ISSN: 2413-9610 E-ISSN: 2663-2365

Харківський національний економічний університет імені Семена Кузнеця

УПРАВЛІННЯ РОЗВИТКОМ

Міжнародний економічний журнал

Заснований у 2002 році Періодичність випуску: 4 рази на рік

Том 24, № 1

Харків – 2025

Засновник: Харківський національний економічний університет імені Семена Кузнеця

Рік заснування: 2002

Рекомендовано до друку та поширення через мережу Інтернет Вченою радою Харківського національного економічного університету імені Семена Кузнеця (протокол № 4 від 25 березня 2025 р.)

Ідентифікатор медіа: R30-02689

(Рішення Національної ради України з питань телебачення і радіомовлення № 177, протокол № 3 від 25 січня 2024 р.)

Журнал входить до переліку наукових фахових видань України

Категорія «Б». Спеціальності: 051 «Економіка», 072 «Фінанси, банківська справа та страхування», 073 «Менеджмент», 126 «Інформаційні системи та технології», 281 «Публічне управління та адміністрування» (Наказ Міністерства освіти і науки України № 1643 від 28 грудня 2019 р. та № 409 від 17 березня 2020 р.)

Журнал представлено у міжнародних наукометричних базах даних, репозитаріях та пошукових системах:

Фахові видання України, Національна бібліотека України імені В. І. Вернадського, Crossref, Universitäts Bibliothek Leipzig, BASE, Litmaps, ERIH PLUS, EconBiz, Polska Bibliografia Naukowa (PBN), WorldCat, Ulrichsweb Global Serials Directory, UCSB Library, Dimensions, German Union Catalogue of Serials (ZDB), University of Oslo Library, University of Hull Library, Search Oxford Libraries Online (SOLO), European University Institute (EUI), Cambridge University Library, Open Ukrainian Citation Index (OUCI)

Управління розвитком : міжнар. екон. журн. / [редкол.: Н. В. Трусова (голов. ред.) та ін.]. – Харків : Харківський національний економічний університет імені Семена Кузнеця, 2025. – Т. 24, № 1. – 68 с.

Адреса редакції: Харківський національний економічний університет імені Семена Кузнеця 61166, пров. Інженерний, 1-А, м. Харків, Україна Тел. +380 (57) 702-03-04 E-mail: info@devma.com.ua https://devma.com.ua/uk

ISSN: 2413-9610 E-ISSN: 2663-2365

Simon Kuznets Kharkiv National University of Economics

DEVELOPMENT MANAGEMENT

International Economic Journal

Founded in 2002 Frequency of issue: Four times per year

Volume 24, No. 1

Kharkiv – 2025

Founder: Simon Kuznets Kharkiv National University of Economics

Year of foundation: 2002

Recommended for printing and distribution via the Internet by the Academic Council of Simon Kuznets Kharkiv National University of Economics (Minutes No. 4 of March 25, 2025)

Media identifier: R30-02689

(Decision of the National Council of Television and Radio Broadcasting of Ukraine No. 177, Minutes No. 3 of January 25, 2024)

The journal is included in the List of scientific professional publications of Ukraine

Category "B". Specialties: 0311 Economics, 0412 Finance, banking and insurance, 0413 Management and administration, 0612 Database and network design and administration (Order of the Ministry of Education and Science of Ukraine No. 1643 of December 28, 2019 and No. 409 of March 17, 2020)

The journal is presented international scientometric databases, repositories and scientific systems:

Professional Publications of Ukraine, Vernadsky National Library of Ukraine, Crossref, Universitäts Bibliothek Leipzig, BASE, Litmaps, ERIH PLUS, EconBiz, Polska Bibliografia Naukowa (PBN), WorldCat, Ulrichsweb Global Serials Directory, UCSB Library, Dimensions, German Union Catalogue of Serials (ZDB), University of Oslo Library, University of Hull Library, Search Oxford Libraries Online (SOLO), European University Institute (EUI), Cambridge University Library, Open Ukrainian Citation Index (OUCI)

Development Management / Ed. by N. Trusova (Editor-in-Chief) et al. Kharkiv: Simon Kuznets Kharkiv National University of Economics, 2025. Vol. 24, No. 1. 68 p.

Editors office address: Simon Kuznets Kharkiv National University of Economics 61166, 1-A Inzhenerny Ln., Kharkiv, Ukraine Tel. +380 (57) 702-03-04 E-mail: info@devma.com.ua https://devma.com.ua/en

УПРАВЛІННЯ РОЗВИТКОМ

Редакційна колегія

Головний редактор	Наталія Трусова – доктор економічних наук, професор, професор кафедри бізнес-консалтингу та міжнародного туризму, Таврійський державний агротехнологічний університет імені Дмитра Моторного, Україна
Заступник	Тетяна Шталь – доктор економічних наук, професор, Харківський національний
головного редактора	економічний університет імені Семена Кузнеця, Україна
Національні члени редколе	riï
Наталія Гавкалова	доктор економічних наук, професор, Харківський національний економічний університет імені Семена Кузнеця, Україна
Лідія Гур'янова	доктор економічних наук, професор, Харківський національний економічний університет імені Семена Кузнеця, Україна
Ірина Губарєва	доктор економічних наук, професор, Науково-дослідний центр індустріальних проблем розвитку Національної академії наук України, Україна
Олексій Гуцалюк	доктор економічних наук, доцент, Приватний заклад вищої освіти «Міжнародний європейський університет», Україна
Мирослава Хуторна	доктор економічних наук, доцент, Черкаський навчально-науковий інститут Університету банківської справи, Україна
Вікторія Коваленко	доктор економічних наук, професор, Одеський національний економічний університет, Україна
Денис Загірняк	доктор економічних наук, професор, Кременчуцький національний університет імені Михайла Остроградського, Україна
Людмила Малярець	доктор економічних наук, професор, Харківський національний економічний університет імені Семена Кузнеця, Україна
Олег Колодізєв	доктор економічних наук, професор, Харківський національний економічний університет імені Семена Кузнеця, Україна
Наталія Внукова	доктор економічних наук, професор, Харківський національний економічний університет імені Семена Кузнеця, Україна
Володимир Лагодієнко	доктор економічних наук, професор, Одеський національний технологічний університет, Україна
Юрій Вітковський	доктор економічних наук, професор, Сілезька академія, Польша; Харківський національний технічний університет сільського господарства імені Петра Василенка, Україна
Міжнародні члени редколег	ii

Ришард Пукала	доктор філософії, професор, Ярославська державна вища техніко-економічна школа імені Броніслава Маркевича, Польща		
Евангелос Сіскос	доктор економічних наук, професор, Університет Західної Македонії, Греція		
Казимир Вачковскі	доктор економічних наук, професор, Варшавський політехнічний університет, Польща		
Марцін Станевський	доктор філософії з менеджменту, проректор з наукової роботи, Економіко- гуманітарний університет у Варшаві, Польща		
Борис Мітліч	доктор філософії з бізнес менеджменту, професор, Міжнародний інститут Камбоджійського технологічного університету, Камбоджа		
Ілан Алон	доктор філософії з бізнес-адміністрування, професор, Коледж управлінських академічних досліджень, Ізраїль		
Томаш Бернат	доктор філософії з економіки, професор, Щецинський університет, Польща		
Роберт Карашевскі	доктор габілітований, професор, Американський університет в Еміратах, Об'єднані Арабські Емірати		
Пьотр Квятек	доктор філософії, професор, Університет Козьмінського, Польща		

DEVELOPMENT MANAGEMENT Volume 24, No. 1

Editorial Board

Editor-in-Chief	Natalia Trusova – Doctor of Economics, Professor, Professor of the Department of Business Consulting and International Tourism, Dmytro Motornyi Tavria State Agrotechnological University, Ukraine		
Deputy Editor-in-Chief	Tatyana Shtal – Doctor of Economics, Professor, Simon Kuznets Kharkiv National University of Economics, Ukraine		
National Members of the Edite	orial Board		
Nataliia Gavkalova	Doctor of Economics, Professor, Simon Kusnets Kharkiv National University of Economics, Ukraine		
Lidiya Guryanova	Doctor of Economics, Professor, Simon Kusnets Kharkiv National University of Economics, Ukraine		
Iryna Hubarieva	Doctor of Economics, Professor, Research Center for Industrial Problems of Development of National Academy of Sciences of Ukraine, Ukraine		
Oleksii Hutsaliuk	Doctor of Economics, Associate Professor, Private Higher Education Institution "International European University", Ukraine		
Myroslava Khutorna	Doctor of Economics, Associate Professor, State Higher Educational Institution "Banking University" Cherkasy Institute, Ukraine		
Viktoriia Kovalenko	Doctor of Economics, Professor, Odesa National University of Economics, Ukraine		
Denys Zagirniak	Doctor of Economics, Professor, Kremenchuk Mykhailo Ostrohradskyi National University, Ukraine		
Lyudmyla Malyarets	Doctor of Economics, Professor, Simon Kuznets Kharkiv National University of Economics, Ukraine		
Oleh Kolodiziev	Doctor of Economics, Professor, Simon Kusnets Kharkiv National University of Economics, Ukraine		
Nataliya Vnukova	Doctor of Economics, Professor, Simon Kusnets Kharkiv National University of Economics, Ukraine		
Volodymyr Lagodiienko	Doctor of Economics, Professor, Odesa National University of Technology, Ukraine		
Yurii Vitkovskyi	Doctor of Economics, Professor, Academy of Silesia, Poland; Kharkiv Petro Vasylenko National Technical University of Agriculture, Ukraine		
International Members of the	Editorial Board		

Ryszard Pukała	PhD, Professor, Bronislaw Markiewicz State School of Technology and Economics, Poland		
Evangelos Siskos	Doctor of Economics, Professor, University of Western Macedonia, Greece		
Kazimierz Wackowski	Doctor of Economics, Professor, Warsaw Polytechnic University, Poland		
Marcin Staniewski	PhD in Management, Vise Rector for Science, University of Economics and Human Sciences in Warsaw, Poland		
Boris Miethlich	PhD in Business Management, Professor, International Institute of Cambodia University of Technology, Cambodia		
Ilan Alon	PhD in Business Administration, Professor, College of Management Academic Studies, Israel		
Tomasz Bernat	PhD in Economics, Professor, University of Szczecin, Poland		
Robert Karaszewski	Doctor Habilitatus, Professor, American University in the Emirates, United Arab Emirates		
Piotr Kwiatek	PhD, Profesor, Kozminski University, Poland		

3MICT / CONTENTS

Н. Павленчик, В. Ціздин
Стратегія управління персоналом: роль мотиваційних чинників у підвищенні ефективності
N. Pavlenchyk, V. Tsizdyn
The strategy of personal management: The role of motivational factors in increasing efficiency
С. Головченко
Створення системи мотивації персоналу будівельних компаній:
алгоритми стимулювання високої продуктивності
S. Holovchenko
Developing a staff motivation system for construction companies:
Algorithms for encouraging high productivity
О. Огункоя, О. Соремекун, Б. Хассан, О. Аделесі, М. Огунделе
Ефективність управління ланцюгами поставок та логістика серед окремих малих
і середніх підприємств у районі місцевого самоврядування Сагаму, штат Огун, Нігерія 34
O. Ogunkoya, O. Soremekun, B. Hassan, O. Adelesi, M. Ogundele
Supply chain management performance and logistics among selected small
and medium-sized enterprises in Sagamu Local Government Area, Ogun State, Nigeria
А. Павленчик, Н. Ціздин
Стратегії менеджменту зовнішньоекономічної діяльності підприємств
сфери туризму Львівщини, як чинник формування їх конкурентоспроможності
A. Pavlenchyk, N. Tsizdyn
Strategies for managing foreign economic activity of tourism enterprises
in the Lviv Region as a factor in shaping their competitiveness
С. Х. Вахюнінгсін, А. Хафід
Вплив інноваційного клімату та мотивації на продуктивність працівників
через інноваційну поведінку як медіаторну змінну
S.H. Wahyuningsin, A. Hafid
The influence of innovation climate and motivation
on employee performance through innovative behaviour as a mediating variable



DEVELOPMENT MANAGEMENT

UDC 658.3:331.101.3 DOI: 10.63341/devt/1.2025.08 Vol. 24, No. 1. 2025 🤇

The strategy of personal management: The role of motivational factors in increasing efficiency

Nataliia Pavlenchyk*

Doctor of Economics, Professor Ivan Boberskyi Lviv State University of Physical Culture 79007, 11 Kostiushka Str., Lviv, Ukraine https://orcid.org/0000-0001-6164-5644

Vladyslav Tsizdyn

Postgraduate Student Ivan Boberskyi Lviv State University of Physical Culture 79007, 11 Kostiushka Str., Lviv, Ukraine https://orcid.org/0009-0009-5647-4276

Abstract. The aim of the research was to determine the impact of motivational factors on the success of personnel management in various enterprises. The research methodology included a survey of 900 employees from three companies: JSC LCF "Svitoch", LLC "Enzym", and SoftServe, conducting semi-structured interviews with 30 managers, and a SWOT analysis. The research results showed that the effectiveness of personnel management largely depends on the balance of material and non-material motivational factors. At SoftServe, the emphasis is on innovation, creative development, and mental health; at "Svitoch", on social benefits and training programmes; and at "Enzym", on comfortable working conditions and financial incentives. The survey results revealed that 70% of SoftServe employees consider career growth opportunities, professional development, and flexible working conditions as the main motivational factors. At "Svitoch", 65% of respondents noted that social benefits, such as health insurance and employee childcare programmes, are key motivational elements. For "Enzym" employees, 78% of respondents stated that comfortable working conditions and competitive wages are the main drivers of their efficiency. The semi-structured interviews with managers confirmed that motivational programmes focused on innovation and employee mental health help maintain team loyalty and engagement. The SWOT analysis results showed that the main obstacles to improving the effectiveness of motivational policies are limited financial resources, adaptation to market changes, and programme performance evaluation. At the same time, the companies' strengths include well-developed training programmes, career development, and employee support. The research confirmed that optimising motivational policies is possible through the implementation of flexible motivational forms, the use of digital tools, and improving internal communications

Keywords: job satisfaction; career prospects; incentive measures; labour productivity; management

Article's History: Received: 29.11.2024; Revised: 21.02.2025; Accepted: 25.03.2025

INTRODUCTION

Effective personal management remains a crucial component of successful business operations, as employees are the primary resource influencing competitiveness and the achievement of strategic goals. In challenging economic conditions, where companies face cost optimisation, increased labour productivity, and retaining talented professionals, the employee motivation system plays a key role. It enables businesses to maintain team stability by ensuring employees are invested in achieving high results. The impact of various motivational factors on employees necessitates an individualised management approach that considers both material and non-material incentives. In

Suggested Citation:

Pavlenchyk, N., & Tsizdyn, V. (2025). The strategy of personal management: The role of motivational factors in increasing efficiency. *Development Management*, 24(1), 8-19. doi: 10.63341/devt/1.2025.08.

*Corresponding author



Copyright © The Author(s). This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/)

a competitive labour market, offering competitive wages, transparency in reward systems, and opportunities for professional growth determine the level of employee engagement. Conversely, undervaluing factors such as comfortable working conditions, psychological climate, flexible schedules, or emotional support can lead to employee demotivation, higher turnover rates, and the loss of skilled professionals. The challenge in personnel management lies in finding optimal methods and motivational tools that not only enhance labour productivity but also ensure long-term employee loyalty. A further complexity is the need to integrate motivational policies into the company's overall strategy, accounting for constant changes in the labour market. This requires studying the impact of various motivational factors, developing innovative personnel management approaches, and implementing comprehensive programmes aimed at maintaining employee engagement, professional development, and improved working conditions.

Several researchers have examined motivation among employees in various industries and approaches to personnel management. For instance, M.J. Barnett et al. (2024) explored barriers and motivational factors for engaging pharmacy employees in innovative services related to drug disposal, noting that the main incentives were upskilling and support for adapting to new responsibilities. S. Spivak et al. (2024) presented an improved employee evaluation and motivation system for companies, incorporating digital tools to enhance management efficiency. V. Ignatiuk & H. Tunina (2023) emphasised the role of staff motivation as a key factor in improving business management efficiency, recommending the implementation of achievement-based evaluation and feedback systems. S. Cenolli et al. (2023) found that effective personnel management contributed to increased productivity in agricultural enterprises in Mongolia. They established that using modern motivational methods, professional training, and clear human resources (HR) policies positively affected employee productivity levels. M. Kopytko et al. (2024) investigated the formation of a personnel management system as a key factor in enhancing competitiveness and enterprise security in the context of digital transformation and new legal challenges. They found that integrating digital technologies into HR processes and adapting to legal changes improved company efficiency.

X. Gong & R. Liu (2020) examined the application of a competency model in private enterprise personnel management, noting that such a model better addresses employee needs and supports organisational goals. X. Xiang & H. Wang (2024) developed a competency-based approach to HR management in Chinese state-owned enterprises, stressing the need for improved professional training and key skill development to achieve long-term organisational objectives. They emphasised that integrating leadership development strategies into management practices enhances responsibility, decision-making efficiency, and leaders' adaptability to internal and external changes. L. Liu (2024) introduced an innovative personnel management system based on computer technology. This system automated routine processes such as time tracking, performance monitoring, and HR data management, significantly improving human resource efficiency. Additionally, its implementation ensured transparency, minimised human bias in decision-making, and enabled more accurate forecasting of skilled labour needs. J.G. Somerville *et al.* (2024b) studied task delegation and employee retention practices in healthcare for underserved regions, finding that such strategies could significantly reduce staff shortages but required careful planning and support. A.O. Karpyak & O.M. Rybytska (2022) applied cluster analysis to assess motivational management effectiveness in IT companies. Their research showed that grouping employees based on motivational needs – such as financial incentives, learning opportunities, or work-life balance – enabled more efficient resource allocation.

The above research highlights the importance of personalised approaches to personnel management and motivation, enhancing productivity and job satisfaction. However, the long-term impact of innovative management approaches on organisational sustainability and retention of qualified personnel requires further research. This research aimed to determine the influence of motivational factors on the effectiveness of personnel management in enterprises in the Lviv Region of Ukraine. The objectives of the study were to identify the key motivational factors among employees of enterprises that affect their motivation and level of job satisfaction; to analyse the effectiveness of incentive policies at enterprises on the example of such companies as Lviv Confectionery Factory (LCF) "Svitoch", Limited Liability Company (LLC) "Enzyme", Soft-Serve; to identify barriers and problems that hinder the successful implementation of motivational programmes at enterprises, as well as ways to overcome them.

• MATERIALS AND METHODS

The objects of the study were enterprises from various industries in Lviv Region (Ukraine). Participants included department heads, HR managers, and employees of the following companies: JSC LCF "Svitoch" (Nestlé, n.d.) (350 persons), Enzym Group (n.d.) (50 persons), and Soft-Serve (n.d.) (500 persons). The sample consisted of 900 individuals, with 57% women and 43% men. The average age of respondents was 35 years. The research was conducted in compliance with ethical principles: voluntary participation, anonymity, and confidentiality. The provisions of the American Sociological Association Code of Ethics (1997) were observed. Participants were informed about the research purpose, and their data were used exclusively for scientific purposes. Company selection criteria included their regional economic impact, employer reputation, level of social responsibility, and presence of motivational programmes.

Data were also collected from company reports and internal documents: Management report of the Limited Liability Company "Lviv Confectionery Factory 'Svitoch'" (2024), SoftServe sustainability report 2023 (2024), Management report of PrJSC Enzym Company 2023 (2024), as well as scientific works on theoretical aspects of motivational policies by M. Garai-Fodor & K. Jäckel (2022), S. Cenolli *et al.* (2023), and S. Spivak *et al.* (2024). This allowed for additional verification of the obtained results and their comparison with existing research in the field of employee motivation.

The primary data collection methods were surveys and semi-structured interviews. The survey method was used to identify key motivational factors among employees. The questionnaire completed by respondents contained closed-ended, scaled, and open-ended questions (Table 1). Closed-ended questions assessed employee satisfaction levels with various aspects of their work, such as wages, working conditions, and opportunities for professional and career growth. Scaled questions, rated on a five-point scale, helped determine the impact of different motivational

factors on employee work activities. For example, respondents evaluated the importance of factors such as social benefits, flexible working hours, and training and development opportunities. Open-ended questions allowed respondents to provide their own suggestions for improving motivational policies, which was useful for further enhancing motivation systems at the enterprises.

Table 1. Questionnaire for identifying key motivational factors among study participants

	Table " Questionnaire for identifying key motivational factors among study participants			
No.	Questions			
1.	How do you assess your current job satisfaction level?			
2.	How do you assess your satisfaction with working conditions at your enterprise?			
3.	How do you assess your satisfaction with your current salary?			
4.	How do you assess the availability of career opportunities in your company?			
5.	Do you believe your work is evaluated fairly?			
6.	How important are the following motivational factors to you (rate on a scale from 1 to 5, where 1 – not important, 5 – very important): salary; career growth; professional training and development; working conditions; flexibility of working hours; social benefits (insurance, holidays, etc.); recognition of achievements; teamwork; leadership and support from managemen			
7.	How do you assess the impact of the following factors on your work motivation (rate on a scale from 1 to 5, where 1 – no impact 5 – strong impact): salary; work environment and working conditions; career opportunities; recognition of work results; professional development opportunities; performance incentives; social benefits (health insurance, bonuses, etc.)			
8.	What changes in the company's motivational policy would you like to see to improve your work motivation?			
9.	What additional factors could positively influence your work motivation at the enterprise?			
10.	What do you consider the main barrier to improving employee motivation in your company?			
11.	How would you rate the support for your professional development and training at the enterprise?			

Source: compiled by the authors

For analysing motivational policies at the enterprises, the method of semi-structured interviews with 30 managers (10 from each enterprise), including HR personal and department heads, was also used. This provided more detailed information about the specifics of implementing motivational programmes, challenges faced by organisations, and prospects for developing motivational policies in the future. Interview questions covered topics such as main approaches to employee motivation, criteria for selecting motivational measures, and factors that could affect their effectiveness (Table 2). This made it possible to evaluate not only the theoretical aspects of motivational policies but also practical aspects of their implementation and functioning.

No.	Questions		
1.	What are the main approaches to staff motivation used in your company?		
2.	What criteria are used to select motivational measures?		
3.	How do you assess the effectiveness of the current motivational policy in your organisation?		
4.	What difficulties do you face when implementing motivational programmes?		
5.	What changes do you think should be made to improve the motivation system?		
6.	How does the company ensure the development of employees' professional skills?		
7.	What non-financial incentives are used and how effective are they?		
8.	What is the impact of external factors (economic situation, labour market) on the motivation policy?		
9.	What are the prospects for the development of motivation policy in your company?		
10.	How do employees respond to new motivation initiatives?		

Source: compiled by the authors

The article uses the method of strengths, weaknesses, opportunities, and threats (SWOT) analysis to analyse the effectiveness of the implemented motivational measures. This method comprehensively assessed the strengths and weaknesses of the current motivational policy of enterprises, as well as identified opportunities for improvement and threats that may arise as a result of external or internal changes. The SWOT analysis helped identify which motivational factors are most effective and which need to be adjusted. It also helped to identify external factors, such as changes in the economic situation or new trends in HR management, which could affect employee motivation. The methods applied allowed us to obtain a comprehensive picture of the impact of motivational factors on the efficiency of HR management, ensuring the reliability and validity of the research results.

RESULTS

Key aspects influencing motivation and job satisfaction levels

In management, motivation is considered a key tool that enhances labour productivity, employee engagement, and reduces staff turnover (Spivak et al., 2024). Understanding these aspects allows businesses to create a favourable work environment and achieve strategic goals. Material incentives, including wages, bonuses, and additional payments, are a fundamental factor influencing employee motivation. A competitive level of remuneration contributes to higher job satisfaction, as employees feel their work is valued. Ensuring transparency in the pay system is particularly important to avoid conflicts and inequality. Opportunities for professional growth, such as upskilling, participation in training, seminars, or career advancement prospects, significantly impact employee motivation. Employees prefer working for organisations that invest in their development and offer clear career paths. Underestimating this aspect may lead to the loss of talented staff. A positive psychological climate, mutual respect between employees and management, team support, and trust are also crucial factors affecting job satisfaction. Organisations that foster openness, inclusivity, and collaboration tend to have more motivated and cohesive teams.

Flexible working hours, remote work options, and support in achieving work-life balance are also motivational factors. Overwork or disregarding employees' need for rest can lead to burnout and reduced productivity. Recognising employee achievements, whether through public praise, awards, or promotions, plays a significant role in boosting motivation. When employees see their contributions valued, they feel important to the organisation, enhancing their loyalty (Cenolli et al., 2023). In addition, the type of leadership chosen by a manager directly affects employee motivation. A democratic management style, involving employees in decision-making, fosters a sense of belonging to the company's outcomes. Conversely, an authoritarian style may cause dissatisfaction and demotivation. Physical working conditions, such as workspace comfort, modern equipment, ergonomics, safety, and cleanliness, are also vital for employee satisfaction. Proper working conditions ensure comfort and enhance productivity. Emotional support from management and involvement in socially significant projects contribute to a positive organisational image. Employees are more motivated when they feel part of a socially responsible business (Garai-Fodor & Jäckel, 2022).

