self-efficacy, perceived

usefulness, and ethical considerations (Venkatesh & Bala, 2008; Williamson & Piattoeva, 2022). For psychology students, whose academic development depends heavily on analytical reasoning and responsible research conduct, these tensions may be particularly salient. Thus, the findings underscore the need for balanced pedagogical frameworks that leverage AI's strengths while preserving core disciplinary competencies.

CONCLUSIONS

The findings of this study demonstrate that psychology students hold a nuanced and ambivalent stance toward the integration of artificial intelligence in higher education. While the majority of participants acknowledged the pedagogical value of AI particularly its capacity to clarify complex theoretical material, provide immediate feedback, and enhance overall study efficiency they also expressed substantial reservations regarding cognitive dependency, reduced analytical engagement, and risks to academic integrity. These concerns reflect a broader psychological negotiation between the learning benefits offered by AI and the potential erosion of core academic competencies essential for the training of future psychologists.

The results underscore the importance of developing institutional guidelines and learning strategies that support responsible, transparent, and educationally meaningful engagement with AI. Such strategies might include integrating digital literacy modules into psychology curricula, providing instruction on the critical evaluation of AI-generated information, and establishing clear boundaries regarding academic integrity. Doing so would allow educators to harness the benefits of AI while mitigating risks related to overdependence, skill degradation, and ethical misuse.

Overall, the study contributes to a growing body of literature that positions student attitudes as central to successful AI implementation in higher education. As AI technologies continue to evolve and permeate the learning environment, understanding the psychological determinants of acceptance among future mental health professionals becomes a critical step toward designing learning ecosystems that are both technologically advanced and pedagogically responsible. Future research should expand upon these findings by examining longitudinal changes in students' attitudes, comparing trends across different academic years, and exploring how specific AI competencies develop over time.

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