For effective personnel management, it is essential to apply an appropriate motivational approach that considers individual employee needs and organisational strategic goals. Motivational approaches vary significantly depending on the industry, corporate culture, and scale of operations. JSC LCF "Svitoch", LLC "Enzym", and Soft-Serve are among Ukraine's leading companies due to continuous development, innovative approaches, and high competitiveness in domestic and international markets. JSC LCF "Svitoch" is one of Ukraine's confectionery industry leaders (Nestlé, n.d.). Enzym Group (n.d.) is a key producer of yeast and biotechnological solutions, actively exporting products to various countries. SoftServe (n.d.) is one of Ukraine's largest IT companies, specialising in software development and outsourcing services for global corporations. Analysing the motivational policies of these three Ukrainian companies reveals effective practices that enhance employee engagement, productivity, and corporate goal achievement. JSC LCF "Svitoch", part of the

international Nestlé corporation, demonstrates a holistic approach to employee motivation. According to the Management report of the Limited Liability Company "Lviv Confectionery Factory 'Svitoch'" (2024), the company allocates significant resources to ensure competitive wages, aligning with industry standards and exceeding regional averages. This approach helps retain talented employees and attract new talent. Social benefits are also a key component of the company's motivational strategy. The report notes that "Svitoch" employees have access to an extended package of social guarantees, including health insurance, meal and transport compensation, and well-being programmes. Additionally, substantial attention is given to professional development. The company organises upskilling courses for all employee categories, including management, and conducts seminars focused on leadership development. Corporate social responsibility (CSR) programmes hold a special place in "Svitoch" motivational policy. The company actively supports charitable initiatives and environmental projects, fostering a sense of belonging to Nestlé's (Switzerland) global mission, which positively impacts employee morale and loyalty.

Enzym Group (n.d.) employs a slightly different motivational approach, focusing on individual achievements and teamwork efficiency. According to Enzym Group, the company has implemented a transparent bonus system based on specific production targets (Management report of PrJSC Enzym..., 2024). The employee training system at "Enzym" is also noteworthy. The company funds staff participation in training, seminars, and conferences aimed at enhancing professional knowledge and skills, boosting both qualifications and confidence. Compliance with safety standards and ensuring comfortable working conditions is another important aspect of "Enzym" motivational policy. The company has implemented environmental responsibility measures, such as transitioning to energy-efficient LED lighting, waste sorting, and organising battery recycling. Collaborating with international environmental organisations has earned "Enzym" recognition in the "Green City: Eco-Friendly Lviv" competition.

SoftServe, one of Ukraine's largest IT employers, demonstrates an innovative approach to employee motivation. According to the SoftServe sustainability report 2023 (2024), the company fosters creative potential by providing access to educational resources and professional growth programmes. In 2023, over 70% of employees completed cultural intelligence training, enhancing cross-cultural collaboration awareness. Flexible schedules and remote work are key elements of SoftServe's motivational strategy. Additionally, the company prioritises mental health support, offering stress management and resilience training to reduce burnout, a common issue in IT. SoftServe also implements achievement recognition programmes. Per the SoftServe sustainability report 2023 (2024), company supports Ukraine through financial aid, humanitarian projects, and veteran employment initiatives. In addition, the company develops equal opportunities programmes, ensuring an inclusive working environment for all categories of employees. Special attention is paid to talent development: SoftServe offers training courses, mentoring, and career counselling to help employees grow professionally.

Analysis of incentive policy effectiveness at JSC LCF "Svitoch", LLC "Enzym", and SoftServe

The survey allowed to identify the main factors of employee motivation in the three companies under study. JSC LCF "Svitoch", "Enzym" LLC and SoftServe demonstrate an individual approach to the development of motivational policies, taking into account the specifics of their industry. At the same time, there is a different level of employee satisfaction with key aspects such as salaries, working conditions, opportunities for professional development and career growth. The analysis of the responses showed that factors such as social benefits, recognition of achievements and work schedule flexibility have a significant impact on the level of employee motivation. Table 3 shows the main results of the assessment, which helped to better understand the priorities of employees.

Table 3. Results of a survey or	n the effectiveness of companies'	motivational policies t	owards their employees

Question	Answors	Obtained data separately for each co		a company
Question	Answers	JSC LKF "Svitoch"	LLC "Enzym"	SoftServe
How do you assess your current job satisfaction level?	Very dissatisfied	5%	6%	2%
	Dissatisfied	10%	8%	5%
	Neutral	20%	16%	15%
	Satisfied	50%	55%	60%
	Very satisfied	15%	15%	18%
	Very dissatisfied	4%	5%	3%
How do you assess your	Dissatisfied	12%	10%	6%
satisfaction with working conditions at your	Neutral	25%	20%	20%
enterprise?	Satisfied	45%	50%	55%
*	Very satisfied	14%	15%	16%
	Very dissatisfied	8%	10%	4%
How do you assess your	Dissatisfied	15%	15%	8%
satisfaction with your	Neutral	30%	25%	20%
current salary?	Satisfied	35%	40%	50%
	Very satisfied	12%	10%	18%
	Very dissatisfied	10%	12%	5%
How do you assess the	Dissatisfied	20%	18%	8%
availability of career opportunities in your	Neutral	30%	25%	22%
company?	Satisfied	30%	35%	40%
	Very satisfied	10%	10%	25%
Do you believe your work	Yes	75%	70%	85%
is evaluated fairly?	No	25%	30%	15%
	Salary	4.5	4.8	4.6
	Career growth	4.2	4.4	4.7
	Professional training and development	4.0	4.3	4.9
How important are the	Working conditions	4.3	4.5	4.6
following motivational	Flexibility of working hours	3.8	3.9	4.8
factors to you (mean scores)	Social benefits (insurance, holidays, etc.)	4.4	4.6	4.5
	Recognition of achievements	4.1	4.2	4.8
	Teamwork	4.2	4.3	4.7
	Leadership and support from management	4.0	4.2	4.5
	Salary	4.7	4.9	4.8
	Work environment and working conditions	4.4	4.6	4.7
How do you assess the	Career opportunities	4.3	4.5	4.8
impact of the following factors on your work	Recognition of work results	4.0	4.3	4.6
motivation (average scores)	Professional development opportunities	4.1	4.4	4.9
	Performance incentives	4.3	4.5	4.8
	Social benefits (health insurance, bonuses, etc.)	4.5	4.7	4.6

Source: compiled by the authors

After analysing the closed and scaled questions of the survey, it becomes evident that the motivation policies of JSC LKF "Svitoch", LLC "Enzym", and SoftServe have their strengths and weaknesses. As the results show, wages and working conditions remain among the most important factors for employees in all three companies, though satisfaction levels with these aspects vary slightly. For example, SoftServe employees demonstrate higher satisfaction with flexible work schedules and professional development opportunities, while at LLC "Enzym", greater emphasis is placed on social benefits and teamwork. At the same time, the importance of factors such as recognition of achievements and leadership is also growing. At "Svitoch", over 65% of respondents are satisfied with career opportunities, while at LLC "Enzym" and SoftServe, this figure stands at 45% and 72%, respectively. These results indicate that each company employs different approaches to personnel management, aligned with its strategic goals and operational specifics. They also help identify areas for improvement, such as strengthening professional development support at "Enzym" or expanding social initiatives at SoftServe.

The analysis of open-ended questions revealed that 45% of JSC LKF "Svitoch" employees cited insufficient transparency in performance evaluation as a key barrier to increased motivation. Specifically, they noted that bonus criteria and career advancement remain unclear or inconsistently applied. Around 35% of employees suggested implementing a clear bonus system that accounts for individual achievements and efforts. Regarding changes to the motivation policy, 40% of employees emphasised the importance of expanding professional development opportunities. They noted that introducing internal training, workshops, and upskilling programmes would support their career growth. Additionally, 25% highlighted the need to improve communication between management and staff, stating that timely praise and recognition from leadership significantly boost their work motivation.

Furthermore, the open-ended responses showed that 50% of LLC "Enzym" employees feel a lack of incentive for achieving results. They noted that the current bonus system is overly generalised and fails to recognise individual contributions. Another 30% expressed a need for more

social benefits, such as health insurance, additional paid leave, and transport compensation. Regarding workplace improvements, 35% proposed modernising workspaces, upgrading equipment, and creating a more comfortable environment for task completion. Flexible work schedules, as a potential motivator, were mentioned by 20% of respondents. Employees stressed that such changes could enhance productivity by improving work-life balance.

As for SoftServe, 55% of its employees consider professional development a key motivational factor. They valued internal training programmes, access to innovative tools, and workshops. However, 30% noted limited opportunities for horizontal growth, such as interdisciplinary projects or interdepartmental rotations. About 25% cited management inflexibility as the biggest motivational barrier, calling for a more individualised approach to task management and support in addressing work challenges. Regarding policy changes, 35% proposed introducing long-term bonus schemes, share ownership programmes, and personalised career development consultations. Another 20% emphasised the importance of regular feedback from leadership and transparent communication about their successes.

The survey analysis demonstrated that employees across all three companies seek a more transparent and differentiated motivation system, as well as professional development support. For JSC LKF "Svitoch" and LLC "Enzym", improving bonus structures and working conditions is a priority, while SoftServe focuses on flexible management approaches and horizontal career growth opportunities. The interview results highlighted the diversity of motivation strategies in the studied companies. Table 4 outlines key challenges, changes, staff development directions, non-material incentives, external factors, and employee reactions to HR innovations.

Aspect of the issue	Company (number of participants confirming response)			
Aspect of the issue	JSC LKF "Svitoch" (10 participants)	LLC "Enzym" (10 participants)	SoftServe (10 participants)	
Main approaches to staff motivation	Social bonuses (8), medical insurance (1), corporate events (1)	Non-financial incentives (7), flexible working hours (2), autonomy in decision- making (1)	Professional development (9), international projects (1)	
Criteria for selecting motivational measures	Analysis of employee requests (6), experience of other companies (4)	Employees' wishes (5), strategic goals of the company (5)	Employee surveys (8), individual approach (2)	
Effectiveness of the current policy	High efficiency among young employees (6), need for adaptation for the older generation (4)	Generally effective (8), need to expand training opportunities (2)	High employee engagement (7), need for personalised approaches (3)	
Difficulties in implementing motivational programmes	Resistance to changes by older employees (6), lack of awareness of new approaches (4)	Lack of resources for programme development (5), different expectations of employees (5)	Global competition for talent (7), rapidly changing market conditions (3)	
Necessary changes in the motivation system	Expanding the range of social bonuses (6), more flexible work schedules (4)	Strengthening of internal training (5), involvement of external experts (5)	Integration of individual career plans (6), development of mentoring (4)	
Development of professional skills	Corporate training (7), mentoring (3)	Internal training (6), support for young professionals (4)	Corporate university (6), international internships (4)	
Non-material ways of motivation	Open communication with management (5), support for employees' families (5)	Flexible working hours (6), ability to influence corporate culture (4)	Individual career plans (7), autonomy in performing tasks (3)	
Influence of external factors	The economic situation forces to adapt social programmes (6), competition in the labour market (4)	Fluctuations in the labour market affect personnel decisions (5), general economic conditions (5)	High competition for IT talent (7), influence of international markets (3)	
Prospects for development	Introduction of support programmes for employees' children (6), expansion of corporate events (4)	Emphasis on internal training (5), improvement of the mentoring system (5)	Deepening of individual approach (6), development of international cooperation (4)	

Table 4. Interview results on employee motivation in the studied companies

Table 4, Continued Company (number of participants confirming response) Aspect of the issue SoftServe (10 participants) JSC LKF "Svitoch" (10 participants) LLC "Enzym" (10 participants) Positive perception of young High readiness to Employee reaction to Interest in new opportunities (7), employees (6), need for adaptation for adapt (8), need for clearer cautious attitude to change (3) innovations the older generation (4) communication (2)

Source: compiled by the authors

At SoftServe, the main goal of the motivational policy was to create a favourable microclimate in the team and support the professional development of employees. Mentoring programmes, a corporate university, and opportunities to participate in international projects ensured a high level of employee engagement. At JSC LCF "Svitoch", the motivational approach was based on social bonuses, including additional health insurance, organisation of corporate events and support for employees' families. Creating a sense of stability and care for each employee helped to increase loyalty to the company. At "Enzym", priority was given to non-material incentives, including freedom in organising working hours, which created comfortable working conditions for employees.

The criteria for selecting motivational measures at SoftServe were based on the results of regular employee surveys, which allowed the company to take into account their needs and develop appropriate programmes. LLC "Enzyme" used a similar approach, taking into account both the wishes of employees and the company's strategic goals. At the same time, organisations faced difficulties in implementing new initiatives. At JSC LCF "Svitoch", resistance to change was observed among older employees, which required the gradual integration of modern methods while maintaining traditional incentives. At SoftServe, global competition for IT talent required continuous improvement of the incentive policy. All interviewees noted the importance of non-financial incentives. At "Enzyme", the opportunity to engage in open discussions with management was particularly valued, which increased engagement and a sense of job significance. At SoftServe, individual career development plans were popular, as they helped to retain employees. As for the prospects for the development of the motivational policy, JSC LCF "Svitoch" planned to expand the range of social bonuses, including support programmes for employees' children. LLC "Enzym" focused on internal training and development of young professionals. SoftServe improved its professional development programmes by integrating an individual approach to each employee. In general, the results of the interviews show that companies use a variety of approaches to motivation that take into account the specifics of their operations, employee needs, and strategic goals. Although each organisation has its own challenges, the implementation of modern motivational programmes remains a priority for all three companies.

Analysis of ways to overcome barriers and problems hindering the successful implementation of motivation programmes in enterprises

Based on reports from companies JSC LKF "Svitoch", LLC "Enzym", and SoftServe, employee survey results, and responses from semi-structured interviews with HR managers and department heads, a SWOT analysis of the current motivation policies of these enterprises was conducted (Table 5).

Analysis aspect	SoftServe	JSC LKF "Svitoch"	LLC "Enzym"
Strong points	High employee engagement through mentorship programmes and corporate university; opportunities to participate in international projects, enhancing professionalism and motivation	Favourable social benefits and corporate care (health insurance, organisation of events); support for employees' families, which creates loyalty to the company	Flexible working hours and opportunities for professional development through trainings; creation of a comfortable working environment that promotes job satisfaction
Weaknesses	High competition for talent in the IT sector, requiring continuous improvement of incentive programmes; high costs of incentive programmes due to international projects	Resistance of older employees to the introduction of new methods of motivation; limited flexibility in approaches to motivation due to certain traditions in the company	Insufficient attention to non- material incentives compared to material incentives; potential for problems in maintaining high motivation in the event of significant changes in the external environment
Opportunities	Expanding professional development programmes, including new mentoring methods and online courses; adapting to changes in the labour market and new motivation technologies (e.g. gamification)	Introducing new motivational tools, such as programmes for young professionals; increasing social bonuses, such as support for employees' children, additional days off	Developing internal training and career development for young employees; implementing work-life balance programmes to increase loyalty
Threats	Changes in the economic situation may lead to a reduction in motivation budgets; loss of employees to other companies offering better conditions	Mismatch between traditional approaches and new trends in HR management; labour market instability may lead to a decrease in the effectiveness of existing motivational measures	Changes in the economic environment that may reduce opportunities for developing incentive programmes; deterioration in working conditions due to the unstable labour market

Table 5. SWOT analysis of the effectiveness of personnel management by enterprises

Source: compiled by the authors

It was found that the most effective programmes were those focusing on professional development and employee support through various social benefits and career growth. At the same time, it was revealed that some companies struggle to adapt to labour market changes, which may reduce the effectiveness of their motivation initiatives. Considering the data, external factors such as economic instability and new technological developments were also identified as potential influences on employee motivation. Enterprises need to adjust their strategies, particularly by increasing the flexibility of motivation programmes, to successfully adapt to new conditions. Based on the SWOT analysis, several barriers and problems were identified that may hinder the successful development of motivation programmes and require careful resolution. At SoftServe, one of the main challenges is the difficulty of adapting motivation programmes to rapid labour market changes and technological innovations. To address this, the company should regularly train managers to increase their awareness of the latest trends in HR management and motivational practices.

Another important step is adapting motivation programmes to digital technologies, particularly through gamification, mobile apps for employee interaction, and performance monitoring. Additionally, strategic partnerships with educational platforms offering online courses and certification programmes should be established to expand professional development opportunities. For SoftServe, particularly for young employees, a challenge may be the lack of transparency and clarity in career progression paths, which could reduce motivation. Although the company has a well-developed career growth system, young professionals may not always understand the specific steps needed for advancement. In this case, it would be advisable to strengthen mentorship and career counselling programmes, providing personalised guidance on competency development and career opportunities. Regarding talent development investments, funding for internal training programmes should be increased, offering grants for international certifications or supporting participation in industry conferences. A fast-track career growth programme for high-performing employees could also be introduced, featuring accelerated job rotation, specialised training, and early promotions based on performance and leadership assessments. Ensuring employees can participate in key projects and leadership roles will help them feel part of the company's significant initiatives. Implementing a clear evaluation and feedback system on career achievements will help employees better understand the steps needed for advancement.

At JSC LKF "Svitoch", one of the main issues remains the low flexibility in motivation policies, negatively affecting employee motivation. To resolve this, the company should create programmes ensuring an optimal work-life balance, such as additional leave or reduced working hours during high-stress periods, implemented through flexible schedules or extra paid leave based on stress-level assessments. In addition, it is necessary to involve employees in decision-making on improving working conditions and company policies to create personalised incentive programmes that meet the needs of different groups of employees. Retention challenges, driven by economic instability, should be addressed by improving communication transparency, informing employees about the company's financial status and strategic direction. Regular management-employee meetings, an internal information portal, and financial reports can enhance transparency. Programmes for financial stability, such as preferential loans or loyalty bonuses, could also be introduced. Funding may come from internal reserves or partnerships with financial institutions offering favourable loan terms. The percentage of funding would depend on the company's financial capacity, but a possible model could cover 50-70% of loan interest rates or offer 5-10% annual salary bonuses for highly loyal employees. Intangible motivational factors, such as professional development, can also be emphasised to improve motivation in times of economic instability.

At LLC "Enzym", one of the biggest challenges is limited financial resources, complicating the implementation of complex motivation programmes, including bonuses and social benefits. To overcome this, existing motivation measures should be optimised, considering the current bonus system. Currently, employees only receive additional payments for exceeding production targets (10-15% of monthly salary). More affordable options, such as extra leave days or corporate training programmes, could be introduced. Partnering with training providers or knowledge-sharing with other companies could reduce costs. Loyalty programmes offering small but regular rewards, such as additional leave days, could also be developed. For example, employees could earn extra paid leave days (up to five per year) for every two years of continuous service. Unused bonus leave could be exchanged for financial compensation (equivalent to average daily earnings). These measures would enhance motivation and retention without significantly increasing company costs. Implementing the above approaches will enable companies to overcome key barriers hindering motivation programme development, improve employee motivation, and ensure long-term loyalty and work efficiency.

DISCUSSION

The results of this study demonstrated that the effectiveness of personnel management largely depends on the implementation of a system of motivational factors that enhance labour productivity and employee satisfaction. These findings align with the conclusions of other studies, particularly M. Garai-Fodor & K. Jäckel (2022), who proved that an individualised approach to employee incentives increases job satisfaction and productivity. This study showed that the use of both material and non-material incentives positively impacts labour productivity. It was found that employees who receive fair wages and have opportunities for professional growth exhibit high levels of engagement. Similar conclusions were drawn in the study by C. Mbachu et al. (2022), who found that motivating rural healthcare workers in Nigeria improves their productivity and ensures high-quality maternal and child health services. This study also emphasised that material incentives, such as bonuses and additional rewards, significantly enhance employee performance.

Meanwhile, the study by A. Melnyk *et al.* (2021) highlighted the importance of integrating motivational approaches into organisational culture. According to their results, companies that embed motivational strategies into

their organisational culture achieve higher personnel management efficiency. These findings support this approach, as implementing a comprehensive motivational system improved the internal organisational climate and increased employee satisfaction. This study established that effective leadership plays a key role in shaping a motivational environment. Leaders who actively support employees, encourage initiative, and ensure open communication create conditions for improved workforce efficiency. This aligns with the research by S. Khawaja & H. Karimi (2024), who found that labour productivity significantly increases when employees feel supported by management. Their conclusions underscore the importance of developing leadership skills as part of personnel management strategies. The study revealed that integrating digital tools into personnel management systems significantly enhances the effectiveness of motivational mechanisms. In particular, digital platforms enable transparent employee evaluation and reward systems. This corresponds with the findings of M. Kopytko et al. (2024), who noted that digitising personal management boosts enterprise competitiveness. They emphasised that new technologies allow motivational mechanisms to be tailored to individual employee needs. This work examined motivation specifics across different economic sectors. It found that employees require tailored motivational approaches, such as seasonal bonuses and comfortable working conditions. These results align with the conclusions of S. Cenolli et al. (2023), who indicated that effective personnel management in agricultural enterprises significantly impacts productivity.

The study also showed that non-material motivation such as recognition of achievements, corporate culture development, and opportunities for self-realisation - is equally important as financial incentives. These conclusions correlate with the work of C. Baumeler & N. Lamamra (2024), who explored motivational factors in Swiss small businesses. They found that a supportive and respectful atmosphere helps retain staff and improve efficiency. This study also highlighted challenges in implementing motivational mechanisms, such as resistance to change and insufficient managerial training in personnel management. These issues often arise due to inadequate attention to manager training and upskilling. Similar problems were described by V. Korolkov & D. Babenko (2020), who noted that refining motivational mechanisms requires a comprehensive approach, including manager training and adapting motivational tools to company specifics. Implementing personalised digital solutions based on motivational factors - such as financial incentives, recognition of achievements, and automated task monitoring - optimises management and reduces job dissatisfaction. These conclusions align with the study by O. Krasivskyy et al. (2023), who proposed a digital personnel management model for engineering firms, facilitating process automation, reducing human error, and improving safety and productivity.

The study found that motivational systems should focus on long-term prospects and professional skill development. O. Ponisciakova *et al.* (2023) emphasised the role of motivation in managerial decisions within Slovak manufacturing companies. They highlighted that proper motivational approaches enhance productivity and competitiveness. The findings of N. Okorie *et al.* (2019) also align with these conclusions, demonstrating that external motivational factors improve productivity among Nigerian library staff. Systematic use of motivational factors enables companies not only to achieve better efficiency but also retain key employees.

According to the study by J.G. Somerville et al. (2024a), motivating employees in remote areas of Ghana and Scotland depends on career development opportunities and employer support. This study also found that access to professional development and training significantly enhances personnel management effectiveness. This is particularly important for employees seeking to fulfil their professional ambitions within an organisation. Similar conclusions were drawn by Z.E. Kootahi et al. (2023), who analysed professional values and job satisfaction among nurses. The results showed that nurses who value high patient care standards, ethical behaviour, and professional growth opportunities exhibit high job satisfaction. Key influencing factors include working conditions, team and managerial support, training opportunities, and emotional exhaustion. This study also stressed the importance of creating favourable conditions for employees to realise their professional values, enhancing job satisfaction and service quality. M. Hitka et al. (2019) also noted that flexible schedules, career growth opportunities, and tailored incentive systems can effectively boost organisational loyalty and reduce turnover.

Additionally, the study by P. Otřísal & D.R. Ralbovská (2024) highlighted the importance of developing employee resilience through continuous education. These results confirm that training and development are significant non-material motivational factors, fostering both professional growth and company loyalty. The study by B. Phuong *et al.* (2024) also confirmed the role of motivational factors for educators. Their research showed that material and non-material incentives positively impact teaching effectiveness at Vietnam National University. This study identified a similar trend, where financial and non-financial rewards stimulated higher employee performance.

The study by S. Rahi et al. (2023) focused on user intentions to continue using e-banking. Although contextually different, their conclusions on the importance of expected benefits and user satisfaction can be applied to employee motivation. This work also showed that employees who perceive personal benefits from their work exhibit higher engagement and loyalty. This aligns with the findings of L.D. Harmider & L.A. Gonchar (2019), who studied factors influencing staff productivity and concluded that key drivers remain financial motivation, work environment, and professional growth opportunities. Thus, financial incentives, organisational culture, professional development, and career growth all play crucial roles in enhancing employee productivity and strengthening company competitiveness. The consistency of these results with the aforementioned researchers confirms that motivational factors are decisive for effective personnel management.

CONCLUSIONS

Employee motivation is a key management tool that directly affects labour productivity, staff engagement and reduction of staff turnover. Financial incentives, such as salaries, bonuses and bonuses, are a key driver of motivation, as competitive remuneration increases employee

satisfaction. Ensuring transparency in remuneration helps to avoid conflicts and fosters an atmosphere of trust. Professional development opportunities, such as advanced training, participation in trainings and career prospects, also have an impact on employee motivation, as employees prefer organisations that invest in their development. Lack of attention to the above aspects can lead to the loss of talented personal. An analysis of the motivation policy at JSC LCF "Svitoch", LLC "Enzyme" and SoftServe shows a variety of approaches to HR Management. While "Svitoch" focuses on social benefits and professional development programmes, "Enzym" focuses on financial incentives and comfortable working conditions. SoftServe, on the other hand, focuses on innovation, developing the creative potential of its employees and supporting their mental health. This policy allows these companies not only to increase the efficiency of their staff, but also to strengthen their competitiveness in the market.

Based on SWOT analysis, surveys, interviews, and an assessment of motivational policies at SoftServe, LLC "Enzym", and JSC LCF "Svitoch", it was found that all companies face barriers reducing the effectiveness of their motivational programmes. Key challenges include limited financial resources, difficulties adapting motivational programmes to labour market changes, and evaluating programme effectiveness. However, specific solutions were identified for each company, such as implementing flexible motivational forms, using digital tools for employee interaction, and optimising internal processes. All companies have significant strengths in their motivational policies, such as clear career prospects and robust training programmes. However, to enhance effectiveness, companies should improve internal communications, integrate more personalised motivational approaches, and increase transparency in goal-setting and success criteria. For Soft-Serve, developing mentorship and career counselling programmes would help young specialists understand growth opportunities. LLC "Enzym" could adjust its incentives by introducing more accessible rewards, such as flexible schedules and remote work options. JSC LCF "Svitoch" should focus on adapting motivational programmes to economic changes and creating non-material incentives. Overall, improving motivational programmes requires continuous adaptation to new conditions and employee demands. Success depends not only on financial incentives but also on fostering a corporate culture that attracts, supports, and develops talent. Future research should expand the company sample and further analyse the impact of external factors - such as economic changes - on organisational motivational practices.

ACKNOWLEDGEMENTS None.

CONFLICT OF INTEREST None.

REFERENCES

- American Sociological Association Code of Ethics. (1997). Retrieved from https://www.asanet.org/about/ethics/. [1]
- Barnett, M.J., et al. (2024). Barriers and motivational factors for engaging in novel opioid and medication disposal-[2] related services in community pharmacies. Research in Social and Administrative Pharmacy, 20(8), 713-722. doi: 10.1016/j.sapharm.2024.03.011.
- [3] Baumeler, C., & Lamamra, N. (2024). Small firms' motivations in offering apprenticeship training in Switzerland. Journal of Education and Work, 37(5-6), 367-381. doi: 10.1080/13639080.2024.2447030.
- Cenolli, S., Osmonova, A., Askarova, Ch., & Miller, A. (2023). The role of personnel management in increasing [4] productivity at agricultural enterprises in Mongolia. Scientific Horizons, 26(6), 146-155. doi: 10.48077/scihor6.2023.146.
- [5] Enzym Group. (n.d.). Retrieved from https://enzymgroup.com/uk.
- Garai-Fodor, M., & Jäckel, K. (2022). Motivational tools and incentives: Different generations, different needs at work. [6] In 2022 IEEE 22nd international symposium on computational intelligence and informatics and 8th ieee international conference on recent achievements in mechatronics, automation, computer science and robotics (pp. 167-170). Budapest: IEEE. doi: 10.1109/CINTI-MACRo57952.2022.10029558.
- Gong, X., & Liu, R. (2020). Research on the application of competency model in personnel management of private [7] enterprises. Journal of Physics: Conference Series, 1621, article number 012034. doi: 10.1088/1742-6596/1621/1/012034.
- [8] Harmider, L.D., & Gonchar, L.A. (2019). Motivation factors of performance of personnel of the enterprise. Review of Transport Economics and Management, 1(17), 127-132. doi: 10.15802/rtem.v0i1(17).176635.
- Hitka, M., Lorincová, S., Gejdoš, M., Klarić, K., & Weberová, D. (2019). Management approach to motivation of white-[9] collar employees in forest enterprises. BioResources, 14(3), 5488-5505. doi: 10.15376/biores.14.3.5488-5505.
- [10] Ignatiuk, V., & Tunina, H. (2023). Personnel motivation as a factor in increasing the efficiency of the enterprise management system. International Science Journal of Management, Economics & Finance, 2(1), 75-83. doi: 10.46299/j. isjmef.20230201.08.
- [11] Karpyak, A.O., & Rybytska, O.M. (2022). Cluster analysis of motivational management of personnel support of IT companies. In COLINS-2022: 6th international conference on computational linguistics and intelligent systems (pp. 1684-1693). Gliwice: CEUR Workshop Proceedings.
- [12] Khawaja, S., & Karimi, H. (2024). Exploring factors influencing work productivity: A qualitative case study of employee motivation and leadership practices. Edelweiss Applied Science and Technology, 8(4), 727-736. doi: 10.55214/25768484.v8i4.1451.
- [13] Kootahi, Z.E., Yazdani, N., Parsa, H., Erami, A., & Bahrami, R. (2023). Professional values and job satisfaction of neonatal intensive care unit nurses and influencing factors: A descriptive correlational study. International Journal of Africa Nursing Sciences, 18, article number 100512. doi: 10.1016/j.ijans.2022.100512.

- [14] Kopytko, M., Liubokhynets, L., Panchenko, V., Moysa, T., & Malanchuk, A. (2024). Formation of a personnel management system as a factor of increasing competitiveness and the enterprise security level in the context of digital transformation and new legal challenges. *Social & Legal Studios*, 7(1), 210-220. doi: 10.32518/sals1.2024.210.
- [15] Korolkov, V., & Babenko, D. (2020). Improving the motivational mechanism of enterprise personnel management. *Efektyvna Ekonomika*, 11. doi: 10.32702/2307-2105-2020.11.69.
- [16] Krasivskyy, O., Pirozhenko, N., Samborska, O., Harbusiuk, V., & Inozemtseva, O. (2023). A model for implementing digital personnel management in security and safety for engineering enterprises. *International Journal of Safety and Security Engineering*, 13(3), 519-526. doi: 10.18280/ijsse.130314.
- [17] Liu, L. (2024). Establishment of enterprise tax personnel information management system based on computer technology. In *Proceedings of the international conference on decision science & management* (pp. 231-236). New York: Association for Computing Machinery. doi: 10.1145/3686081.3686120.
- [18] Management report of PrJSC Enzym Company 2023. (2024). Retrieved from <u>https://enzymgroup.com/uk/report/</u> <u>rehulyarna-informatsiya</u>.
- [19] Management report of the Limited Liability Company "Lviv Confectionery Factory 'Svitoch'". (2024). Retrieved from https://www.nestle.ua/sites/g/files/pydnoa316/files/2024.pdf.
- [20] Mbachu, C., Etiaba, E., Ebenso, B., Ogu, U., Onwujekwe, O., Uzochukwu, B., Manzano, A., & Mirzoev, T. (2022). Village health worker motivation for better performance in a maternal and child health programme in Nigeria: A realist evaluation. *Journal of Health Services Research & Policy*, 27(3), 222-231. doi: 10.1177/13558196211055323.
- [21] Melnyk, A., Lepeyko, T., Myronova, O., & Mazorenko, O. (2021). Formation of organizational culture: Motivative approach. Studies of Applied Economics. Special Issue: Impact of Current Trends in Social Commerce, Economics, and Business Analytics, 39(7). doi: 10.25115/eea.v39i7.4939.
- [22] Nestlé. (n.d.). Retrieved from https://www.nestle.ua/jobs/vacancy/svytoch.
- [23] Okorie, N., Ikonne, C., & Haliso, Y. (2019). Extrinsic motivational factors and job performance of library personnel in universities and institutes of agriculture in Nigeria. *Library Philosophy and Practice*.
- [24] Otřísal, P., & Ralbovská, D.R. (2024). Analysis of the possibilities of developing the resilience of employees and members of the integrated rescue system in the Czech Republic as part of lifelong education. In *Proceedings of 4th international conference CNDCGS'2024* (pp. 539-549). Brno: General Jonas Žemaitis Military Academy of Lithuania. doi: 10.3849/cndcgs.2024.539.
- [25] Phuong, B., Nhien, N.D., Van, L.H., & Hoai, N.T.T. (2024). Assessing the impact of motivational factors on the job performance of lecturers at Vietnam National University, Hanoi. *Multidisciplinary Science Journal*, 7(2), article number 2025070. doi: 10.31893/multiscience.2025070.
- [26] Ponisciakova, O., Rosnerova, Z., & Kicova, E. (2023). Motivation as an element of managerial decision-making in manufacturing companies: The case of the Slovak Republic. *Sustainability*, 15(12), article number 9186. <u>doi: 10.3390/su15129186</u>.
- [27] Rahi, S., Alghizzawi, M., & Ngah, A.H. (2023). Factors influencing users' intention to continue the use of e-banking during the COVID-19 pandemic: The nexus between self-determination and expectation confirmation model. *EuroMed Journal of Business*, 18(3), 380-396. doi: 10.1108/EMJB-12-2021-0194.
- [28] SoftServe sustainability report 2023. (2024). Retrieved from <u>https://www.softserveinc.com/files/csr/softserve-corporate-social-responsibility-report-2023.pdf</u>
- [29] SoftServe. (n.d.). Retrieved from https://www.softserveinc.com/uk-ua.
- [30] Somerville, J.G., Strang, N.C., & Jonuscheit, S. (2024a). Task-shifting and the recruitment and retention of eye care workers in under-served areas: A qualitative study of optometrists' motivation in Ghana and Scotland. *Primary Health Care Research & Development*, 25, article number 30. doi: 10.1017/S1463423624000185.
- [31] Somerville, J.G., Strang, N.C., & Jonuscheit, S. (2024b). Topical review: Task shifting and the recruitment and retention of eye health workers in underserved areas. *Optometry and Vision Science*, 101(3), 143-150. doi: 10.1097/ <u>OPX.00000000002118</u>.
- [32] Spivak, S., Korolyuk, T., Halyniak, L., Spivak, I., Krepych, S., & Tkach, U. (2024). Improvement of the system company's employee estimation and motivation. In *14th international conference on advanced computer information technologies* (pp. 380-383). Ceske Budejovice: IEEE. <u>doi: 10.1109/ACIT62333.2024.10712464</u>.
- [33] Xiang, X., & Wang, H. (2024). Overcoming one-sidedness in cadre personnel management: Developing a competency framework for China's central state-owned enterprise executives. *Heliyon*, 10(10), article number e31439. doi: 10.1016/j.heliyon.2024.e31439.

Стратегія управління персоналом: роль мотиваційних чинників у підвищенні ефективності

Наталія Павленчик

Доктор економічних наук, професор Львівський державний університет фізичної культури імені Івана Боберського 79007, вул. Костюшка, 11, м. Львів, Україна https://orcid.org/0000-0001-6164-5644

Владислав Ціздин

Аспірант

Львівський державний університет фізичної культури імені Івана Боберського 79007, вул. Костюшка, 11, м. Львів, Україна https://orcid.org/0009-0009-5647-4276

Анотація. Метою дослідження було визначення впливу мотиваційних чинників на успішність в управлінні персоналом різних підприємств. Методологія дослідження включала анкетування 900 працівників трьох компаній: АТ ЛКФ «Світоч», ТОВ «Ензим» і SoftServe, проведення напівструктурованих інтерв'ю з 30 менеджерами та SWOTаналіз. Результати дослідження показали, що ефективність управління персоналом значною мірою залежить від збалансованості матеріальних і нематеріальних мотиваційних чинників. У SoftServe наголошено на інноваціях, творчому розвитку та ментальному здоров'ї, у «Світоч» – на соціальних пільгах і навчальних програмах, в «Ензим» – на комфортних умовах праці й фінансових стимулах. Результати анкетування показали, що 70 % працівників SoftServe вважають основними мотиваційними факторами можливості для кар'єрного зростання та професійного розвитку, а також гнучкі умови праці. У компанії «Світоч» 65 % респондентів відзначили, що соціальні пільги, як-от медичне страхування та програми для дітей співробітників, є ключовими мотиваційними елементами. Для працівників компанії "Ензим" 78 % опитаних зазначили, що комфортні умови праці та конкурентоспроможна заробітна плата є основними рушіями їхньої ефективності. Напівструктуровані інтерв'ю з менеджерами підтвердили, що мотиваційні програми зосереджені на інноваціях і ментальному здоров'ї працівників, що дозволяють зберігати лояльність і залученість команди. Результат SWOT-аналізу показав, що основними перешкодами для підвищення ефективності мотиваційної політики є обмежені фінансові ресурси, адаптація до ринкових змін і оцінка результативності програм. Водночає сильні сторони компаній включають розвинені програми навчання, кар'єрний розвиток і підтримку співробітників. Дослідження підтвердило, що оптимізація мотиваційної політики можлива через впровадження гнучких форм мотивації, використання цифрових інструментів і вдосконалення внутрішніх комунікацій

Ключові слова: задоволеність роботою; кар'єрні перспективи; заходи заохочення; продуктивність праці; менеджмент



DEVELOPMENT MANAGEMENT

UDC 005.95/.96 DOI: 10.63341/devt/1.2025.20 Vol. 24, No. 1. 2025 🤇

Developing a staff motivation system for construction companies: Algorithms for encouraging high productivity

Serhii Holovchenko*

Master Kyiv National University of Construction and Architecture 03037, 31 Povitrianykh Syl Ave., Kyiv, Ukraine https://orcid.org/0009-0007-8032-3377

Abstract. This study aimed to provide practical recommendations for enhancing staff productivity in construction companies. The activities of Ukrainian construction companies, specifically Limited Liability Company "PC Regional Construction Company", Limited Liability Company "Interbud", and Private Joint-Stock Company Holding Company "Kyivmiskbud", were analysed, along with the algorithm for improving motivation within these companies. A comparative analysis of motivation systems in Ukraine and internationally, using Germany, the United Kingdom, and the USA as examples, was conducted. Based on the findings, a mechanism for increasing staff motivation in Ukrainian construction companies was developed. Motivation was identified as a key factor in improving labour productivity. In particular, the use of a combination of material and non-material incentives proved effective in enhancing work efficiency. Company performance confirmed the effectiveness of strategies that contributed to increased productivity and employee loyalty. Limited Liability Company "PC Regional Construction Company" achieved a 15% increase in labour productivity through a bonus system and improved working conditions. At Limited Liability Company "Interbud", employee engagement increased to 80%, while Private Joint-Stock Company Holding Company "Kyivmiskbud" achieved a 70% rise in employee loyalty through non-material incentives. A crucial aspect was the introduction of flexible bonus systems that considered both individual and collective achievements. The study confirmed that professional growth, training, and employee development contributed not only to skill enhancement but also to increased company loyalty. Non-material incentives, such as recognition of achievements and team-building activities, significantly improved workplace morale and strengthened team cohesion. The implementation of feedback systems and employee participation in decision-making fostered closer ties between management and staff, positively impacting company performance. The practical significance of this study lay in optimising motivational strategies to enhance productivity and employee loyalty in construction companies. These improvements facilitate high performance, reduce staff turnover, and foster an effective working environment

Keywords: professional development; work efficiency; incentive system; management strategies; knowledge sharing

Article's History: Received: 16.10.2024; Revised: 10.02.2025; Accepted: 25.03.2025

INTRODUCTION

Creating an effective staff motivation system is a crucial aspect of management that directly impacts the efficiency of construction companies. High productivity is a key factor for success in a competitive market, making it essential to develop incentive strategies that ensure the achievement of high-performance levels. Construction sector employees often face various challenges, including demanding working conditions, heavy physical labour, and the need to meet strict deadlines. Therefore, developing an effective system of rewards and motivational strategies aimed at enhancing work efficiency is a priority for company management. A well-designed motivation system not only increases productivity but also reduces staff turnover, contributing to the stability and development of the company. However, it is worth noting that research in this field often focuses on general principles of motivation without clear links to the

Suggested Citation:

Holovchenko, S. (2025). Developing a staff motivation system for construction companies: Algorithms for encouraging high productivity. *Development Management*, 24(1), 20-33. doi: 10.63341/devt/1.2025.20.

*Corresponding author



Copyright © The Author(s). This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/)

specific characteristics of the construction sector, creating gaps in scientific approaches.

Researchers have highlighted various aspects of creating a staff motivation system for construction companies, specifically strategies for boosting high productivity. W. Alaghbari et al. (2021) examined the impact of motivational factors on the effectiveness of public construction projects in Yemen. They found that employee motivation directly affects project performance, including timeliness and quality of work. In their conclusions, the authors recommended that governments and companies focus on creating motivational programs that enhance the performance of construction projects. C. Amoah & L. van Niekerk (2023) focused on the motivational factors for workers in the construction industry, particularly the need to consider individual needs and working conditions. The authors emphasised that work motivation directly impacts productivity and the quality of construction projects, and they proposed various motivational tools to maximise the efficiency of construction work. S.K. Ansah & E. Tekpe (2022) examined the influence of motivational factors on the implementation of quality management systems in the construction sector. They noted that the successful implementation of total quality management (TOM) requires consideration of both external and internal employee motivation factors.

P.T. Phan *et al.* (2020), Y. Bayır & S. Gundes (2024), and R.A. Kubanov *et al.* (2024) studied the impact of motivational factors on employees of construction companies. The authors' recommendations included an emphasis on the flexibility of motivational strategies, taking into account new working conditions. D.V. Bondarenko (2024) highlighted the importance of using building information modelling (BIM) to optimise construction processes and project management. In research, the author emphasised the technology's potential to reduce costs, improve coordination between project participants, and increase planning accuracy. They also stressed the need to adapt BIM to the requirements of sustainable construction regarding energy efficiency, carbon emission reduction, resource efficiency, and the integration of renewable energy sources.

An important aspect of the research by O. Gibadullin et al. (2024) was the problem of Ukraine's post-war reconstruction. The authors noted that to attract digital nomads to this effort, the state needs to create innovative and adaptable motivational strategies that consider the specific challenges of industrial and construction reconstruction. At the same time, to attract highly qualified workers, they recommended adhering to principles of rationality and mutual respect, avoiding displays of authoritarianism and empty promises in relationships, and allowing for reasonable levels of creativity. Z. Mustapha et al. (2024) analysed the impact of motivational factors on the productivity of construction industry employees. The authors found that the main incentives for increasing productivity were fair wages, opportunities for professional growth, and effective communication between management and staff. Their findings highlighted the importance of cultivating a positive work environment to ensure long-term employee effectiveness. Accordingly, the purpose of this study was to develop an algorithm for incentivising employees, taking into account their specific needs and motivations.

MATERIALS AND METHODS

An evaluation of Ukrainian construction companies and their motivation systems was conducted. The criteria for selecting these companies included their experience in implementing innovative motivational strategies, the scale of their operations within the construction sector, and the currency of information available. As part of the research, a detailed analysis of motivation strategies was carried out in three construction companies: Limited Liability Company (LLC) "PC Regional Construction Company", LLC "Interbud", and Private Joint-Stock Company (PrJSC) Holding Company (HC) "Kyivmiskbud". Each strategy was examined using data from company reports and corporate statistics. This analysis allowed for the identification of key approaches that have been applied and adapted for Ukrainian construction companies.

The primary focus was on strategies involving financial incentives, professional development, non-financial rewards, and employee participation in management. All of these strategies were evaluated based on their effectiveness in achieving desired outcomes, the level of employee engagement, satisfaction with working conditions, and the impact on long-term employee loyalty to the companies. The motivation enhancement strategies of LLC "PC Regional Construction Company", LLC "Interbud", and PrJSC HC "Kyivmiskbud" were analysed, specifically:

1. The material incentives strategy and the employee participation strategy at LLC "PC Regional Construction Company". The material incentives strategy examined the use of financial rewards, such as bonuses, salary increases, and performance-based payments. This strategy was evaluated based on the effectiveness of financial incentives, the relationship between motivation and reward size, and the impact on employee satisfaction. The employee participation strategy assessed the level of staff involvement in decision-making, satisfaction with opportunities to express opinions, and the extent of organisational support.

2. The professional development strategy at LLC "Interbud", focused on providing learning and career advancement opportunities. This included training programmes, professional development courses, and structured career progression initiatives. The strategy was assessed based on employee participation rates in these programmes, improvements in professional competence, and the impact on motivation through career prospects.

3. The non-financial incentives strategy at PrJSC HC "Kyivmiskbud", is aimed at motivation through employee recognition, strengthening their role within the team, organising team-building activities, and fostering a supportive environment for personal development. The strategy was evaluated using criteria such as employee satisfaction with managerial support, corporate culture, and the company's commitment to social responsibility.

The potential applications of project management software such as Trello, Asana and Slack were analysed. Company documentation was also reviewed, including news reports on the increasing construction costs of a police office by LLC "Interbud" (The construction of a new police..., 2023), a press release regarding the decision on the recapitalisation of PrJSC HC "Kyivmiskbud" (Decision on recapitalization..., 2024), and a press release on the financing mechanism for completing construction projects of PrJSC HC "Kyivmiskbud" and "Ukrbud" (The financing mechanism..., 2024). A comparative analysis of motivational systems was conducted, comparing those in Ukraine with three other countries with developed construction sectors (Germany, the United Kingdom, and the USA). Comparative analysis methods were employed for this purpose. The motivational tools used in these countries and their impact on the efficiency of construction companies were studied. The adaptation of these international standards to the specific conditions of each country was examined. Based on this analysis, an algorithm was developed to stimulate high productivity in the Ukrainian construction sector. This algorithm included a system of financial and non-financial incentives, professional training and development, and improvements to corporate culture. The algorithm was adapted for the analysed companies, taking into account their size, structure, staffing needs, and specific work processes.

RESULTS

The role, methods, and factors of staff motivation in construction

Motivation is an internal process that drives a person to action, to achieve specific goals, and to satisfy their needs. It encompasses various factors that can be both external (e.g., financial rewards, and social recognition) and internal (a sense of self-fulfilment, personal beliefs, and interest in the work). Motivation is a crucial factor in ensuring high productivity, effective teamwork, and the achievement of organisational goals, especially in construction, where tasks are often complex and require maximum professionalism. In construction companies, employee motivation plays a key role in ensuring the successful completion of projects. This is because success depends on the direct work of many individuals, from the organisation of processes to the execution of technical tasks. If motivation is absent or insufficient, it can lead to decreased productivity, an increase in errors, delays in work completion, and consequently, financial losses and a decrease in the company's competitiveness.

Effective motivation allows employees to feel valued, increases their engagement, and reduces staff turnover. This is particularly important in construction companies, where frequent employee turnover can lead to additional costs for training new staff and a decline in the quality of work performed. If employees are interested in their work and derive satisfaction from completing their tasks, they are willing to put more effort into achieving results. Various methods exist for motivating employees in construction companies. One of the most common is the use of financial incentives: bonuses, pay rises, and performance-based payments. These methods are directly linked to the achievement of specific results and are often used to encourage the completion of urgent tasks or the attainment of defined goals. However, while financial rewards can be effective in the short term, they are not always capable of providing longterm motivation. This is because employees may become accustomed to a certain level of financial payment and begin to take it for granted, which reduces their incentive for even greater achievements.

Opportunities for professional development are also an important motivating factor. Training programs, workshops, and advanced training courses not only contribute to the development of employee skills but also to their loyalty to the company. If an employee sees that the company is investing in their development, it motivates them to stay with the company and demonstrate a high level of productivity. This is particularly important in construction companies, as the rapid development of new technologies and standards requires continuous learning and improvement from employees.

Creating a system for employee participation in management is also an important motivating factor in construction companies. Including employees in decision-making processes, discussions about work processes, or participation in corporate initiatives allows employees to feel valued and recognise the importance of their contribution to the overall result. This approach helps to increase employee engagement and improve their attitude towards work. Employee motivation in construction companies is a crucial element for achieving high performance. It can be both financial and non-financial, and it depends on the company's needs, the level of employee development, and specific working conditions. The correct combination of various motivational strategies allows companies to maintain a high level of productivity, reduce staff turnover, and ensure the successful completion of projects.

Analysis of motivation strategies in Ukrainian construction companies

LLC "PC Regional Construction Company" operates actively in the Ukrainian construction market, implementing both commercial and public sector projects. The company actively introduces innovative methods of employee motivation, ensuring high productivity and efficiency at all stages of construction. LLC "PC Regional Construction Company" has implemented a system of financial incentives that includes regular bonuses for completing projects within specified deadlines, allowances for exceeding planned performance indicators, and bonuses for saving material resources. This strategy has demonstrated high effectiveness in increasing labour productivity, as employees are directly motivated to achieve specific results. For example, the regular payment of bonuses for the quality completion of projects has motivated over 80% of employees to exceed their work targets. In addition, qualification allowances have helped to attract more experienced employees, which has positively impacted the overall efficiency of the company.

LLC "PC Regional Construction Company" also implements a strategy of involving employees in the managerial decision-making process. Employees regularly participate in project development and submit proposals for optimising work processes. Such mechanisms increase the level of trust between management and staff, which contributes to a better understanding of company goals and enhances employee productivity. Research has shown that over 60% of employees who participated in such programs reported an increase in satisfaction with working conditions.

LLC "Interbud" also occupies an important position in the Ukrainian construction market and is actively developing, and completing major infrastructure projects, including the construction of police offices. At the same time, the company continues to maintain a high level of motivation among employees through a system of bonuses, opportunities for professional development, and comfortable working conditions, which contributes to maintaining work efficiency and improving the quality of services provided. LLC "Interbud" actively develops a system of professional training for its employees, offering advanced training courses in modern construction technologies. The implementation of a continuous learning program has allowed employees not only to update their knowledge but also to feel supported by their employers. For example, about 70% of employees noted that participation in training programs increased their job satisfaction. At the same time, the company notes that this contributes to long-term staff loyalty, as such initiatives strengthen the feeling of stability and career prospects.

PrJSC HC "Kyivmiskbud", one of the largest construction companies in Ukraine, is also facing the economic challenges confronting the construction industry. In 2024, the Kyiv City Council supported a decision to increase the company's authorised capital by 2.56 billion UAH to stabilise its financial position (Moroz, 2024). PrJSC HC "Kyivmiskbud" implements non-financial forms of incentives, including recognition of employee achievements, organisation of corporate events, and public praise. For example, employees who achieve high-performance results are recognised at annual staff meetings. This increases employee engagement, fosters a cohesive team, and improves morale within the company. In addition, employee involvement in such initiatives contributes to their long-term loyalty and reduces staff turnover. Specifically, for PrJSC HC "Kyivmiskbud", the financial incentive system is implemented through bonuses for plan completion. Productivity is assessed by the number of completed projects and adherence to work deadlines.

A significant problem identified was the lack of professional training and advanced training programs. At PrJSC HC "Kyivmiskbud", employees reported that only a small portion of the staff had access to specialised training or educational programs. This led to professional burnout and job dissatisfaction among employees. The absence of regular feedback mechanisms was also a common issue. However, at LLC "Interbud", although a staff training system was in place, employees rarely had the opportunity to express their suggestions for improving work processes or working conditions. This reduced employee engagement and created barriers to communication between management and staff. Flexible bonus systems that consider the individual contributions of employees can significantly increase motivation levels. Organising internal training sessions, advanced training courses, and internship programs are effective motivational tools. The implementation of an individual bonus program for the early completion of projects at PrJSC HC "Kyivmiskbud" led to an increase in labour productivity, improved work quality, and a rise in employee satisfaction.

LLC "PC Regional Construction Company" has introduced regular training sessions for staff, particularly in the use of the latest construction technologies. Companies like LLC "Interbud" and others can improve employee motivation through the regular recognition of their achievements, the organisation of corporate events, and the creation of a favourable working environment. Such changes will help to strengthen employee trust in management and increase their lovalty to the company. Regular meetings between management and employees, as well as the creation of platforms for exchanging ideas, can contribute to improving work processes. For example, PrJSC HC "Kyivmiskbud" plans to organise quarterly discussions to gather suggestions from staff. LLC "Interbud" regularly holds meetings with employees to discuss project outcomes and improve work processes, which contributes to increased productivity and team efficiency. LLC "PC Regional Construction Company" has created an online platform for exchanging ideas between employees from different departments, allowing for the implementation of innovative solutions and improved teamwork.

Creating an effective employee motivation system for construction companies is a complex but necessary task to ensure their competitiveness. The use of financial and non-financial incentives, the development of professional programs, and the implementation of feedback mechanisms can significantly improve the situation. The implementation of these opportunities in companies such as LLC "PC Regional Construction Company", LLC "Interbud", and PrJSC HC "Kyivmiskbud" can serve as an example for other enterprises in the industry. A distinctive feature of LLC "PC Regional Construction Company", LLC "Interbud", and Pr-JSC HC "Kyivmiskbud" is their ability to adapt to changes in the market and effectively implement innovative solutions in their operations. These enterprises adhere to the principles of energy-efficient construction and focus on customer needs even in times of crisis. Their experience in developing new business areas, optimising processes, and implementing socially responsible projects demonstrates how existing opportunities can be successfully used to achieve competitive advantages. This implementation can serve as a useful example for other companies in the construction industry, contributing to increasing their resilience to external challenges and the implementation of effective management and production process organisation practices. It is important to consider in more detail the motivational strategies used by the aforementioned companies in Ukraine (Table 1).

Strategy	Description	Effectiveness criteria	Analysis results	
Financial incentives	Use of financial rewards such as bonuses, pay rises, and performance-based payments	Effectiveness of financial rewards, dependence of motivation on the size of the reward, impact on satisfaction	Increase productivity in the short term, especially for tasks with clear goals. Loyalty depends on the consistency and size of the reward Improves employee competence and engagement. Long-term loyalty depends on real career growth prospects. Requires financial and time investments	
Professional development	Providing opportunities for training, career growth, participation in workshops and courses	Level of employee participation, increase in professional competence, impact on career prospects		

Table 1. Types of motivational strategies in Ukraine

Strategy	Description	Effectiveness criteria	Analysis results		
Nonfinancial incentives	Recognition of achievements, organisation of teambuilding activities, favourable environment for personal development	Level of satisfaction with management support, corporate culture, social responsibility	Stimulates a positive atmosphere and team spirit. Effective in the absence of significant financial resources. Impact on productivity is indirect, through motivation		
Participation in management	* making, and suggestions for		Promotes a sense of importance among employees, and improves mutual understanding between management and staff. Impact on productivity depends on the effectiveness of idea implementation		

Table 1, Continued

Source: created by the author

The use of effective motivational strategies in personnel management is a critical aspect that directly impacts employee productivity, satisfaction, and loyalty to the company. Various incentive strategies can significantly improve business performance by fostering a positive work environment, stimulating the development and growth of employee professionalism, and ensuring a harmonious balance of personal and corporate interests. However, to further refine these strategies, it is worth evaluating the impact of bonuses on different categories of employees: for department managers, this could be the percentage of tasks completed relative to the total volume, and for fitters, the number of installed structures.

Recognition of achievements and the support of corporate culture are also important motivational factors. LLC "PC Regional Construction Company" implements a similar system of financial incentives, but the main difference is that bonuses are awarded for the quality of work performed. Professional development in the company is focused on improving the skills of technical staff, which allows for increased productivity after training. Recognition of achievements is also actively used through awards at corporate events, which enhances team spirit and motivation. Therefore, the effectiveness of motivational strategies in these companies can be measured through productivity indicators, employee satisfaction levels, and changes in staff turnover after the application of specific incentives. Defining these indicators helps to more accurately assess the impact of each strategy on the performance of construction companies.

Investments made by construction companies often relate to various aspects, such as equipment modernisation, the introduction of new technologies, staff development, and infrastructure improvement. For example, LLC "PC Regional Construction Company" invests in the purchase of high-quality building materials and equipment, and in the implementation of automated construction process management systems. The volume of investments in the purchase of building materials and equipment has increased significantly in recent years, which allows companies to improve the efficiency and quality of work performed. In addition, significant funds are directed towards the implementation of automated construction process management systems, which optimise operating costs and facilitate project execution control.

To analyse the strategy of participation in management, it is necessary to evaluate several key indicators, including the effectiveness of achieving desired results, the level of employee engagement, satisfaction with working conditions, and the impact on long-term employee loyalty. The effectiveness of increasing labour productivity can be assessed by comparing performance indicators before and after the implementation of the strategy. The level of employee engagement can be assessed through an engagement index, which is determined by the number of employees who actively participate in decision-making, as well as those who have a high level of motivation. Satisfaction with working conditions is assessed through surveys where employees rate their work conditions on a scale of 1 to 5. If the average satisfaction rating for working conditions is 4.2, this indicates a high level of satisfaction among employees, which is a positive result for the company. The impact on long-term employee loyalty can be assessed through a loyalty index, which is measured by the number of employees who plan to stay with the company for an extended period. If 80% of employees plan to remain with the company for several years, this indicates a high level of loyalty to the company, which is an important factor for the stability and development of the organisation in the future.

Comparison of motivational systems in different countries

To create an effective algorithm for stimulating high labour productivity in the Ukrainian construction industry, a comparative analysis of motivational systems was conducted in three countries with developed construction sectors: Germany, the United Kingdom, and the USA (Table 2). The focus was on the motivational tools used in these countries and their impact on the efficiency of construction companies. Among the mechanisms studied, particular attention was paid to flexible bonus systems, professional development programs, training, feedback, gamification, corporate volunteering, electronic platforms for task management, performance evaluation systems, and programs for employee health and well-being.

Country	Motivational tools	Results		
Germany	Flexible bonus systems, professional development programs, feedback systems, corporate volunteering	Increased productivity, minimised staff turnover, creation of a favourable environment		
United Kingdom	Gamification, electronic platforms, health support programs, modern technology training	Employee engagement, process transparency, job satisfaction		
USA	Performance evaluation systems, flexible bonuses, corporate volunteering, health support programs	High motivation, performance, and development of social responsibility		
Ukraine	The motivation of companies is primarily based on wages and bonuses, while training programs and gamification are only beginning to gain popularity. Corporate volunteering and psychological support programs for employees, which are observed in other analysed countries, are insufficiently implemented	Increased productivity, creation of a favourable working environment, employee loyalty		

Table 2. Comparative analysis of motivational systems

Source: compiled by the author based on O. Pavelko *et al.* (2023), Z. Mustapha *et al.* (2024), Motivation and leadership practices around the world research paper (2024)

In Germany, motivational systems are characterised by clear structure and discipline. The main tools are flexible bonus systems, which provide bonuses to employees for achieving key performance indicators, such as completing projects on time or reducing costs. Flexible working arrangements in Germany are generally characterised by a clearer balance between professional and personal life, where employees have significant freedom in choosing their working hours and place of work, promoting their greater independence and autonomy. Construction companies in the country typically set fixed working hours and workplaces for their employees. However, some companies may offer flexible working conditions, including the ability to choose working hours or place of work, depending on the specifics of the project and business needs. For example, the report by International Labour Organization (2013) stated that flexible working conditions can be implemented to increase employee efficiency and engagement. However, such flexible working conditions are not standard practice in German construction and may be limited by certain conditions or projects. In general, most construction companies in Germany adhere to traditional working hours and workplaces, which align with industry requirements and legislation. In Ukraine, despite progress, work flexibility is often limited by corporate culture and traditions, which can lead to less flexibility in organising work time and place.

Professional development programs play a significant role, including training in energyefficient construction methods and the use of digital technologies such as BIM. A feedback system helps management to constantly interact with employees, discussing their achievements and future prospects. In Germany, the feedback system in construction companies often includes regular employee surveys, interviews, and meetings with management to discuss work efficiency and corporate culture. Additionally, many companies use feedback tools through specialised platforms or anonymous channels so that employees can express their opinions and suggestions without fear of being identified. This promotes transparency and interaction between employees and management, improving motivation and work efficiency. In Germany, many construction companies use specialised platforms or anonymous channels to collect feedback from employees. However, this process is often accompanied by bureaucratic barriers that can slow down the efficiency of collecting and processing information.

Corporate volunteering contributes to team cohesion and the development of social responsibility. Through such initiatives, German companies achieve high productivity, minimise staff turnover, and create comfortable working conditions. Corporate volunteering in Germany is gaining popularity as companies recognise its positive impact on labour productivity. Involving employees in social initiatives helps to increase their engagement and job satisfaction. Engaging employees in volunteer programs can increase their motivation and effectiveness, as they feel a greater sense of belonging to the company's social initiatives. Such activities contribute to the development of corporate culture and strengthen team spirit among employees. The implementation of corporate volunteering programs in Germany is part of a broader corporate social responsibility strategy, which includes supporting local communities and promoting sustainable development. These initiatives help companies not only improve their image but also achieve high levels of productivity through employee engagement and motivation.

Corporate volunteering in Ukraine is not as widespread as in many Western countries, particularly the USA or the United Kingdom. Reasons for this include the absence of a tradition of corporate social responsibility, the underdevelopment of volunteer programs in companies, and often limited resources for implementing such initiatives. Many companies, especially in the construction industry, focus on short-term economic results rather than social projects, which may reduce interest in developing corporate volunteering. However, with the development of corporate social responsibility and the integration of such initiatives into the strategic goals of companies, the situation may change.

In addition to bonuses, Germany employs professional development programs, training, and corporate volunteering, which ensures a high level of employee engagement and motivation through opportunities for the development of new projects and the study of cutting-edge technologies. In the USA, gamification methods, loyalty programs, bonuses for achieving results, and the provision of flexible working conditions and insurance are widely used to motivate employees (All you need..., 2022). Gamification in the construction industry in the USA includes the integration of game elements to motivate employees to complete tasks on time and with high quality. Specifically, it involves integrating game elements such as points, leaderboards, and achievements to motivate employees to complete tasks on time and with high quality. These tools allow for healthy competition and increase employee engagement, improving their productivity and efficiency on projects.

In the United Kingdom, the emphasis is on innovation and digital technologies. However, gamification is also common and is implemented through the integration of game elements into project management processes and the enhancement of labour productivity. In construction companies, applications such as BIM 360 may be used, which allow for the integration of gamified tasks where employees receive points and rewards for completing project stages or adhering to schedules. The mechanism of influence on motivation consists of increasing employee engagement by creating competition, where everyone can "compete" for status or bonuses, which positively affects their interest in work and final results (Gamification in construction, n.d.). Also, in the United Kingdom, an important aspect is the support of employee health through medical insurance, and the provision of corporate benefits such as sports club memberships. Electronic platforms for task management increase transparency and simplify communication between employees and management. These platforms include paid and free resources. For example, Trello and Asana are paid online project management platforms that allow for task management and real-time progress monitoring. On the other hand, Google Docs, Google Sheets, and other similar tools are free software that can also be used for task planning, reporting, and realtime collaboration.

Significant attention is paid to health support, including psychological assistance programs, access to medical services, and fitness centres. In the United Kingdom, some construction companies provide annual gym memberships to their employees as part of a well-being program. Most companies also provide mandatory employee insurance in case of accidents. Regarding psychological assistance programs, many companies in the USA offer access to employee support services, including consultations with psychologists, mental health support, and stress management programs are also actively implemented, including leadership and modern construction technology training. These tools allow United Kingdom companies to ensure employee engagement and satisfaction.

Motivational systems in the USA are focused on performance and individualised approaches. The main mechanisms are performance evaluation systems, which allow for a clear definition of each employee's contribution. Flexible bonus systems stimulate both individual and team achievements. Corporate volunteering is used to develop social responsibility, and health support programs cover mental health, stress reduction, and sports activities. Gamification promotes employee engagement by creating friendly competition. Such systems allow American companies to maintain a high level of motivation and productivity.

Gamification in the USA and the United Kingdom shares similarities, as both countries actively use it in the education and business sectors to increase engagement and motivation. However, in the USA, gamification is more focused on technological innovation and international platforms, such as mobile apps and online games, where incentives often include competitions and rewards, linking participants to dynamic processes and outcomes. In the United Kingdom, while gamification is also applied, more attention is paid to its use in educational programs and organisations to support teamwork, particularly through learning platforms and challenges, where not only individual motivation but also team collaboration is important.

Corporate volunteering in the USA and Germany also has its own characteristics. In the USA, corporate volunteering is an important element of corporate culture, often supported at the level of large companies that create programs for employees that promote social responsibility through active participation in volunteer projects. In Germany, corporate volunteering is more focused on local initiatives, and even at the legislative level, there are programs that support volunteering among employees by encouraging their participation in community projects. German companies place more emphasis on corporate social responsibility through long-term volunteer projects that include ethical and social goals, while in the USA, much of volunteering is seen as a way to enhance image and interact with the public. The basis of motivation in Ukrainian companies consists of wages and bonuses, while training programs and gamification are only beginning to gain popularity. Corporate volunteering and psychological support programs for employees, which are observed in other analysed countries, are insufficiently implemented. For Ukrainian construction companies, organising training and educational programs is an important part of the staff development strategy, increasing their motivation and productivity.

One possible training option is a project management training course in construction. Training topics may include the fundamentals of project management, the Agile methodology, and the use of project management software such as Asana and Trello (What is Agile..., 2024). Such training can last 24 academic hours. Evaluation of results is carried out through knowledge testing after training, assessment of the ability to plan and implement a project, and analysis of real-world case studies. This training has a positive impact on employee productivity and motivation, increasing project execution efficiency, improving work process organisation, and reducing time costs.

Another important area is training in the implementation of BIM technologies in construction. It covers an introduction to BIM, the benefits of using BIM in construction and working with software such as Revit and AutoCAD. The duration of the training can be 30 academic hours. Evaluation of results includes practical work with BIM systems and the completion of a project using them. The impact of this training on productivity and motivation is expressed in improved project accuracy, reduced errors, and improved coordination between different stages of construction, which positively affects the final results.

In addition, safety training at construction sites is an essential training area. It covers safety standards, rules of conduct at construction sites, and first aid in emergency situations. This training is important for reducing injuries and accidents at construction sites, which directly affects employee motivation by creating a safe working environment. In Ukraine, companies, including PrJSC HC "Kyivmiskbud", are actively implementing flexible bonus systems, where bonuses depend on the results of completed projects and their completion deadlines. Professional development programs, which contribute to improving employee qualifications and adapting to new technologies, play a crucial role. Feedback systems allow for the effective adjustment of motivation strategies in real time. Overall, the research has shown that the application of international standards and innovative motivational tools in construction companies in different countries allows for the achievement of high work efficiency, increases employee engagement, and promotes the sustainable development of the industry.

Mechanism for enhancing staff motivation in Ukrainian construction companies

A system of financial and non-financial incentives, which includes a combination of both. Financial incentives involve a flexible bonus system depending on the completion of individual or team tasks, such as completing a project by a specified deadline or reducing material costs; allowances for advanced qualifications, particularly for employees who have successfully completed courses in modern construction technologies; and the introduction of a program for partial reimbursement of medical insurance or transportation costs. Non-financial incentives include recognising employee achievements through monthly "Best Employee" nominations, public announcements of appreciation, or the organisation of events to celebrate professional successes. A system of additional days off for employees with high productivity indicators has also been developed.

In construction companies, the motivation and bonus systems are adapted to different categories of employees, considering their functional responsibilities and level of qualification. For directors and site managers, individual bonuses are established for achieving strategic goals, such as completing large projects within established deadlines and with budget savings. Bonuses for this category can be significant, depending on the tasks performed and the results achieved. For department heads, incentives are developed for managerial achievements, such as process optimisation and ensuring compliance with safety standards at sites, which can contribute to salary increases. For generally skilled workers, bonuses are awarded for individual achievements, such as completing tasks within set deadlines or high-quality work. For unskilled workers, bonuses may be small and depend on participation in training programs or improved productivity.

Employees whose duties involve physical exertion are provided with additional payments for performing hazardous or heavy work. Office staff bonuses often include achievements in project organisation, communication, or document management efficiency. The bonus system provides for salary increases for completing individual tasks, such as accurate adherence to schedules, minimising errors, or achieving defined standards. Team tasks, such as the successful completion of projects within deadlines, can stimulate a general bonus for the entire team. Regarding advanced qualifications, for employees who complete advanced training courses or certification, the salary may be increased. If it concerns specialised and highly skilled courses, such as BIM technologies or project management, the additional payment may be significant. Reimbursement for travel to remote sites is usually provided through compensation for transportation costs or additional payments, which may form part of the base salary. If sites are located in hard-to-reach areas, the compensation may be significantly higher.

Regarding the monthly "Best Employee" nomination, this can be organised through corporate meetings or internal team meetings. Nominations are often accompanied by the presentation of certificates, awards, or additional bonuses, which motivates employees to achieve high results. Appreciations can be announced at general company meetings or during festive corporate events, creating an atmosphere of gratitude and support within the team. Additional days off can be granted according to the work schedule or the specifics of the sites. For example, if employees work in remote areas, additional days off may be granted for difficult working conditions. This can be stipulated in the contract or through the company's internal rules system.

In the process of employee motivation in construction, it is important to clearly define the responsibilities of each individual, starting with the evaluation of work performance. For workers performing physically demanding tasks, such as fitters driving piles, establish specific requirements for the volume of work performed, for example, the number of piles to be installed per shift. Then, evaluate the effectiveness of their task performance, in particular, compare the planned performance with actual indicators. After that, determine the financial reward: for each additional task performed or overtime work, employees can receive bonuses or bonuses, which stimulate them to more productive work.

Specifically, internal training sessions are organised to teach the latest construction methods, such as working with energy-efficient materials or using BIM technologies. These courses are relevant for design engineers, site managers, architects, project managers, and economists. To conduct them, it is advisable to involve lecturers with practical experience, including representatives of leading construction companies, consulting engineers, and technical university lecturers. Courses should be organised in several stages: first, theoretical lectures where participants can learn the basic principles of new technologies, followed by practical sessions where participants will model real projects using BIM technologies and analyse the energy efficiency of buildings. At the end of the courses, it is necessary to conduct testing to check the level of material absorption and issue certificates to participants.

In parallel with the courses, it is worth organising workshops for construction company managers, as the success of innovation implementation depends on their understanding of modern approaches. Workshops can cover topics related to energy efficiency, digital technologies in project management, and the use of BIM platforms to optimise construction processes. Topics such as: "Energy Efficiency in Construction: Modern Materials and Solutions" (8 academic hours), "BIM Technologies: Optimising Design and Construction" (10 academic hours), and "Digital Technologies in Construction Project Management" (6 academic hours) can be offered. Workshops can be held in company conference rooms or technical universities where the necessary infrastructure for practical sessions is available.

Additionally, external experts are involved in conducting workshops on project management or management in construction, and internship programs are implemented in foreign companies with subsequent knowledge sharing. These activities contribute not only to improving employee qualifications but also to strengthening their loyalty to the company, as they receive opportunities for professional growth (Mantur-Chubata *et al.*, 2022). An important aspect is the improvement of corporate culture by creating a favourable internal environment that stimulates employee motivation. It is proposed to regularly hold team-building activities, such as corporate meetings, sports competitions, or family days at construction sites. For example, organising a volleyball tournament between teams helped to unite the workforce. Other measures included establishing an open communication system between management and ordinary employees through regular feedback, discussions of working conditions and suggestions for improvement, and creating conditions for social support of employees, particularly through mutual aid funds to address financial or social problems.

Communication between construction company employees can be maintained through groups in messaging applications such as Telegram, where important issues are regularly discussed and operational problems are resolved. Specialised project management applications such as Trello or Slack, where employees can exchange information and report on completed work, can also be used. Regarding social support, aid funds are usually created by the company or employee initiative groups and are funded through contributions from the employees themselves or partially by the company. In some cases, such funds may be supported through company lending, particularly through partnerships with banks or other financial institutions (Fig. 1).

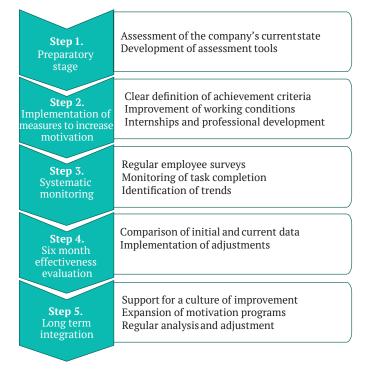


Figure 1. Algorithm for stimulating high productivity

Source: compiled by the author

The developed algorithm involved systematic monitoring of the effectiveness of motivational measures using indicators such as employee satisfaction ratings, the number of tasks completed within specified deadlines, and staff turnover rates. Six months after the mechanism's implementation, it was planned to evaluate these changes and analyse production data. In addition, the algorithm for monitoring employee satisfaction with working conditions within the theoretical study included analysis of scientific literature, available case studies, and reports on similar topics. The monitoring frequency was determined by analysing available data for a year or several years to identify long-term trends.

Types of monitoring covered the analysis of theoretical models of job satisfaction, metaanalysis of previous empirical research results, and systematisation of data from various industries. Methods included qualitative analysis of scientific articles, comparison of key concepts within selected theories, and consideration of existing satisfaction rating scales such as the job satisfaction survey or the Minnesota satisfaction questionnaire. Satisfaction was measured by interpreting the results collected in previous studies and adapting approaches to model the impact of working conditions on overall employee productivity and loyalty.

To improve the motivation of construction company employees, it is necessary to apply a mechanism that considers individual and team tasks, clearly defines achievement criteria, and offers appropriate rewards. For example, providing employees with the opportunity to undertake internships at international companies or other major sites enhances their professionalism and brings new approaches and ideas to the company. In the Ukrainian construction industry, internship programs exist that provide employees with the opportunity to increase their professionalism and implement new approaches within the company. For example, CEMARK offers internships for engineers, economists, accountants, and other specialists. Requirements for candidates include English language proficiency at an Intermediate level or higher, willingness to relocate within Ukraine, and the ability to work in a team (CEMARK internship programme, n.d.). Selection takes place in two stages: an online interview with an HR manager and a direct supervisor. Also, the international company GIZ offers a program for specialists in the construction industry, which includes online training and a 3-week business session in Germany (Offers from the partnering..., 2024). The program is aimed at developing skills related to construction, architecture, and the implementation of innovative solutions, particularly green technologies, in the process of restoring Ukraine's infrastructure.

Companies arrange internships through announcements on their official websites, social media, and collaborations with educational institutions. They develop internship programs that include theoretical training and practical sessions under the guidance of experienced mentors. After completing the internship, an evaluation of the results is conducted, and the best interns may be invited to permanent employment with the company. Such initiatives contribute to improving employee qualifications and introducing new ideas into the construction process, which positively impacts the development of the industry in Ukraine.

Regular surveys, questionnaires, and discussions of workplace issues allow management not only to understand the needs of their employees but also to identify problems that may negatively impact productivity promptly. This approach allows for the creation of an atmosphere of trust and mutual respect between employees and management, which positively affects productivity. Regular surveys, questionnaires, and discussions of workplace issues should take place at least once every six months to allow management to promptly identify employee needs and address issues that may affect productivity.

Furthermore, in the construction industry in Ukraine, the ability for employees to independently plan their working hours could be a significant change in approaches to work organisation, particularly at construction sites. In some companies, especially smaller ones, employees often remain on-site until the end of the working day, even if everything planned for the day has been completed, due to tradition or management requirements that they are present until the end of working hours. This can lead to a loss of motivation and a decrease in productivity, as employees lack the flexibility and opportunity to finish the day when the work is done. In larger companies, where there is a clearer organisation of processes, there is sometimes more freedom in planning working hours, but this depends on specific conditions and the construction site.

To change this situation and improve motivation, companies can implement a system in which employees have a clear understanding of the scope of work for the day and can finish work after completing all tasks. It is important to maintain a balance and prevent a decrease in the quality of work, so a system for monitoring completed tasks, for example, through specialised programs or reports, may be useful for such companies. In addition, in large companies, a flexible work schedule can be applied, which allows employees to finish work, when possible, which positively affects their motivation and satisfaction. In small companies, this approach can also be useful but will require significant changes in internal organisation and management culture.

DISCUSSION

The conducted research, aimed at creating an effective staff motivation system for construction companies, has demonstrated the significance of both financial and non-financial incentives in ensuring high labour productivity. A motivation system that combined financial and non-financial factors contributed to the development and maintenance of effective work. Financial incentives, including salaries, bonuses, and performance-based rewards, remained the foundation of motivation. At the same time, non-financial incentives, such as social recognition, professional development opportunities, and participation in important projects, became particularly significant as they created additional motivational factors that increased employee loyalty and contributed to the growth of their productivity.

A significant portion of research confirmed that a comprehensive approach to employee motivation, which considers financial incentives, professional growth, and social recognition, contributes to achieving high efficiency. For example, N. Saloid (2021) emphasised the importance of a harmonious combination of financial and non-financial factors in Ukrainian construction companies, which fully aligned with current findings. E. Soliman & H. Altabtai (2021) and R. Taiwo et al. (2022) studied motivation systems in construction companies and noted that employees responded better to individualised approaches to motivation that considered cultural characteristics. Similarly, this research showed that adapting motivational practices to national conditions is an important factor in increasing productivity. S. Ivanytska et al. (2018) studied the implementation of innovative remuneration systems for construction companies in Ukraine. They emphasised the need to create a comprehensive motivational system that would combine both financial and non-financial incentive tools.

The study by R. Skrynkovskyy et al. (2022) explored the role of construction companies in the reconstruction of Ukraine's infrastructure in wartime. The authors emphasised that employees involved in socially significant projects demonstrated increased motivation. Similar results were obtained in current research, where socially significant tasks served as an important motivational factor. O. Redkin et al. (2019) and V. Shvedun & L. Hren (2020) focused on the importance of innovation policy and state support for motivating construction industry employees. Similar conclusions were made by N.V. Plys (2024), who studied the involvement of construction companies in postwar reconstruction projects in Ukraine, which has a significant impact on increasing employee loyalty. Despite the general consistency of conclusions about the importance of a comprehensive approach to employee motivation, certain differences between the results of the conducted study and the articles of other authors were identified.

In the study by K. Saddiya & F.A. Aziz (2022), which concerns motivation systems in construction companies in Saudi Arabia, it was found that financial rewards and fear of job loss contribute more to job satisfaction than they directly affect employee productivity. Data analysis, conducted using the Statistical Package for the Social Sciences 21, showed that to increase employee productivity, managers should use methods such as recognition, praise, and public compliments. These non-financial tools proved effective in stimulating employees to productive activity. At the same time, this study, conducted on the example of Ukrainian construction companies, showed that in conditions of economic instability and constant challenges, such as war or post-war reconstruction, the importance of non-financial incentives significantly increases. Social recognition, involvement in projects that have national or public significance, and the opportunity to demonstrate their professional qualities influenced employee motivation even more strongly than financial incentives.

A similar discrepancy was observed in the research of M.B. Zailani et al. (2020), who studied motivational factors in construction companies in Nigeria. In this study, the main emphasis was also placed on financial factors such as competitive salaries, favourable working conditions, and financial rewards for achieving high results. The authors concluded that non-financial factors, such as job security, reward and recognition, a sense of belonging, the opportunity to develop skills, and challenging work, had a significantly smaller impact on labour productivity. In contrast, this study noted that the effectiveness of Ukrainian construction companies largely depended on the ability of management to integrate financial and non-financial incentives into a unified motivation system. It is worth noting that these discrepancies can be explained by cultural, economic, and social differences between countries.

In Saudi Arabia and Nigeria, the level of employee well-being is often determined by financial indicators, which makes financial incentives dominant. At the same time, in Ukraine, especially in the context of an economic crisis, employees may seek additional motivation in forms that go beyond financial rewards. In particular, a sense of belonging to important social projects, the possibility of professional and career growth, and the creation of a favourable corporate culture play a crucial role. These differences highlighted the need to consider national and cultural characteristics when forming motivational strategies for construction companies. At the same time, they confirmed that there is no universal motivation system, and each model requires adaptation to the conditions of a specific market. The research showed that the implementation of innovative approaches in staff motivation systems has a significant impact on the labour efficiency of construction companies. In particular, the use of digital platforms for managing task execution and exchanging ideas allows for ensuring process transparency, increasing objectivity in the calculation of rewards, and creating additional incentives for employees.

Another aspect of innovative motivation was considered in the articles of Y.V. Pynda (2020), L. Shumak (2020), and O. Taranych & A. Vyshnivska (2023), which explored the peculiarities of the engineering labour market in construction in Ukraine and abroad. In particular, L. Shumak (2020) analysed the features of engineering work in the construction industry, focusing on the impact of digital technologies on work organisation. The researcher emphasised that the use of digital project management tools, such as BIM systems, significantly increases the efficiency of engineers' work. The researcher also stressed the need to integrate modern motivational mechanisms, including financial bonuses for the use of innovative solutions. Y.V. Pynda (2020) explored the international experience of organising the work of engineers in construction, focusing on flexible work schedules and the balance between professional and personal life. The author noted that in countries with a developed construction sector, individualised approaches to employee motivation are widely used, considering their professional achievements. In addition, Y.V. Pynda (2020) drew attention to the prospects of implementing gamification systems to increase team productivity.

O. Taranych & A. Vyshnivska (2023) focused on researching modern requirements for the motivation of construction engineers in Ukraine, emphasising the importance of adapting to international standards. In their research, they proposed the introduction of new forms of motivation, such as recognising professional achievements through rating systems and organising educational training. The researchers also noted that the further development of engineering work depends on creating a comfortable working environment and opportunities for professional development. The current study partially confirmed these findings, emphasising the importance of creating conditions for continuous learning, professional development, and participation in largescale infrastructure projects that provide employees with the opportunity to develop professional skills and gain recognition for their achievements.

Additionally, the research results aligned with the conclusions of V. Vasiuta et al. (2021), who explored the role of "green" construction in the development of small businesses in Ukraine. The authors emphasised that participation in projects involving the implementation of environmentally friendly technologies stimulates employees to greater engagement due to a sense of belonging to socially important initiatives. The results obtained are consistent with the conclusions of this study, namely, that an effective staff motivation system should be based on a comprehensive approach. In particular, it should include both financial incentives and non-financial factors, among which innovative technologies occupy a special place. Comparing the results with the conclusions of other researchers confirmed that the proposed motivation algorithms are relevant both in a national and international context.

CONCLUSIONS

Most Ukrainian construction companies use traditional motivation methods, such as financial rewards and bonuses, which provide short-term productivity gains. However, it was found that to achieve sustainable results, it is necessary to combine these strategies with professional development, non-financial incentives, and employee involvement in decision-making processes. A comparative analysis of motivation systems in Ukraine and other countries showed that companies actively used professional development programs and flexible bonus systems, which significantly increased employee loyalty and work efficiency.

In the course of the research, the strategies of three construction companies, LLC "PC Regional Construction Company", LLC "Interbud", and PrJSC HC "Kyivmiskbud", were analysed. Key performance indicators related to the effectiveness of achieving desired results, the level of em-

ployee engagement, satisfaction with working conditions, and the impact on long-term employee loyalty to the companies were calculated and analysed. In particular, for LLC "PC Regional Construction Company", the participation in management strategy was evaluated, for LLC "Interbud", the professional development strategy, and for PrJSC HC "Kyivmiskbud", the nonfinancial incentives strategy. Each of these strategies was evaluated through established indicators, such as the growth of labour productivity, active employee participation in internal processes, the level of satisfaction with working conditions, and loyalty planning to the company.

An algorithm was constructed that allowed for the calculation of these indicators based on data on labour productivity, employee engagement, and satisfaction. A comparative analysis of motivation systems in Ukraine and other countries, particularly in Germany, the United Kingdom, and the USA, showed that these countries employed more developed approaches to staff motivation. For example, in Germany, flexible bonus systems, corporate volunteering programs, and electronic platforms for managing task execution were actively used, which allowed employees to feel their importance and involvement in the decision-making process. In the United Kingdom, the focus was on developing corporate culture and creating a favourable climate for the personal development of employees, and in the USA, gamification was actively used to improve results, which contributed to achieving high motivation and increasing the efficiency of company operations.

Based on these results, a mechanism for increasing motivation for Ukrainian construction companies was developed, which included a flexible system of financial and non-financial incentives, professional development programs, and the creation of a favourable corporate culture. It was found that the most effective are comprehensive strategies that combine financial and nonfinancial incentives, with a particular emphasis on the development of corporate culture and the professional growth of employees. The conducted research showed that for effective stimulation of productivity in construction companies in Ukraine, it is necessary to integrate innovative motivational strategies, including gamification, which will ensure long-term motivation and growth in efficiency. The limitations of the study were the small number of companies analysed in Ukraine and the limited access to accounting data for these companies. Directions for further research should focus on the impact of the following new technologies on motivational strategies: digital platforms for training and professional development, tools for automating routine tasks, virtual platforms for teamwork, chatbots for communication and employee support, and cloud services for organising remote work.

ACKNOWLEDGEMENTS

None.

• CONFLICT OF INTEREST None.

REFERENCES

- [1] Alaghbari, W., Sultan, B., & Al-Yousfi, S.Q. (2021). <u>The impact of motivation factors on performance of public construction projects in Yemen</u>. *PM World Journal*, 5(6).
- [2] All you need to know about gamification in the USA. (2022). Retrieved from <u>https://smartico.ai/blog-post/</u> gamification-in-usa.
- [3] Amoah, C., & van Niekerk, L. (2023). Workforce motivational factors in the construction industry. *Proceedings of International Structural Engineering and Construction*, 10(1). <u>doi: 10.14455/ISEC.2023.10(1).CON-22</u>.
- [4] Ansah, S.K., & Tekpe, E. (2022). Influence of employees' motivational factors on total quality management implementation in the construction industry. *Journal of Engineering Research and Reports*, 23(12), 373-382. doi: 10.9734/jerr/2022/v23i12792.
- [5] Bayır, Y., & Gundes, S. (2024). Employee motivation in the construction industry: Effects of Covid-19. A|Z ITU Journal of the Faculty of Architecture, 21(2), 241-258. doi: 10.58278/0.2024.52.
- [6] Bondarenko, D.V. (2024). Methodical approach to assessing the digitalization of construction industry enterprises. *Business Inform*, 6, 93-103. doi: 10.32983/2222-4459-2024-6-93-103.
- [7] CEMARK internship programme. (n.d.). Retrieved from https://cemark.ua/en/programa-stazhuvannya.
- [8] Decision on recapitalisation of HC PrJSC HC "Kyivmiskbud": Kyiv City Council supported the decision to increase the authorized capital by 2.56 billion UAH to stabilize the financial position of the company. (2024). Retrieved from https://interfax.com.ua/news/economic/1024372.html.
- [9] Employee assistance programs. (n.d.). Retrieved from <u>https://www.opm.gov/frequently-asked-questions/work-life-faq/employee-assistance-program-eap/what-is-an-employee-assistance-program-eap/</u>.
- [10] Gamification in construction. (n.d.). Retrieved from https://ufi.co.uk/voctech-directory/gamification-construction/.
- [11] Gibadullin, O., Melnychenko, O., & Zolotarev, V. (2024). Substantiation of the motivation of global digital nomads for their engagement in the post-war industrial recovery of Ukraine. *State Formation*, 1(35), 8-26. doi: 10.26565/1992-2337-2024-1-01.
- [12] International Labour Organization. (2013). *Labour inspection and undeclared work in the EU*. Geneva: ILO Publications.
- [13] Ivanytska, S., Galayda, T., & Tenytska, N. (2018). Personnel labor remuneration innovative systems implementation for construction companies in Ukraine. *International Journal of Engineering & Technology*, 7(3), 149-153. <u>doi: 10.14419/ ijet.v7i3.2.14393</u>.
- [14] Kubanov, R.A., Makatora, D.A., & Yashchenko, O.F. (2024). Motivational mechanism of an architectural and construction manager's activity. *Business Inform*, 8, 399-412. doi: 10.32983/2222-4459-2024-8-399-412.
- [15] Mantur-Chubata, O., Shelest, I., Danilkova, A., & Zelena, M. (2022). Employee development as an integral component of personnel management strategy. *Innovation and Sustainability*, 2(4), 71-78. doi: 10.31649/ins.2022.4.71.78.

- [16] Moroz, O. (2024). *Kyiv City Council decided to recapitalize HC PrJSC HC "Kyivmiskbud"*. Retrieved from <u>https://www.rbc.ua/rus/news/kiyivrada-priynyala-rishennya-dokapitalizuvati-1730388389.html</u>.
- [17] Motivation and leadership practices around the world research paper. (2024). Retrieved from <u>https://ivypanda.com/</u> essays/motivation-and-leadership-practices-around-the-world/.
- [18] Mustapha, Z., Akomah, B.B., Mensah, D., Wisdom, G., & Tieru, C.K. (2024). Boosting construction workers' performances through motivation: A study in Ghana. *Built Environment Journal*, 21(2), 67-77. doi: 10.24191/bej. v21i2.553.
- [19] Offers from the partnering in business with Germany program for construction managers. (2024). Retrieved from <u>https://grant.market/opp/giz-construction</u>.
- [20] Pavelko, O., Lazaryshyna, I., Knyshek, O., Farynovych, I., Skakovska, S., & Blyschyk, V. (2023). Analysis of Ukraine's construction companies profitability as a tool for achieving the SDG. *IOP Conference Series: Earth and Environmental Science*, 1269, article number 012033. doi: 10.1088/1755-1315/1269/1/012033.
- [21] Phan, P.T., Pham, C.P., Tran, N.T.Q., Le, H.T.T., Nguyen, H.T.H., & Nguyen, Q.L.H.T. (2020). Factors affecting the work motivation of the construction project manager. *Journal of Asian Finance, Economics and Business*, 7(12), 1035-1043. doi: 10.13106/jafeb.2020.vol7.no12.1035.
- [22] Plys, N.V. (2024). Public-private partnership as a tool for involving construction enterprises to participate in postwar reconstruction projects of Ukraine. *Ways to Improve Construction Efficiency*, 2(52), 14-32. doi: 10.32347/2707-501x.2023.52(2).14-31.
- [23] Pynda, Y.V. (2020). Functioning characteristics of construction companies in Ukraine under the influence of macroeconomic factors. *Revista Espacios*, 41(31), 119-126.
- [24] Redkin, O., Zlepko, O., & Pents, M. (2019). Organizational innovations in the activities of construction companies in Ukraine in the transition to world standards of management. *Academic Journal Industrial Machine Building, Civil Engineering*, 2(53), 151-156. doi: 10.26906/znp.2019.53.1906.
- [25] Saddiya, K., & Aziz, F.A. (2022). Effects of motivation parameters on employee performance in a Saudi construction company. *East African Journal of Engineering*, 5(1), 72-86. doi: 10.37284/eaje.5.1.586.
- [26] Saloid, N. (2021). Personnel management of construction companies. Ways to Improve Construction Efficiency, 2(47), 33-39. doi: 10.32347/2707-501x.2021.47(2).33-39.
- [27] Shumak, L. (2020). Engineering labour market in construction in Ukraine and abroad. *Three Seas Economic Journal*, 1(4), 159-165. doi: 10.30525/2661-5150/2020-4-23.
- [28] Shvedun, V., & Hren, L. (2020). State innovative policy of improving the investment and construction complex of Ukraine. *Public Administration and Regional Development*, 10, 1092-1105. <u>doi: 10.34132/pard2020.10.06</u>.
- [29] Skrynkovskyy, R., Tsyuh, S., Protseviat, O., Tyrkalo, Yu., & Horbonos, F. (2022). Trends and problems in the field of construction of Ukraine in the war conditions. *International Scientific Journal "Internauka"*. Series Economical Sciences, 7. doi: 10.25313/2520-2294-2022-7-8146.
- [30] Soliman, E., & Altabtai, H. (2021). Employee motivation in construction companies in Kuwait. International Journal of Construction Management, 23(10), 1665-1674. doi: 10.1080/15623599.2021.1998303.
- [31] Taiwo, R., Wang, K.C., Olanrewaju, O.I., Tariq, S., Abimbola, O.T., Mehmood, I., & Zayed, T. (2022). An analysis of employee motivation in the construction industry: The case of Hong Kong. *Engineering Proceeding*, 22(1), article number 11. doi: 10.3390/engproc2022022011.
- [32] Taranych, O., & Vyshnivska, A. (2023). The role of the motivation system in the strategic development of an enterprise. *Economy and Society*, 58, 283-290. doi: 10.32782/2524-0072/2023-58-51.
- [33] The construction of a new police office has increased in price by over UAH 37 million. (2023). Retrieved from https://ngl.media/2023/03/01/budivnytstvo-novogo-ofisu-politsiyi-podorozhchalo-na-37-mln-grn/.
- [34] The financing mechanism for the completion of the construction of Ukrbud and Kyivmiskbud facilities will be determined by the end of the year Klytchko. (2024). Retrieved from https://interfax.com.ua/news/economic/1016565. <a href="https://interfax.com.ua/news/economi
- [35] Vasiuta, V., Kryvoshei, D., & Tovstun, O. (2021). "Green" construction as a promising direction for the development of small entrepreneurship in Ukraine. *Economics and Region*, 4(83), 45-52. <u>doi: 10.26906/EiR.2021.4(83).2525</u>.
- [36] What is Agile and how to apply it in business. (2025). Retrieved from <u>https://brainrain.com.ua/uk/chto-takoe-agile-ua/</u>.
- [37] Zailani, M.B., Ibrahim, A.G., & Bahago, Y. (2020). Critical motivational factors for enhancing employee performance in construction firms based on correlation and principal component analyses. *Nigerian Journal of Technology*, 39(3), 647-653. doi: 10.4314/njt.v39i3.2.

Створення системи мотивації персоналу будівельних компаній: алгоритми стимулювання високої продуктивності

Сергій Головченко

Магістр Київський національний університет будівництва і архітектури 03037, просп. Повітряних Сил, 31, м. Київ, Україна https://orcid.org/0009-0007-8032-3377

Анотація. Метою дослідження було надати практичні рекомендації для стимулювання продуктивності персоналу будівельних компаній. Проаналізовано діяльність українських будівельних компаній, а саме Товариство з обмеженою відповідальністю «ПК Регіональна будівельна компанія», Товариство з обмеженою відповідальністю «Інтербуд», Приватне акціонерне товариство Холдингова компанія «Київміськбуд» та алгоритм підвищення мотивації даних компаній. Здійснено порівняльний аналіз мотиваційних систем в Україні та у світі на прикладі Німеччини, Великобританії, США, за результатами якого розроблено механізм підвищення мотивації персоналу для будівельних компаній в Україні. Мотивація виявилася ключовим фактором підвищення продуктивності праці. Зокрема, використання комбінованих матеріальних та нематеріальних стимулів дозволило покращити ефективність роботи. Діяльність компаній підтвердила ефективність стратегій, що сприяли підвищенню продуктивності та лояльності працівників. Товариство з обмеженою відповідальністю «ПК Регіональна будівельна компанія» досягла підвищення продуктивності праці на 15 % завдяки системі бонусів і покращенню робочих умов. В Товаристві з обмеженою відповідальністю «Інтербуд» зросла залученість працівників до 80 %, Приватне акціонерне товариство Холдингова компанія «Київміськбуд» збільшило лояльність співробітників на 70 % завдяки нематеріальним заохоченням. Важливим аспектом стало впровадження гнучких бонусних систем, що враховували індивідуальні та колективні досягнення працівників. Дослідження підтвердило, що професійне зростання, навчання та розвиток працівників сприяли не лише підвищенню їхньої кваліфікації, але й зміцненню лояльності до компанії. Нематеріальні заохочення, такі як визнання досягнень та організація командних заходів, значно підвищували моральний клімат і сприяли згуртованості колективу. Впровадження системи зворотного зв'язку та участь працівників у прийнятті рішень забезпечували більш тісний зв'язок між керівництвом та персоналом, що позитивно впливало на результативність компанії. Практичне значення роботи полягає в оптимізації мотиваційних стратегій для підвищення продуктивності та лояльності працівників будівельних компаній, що дозволить досягти високих результатів, знизити плинність кадрів і створити ефективну робочу атмосферу

Ключові слова: професійний розвиток; ефективність праці; система заохочення; стратегії в управлінні; обмін досвідом



DEVELOPMENT MANAGEMENT

UDC 658.7 DOI: 10.63341/devt/1.2025.34

Vol. 24, No. 1. 2025 🤇

Supply chain management performance and logistics among selected small and medium-sized enterprises in Sagamu Local Government Area, Ogun State, Nigeria

Olufemi Ogunkoya

PhD in Business Administration, Associate Professor Olabisi Onabanjo University Ago-Iwoye, Nigeria https://orcid.org/0000-0001-7356-5086

Oluwatobi Soremekun*

Bachelor Olabisi Onabanjo University Ago-Iwoye, Nigeria https://orcid.org/0009-0004-4877-6534

Banjo Hassan

PhD in Business Administration, Senior Lecturer Olabisi Onabanjo University Ago-Iwoye, Nigeria https://orcid.org/0000-0002-2569-6468

Omotoke Adelesi

Master Olabisi Onabanjo University Ago-Iwoye, Nigeria

Moshood Ogundele

Master Olabisi Onabanjo University Ago-Iwoye, Nigeria

Abstract. Small and medium-sized businesses in Nigeria are beginning to recognise the importance of supply chain management for economic growth, but they are still lagging behind in understanding the integrated supply chain dimensions that drive remarkable changes in business processes and yield positive outcomes for improved service quality, efficiency and cost reduction. The purpose of this study was to ascertain how supply chain management performance and logistics relate to particular small and medium-sized enterprises in Ogun State, Nigeria. The adoption of a descriptive survey methodology allowed for this. A systematic questionnaire was used to gather primary data. Both descriptive and inferential statistics were used to analyse the data that was gathered. The data were described and summarised using the descriptive analysis. The impact of the independent variable on logistics was evaluated using analysis of variance. The strategy and flexibility of the supply chain were used to gauge the effectiveness of supply chain management. The results demonstrate that logistics, as predicted by hypothesis one, has a major impact on supply chain flexibility. They also

Article's History: Received: 27.11.2024; Revised: 18.02.2025; Accepted: 25.03.2025

Suggested Citation:

Ogunkoya, O., Soremekun, O., Hassan, B., Adelesi, O., & Ogundele, M. (2025). Supply chain management performance and logistics among selected small and medium-sized enterprises in Sagamu Local Government Area, Ogun State, Nigeria. *Development Management*, 24(1), 34-41. doi: 10.63341/devt/1.2025.34.

*Corresponding author



Copyright © The Author(s). This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/)

demonstrate that logistics, as predicted by hypothesis two, has a major impact on supply chain strategy. According to the study's findings, performance evaluation is crucial for businesses in order to assess how well they are accomplishing their strategic goals, especially with regard to their supply chain and logistics operations. In order to gain a competitive edge and improve their business performance, the study suggested, among other things, that small and medium-sized enterprises embrace supply chain flexibility and make flexible, adaptable modifications to meet market demands. The study's findings will provide manufacturers, researchers, scholars, policymakers, students, and anyone else interested in operations and production management with a better understanding of the effectiveness of comprehensive supply chain and logistics management performance metrics

Keywords: distribution chain; flexibility; strategy; business performance; competitiveness

INTRODUCTION

Small and medium-sized enterprises (SMEs) are not wellversed in the principles of effective supply chain management (SCM). SMEs have greater challenges with SCM procedures than do major corporations, as they strive to handle and adapt to the growing complexity of markets, technologies and suppliers. The supplier, storage, production, distributor, retailer, and client have long been the focal points of SCM, sometimes leaving out other crucial components like quality control and logistics or traffic management. An essential component of efficient SCM is tracking the movement of both departing and incoming products. This traffic management function manages schedules and makes decisions about how and when to move, accounting for the costs of different options, legal requirements, organisational needs regarding quantities and timing, and outside variables such possible delays in movement. Ineffective logistics planning has frequently caused major issues for Nigeria's SCM.

As for SCM, scholars defined it differently. The majority of research on SCM originates from the fields of operations and logistics, with smaller contributions coming from marketing, information systems, and technology. Although SCM facilitates communication between suppliers and end users, its primary objective is to deliver the correct product at the right location at the right time. Significant paradigm shifts have occurred in SCM and logistics around the year 2021. Competitive pressure has fuelled the growing interest in SCM and logistics, which has ultimately elevated them to become a crucial component of organisational operations and strategy. It makes sense that these organisational functions now play a larger role. As noted by S.M. Shavarani et al. (2019) and A. Rejeb et al. (2020), in order to remain competitive in a business environment that is becoming more and more dynamic, companies must effectively manage their supply chain and logistics operations. C.S. Tang & L.P. Veelenturf (2019) emphasised that to deliver the right product to the right client at the right time, organisations must constantly improve their SCM and logistics systems. Historically, logistics has not been viewed as a strategic source of competitive advantage, but rather as an expensive but necessary cost driver for firms. But when new technologies have emerged, businesses have been able to take advantage of fresh opportunities and gain a competitive edge. Scholars such as H. Treiblmaier et al. (2020) and A. Rejeb et al. (2020) view that throughout the supply chain the integration of new technologies has the potential to enhance information sharing and make it easier to monitor physical items.

As noted by K. Jermsittiparsert *et al.* (2019), SMEs are enhancing their operational performance by managing

the supply chain more effectively. To maintain sustainability and competitiveness in a global setting, these companies are innovating their internal processes. The supply chain is a key element influencing how well a company performs since it comprises businesses and activities engaged in every stage of the process, from the creation of goods or services to their consumption. By strengthening the bonds between its companies to increase profitability for everybody, the supply chain reaches its peak performance. Through these strategic connections, SCM seeks to increase company performance and competitiveness. Stated differently, the secret to a successful supply chain and business is to reinforce the tactics that have been developed within it. According to R. Lee (2021), since SMEs are essential to the growth of the national economy, supply chain strategies must be introduced and implemented in order to ensure their sustainability. Nonetheless, compared to large organisations, these businesses frequently have a poorer production efficiency ratio. Globally, logistics and SCM have become significant economic drivers in the majority of countries, which boosts national economies. The purpose of this study was to examine the extent to which supply chain flexibility among a sample of SMEs in Sagamu Local Government Area, Ogun State, Nigeria, depends on logistics and to investigate the degree to which supply chain strategy within these SMEs relies on logistics. The study considered the following hypotheses. H₀₁: Logistics has no significant effect on supply chain flexibility. H₀₂: Logistics has no significant effect on supply chain strategy.

MATERIALS AND METHODS

For this research project, a descriptive survey research design was chosen and was conducted within the period of year 2021 to year 2023. Through primary data collection, a descriptive survey research approach was employed to gather information from the study population regarding the current status of the phenomenon. SMEs with top, middle and lower-level cadres that operate in Sagamu Local Government Areas in Ogun State make up the study's target population. Thus, the 184 respondents who are the owners/managers and supervisors of SMEs in Sagamu Local Government Areas, Ogun State, comprise the population of study for this research project. Using T. Yamane (1967) methodology, a sample size of 126 respondents was chosen for this research project from the 184 respondents in the study region. 126 is provided as the sample size. Frequency counts and the straightforward percentage approach of analysis were used to examine the respondents' demographic data (Table 1).

Characteristics	Classification	Percentage
Gender	Male	44.2
Gender	Female	55.8
	Below 25 years	25.0
	26-35 years	45.8
Age	36-45 years	17.5
	46-55 years	9.2
	Above 56 years	2.5
	Single	50.0
Marital status	Married	43.3
	Other	6.7
	WAEC	16.7
	NCE/OND/HND	28.3
Educational qualification	Bachelor of Science/Bachelor of Arts/Bachelor of Education	34.2
_	Master of Sciences/Master of Business Administration/Master of Education	18.3
	Others	2.5
	0-5 years	39.2
Toursell of country	5-10 years	44.2
Length of service	11-20 years	13.3
	Above 20 years	3.3

Table 1. Demographic characteristics of respondents

Note: WAEC – West African Examinations Council's certificate; NCE – Nigeria certificate in education; OND – ordinary national diploma; HND – higher national diploma

Source: created by the authors

To obtain sufficient, relevant and trustworthy data, the study used solely primary sources of information. Questionnaires are among the tools used in data collection. It was anticipated that the primary data, which measured SCM and logistics among particular SMEs, would live up to the researcher's expectations. However, the validity of the primary data depends on how the research hypotheses turn out. For this reason, the target respondents were given the questionnaires, and they were also informed of the purpose and goals of doing so in order to ensure the validity of the information gathered about the research variables. Being the easiest way of collecting data from the respondents, copies of the questionnaire were distributed. The following statements were included in the questionnaire. Logistics: reduced warehouse costs; reduced obsolescence; faster order processing speed; reduced inventory at all sites of supply chain. Supply chain flexibility: creating flexible organisation in order to meet variety of customer and supplier; managing reasonably the cost of switching from one supplier to another; launching of new product at right time in market. Supply chain strategy: providing quality products

and services; offering modular parts in competitive price; using power of existing knowledge, ability and resources. The American Sociological Association's Code of Ethics (1997) was used for conducting research with respondent.

The study used a regression method of analysis to interpret the research hypotheses and a straightforward percentage method with a frequency distribution table to display and analyse each questionnaire's results as clearly as feasible. Moreover, primary data collected via the distribution of questionnaires were processed using Statistical Package for the Social Sciences (SPSS) software. This made it possible for the output and processed data to be shown in tables for qualitative assessments and justifications of the study variables. Analysis of variance (ANOVA) was conducted. With the use of the linear regression analysis approach, the study's hypothesised were examined.

RESULTS AND DISCUSSION

Responses obtained from questionnaire items of the research instrument are presented in Table 2. Here are the responses presented in line with research variables (Table 2).

S/N	Statements	Strongly agree 1	Agree 2	Undecided 3	Disagree 4	Strongly disagree 5		
	LOGISTICS							
L1	Reduced warehouse costs	26.7%	41.7%	12.5%	10%	9.1%		
L2	Reduced obsolescence	36.7%	31.7%	9.2%	8.3%	14.1%		
L3	Faster order processing speed	55%	25.9%	3.3%	8.3%	7.5%		
L4	Reduced inventory at all sites of supply chain	22.5%	35%	6.7%	19.2%	16.6%		
SUPPLY CHAIN FLEXIBILITY								
SF1	Creating flexible organisation in order to meet variety of customer and supplier	37.5%	46.7%	1.6%	7.5%	6.7%		
SF2	Managing reasonably the cost of switching from one supplier to another	28.3%	42.5%	4.2%	16.7%	8.3%		
SF3	Launching of a new product at right time in market	59.2%	33.3%	0%	4.2%	3.3%		

Table 2. Analysis of questionnaire items

Table 2, Continued

S/N	Statements	Strongly agree 1	Agree 2	Undecided 3	Disagree 4	Strongly disagree 5
SUPPLY CHAIN STRATEGY						
SS1	Providing quality products and services	43.3%	42.5%	3.3%	4.2%	6.7%
SS2	Offering modular parts at competitive price	28.3%	43.3%	5.9%	17.5%	5%
SS3	Using power of existing knowledge, ability and resources	41.7%	43.3%	2.5%	6.7%	5.8%

Source: created by the authors

 H_{01} : Logistics has no significant effect on supply chain flexibility. To test the hypothesis, the study adopted simple regression analysis where the scores of logistics were

regressed on the values of supply chain flexibility. The relevant regression results for the hypothesis one are presented in Table 3.

Table 3. Linear regression analysis showing effect of logistics on supply chain flex	11. 11.1
	lollity

		0	/ 0	0 11 2	~	
			Model summa	ry		
Model	R	R^2	Adjusted R ²	Std. error of the e	stimate	
1	0.684ª	0.647	0.644	0.61292		
	a. Predictors: (constant), supply chain flexibility					
			ANOVAª			
	Model	Sum of squares	Df	Mean square	1	F
	Regression	15.339	1	15.339	40.	829
1	Residual	50.008	119	0.376		
	Total	65.347	120			
		a	. Dependent variable:	logistics		
			Coefficients			
Model		Unstandardi	sed coefficients	Standardised coefficients	F	S :~
		В	Std. error	beta	F	Sig.
1	(Constant)	2.008	0.324		6.191	0.000
1	Supply chain flexibility	0.541	0.085	0.684	6.390	0.000
		a	. Dependent variable:	logistics		

Source: created by the authors

Table 3 demonstrates that the model's R^2 of 0.647 indicates that variations in supply chain flexibility account for 64.7% of the variation in logistics. One hypothesis for the variation in logistics described by supply chain flexibility (64.7%) is that there may be more factors affecting logistics that the model did not account for. The model is statistically significant, according to the ANOVA results (F=40.83, p = 0.000, hence, p < 0.05). The statistical significance and favourable impact of logistics on supply chain flexibility are demonstrated by the standardised coefficients. The findings of the simple regression model refute the null hypothesis, H_{01} , which holds that supply chain flexibility is not statistically significantly impacted by logistics. Thus, the null hypothesis is disproved. This implies that in-

creased logistics would arise from supply chain flexibility. At the 5% level, the logistical coefficient was positive and statistically significant. The positive correlation demonstrated by the coefficient of logistics indicated that these SMEs would gain 68.4% supply chain flexibility from a 1% increase in their logistics. Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted. Logistics, then, significantly improves supply chain flexibility.

 H_{02} : Logistics has no significant effect on supply chain strategy. To test the hypothesis, the study adopted simple regression analysis where the scores of logistics were regressed on the values of supply chain strategy. The relevant regression results for the hypothesis one is presented in Table 4.

Table 4. Simple li	inear regression	analysis sho	owing effect	of logistics of	on supply chain	strategy

	Model summary						
Model R R^2 Adjusted R^2 Std. error of the estimate							
1 0.516 0.476 0.471 0.52781							
	a. Predictors: (constant), supply chain strategy						
	ANOVAª						
	Model	Sum of squares	Df	Mean square	F	Sig.	
	Regression	13.840	1	13.840	36.227	0.000 ^b	
1	Residual	51.507	119	0.387			
	Total	65.347	120				
		a.	Dependent variable:	logistics			

Coefficients ^a						
Model		Unstandardi	ised coefficients	Standardised Coefficients		
		В	Std. error	β	1	Sig.
1	(Constant)	2.306	0.295		7.816	0.000
1	Supply chain strategy	0.477	0.079	0.516	6.019	0.000
	a. Dependent variable: logistics					

Table 4, Continued

Source: created by the authors

Table 4 demonstrates that the model's R^2 of 0.476 indicates that variations in supply chain strategy account for 47.6% of the variation in logistics. The possibility that there may be more factors influencing logistics that the model did not account for explains the variation in logistics explained by supply chain strategy (47.6%). The model is statistically significant, according to the ANOVA results (F = 36.227, p = 0.000, hence, p < 0.05). The statistical significance and positive impact of logistics on supply chain strategy is demonstrated by the standardised coefficients. The results of the simple regression model refute the null hypothesis (H_{02}) , which holds that supply chain strategy is not statistically significantly impacted by logistics. Thus, the null hypothesis is disproved. This implies that higher logistics would follow from the provision of a supply chain plan. The logistical coefficient was statistically significant and positive at the 5% level. The positive correlation indicated by the coefficient of logistics demonstrated that, for every 1% increase in logistics, these SMEs would obtain 51.6% of their supply chain strategy from the improved logistics. As a result, the alternative hypothesis is accepted and the null hypothesis is rejected. Thus, supply chain strategy benefits greatly from logistics.

The study looks at the connection between logistics and SCM effectiveness among certain SMEs in Ogun State, Nigeria. After the data was analysed and the hypotheses were tested, the results showed that logistics significantly affects the supply chain flexibility, as predicted by hypothesis one, and that it also significantly affects the supply chain strategy, as predicted by hypothesis two. The study leads to the conclusion that businesses in the supply chain collaborate with one another to make, distribute, and sell different parts and raw materials in a network of producers and assembly manufacturers. Therefore, as a tactic to promote SCM, SMEs can enhance their corporate financial performance by optimising their organisational competency. Furthermore, the study found that an organisation's performance - particularly with regard to its logistics and SCM – is crucial in assessing how well it is accomplishing its strategic goals. SMEs can improve their core skills to boost the performance of the supply chain and thus boost their competitiveness in an environment where supply chain rivalry is garnering attention. In addition, companies can find new opportunities by researching and creating new supply networks in the long run, as well as by enhancing their current supply chains in the short term.

Furthermore, the survey found that SCM gives businesses the capacity to set benchmarks for value-added operations and assess the effectiveness of different supply chain and logistics domains. Any business that wants to stand out from the competition must focus on the crucial field of logistics. The process of figuring out how to get inputs and turn them into goods and services in the most effective and profitable way is known as SCM. SMEs should embrace supply chain flexibility to create flexible and agile adjustments that meet market demands and provide them a competitive edge and better business performance. In order to maximise their total performance, organisations should aim to implement the most successful and efficient SCM strategy. Finally, in order to provide services that are tailored to the needs of their clients, SMEs should be customer-focused or attuned to the demands of the current markets. Naturally, the first step should be to choose reliable suppliers who can fulfil delivery commitments. In order to guarantee that the products placed on the market satisfy both customer expectations and the intended standards, the management must work to make sure that the quality control is a routine activity.

The findings presented here corroborate those of A. Chandak et al. (2019), who claimed that, depending on an organisation's research, technology commercialisation and marketing capabilities, supply chain strategies can enhance overall business success. Supply chain strategies, in particular, can enhance corporate performance through cost reduction, quality improvement, enhanced delivery performance, and flexibility through the optimisation of each firm's organisational skills. Furthermore, the results corroborated the conclusions that logistics and other independent factors (supply chain flexibility and supply chain strategy) have favourable relationships. A case study of Lagos State demonstrated that managers need to take into account the bridge in its entirety rather than concentrate on who just one facilitator or inhibitor for effective SCM. Also, the findings agreed with R. Lee (2021), who shows that supply chain strategy had a significant effect on SME organisational competencies. Additionally, the researcher analysed the mediating effect of organisational competencies on the effect of supply chain strategy on overall business performance.

Rahiminezhad Galankashi & F. Mokhatab M. Rafiei (2021) defined SCM as the process of transforming raw resources into end goods and delivering those items to clients. In this sense, every SCM involves several flows (information, money and product) and components (suppliers, manufacturers, distributors, retailers and customers). Consequently, the goal of SCM is to take into account and manage each of these elements and flows simultaneously. More research-related, SCM is experiencing a number of trends and problems. Scholars such as S.A. Gawankar et al. (2019) have focused more on SCM performance measurement among these concerns. Additionally, SCM, encompasses the information systems required to keep an eye on all of those processes. The integrated philosophy of SCM is used to control the distribution process from supplier to end user.

Researchers such as A. Rojo-Gallego-Burin *et al.* (2020) and S. Bag & M.S. Rahman (2023), who studied SCM, have used supply chain flexibility as well as supply chain strategy.

P. Centobelli et al. (2020) noted that many organisations have embraced supply chain flexibility to create flexible and adaptive adjustments to meet market requirements because the supply chain operates in an uncertain environment. This has allowed them to gain a competitive edge and improve their business performance. The idea of supply chain flexibility, according to P. Centobelli et al. (2020) and J.J.-E. Yoo & M. Cho (2021), should be viewed as multidimensional and operationalised by many aspects, such as product flexibility and volume flexibility. Supply chain flexibility is widely acknowledged to be a multi-dimensional construct, even though its precise definition and dimensions are unknown. A comprehensive definition would encompass the flexibility aspects that are necessary for all supply chain actors. Moreover, J.J.-E. Yoo & M. Cho (2021) suggested that not all supply chain organisations can attain the same degree of flexibility since supply chain flexibility is a particular organisational capacity.

According to K. Yu et al. (2018), gaining a competitive edge in an organisation solely through internal development is challenging. Businesses must figure out how to acquire new capabilities in order to adapt to changing conditions and heightened global. Corporate supply chain strategies are important tools for enhancing performance and innovation. These strategies can assist businesses in growing and adapting to environmental changes. An SCM strategy can therefore assist businesses in overcoming these obstacles. According to R. Lee (2021) and I. Kryvovyazyuk (2023), demand and supply planning is a vital component of vendor-managed inventory, enterprise replenishment planning, collaborative planning, forecasting, and replenishment, warehouse management systems, and outsourcing strategies. It has also been applied in a variety of organisational relationships in the supply chain. These strategies facilitate factors that enhance corporate performance. A mutually accepted inventory level can be established in terms of vendor-managed inventory through strong information flow across inter-firm interactions.

A. Ali *et al.* (2020) defined logistic as the process of organising, putting into practice and managing the economical and efficient movement of raw materials, finished goods, in-process inventory, and associated data from the point of consumption to the point of origin with the intention of recovering value or disposing of waste properly. According to this concept, the first step in logistics can be taken by distributors, retailers, and internal organisation resources that can be used to gather and repurpose manufacturing wastes or product side materials. J. Euchi *et al.* (2018) referred logistics to the procedure focused on the management of returned goods awaiting recovery via processes such as reusing, fixing, recycling or awaiting complete disposal.

J. Bor (2020) defined logistics as the process of transporting things backward in order to capture value and carry out appropriate disposal, remanufacturing, and refurbishment activities. According to Y. Zhang *et al.* (2018), it is "the process of moving goods from their typical final destination for the purpose of recycling, reuse, capturing value or proper disposal". Logistics refers to the range of tasks carried out following a product's sale, including maintenance, repair and recycling, with the aim of recovering or appropriately disposing of the product's value. M. Farouk & S.M. Darwish (2020) noted that a company's handling of items returned to the manufacturer by a customer fall under the category of logistics. This includes all the processes involved in deciding what happens to the returned goods. In order to guarantee environmentally responsible disposal while also generating revenue through recycling or resale in the secondary market, the logistics process entails a number of operations that must be completed in order to gather old, unwanted or disposal products.

The study made the following recommendations in light of its key findings and conclusions: the findings revealed that logistics capabilities significantly impact supply chain flexibility. Efficient logistics systems enable SMEs to adapt quickly to market changes and disruptions, ensuring continuous operations and customer satisfaction. The study found that logistics plays a critical role in the overall supply chain strategy, influencing performance outcomes. Enterprises with streamlined logistics operations reported higher levels of productivity, faster delivery times and reduced operational costs. Policymakers must focus on improving infrastructure such as roads and power supply to support the logistics operations of SMEs. Additionally, government-backed initiatives can promote access to affordable financing for logistics upgrades. Implementing sustainable logistics strategies, such as eco-friendly transportation and optimised delivery routes, can reduce operational costs and align with global trends toward sustainable business practices. SMEs should adopt supply chain flexibility to create agile and adaptable changes to meet market demands in order to gain a competitive edge and improve business performance. In order to fully optimise their overall performance, organisations should aim to adopt the most effective and efficient SCM strategy. SMEs must be customer-focused or sensitive to the demands of the current markets in order to provide services that are tailored to the needs of the clients.

CONCLUSIONS

The research's findings led to the following conclusions. On the basis of the study's findings, it can be deduced that businesses function as a chain of producers and assembly manufacturers in the supply chain as they produce, distribute and market a variety of parts and raw materials. As a result, as a strategy to aid SCM, SMEs can enhance their corporate financial performance by maximising their organisational competence. The study came to the conclusion that performance, particularly with regard to logistics and SCM activities, is crucial for organisations to understand how they are achieving their strategic objectives. SMEs can improve their core competencies to increase the performance of the supply chain and thereby enhance their competitiveness in an environment where supply chain competition is garnering attention. Additionally, businesses can find new opportunities by exploring and developing new supply chains over the long term while also short-term enhancing their current supply chains.

The study concluded that SCA empowers organisations to establish benchmarks for identifying value-added operations and facilitates the measurement of performance across various aspects of logistics and SCM. In the competitive landscape, each business must differentiate itself, particularly in the critical domain of logistics. SCM involves selecting the most effective and profitable methods to acquire inputs and transform them into goods and services. This process inherently begins with identifying reliable suppliers capable of meeting deadlines. To ensure that what is released onto the market meets both the desired standards and the expectations of customers, management must make efforts to ensure that quality control is a regular exercise. By focusing on local business environments and specific logistical challenges, this study will contribute to understanding how SMEs in Nigeria can enhance supply chain performance. The research will also offer practical insights for business owners, policymakers, and supply chain professionals seeking to improve logistics efficiency and achieve sustainable growth.

ACKNOWLEDGEMENTS

None.

• CONFLICT OF INTEREST None.

REFERENCES

- [1] Ali, A., Cao, H., Eid, A., Madkour, T., & Hammad, M.A. (2020). <u>The impact of reverse logistics on environmental sustainability performance</u>. *International Journal of Advances in Science Engineering and Technology*, 8(2), 18-27.
- [2] American Sociological Association's Code of Ethics. (1997, June). Retrieved from <u>https://www.asanet.org/wp-content/uploads/savvy/images/asa/docs/pdf/CodeofEthics.pdf</u>.
- [3] Bag, S., & Rahman, M.S. (2023). The role of capabilities in shaping sustainable supply chain flexibility and enhancing circular economy-target performance: An empirical study. *Supply Chain Management*, 28(1), 162-178. <u>doi: 10.1108/SCM-05-2021-0246</u>.
- [4] Bor, J. (2020). Reverse logistics and performance of food industries in Kenya. *Journal of Logistics Management*, 9(2), 23-30. doi: 10.5923/j.logistics.20200902.01.
- [5] Centobelli, P., Cerchione, R., & Ertz, M. (2020). Agile supply chain management: Where did it come from and where will it go in the era of digital transformation? *Industrial Marketing Management*, 90, 324-345. doi: 10.1016/j. indmarman.2020.07.011.
- [6] Chandak, A., Chandak, S., & Dalpati, A. (2019). <u>The impact of supply chain strategy and supply chain flexibility on</u> <u>supply chain performance: A study in the Indian context</u>. *The IUP Journal of Supply Chain Management*, 16(1), 52-69.
- [7] Euchi, J., Bouzidi, D., & Bouzid, Z. (2018). <u>Structural analysis of a cute success factors of performance of reverse logistics</u> relative to customer satisfaction. *International Journal of Combinatorial Optimization Problems and Informatics*, 10(2), 39-56.
- [8] Farouk, M., & Darwish, S.M. (2020). <u>Reverse logistics solution in e-supply chain management by blockchain technology</u>. *Egyptian Computer Science Journal*, 44(1), 22-34.
- [9] Gawankar, S.A., Gunasekaran, A., & Kamble, S. (2019). A study on investments in the big data-driven supply chain, performance measures and organisational performance in Indian retail 4.0 context. *International Journal of Production Research*, 58(5), 1574-1593. doi: 10.1080/00207543.2019.1668070.
- [10] Jermsittiparsert, K., Sutduean, J., Sriyakul, T., & Khumboon, R. (2019). The role of customer responsiveness in improving the external performance of an agile supply chain. *Polish Journal of Management Studies*, 19(2), 206-217. doi: 10.17512/pjms.2019.19.2.17.
- [11] Kryvovyazyuk, I. (2023). Digital transformation and improvement of integrated planning systems in supply chains of industrial enterprises. *Economic Forum*, 13(4), 125-133. doi: 10.36910/6775-2308-8559-2023-4-16.
- [12] Lee, R. (2021). The effect of supply chain management strategy on operational and financial performance. *Sustainability*, 13(9), article number 5138. <u>doi: 10.3390/su13095138</u>.
- [13] Rahiminezhad Galankashi, M., & Mokhatab Rafiei, F. (2021). Financial performance measurement of supply chains: A review. *International Journal of Productivity and Performance Management*, 71(5), 1674-1707. doi: 10.1108/ IJPPM-11-2019-0533.
- [14] Rejeb, A., Simske, S., Rejeb, K., Treiblmaier, H., & Zailani, S. (2020). Internet of things research in SCM and logistics: A bibliometric analysis. *Internet of Things*, 12, article number 100318. <u>doi: 10.1016/j.iot.2020.100318</u>.
- [15] Rojo-Gallego-Burin, A., Llorens-Montes, F.J., Perez-Arostegui, M.N., & Stevenson, M. (2020). Ambidextrous supply chain strategy and supply chain flexibility: The contingent effect of ISO 9001. *Industrial Management & Data Systems*, 120(9), 1691-1714. doi: 10.1108/IMDS-01-2020-0038.
- [16] Shavarani, S.M., Golabi, M., & Izbirak, G. (2019). A capacitated biobjective location problem with uniformly distributed demands in the UAV-supported delivery operation. *International Transactions in Operational Research*, 28(6), 3220-3243. doi: 10.1111/itor.12735.
- [17] Tang, C.S., & Veelenturf, L.P. (2019). The strategic role of logistics in the industry 4.0 era. *Transportation Research Part E: Logistics & Transportation Review*, 129, 1-11. <u>doi: 10.1016/j.tre.2019.06.004</u>.
- [18] Treiblmaier, H., Mirkovski, K., Lowry, P.B., & Zacharia, Z.G. (2020). The physical internet as a new supply chain paradigm: A systematic literature review and a comprehensive framework. *The International Journal of Logistics Management*, 31(2), 239-287. doi: 10.1108/IJLM-11-2018-0284.
- [19] Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). New York: Harper and Row.
- [20] Yoo, J.J.-E., & Cho, M. (2021). Supply chain flexibility fit and green practices: Evidence from the event industry. *International Journal of Contemporary Hospitality Management*, 33(7), 2410-2427. doi: 10.1108/IJCHM-09-2020-0999.

- [21] Yu, K., Luo, B.N., Feng, X., & Liu, J. (2018). Supply chain information integration, flexibility, and operational performance: An archival search and content analysis. *The International Journal of Logistics Management*, 29(1), 340-364. doi: 10.1108/IJLM-08-2016-0185.
- [22] Zhang, Y., Ma, T., & Muhammad, F.U.D. (2018). The impact of reverse logistics on operational performance. *American Journal of Mechanical and Industrial Engineering*, 3(5), 99-104. <u>doi: 10.11648/j.ajmie.20180305.14</u>.

Ефективність управління ланцюгами поставок та логістика серед окремих малих і середніх підприємств у районі місцевого самоврядування Сагаму, штат Огун, Нігерія

Олуфемі Огункоя

Доктор філософії з бізнес-адміністрування, доцент Університет Олабісі Онабанджо м. Аго-Івоє, Нігерія https://orcid.org/0000-0001-7356-5086

Олуватобі Соремекун

Університет Олабісі Онабанджо м. Аго-Івоє, Нігерія https://orcid.org/0009-0004-4877-6534

Банджо Хассан

Доктор філософії з бізнес-адміністрування, старший викладач Університет Олабісі Онабанджо м. Аго-Івоє, Нігерія https://orcid.org/0000-0002-2569-6468

Омотоке Аделесі

Магістр Університет Олабісі Онабанджо м. Аго-Івоє, Нігерія

Мосхуд Огунделе

Магістр Університет Олабісі Онабанджо м. Аго-Івоє, Нігерія

Анотація. Малі та середні підприємства в Нігерії починають усвідомлювати важливість управління ланцюгами поставок для економічного зростання, але вони все ще відстають у розумінні інтегрованих аспектів ланцюгів поставок, які спричиняють значні зміни в бізнес-процесах і дають позитивні результати щодо покращення якості послуг, ефективності та скорочення витрат. Метою цього дослідження було з'ясувати, як ефективність управління ланцюгами поставок та логістика пов'язані з конкретними малими та середніми підприємствами в штаті Огун, Нігерія. Для цього була застосована методологія описового опитування. Для збору первинних даних було використано систематизовану анкету. Для аналізу зібраних даних були використані як описова, так і інференційна статистика. Дані були описані та узагальнені за допомогою описового аналізу. Вплив незалежної змінної на логістику оцінювався за допомогою дисперсійного аналізу. Стратегія та гнучкість ланцюга поставок були використані для оцінки ефективності управління ланцюгом поставок. Результати показують, що логістика, як і передбачала перша гіпотеза, має значний вплив на гнучкість ланцюга поставок. Вони також демонструють, що логістика, як і передбачалося другою гіпотезою, має значний вплив на стратегію ланцюга поставок. Згідно з висновками дослідження, оцінка ефективності діяльності має вирішальне значення для бізнесу, щоб оцінити, наскільки добре він досягає своїх стратегічних цілей, особливо щодо ланцюгів поставок і логістичних операцій. Для того, щоб отримати конкурентну перевагу та підвищити ефективність бізнесу, дослідження запропонувало, серед іншого, щоб малі та середні підприємства використовували гнучкість ланцюгів поставок та вносили гнучкі, адаптовані зміни відповідно до вимог ринку. Результати дослідження допоможуть виробникам, дослідникам, науковцям, політикам, студентам та всім, хто цікавиться операціями та управлінням виробництвом, краще зрозуміти ефективність комплексних показників ефективності управління ланцюгами поставок та логістикою

Ключові слова: ланцюг розподілу; гнучкість; стратегія; ефективність бізнесу; конкурентоспроможність





DEVELOPMENT MANAGEMENT

UDC 338.48 DOI: 10.63341/devt/1.2025.42 Vol. 24, No. 1. 2025 🤇

Strategies for managing foreign economic activity of tourism enterprises in the Lviv Region as a factor in shaping their competitiveness

Anatolii Pavlenchyk

PhD in Economics, Associate Professor Ivan Boberskyi Lviv State University of Physical Culture 79007, 11 Kostiushka Str., Lviv, Ukraine https://orcid.org/0000-0002-2205-1883

Nazarii Tsizdyn

Postgraduate Student Ivan Boberskyi Lviv State University of Physical Culture 79007, 11 Kostiushka Str., Lviv, Ukraine https://orcid.org/0009-0001-2172-5815

Abstract. The study was conducted to assess the competitiveness of the tourism industry in the Lviv Region at the international level and to develop strategies for its development in the current political and economic context. For this purpose, a comprehensive approach was employed, including a SWOT analysis of competitiveness and comparisons with other tourist regions. The study also developed strategies for entering new markets for tourism enterprises in the Lviv Region, particularly through international partnerships, the creation of joint tourism programmes, and infrastructure development. The study analysed the dynamics of the development of the tourism industry in the Lviv Region during 2022-2024, in particular the net income of tourism companies in 2024, which in the first half of the year amounted to UAH 1.1 billion (19.1% of the total income of the industry in Ukraine), tax revenues of UAH 314.9 million (+27% compared to 2023), and a record tourist fee of UAH 47 million. These figures reflect trends in domestic and international tourism, the growth of the average length of stay of tourists, and the region's adaptation to economic and security challenges. The main results of the study included the identification of the strengths of the Lviv Region, such as its rich cultural heritage, natural resources, developed infrastructure, and favourable geographical location. The Lviv Region was found to be promising for the development of cultural tourism, gastronomic tourism, and ecological recreation. It was established that the Lviv Region has significant potential to improve its position in the international market but requires additional investment in the development of marketing strategies, infrastructure, and digital technologies. A comparison with other tourist regions, such as the Tatra Mountains in Poland and the Karlovy Vary Region in the Czech Republic, showed that the Lviv Region possesses competitive advantages in terms of cultural heritage and natural resources but lags behind in infrastructure and the development of sustainable tourism. The strategies of these other regions focus on improving infrastructure, developing integrated tourism products, and intensifying international marketing, which represent important directions for the Lviv Region as well. This highlights the need for investment in infrastructure development, the expansion of tourist routes, the improvement of transport accessibility, and the enhancement of service quality

Keywords: evolutionary-historical analysis; digitalisation; intangible assets; IT industry; Schumpeter's innovation theory

Article's History: Received: 26.09.2024; Revised: 31.01.2024; Accepted: 25.03.2025

Suggested Citation:

Pavlenchyk, A., & Tsizdyn, N. (2025). Strategies for managing foreign economic activity of tourism enterprises in the Lviv Region as a factor in shaping their competitiveness. *Development Management*, 24(1), 42-56. doi: 10.63341/devt/1.2025.42.

*Corresponding author



Copyright © The Author(s). This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/)

INTRODUCTION

The tourism sector is one of the key drivers of regional economic development, contributing to the attraction of foreign investment, the creation of new jobs, and the improvement of a country's image on the international stage. With its rich cultural and historical potential, convenient geographical location, and developed infrastructure, the Lviv Region has significant opportunities for integration into the international tourism market. However, tourism enterprises are facing new challenges in maintaining competitiveness. These challenges include globalisation, economic instability, political restrictions, and competition from other countries in Europe and within Ukraine. The need for effective management is increasing as a result of the intensification of foreign economic activity among tourism companies. Such management can optimise resource use, foster profitable partnerships with foreign companies, and facilitate the creation of unique tourism products for international markets. Overcoming external obstacles, such as currency fluctuations and visa restrictions that influence tourist flows, is also of crucial importance.

The development of tourism enterprises is significantly influenced by external economic factors, including investment, regional institutions, and access to markets. Y. Wu et al. (2022) examined the impact of regional institutions and foreign direct investment on the performance of tourism companies in China, finding that institutional quality enhances profitability, while foreign direct investment has a limited effect in the absence of appropriate regulation. However, the influence of these factors on social efficiency remains insufficiently explored, necessitating further research. The issue of enhancing the competitiveness of tourism enterprises remains highly relevant. N. Malyarchuk (2021) analysed the impact of marketing tools, concluding that the efficient use of resources and the development of strategies based on marketing approaches contribute to the formation of competitive advantages. Nevertheless, the interaction between internal and external factors, as well as the influence of the socio-cultural environment, has not been sufficiently studied and thus requires additional scholarly attention.

Under modern conditions, the management of foreign economic activities of tourism enterprises requires consideration of numerous external and internal factors that affect their effectiveness. A. Melnik & A. Mamchur (2020) investigated the main factors influencing the functioning of tourism enterprises in the context of foreign economic activity. In their study, the authors identified demographic, social, economic, scientific and technical, and international factors as having a crucial impact on the competitiveness of enterprises in the global market. However, the integration of innovation strategies into foreign economic activities and their influence on long-term competitiveness remain insufficiently explored, highlighting the need for further research in this area. The contemporary development of sustainable tourism necessitates the consideration of social, economic, and environmental aspects to enhance competitiveness. D. Streimikiene et al. (2020) conducted a literature review and concluded that innovations aimed at environmentally responsible consumption reduce the negative impact of tourism and improve the quality of life in local communities. Nonetheless, there remains a lack of trust among consumers regarding environmental initiatives, as well as insufficient attention to the needs of elderly individuals and people with disabilities – issues that require additional scholarly inquiry.

In the field of managing foreign economic activities of enterprises, there is a growing need to improve strategies for adaptation to the conditions of globalisation and integration. V. Lagodiienko et al. (2022) examined the characteristics of managing foreign economic activities within the context of sustainable development. The authors found that the effectiveness of foreign economic activities of enterprises is influenced by a range of external and internal factors, including integration processes, structural transformations within the international division of labour, and the increasing role of the state in integrating into the global economic system. Nevertheless, insufficient attention has been paid to mechanisms for reducing regional asymmetry in foreign economic activities, which underscores the need for further research aimed at developing tools to harmonise regional development.

In the context of integration into the global economic space, an important task for enterprises is to increase the efficiency of foreign economic activity management. O. Kryvda *et al.* (2024) studied the mechanisms for managing the foreign economic activities of enterprises, particularly the implementation of modern information systems. The authors noted that the use of such systems enables prompt assessment of enterprise performance and contributes to the growth of profitability and competitiveness. However, the integration of innovative management approaches under conditions of external environmental instability remains insufficiently explored, which requires further research aimed at developing adaptive management strategies.

The growing interest in the relationship between knowledge management and the competitiveness of tourism enterprises highlights the need to study the integration of theoretical approaches. H. Ogutu *et al.* (2023) examined the relationship between knowledge, organisational culture, and competitiveness, based on resource-based, knowledge-based, dynamic capabilities, and institutional theories. Their findings indicate that competitive advantages are formed through unique knowledge, adaptability, and innovation. Nevertheless, the integration of these theories into a holistic approach to competitiveness management remains underexplored, necessitating further research, particularly regarding the influence of regional and sectoral characteristics on enterprise performance.

In the field of tourism, considerable attention has been given to examining the relationship between competitiveness and sustainability. V.T. Díaz-Padilla *et al.* (2023) investigated the impact of sustainability on the competitiveness of tourism destinations, using the Rasch methodology to assess progress towards the Sustainable Development Goals (SDGs). The authors confirmed that countries with higher levels of socio-economic development exhibit stronger competitiveness indicators, and that the most significant SDGs for tourism are those related to prosperity and social guarantees. However, the study also revealed a lack of attention to the assessment of SDGs concerning marine resources and the effectiveness of international partnerships, highlighting gaps in measuring the impact of sustainability on global competitiveness.

The purpose of this study was to examine the impact of effective management of foreign economic activity on the competitiveness of tourism enterprises in the Lviv Region within the context of globalisation and integration. The objectives of the study were to analyse external and internal factors that determine the competitive advantages of tourism enterprises in the Lviv Region, as well as to develop strategies for optimising foreign economic activity to improve the efficiency of these enterprises' operations in the international environment.

MATERIALS AND METHODS

To conduct a study on the competitiveness of tourism enterprises in the Lviv Region, a comprehensive approach was employed, which included several methods for an indepth analysis of the factors affecting the development of the industry. This approach considered both internal and external factors, such as the economic situation, political risks, and currency fluctuations, all of which have a direct impact on tourist flows. The analysis of these factors provided a theoretical basis for assessing competitiveness at the regional level. Statistical data from the literature were analysed, including data related to tourist flows, investment levels in tourism infrastructure, and economic indicators (Pavlish, 2013; Pankiv & Eliseeva, 2024). These data facilitated the identification of key challenges that hinder the attraction of more tourists, as well as opportunities to enhance competitiveness. Statistical analysis also enabled the assessment of the influence of factors such as infrastructure, tourist services, and cultural resources on the overall development of the tourism sector in the region.

The study utilised statistical data on the development of the tourism industry in the Lviv Region, focusing on indicators such as the net income of tourism companies, tax revenues, and tourist tax for the period 2022-2024 (Voloshchak, 2023; Lviv Region is second..., 2024; Pinyazhko, 2025). An analysis of changes in tourist flows was also carried out, including the dynamics of domestic and international tourism, the average length of stay of visitors, and the geographical structure of tourist flows (Tourist tax..., 2024). A SWOT analysis was conducted to evaluate the internal factors influencing the competitiveness of enterprises. This method enabled the identification of the strengths and weaknesses of the tourism infrastructure in the Lviv Region, as well as the opportunities and threats faced by tourism enterprises. The SWOT analysis helped to define key areas for improving competitiveness, such as the development of infrastructure - particularly transport and communications - and the enhancement of the quality of tourist services.

To assess competitiveness at the international level, a comparison was made between the Lviv Region and other tourist regions, in particular the Tatra Mountains in Poland (Borkowski *et al.*, 2021) and the Karlovy Vary Region in the Czech Republic (Duraj *et al.*, 2023). The selection of these regions is based on their similarity to the Lviv Region in terms of tourist resources and areas of tourism development: the Tatra Mountains are a popular destination for ski and nature tourism, while the Karlovy Vary Region is renowned for its health resorts, making both regions

relevant for comparison with the tourism potential of the Lviv Region. The comparison was conducted according to the following criteria: natural and recreational potential; historical and cultural heritage; infrastructure (including transport accessibility, the development level of the hotel industry, sanatorium and resort infrastructure, and service quality); tourist products and their diversity (availability of tourist routes, excursion programmes, active, medical, gastronomic, and festival tourism); development opportunities (potential for attracting investment, use of digital technologies in the tourism sector, and prospects for international cooperation); challenges and limitations (factors affecting regional attractiveness, such as environmental threats, competition with other regions, seasonality of tourist flows, and economic risks). Additionally, to provide a more detailed assessment of competitiveness, a comparison was made between the Lviv Region and other tourist regions of Ukraine, specifically the Transcarpathia and Odesa regions. These regions were chosen due to their distinct tourism specialisations, allowing for an evaluation of the unique competitive advantages of the Lviv Region. This approach enabled the identification of both common and distinctive aspects of tourism market development in various regions of the country.

In the course of the research, strategies were developed for tourism enterprises in the Lviv Region to enter new markets, particularly aimed at attracting foreign tourists and expanding the geographical reach of tourist flows. A key focus of the strategy was on strengthening international cooperation with tour operators and travel agencies from other countries. Particular emphasis was placed on the creation of joint tourist programmes with European and international partners, enabling the Lviv Region to become part of global tourist routes and to promote its cultural, natural, and historical assets. The methods employed allowed for a comprehensive assessment of the competitiveness of tourism enterprises in the Lviv Region, identification of development opportunities, and determination of priorities for future improvement. The integration of findings from different methods provided a holistic analysis of the situation in the tourism sector and facilitated the development of practical recommendations for enhancing competitiveness.

RESULTS

The management of foreign economic activity is a complex and multifaceted process that requires the integration of various approaches to achieve the strategic goals of an enterprise. Conceptual approaches to the management of foreign economic activity are aimed at creating conditions that ensure effective interaction between enterprises and international partners, the optimisation of resource use, and adaptation to changes in the external environment. A systemic approach to the management of foreign economic activity considers the enterprise's operations as a holistic system, in which all elements are interconnected and aligned towards achieving a common goal. This approach is grounded in the analysis of both internal and external factors that influence the enterprise's activities. In the context of the tourism industry, this implies that an enterprise must consider not only its own resources (material, financial, and human), but also external factors such

as international competition, legislative restrictions, and the economic policies of partner countries. The systemic approach also underscores the importance of integrating foreign economic activity strategies with the enterprise's overall strategic goals. For instance, if a company focuses on attracting foreign tourists, its marketing strategy should reflect the characteristics of target markets, including cultural preferences and purchasing power (Kuzmenko & Kostenko, 2018).

A strategic approach to the management of foreign economic activity focuses on long-term planning and determining development pathways that provide enterprises with competitive advantages in the international market. In the tourism industry, the strategic approach encompasses an analysis of promising markets, identification of key partners, and the development of new products and services that meet contemporary consumer demands. One example of the strategic approach in practice is market diversification, which mitigates risks associated with dependence on a single region or category of customers (Zhyhalkevych & Drahomoshchenko, 2021). The process approach involves dividing foreign economic activity into distinct stages, each aimed at achieving specific results. In the tourism industry, these stages may include planning international partnerships, implementing joint projects with foreign operators, monitoring the execution of agreements, and evaluating the effectiveness of cooperation. The process approach ensures flexibility in decision-making and enables enterprises to respond promptly to changes in the external environment. For example, if the economic situation in one of the partner countries shifts, an enterprise can swiftly adjust its plans and redirect resources to other markets (Kuzmenko & Kostenko, 2018).

The adaptive approach is essential in dynamic external environment. It focuses on the enterprise's ability to respond rapidly to changes in the economic, political, or social landscape of partner countries. Tourism enterprises that adopt this approach continuously monitor the external environment, analyse emerging trends, and promptly implement innovations to maintain competitive advantages. For instance, during the COVID-19 pandemic, many tourism companies were compelled to adjust their services to new realities by developing domestic tourism products or adopting digital solutions, such as virtual tours (Gerasimenko, 2013). The integration approach aims to unite all components of foreign economic activity into a coherent strategy that ensures maximum operational efficiency. In the tourism sector, this approach entails close cooperation with international partners, the development of transnational projects, and the alignment of company activities with international standards. Integration enables tourism enterprises in the Lviv Region to attract additional resources, broaden the geographical reach of their services, and enhance brand trust at the international level (Kuzmenko & Kostenko, 2018). The application of conceptual approaches to managing foreign economic activity allows tourism enterprises to enhance their competitiveness, utilise resources more effectively, and adapt to the evolving international environment.

The implementation of strategies and methods that facilitate the integration of companies into the international environment forms the foundation for the practical application of conceptual approaches to the management of foreign economic activities of tourism enterprises. The constantly evolving nature of the tourism industry requires the integration of multiple approaches to ensure effective performance. The ability of companies to adapt their strategies to diverse markets is crucial for the successful management of foreign economic activities. Target market analysis encompasses demographic, economic, and socio-cultural characteristics, as well as the application of digital technologies for the positioning of products and services. Global consumers can access information about tourism services through various digital communication channels, including web platforms, social networks, and contextual advertising. Furthermore, the effectiveness of the strategic approach largely depends on a company's ability to develop and adapt products that meet the specific demands of different markets (Cherchyk & Lazhnik, 2021).

Cooperation with international partners represents a vital component of foreign economic activity management. This cooperation includes the creation of joint tourism products, exchange of expertise, infrastructure development, and participation in international events such as exhibitions and forums. Key advantages of such partnerships are the exchange of customer bases, enhanced brand credibility through association with recognised partners, and the adoption of best management practices. A critical aspect of modern partnership management is the introduction of innovative technologies, such as CRM systems for customer relationship management, online booking platforms, and analytics tools for monitoring market trends. The use of advanced technologies, including big data analysis, enables companies to better understand consumer needs, while artificial intelligence (AI) facilitates the personalisation of offers and services. However, enterprises face a range of challenges in the management of foreign economic activities. These challenges include cultural barriers related to differences in mentality and language, economic instability arising from currency fluctuations and political crises, and intense international competition, which necessitates the continuous improvement of service quality. Addressing these issues requires a systematic approach to managing foreign economic activities, incorporating innovative tools and adapting strategies to meet the contemporary challenges of globalisation.

The foreign economic activity of tourism enterprises in the Lviv Region is a key factor in the region's economic development, underpinned by its significant potential for tourism and recreation. The geographical location, rich historical heritage, and natural resources of the Lviv Region contribute to the growth of various forms of tourism, including cultural and educational, medical, ecological, gastronomic, and ski tourism. Nevertheless, the current state of the tourism industry in the Lviv Region requires thorough analysis, taking into account factors influencing both internal and external aspects, as well as the development of strategic directions aimed at enhancing the region's competitiveness.

In 2020, the Lviv Region was visited by more than 533,000 tourists, of whom approximately 118,000 were foreign visitors. The main countries of origin of these visitors were Poland, Turkey, Germany, the USA, the United

Kingdom, and Italy. The foreign economic activity of tourism enterprises in the region is focused on integration into the global tourism market, attracting foreign tourists, partners, and investments, and developing new tourism products. Currently, there are 106 hotels and similar accommodation facilities in the Lviv Region, offering a total of 5,677 rooms, which enables the simultaneous accommodation of a significant number of tourists. Additionally, the region hosts 81 sanatoriums and boarding houses, contributing to a total of 130 collective accommodation facilities. However, only 8% of the region's tourism potential is currently utilised, indicating substantial reserves for future growth (Pankiv & Eliseeva, 2024).

Key components of foreign economic activity in the tourism sector include participation in international tourism exhibitions, development of partnerships with foreign tour operators, and the implementation of digital platforms for regional promotion. In 2020, Danylo Halytskyi Lviv International Airport welcomed approximately 84,000 foreign tourists, serving as a critical gateway for increasing the influx of visitors. Furthermore, the region has launched a mobile application "Lviv Region&GO", designed to assist tourists in accessing information about routes, hotels, and attractions. In 2024, the tourism industry of the Lviv Region demonstrates stable development dynamics, despite challenging external conditions. The Lviv Region ranked second in Ukraine in terms of tourism revenues, reaching approximately UAH 1.1 billion in the first half of the year, which accounts for 19.1% of the total net income of all Ukrainian tourism companies. Tax revenues from tourism activities for January to September 2024 amounted to UAH 314.9 million, representing a 27% increase compared to the previous year. Nevertheless, the growth rate remains relatively moderate in comparison to other regions (Lviv Region is second..., 2024).

One of the key indicators of the financial efficiency of the tourism industry is the tourist fee, which set a new record in 2024, exceeding UAH 47 million (Pinyazhko, 2025). This reflects a gradual recovery of the tourism sector following the crisis years. For comparison, this figure was UAH 46 million in 2023, and UAH 41.4 million in 2022. It is also noteworthy that total revenues from the hospitality industry of the Lviv urban territorial community reached UAH 282 million in 2022, which marked a 15% increase compared to 2021, when profits amounted to UAH 245 million. The share of the tourist fee that contributed to the Lviv city budget in 2022 amounted to UAH 19.7 million (Voloshchak, 2023). Regarding tourist flows, there has been a significant shift in their structure. Domestic tourism has become the primary source of income for the region, as many Ukrainians now choose the Lviv Region as a safe destination for recreation, due to travel restrictions abroad and risks in other parts of the country. The share of Ukrainian tourists in Lviv has increased from 40% to nearly 89%, while the proportion of foreign tourists has substantially decreased to 11-15%. Among international visitors, the main countries of origin are Poland, Germany, the Czech Republic, and the United States (Kmetik, 2023).

Significant changes are also observed in the duration of tourists' stays. While previously short trips of 2-3 days

were typical, domestic tourists now stay in Lviv for an average of 3-7 days, and foreign tourists for 6-10 days. The main factors influencing these changes include military and security risks, economic restrictions on travelling abroad, and the development of tourism infrastructure in the region. The largest payers of the tourist tax in 2024 were Lviv (UAH 25.47 million), Truskavets (UAH 9.203 million), and the Skhidnytsia community (UAH 2.782 million) (Tourist tax..., 2024). These figures indicate that the traditional tourist locations of the region remain attractive to visitors and that local infrastructure continues to adapt to new conditions. Thus, the Lviv Region is undergoing a transformation of its tourism industry, adapting to internal and external challenges. The region not only maintains its tourism activity but also demonstrates significant potential for further growth, reinforcing its role as one of the key centres of tourism in Ukraine.

Despite these achievements, the tourism industry of the Lviv Region faces a number of challenges. Economic instability caused by the war has reduced tourist flows, and the uneven distribution of infrastructure complicates access to many attractions. Although there are more than 500 private estates in the region, a significant proportion require modernisation. Furthermore, the poor condition of roads and underdeveloped transport connections with remote areas limit the region's attractiveness to foreign tourists. To overcome these challenges, several measures must be implemented. First, the modernisation of infrastructure, including road repairs and the creation of new tourist routes, is essential. Second, the active use of digital technologies to promote the region in international markets is critical. For instance, 3D virtual tours, which gained popularity during the pandemic, can help attract more foreign tourists. The prospects for developing foreign economic activity of tourism enterprises in the Lviv Region are also connected with increasing the number of tourism products aimed at foreign visitors. Recent research has identified green tourism as a promising area for the development of the tourism business in Ukraine (Sevastyanov & Donchenko, 2023). For example, the development of rural green tourism in the Drohobych district, offering horse-riding routes, national cuisine, and recreation in traditional villages, has already attracted attention from tourists in Germany and Poland. Further expansion of such tourism could significantly increase local population incomes (Pankiv & Eliseeva, 2024).

Regarding foreign economic activity, it is important to emphasise that it encompasses aspects such as the export of tourism services, international financial transactions, participation in international exhibitions, partnerships with foreign companies, and the development of new tourism products. Effective management of foreign economic activity involves the integration of enterprises into the international environment, which requires a strategic approach to planning and implementation. To gain a deeper understanding of the current state of the industry and to formulate strategic development directions, a SWOT analysis was conducted. This analysis makes it possible to assess the key strengths, weaknesses, opportunities, and threats facing the tourism industry of the Lviv Region (Table 1).

Strengths (S)	Weaknesses (W)
Favourable geographical location	Insufficient development of tourism and recreational infrastructure
Rich historical and cultural heritage	Low level of financing of the industry
Natural and recreational potential	Inconsistency of the quality of tourist services with international standards
Experience in recreational activities	Disadvantages of international marketing strategy
Developed sanatorium and resort sector	Weak cooperation between state and private structures
Opportunities (O)	Threats (T)
Development of international cooperation	Competition with other tourist regions
Growing demand for cultural, ecological and	Political instability and economic crises
gastronomic tourism	
gastronomic tourism Use of digital technologies	Decline of architectural monuments due to lack of funding
<u>0</u>	Decline of architectural monuments due to lack of funding Deterioration of the environmental situation

Table 1. SWOT analysis of the tourism industry of Lviv Region	Table 1	. SWOT an	alysis of the	e tourism	industry	of Lviv Region
---	---------	-----------	---------------	-----------	----------	----------------

Source: created by the authors based on L.V. Pavlish (2013), N. Pankiv & T. Eliseeva (2024)

As the SWOT analysis has shown, the Lviv Region possesses significant potential for tourism development, but a systemic approach is required to address the existing challenges. Natural and recreational resources, historical heritage, and geographical location form a solid foundation for further growth. However, the industry's development opportunities are currently limited by issues such as underdeveloped infrastructure and insufficient marketing efforts. The modernisation of infrastructure, improvement of service quality, and strengthening of marketing strategies can open up new opportunities, including enhanced international cooperation, the adoption of innovative technologies, and growing demand for cultural tourism. At the same time, threats such as political instability and competition from other regions require continuous monitoring and effective management. A comprehensive approach to the development of the Lviv Region's tourism industry will enable it to become a leading tourist centre in Ukraine and Europe. This approach should involve the integration of modern technologies, enhancement of tourist service quality, promotion of cooperation between public and private entities, and active attraction of investments into the region's tourism infrastructure.

To increase the efficiency of foreign economic activity in the Lviv Region's tourism sector, it is necessary to implement a holistic strategy that includes infrastructure modernisation, service improvement, the creation of competitive tourism products, and targeted international marketing. The joint efforts of government bodies, commercial enterprises, research institutions, and civil society organisations are essential for this process. The introduction of digital technologies, such as CRM systems, online booking platforms, and market analysis tools, represents an important step forward. These technologies will enable tourism companies to analyse data more effectively, anticipate customer needs, and adjust offerings in line with market trends. In the strategic planning of the Lviv Region, it is essential to focus on increasing the region's attractiveness as a tourist destination at the international level, expanding its brand, and creating favourable conditions for attracting investment. The implementation of joint programmes with international partners will contribute to the integration of the region into the global tourism community, while also increasing revenues from tourism services.

Continuing the analysis, an important task is to identify the most promising areas of tourism development, such as ecotourism, gastronomic tourism, and the development of sanatorium and resort recreation. To achieve a balance between economic benefits and environmental sustainability, these areas should be incorporated into the region's overall sustainable development strategy. Thus, the Lviv Region possesses all the necessary preconditions to become a leading tourist centre both in Ukraine and in Europe. The development of the tourism industry requires a systematic approach, effective management of foreign economic activity, and innovative methods of marketing and service delivery. Only through such an integrated approach can the full potential of the region be realised. As the analysis has shown, achieving strategic goals necessitates the mobilisation of all available resources, strengthening cooperation among market participants, and the active application of modern technologies to promote the Lviv Region's tourism products at the international level.

Effective tourism industry development requires consideration of not only the region's internal resources, but also external factors, particularly the competitive advantages of other destinations. Competitor analysis in the tourism market allows for the identification of weaknesses, strengths, and opportunities to adopt successful practices. It is important to compare the tourism potential of the Lviv Region with that of other Ukrainian regions, such as Transcarpathia and the Odesa Region, as well as with foreign regions, notably Poland and the Czech Republic. Such a comparative analysis provides insights into the competitiveness of the Lviv Region, identifies promising directions for the development of tourism services, and highlights opportunities for diversification of the tourism product and infrastructure improvement. Moreover, incorporating the experience of foreign regions that have successfully developed their tourism sectors will contribute to enhancing the strategic framework for the sustainable development of the Lviv Region's hospitality industry.

The Lviv Region, Transcarpathia, and the Odesa Region are three of Ukraine's leading tourist destinations, each distinguished by unique characteristics, substantial potential, and a diverse range of tourism types. However, each of these regions also possesses specific advantages and challenges that shape their competitive positions. Table 2 presents a comparison of key aspects of the tourism potential of the Lviv Region, Transcarpathia, and the Odesa Region, allowing for the assessment of their respective strengths and weaknesses, as well as development prospects.

Parameter	Lviv Region	Transcarpathia	Odesa Region
Natural and recreational potential	Health resorts (Truskavets,	Carpathian Mountains, thermal	Access to the Black Sea, estuaries,
	Morshyn, Skhidnytsia), picturesque	springs, mineral waters, national	Danube Biosphere Reserve,
	landscapes of Carpathian Mountain	parks, dense forests. Popular ski	therapeutic mud. Main emphasis
	tourism is less developed	tourism, hiking trails, river rafting	on beach holidays and ecotourism
Historical and cultural heritage	Lviv – the cultural capital of Ukraine (UNESCO heritage). A large number of museums, castles, architectural monuments. Popular gastronomic and festival tourism	Castles (Uzhhorod, Mukachevo), UNESCO wooden churches, ethnographic features. Authentic tourism with wine tastings	Rich cultural heritage, including Odesa - a pearl of architecture, unique festivals, Odesa Film Festival, cultural and artistic events
Infrastructure	International airport, developed	Problems of transport accessibility	Developed transport and beach
	road and railway network. Tourist	due to mountainous terrain.	infrastructure. Disadvantages
	infrastructure of Lviv, Truskavets	Development of hotels, thermal	include uneven development of
	and other resorts meets high	resorts, but overall infrastructure is	tourist facilities in remote areas of
	standards	less developed	the region
Tourism products	Cultural and educational tourism, gastronomic tours, festivals, medical and health tourism. Integration of historical monuments with modern services	Ski tourism, eco-tourism, thermal resorts, ethnotourism with an emphasis on tasting local wines and dishes	Beach vacation, gastronomic tourism, ecotourism. Holding international festivals and events, emphasis on Black Sea resort tourism
Opportunities for development	Development of cultural and	Expansion of ski infrastructure,	Increasing environmental
	gastronomic products, organisation	popularisation of thermal resorts,	attractiveness, modernising
	of new festivals, creation of	activation of cross-border	beach infrastructure, developing
	innovative tourist destinations	cooperation for international	ecotourism in combination with
	(castle tourism, inclusive tourism)	tourism	increasing international marketing
Challenges	Oversaturation of tourists in	Lack of developed transport	Problems of coastal ecology,
	Lviv, insufficient promotion of	infrastructure, limited access to	uneven development of tourist
	other districts, modernisation of	investment, environmental risks	facilities, seasonality of main
	infrastructure in certain areas	due to intensive nature use	tourist products

Table 2. Comparison of the tourism potential of the Lviv, Transcarpathia and Odesa regions

Source: created by the authors based on R. Slavik et al. (2020), O. Muzychenko-Kozlovska (2022), N. Pankiv & T. Eliseeva (2024)

The Lviv Region, Transcarpathia, and the Odesa Region each possess distinct tourism potentials, shaped by their unique natural, cultural, and infrastructural features. The Lviv Region focuses primarily on cultural-educational and medical-recreational tourism, while Transcarpathia offers a unique experience through mountain tourism and ethnographic tourism, and the Odesa region is renowned for its international beach tourism. Although each of these regions faces specific challenges, they also hold significant opportunities for development, which can contribute to increased tourist flows both from within Ukraine and internationally.

Comparing the tourism potential of the Lviv Region with the Tatra Mountains (Poland) and the Karlovy Vary Region (Czech Republic) is particularly relevant due to similarities in the focus and development of tourism services. The Tatra Mountains in Poland are well-known for their ski infrastructure, national parks, and active tourism, which mirrors the natural and recreational potential of the Carpathians located in the Lviv Region. In turn, the Karlovy Vary Region serves as an exemplary model of health tourism development, leveraging thermal springs and modern tourist infrastructure, which presents useful insights for enhancing medical and wellness tourism in the Lviv Region. The analysis of these foreign regions offers an opportunity to identify the key elements of their success and compare them with the current state of tourism in the Lviv Region, thereby outlining concrete ways to improve local tourism products and services. To facilitate this comparison, Table 3 presents an overview of the tourism characteristics of the Lviv Region, the Tatra Mountains (Poland), and the Karlovy Vary Region (Czech Republic), highlighting their main features, competitive advantages, and key challenges.

Aspect	Lviv Region	Tatra Mountains (Poland)	Karlovy Vary Region (Czech Republic)
Natural features	Carpathian Mountains, mineral springs (Truskavets, Skhidnytsia), temperate climate, proximity to the Carpathians	Mountain landscapes, glacial lakes, Tatra National Park with rich flora and fauna	Thermal springs, picturesque valleys, unique geomorphology associated with volcanic activity
Tourist focus	Medical tourism (mineral water resorts), cultural and historical excursions (Lviv – UNESCO heritage)	Active tourism: hiking, skiing, mountaineering, ecotourism in nature reserves	SPA tourism based on therapeutic mineral waters, cultural and geotourism routes
Infrastructure	Developed road and railway network, international airport, wide choice of accommodation in the city of Lviv	Seasonal peak loads on infrastructure, limited amenities in remote areas	Luxurious SPA complexes, historic hotels, modern public transport, international accessibility

Table 3. Comparison of aspects of the formation of the tourism potential of the Lviv Region, the Tatra Mountains and the Karlovy Vary Region

			Table 3, Continued
Aspect	Lviv Region	Tatra Mountains (Poland)	Karlovy Vary Region (Czech Republic)
Cultural features	Lviv city centre (UNESCO heritage), castles, temples, local gastronomy, festivals	Limited cultural infrastructure, focused mainly on natural attractions	Historical SPA architecture, cultural monuments, film tourism (the famous Grandhotel Pupp)
Challenges	Overcrowding with tourists in Lviv during the season, infrastructure gaps in rural areas	Seasonal congestion of tourist trails, environmental threats due to large number of visitors	Dependence on SPA tourism and the need for diversification, preserving the historical integrity of the region
Target audience	Domestic and international tourists interested in medical and cultural tourism	Nature lovers, active recreation and ecotourism, mostly domestic and partly international tourists	Visitors to spa resorts seeking wellness and international tourists interested in European traditions

Source: created by the authors based on K. Borkowski et al. (2021), M. Duraj et al. (2023)

The Lviv Region, the Tatra Mountains, and the Karlovy Vary Region offer tourists a wide variety of opportunities, each based on their distinct natural and cultural advantages. The Lviv Region specialises in medical and cultural tourism, actively leveraging its rich historical heritage. The Tatras attract enthusiasts of active and ecotourism, while the Karlovy Vary Region is recognised as a leader in spa tourism, owing to its unique mineral springs. Cooperation between these regions and the exchange of best practices could serve as an effective strategy to enhance their tourist appeal and competitiveness.

The development of the tourism industry in the Lviv Region is significantly influenced by a range of external economic factors that determine the region's competitiveness in the international tourism market. One of the most decisive factors is visa policy, which plays a crucial role in shaping international tourist flows. The visa-free regime between Ukraine and the European Union, introduced in 2017, has greatly simplified travel for citizens of EU member states and neighbouring countries. This policy has stimulated an increase in tourist arrivals from Europe, particularly from Poland, Germany, Hungary, and the Czech Republic. However, tourists from more distant regions, including Asia, North and South America, and the Middle East, continue to face visa barriers, limiting their access to Ukraine (What does Ukraine's..., 2019). This situation underscores the need for additional diplomatic efforts aimed at simplifying entry procedures and expanding tourism opportunities.

Furthermore, the political situation plays a critical role in shaping the image of the country and specific tourist regions. The ongoing war in Ukraine has negatively affected the overall perception of Ukraine as a safe tourist destination, deterring many potential visitors. Nevertheless, the Lviv Region, being geographically distant from active conflict zones, is widely regarded as a safe and attractive location for recreation. To mitigate the negative impact of political instability, it is essential to actively promote the Lviv Region as a safe and appealing tourist destination. This can be achieved through participation in international tourism exhibitions, forums, and targeted campaigns on social media, aimed at building a positive image and encouraging international tourist flows.

Cooperation with international tour operators, travel agencies, and transport companies plays a crucial role in integrating the Lviv Region into the global tourism market. The launch of low-cost airlines, such as Ryanair and Wizz Air, has significantly increased the number of international flights to Lviv, greatly improving the region's transport accessibility (Wizz Air opened..., 2020). Travel companies in Lviv actively collaborate with European partners, creating combined tourism routes that include a stop in Lviv. Given the territorial proximity and historical ties with neighbouring countries such as Poland, Hungary, and Slovakia, special emphasis is placed on cross-border cooperation. Notable examples of such routes include the Lviv - Krakow - Prague - Wroclaw - Lviv bus tour, which offers visits to several royal cities of Europe, including sightseeing tours in Krakow (Market Square, Royal Castle), Prague, and Wroclaw. Another popular route, Lviv - Budapest – Hévíz – Lviv, is a four-day tour connecting Ukraine with Hungary, featuring overnight transfers between cities. These routes contribute to the development of international tourism and enhance the competitiveness of the Lviv Region within the European tourism market. Efforts to strengthen international cooperation and increase the region's tourist appeal are also facilitated through joint tourism projects, festivals, and thematic tours. However, during the period of full-scale war, the inflow of foreign tourists has significantly declined, with most international visitors arriving for work-related purposes, such as humanitarian aid, business engagements, or official tasks, rather than for leisure tourism.

To ensure the stable and sustainable development of the tourism industry in the Lviv Region, it is essential to implement modern strategies that address both current challenges and emerging opportunities in the external environment. The main strategic priorities include: infrastructure development, particularly through investment in modernising transport connections, as well as the construction of new hotels, recreational complexes, and tourist centres; the creation of innovative tourism products, such as interactive itineraries, mobile travel applications, and inclusive tourism offerings, which will attract new categories of visitors, including international and special-needs tourists.

Marketing and promotion, active participation in international tourism exhibitions, targeted advertising campaigns on social media, and the use of modern digital technologies are essential tools for enhancing the Lviv Region's brand visibility on the international market. Equally important is the improvement of service quality through staff training and the adoption of international service standards to meet the expectations of foreign visitors. Environmental sustainability is also a critical aspect of tourism industry development, ensuring the preservation of natural resources and the minimisation of negative environmental impacts. As tourism grows, a balance between economic development and environmental protection must be maintained. External economic factors have a profound impact on the development of the Lviv Region's tourism sector, presenting both challenges and opportunities for its advancement. Adaptation to global changes, effective international cooperation, and the implementation of modern development strategies will ensure the sustainable growth of the region's tourism potential. A focus on service quality, innovation, and environmental sustainability will be crucial for the successful positioning of the Lviv Region on the global tourism map.

The development of strategies for entering new markets is a key task to secure the sustainable growth of the tourism industry in the Lviv Region and to enhance its competitiveness internationally. The Lviv Region possesses unique potential owing to its rich historical and cultural heritage, developed infrastructure, and geographical proximity to European countries. This potential can be effectively realised through strategically designed initiatives that align with global tourism trends, target market characteristics, and foreign economic influences. Diversification of tourism products must be tailored to the interests of various visitor categories and global industry trends. For instance, special thematic tours can be designed for European tourists interested in historical monuments, including visits to medieval castles in the Lviv Region, participation in historical festivals, and excursions through Lviv's old quarters. Additionally, gastronomic tours - featuring local cuisine tastings, cooking masterclasses for traditional dishes, and visits to regional wineries - may appeal to tourists from Asia and the Middle East, where culinary experiences are gaining popularity as a form of cultural tourism. By diversifying tourism offerings and targeting specific international markets, the Lviv Region can strengthen its position as a competitive and attractive tourist destination, contributing to both regional economic growth and international cultural exchange.

Especially during times of war, when air travel is limited, the creation of international rail connections is of strategic importance for attracting tourists to the Lviv Region. Cooperation with international rail operators, such as PKP Intercity (Poland), MÁV (Hungary), and RegioJet (Czech Republic), contributes to the launch of new international routes, making it possible for tourists from various countries to travel directly to the region. For instance, direct trains from Poland, Hungary, or Slovakia to Lviv could significantly enhance tourist flows to the city by offering convenient and safe travel options. In modern tourism, digitalisation plays a crucial role in business development. Travel companies in the Lviv Region should invest in online platforms and services that enable tourists to book tours, accommodation, and other services via the Internet. The tourist experience can be significantly improved through mobile applications that feature interactive maps, personalised routes, and practical tips for visitors. Additionally, virtual museum tours and online excursions would help attract remote audiences who are unable to visit the region in person but are interested in its cultural heritage.

A powerful tool for promoting the tourism potential of the Lviv Region is the use of social media platforms. Targeted advertising campaigns on platforms such as Facebook, Instagram, and TikTok enable precise targeting of potential customers and help reach a broad international audience. For example, advertising campaigns that showcase unique festivals, traditional cuisine, and cultural events of the Lviv Region can successfully capture the attention of tourists from the EU, the USA, and Asia. Moreover, collaborating with well-known tourism experts and influencers can further contribute to shaping a positive image of the region and attracting new visitors. Strengthening the position of the Lviv Region in the international tourism market also depends on compliance with international standards. The implementation of high standards in areas such as hospitality, catering, and excursion services enhances tourist trust and contributes to building a positive reputation for the region. For example, the certification of tourism services in accordance with international ISO standards or the adoption of environmentally sustainable practices in hotel operations would increase the region's appeal to European and international travellers.

The expansion of the business tourism segment represents an important direction for the development of the hospitality industry in the Lviv Region. The organisation of international business forums, conferences, and exhibitions will contribute to attracting business tourists, who, alongside participating in professional events, may also take interest in the region's cultural and gastronomic offerings. For example, the establishment of modern congress centres in Lviv and the hosting of international exhibitions would not only attract investors but also foster the development of local infrastructure, including hotels, transport, and event services.

To enter new markets, cooperation with leading international tour operators is a crucial strategy. Establishing agreements with major global companies such as TUI Group, CWT (Carlson Wagonlit Travel), Expedia Group, Booking Holdings, as well as regional leaders like Polrail Service (Poland), Čedok (Czech Republic), and American Express Global Business Travel (USA), would enable the integration of Lviv Region's tourism products into global travel networks. Joint programmes with prominent European tour operators, including TUI and Čedok, could focus on cultural and educational tourism, positioning Lviv as an essential stop in itineraries for visitors from Germany, the UK, and France. Additionally, partnerships with American Express Global Business Travel could facilitate the customisation of tourism packages to meet the expectations of American travellers, thereby broadening the region's reach into North American markets. By establishing such international collaborations, the Lviv Region can significantly enhance its global visibility, diversify its tourist offerings, and increase competitiveness in the international tourism market. Such partnerships will contribute to forming a stable flow of tourists, expanding the geographical diversity of visitors, and increasing the international recognition of the Lviv Region within the global tourism market.

The implementation of international tourism programmes creates broad opportunities for establishing partnerships with other countries. For example, joint tourist routes connecting Poland, Hungary, Slovakia, and the Lviv Region would attract foreign visitors by offering multinational cultural experiences. Additionally, the organisation of joint sports and cultural events between these countries could serve as a powerful tool to stimulate the development of international tourism. Participation in international tourism festivals is another effective method for promoting the Lviv Region. Inviting renowned artists, chefs, and designers to participate in such events will draw public attention and ensure international media coverage. For instance, European star chefs could lead a gastronomic festival, attracting professional culinary communities and gastronomy enthusiasts.

The development of thematic tours represents a promising avenue for attracting tourists from various countries. Specialised routes designed for history lovers, cultural exchange participants, and gastronomy enthusiasts will appeal to a wider international audience seeking unique and immersive experiences. The Lviv Region can offer diverse thematic programmes, allowing visitors to engage deeply with the region's cultural, historical, and gastronomic heritage. The implementation of these measures, including the integration of digital technologies, collaboration with international tour operators, the creation of unique tourism products, and adaptation to international quality standards, will enable the Lviv Region to strengthen its position in the global tourism market. These efforts will support the region's sustainable development, attract new categories of tourists, and enhance overall competitiveness.

Developing strategies for entering new markets should become a priority area for ensuring the long-term, sustainable growth of the tourism industry in the Lviv Region. The region's extensive tourism resources, particularly its historical and cultural heritage, medical and wellness tourism potential, and geographical proximity to European countries, provide strong prerequisites for establishing a competitive advantage in the international tourism market. However, to effectively realise this potential, it is necessary to consider the influence of external economic factors, such as visa barriers, currency fluctuations, and global tourism trends. Addressing these challenges will require coordinated efforts and adaptive strategies to ensure that the Lviv Region can fully leverage its opportunities for international tourism development.

DISCUSSION

The competitiveness of tourist destinations is a crucial factor in the development of the hospitality industry, as it determines the ability of regions to attract visitors, stimulate economic growth, and create new jobs. To ensure the sustainable development of tourism, it is essential to consider not only internal factors, such as infrastructure, cultural resources, and service quality, but also external factors, including global economic conditions, political situations, and evolving tourist behaviour. The ability to adapt to external factors is critical for maintaining and enhancing the competitiveness of tourist destinations, as well as ensuring their economic resilience in a context of constant change.

The study by C. Camisón (2020) focused on analysing the competitiveness of enterprises and regions, particularly in the context of sustainable tourism development. One of the core aspects of their research is the importance of adapting tourism enterprises to external factors, such as economic, social, and environmental changes, to maintain competitiveness in a dynamic environment. This approach aligns with the framework of the present study, which also emphasised the role of external economic factors, including the political situation, currency fluctuations, and visa barriers, all of which directly affect tourist flows. A common element identified in both studies is the emphasis on international partnerships. Both this and the current research highlighted that cooperation with international partners, particularly with tour operators and transport companies, is a key mechanism for boosting tourist flows and enhancing regional competitiveness. Nevertheless, there are notable differences between the two studies. C. Camisón (2020) work focused more on the internal organisational aspects of tourism enterprises, particularly their capacity for adaptation and innovation, as well as the development of new products and services that meet the modern needs of tourists. In contrast, the current study concentrated more on external factors, especially the impact of the war on tourist flows and the need for tourism enterprises and regions to adapt to new geopolitical and economic conditions, reflecting the unique and challenging context of Ukraine.

The study by D.A. Gârdan *et al.* (2020) focused on how enterprises can adapt their strategies to maintain or enhance competitiveness during crisis situations. At the same time, this study also highlighted the importance of effective interaction between enterprises and other market participants, including suppliers, partners, and government agencies, as a critical factor for successful adaptation to new conditions. The authors emphasised the role of organic enterprise growth and adaptation to external changes, including the use of digital technologies to improve customer service and attract new consumer segments. Both D.A. Gârdan *et al.* (2020) study and the present research agree that a key component of competitiveness is the ability of enterprises to swiftly adapt to market changes and identify new opportunities for development.

N.V. Kuzmynchuk et al. (2023) examined the management of foreign economic activities, focusing on the necessity for enterprises to adapt to the challenges of globalisation and international market demands, particularly through the creation of a favourable business environment, modernisation, and innovative development. They underscored the importance of developing new management strategies that incorporate effective legal and regulatory mechanisms to support enterprises in navigating international markets. N.V. Kuzmynchuk et al. (2023) focused on the systematic management of foreign economic activities, with particular attention to infrastructure and financial challenges in the context of international markets. In contrast, the present study emphasised innovation and scientific-technological advancement as primary drivers of competitiveness, especially in the tourism sector.

The study by A.H. Tran (2022) focused on the concept of dynamic competitiveness of enterprises in the tourism sector, highlighting the importance of adapting to a changing external environment and effectively utilising resources to achieve sustainable competitive advantage. A.H. Tran (2022) research also explored various aspects of dynamic capabilities within enterprises, including the capacity for creativity, innovation, and the integration of external and internal resources. These ideas conceptually align with the approaches presented in this study, which also emphasised adaptability and the ability to integrate diverse resources as key components of competitiveness.

A.H. Tran (2022) examined the notion of dynamic capability in depth, identifying five main components: creative, adaptive, absorptive, cohesive, and market-oriented capabilities, all of which enable enterprises to remain flexible and respond effectively to market changes. In contrast, while this study addressed specific strategies for integrating competitive aspects of enterprises, it placed greater emphasis on strategic pathways for entering international markets, without delving as deeply into the practical elements of dynamic capabilities that underpin competitiveness in operational contexts. Moreover, A.H. Tran (2022) study adopted an empirical approach based on enterprise surveys, providing a quantitative basis for analysis and a deeper examination of the interrelationships between various dynamic capabilities and enterprise competitiveness. By contrast, this study is primarily theoretical, focusing on the development of strategic directions, particularly in relation to international market integration, and less on empirical assessment of dynamic capabilities.

In addition, the study by N.S. Shariffuddin *et al.* (2022) aimed to review the competitiveness of tourism destinations through a systematic literature review. Their work identified key factors influencing the competitiveness of tourism destinations and highlighted the importance of understanding this concept from both visitor and service provider perspectives. The authors concluded that there is no universal set of indicators for measuring competitiveness, as it is a complex and multifaceted phenomenon encompassing both internal and external factors. Compared to this study, N.S. Shariffuddin et al. (2022) focused more on systematising the existing literature regarding key attributes of competitiveness, including an analysis of established models such as the Ritchie and Crouch model, and pointed out the absence of a single standardised framework for assessment. Nevertheless, both studies underscored the importance of integrating demand-side (tourist) and supply-side (service provider) factors to develop effective tourism development strategies. While N.S. Shariffuddin et al. (2022) study is more focused on theoretical and literature-based approaches to understanding the competitiveness of tourism destinations, this study placed greater emphasis on practical applications, including specific models and strategies aimed at enhancing competitiveness in the real tourism sector.

The study by X. Wang & D. Liu (2020) focused on the relationship between tourism competitiveness and economic growth in developing countries. The authors employed the linkage ratio model and the information entropy weight method to analyse this relationship across 56 countries. Their findings indicated that, in many of these countries, there is an inconsistent relationship between tourism competitiveness and economic growth, with imbalanced development particularly notable in several countries in Latin America, East Asia, and the Pacific. However, X. Wang & D. Liu (2020) focused primarily on quantitative analysis, using statistical models to explore the connection between economic growth and tourism competitiveness in the specific context of developing countries. The present study is centred on formulating strategies for tourism development, with a particular focus on integrating into international markets and promoting the use of innovative technologies to enhance competitiveness in the tourism sector. Similarly,

the study by R. Purwono et al. (2023) examined the competitiveness of tourism destinations, focusing on the roles of infrastructure, sustainable development, connectivity, and demand drivers in tourism sector growth. A central component of their work is the analysis of the economic impact of tourism through the Travel and Tourism Development Index (TTDI), with a specific emphasis on the developing economic contexts of Asian countries. While R. Purwono et al. (2023) applied a structural equation modelling (SEM) approach to investigate the relationship between tourism performance and competitiveness specifically within Asian countries, the present study adopted a broader perspective, analysing a wider set of developing countries and focusing on macroeconomic factors influencing tourism competitiveness, rather than limiting the analysis to specific regions or tourism development indices.

The study by A.S. Saleh et al. (2022) focused on assessing foreign tourists' perceptions of Qatar's competitiveness as a tourist destination. Using visitor survey data, the authors identified key factors that influence Qatar's attractiveness, including natural and cultural resources, infrastructure, accessibility, and service quality. Similarly, the study by A. Salman & M.S. Hasim (2024) examined the factors influencing Malaysia's competitiveness as a tourist destination, focusing particularly on the motivations of Middle Eastern visitors and their perceptions of Malaysia as a destination. Their research highlighted the importance of security and the provision of high-quality hospitality services, which are crucial for attracting tourists from the Middle East. Both A.S. Saleh et al. (2022) study and the present research emphasised the importance of infrastructure, security, and accessibility as critical elements in determining the competitiveness of tourist destinations. In contrast, A. Salman & M.S. Hasim (2024) study placed greater emphasis on socio-cultural and security factors, which are particularly significant for visitors from the Middle East, and on evaluating destination image and service quality. Thus, while they focused on visitor perceptions, cultural sensitivities, and safety concerns, this study is more concerned with the economic dimension of tourism competitiveness, particularly regarding how tourism development contributes to broader economic growth and stability through enhanced competitiveness.

In the study by I. Mustetsa & S. Luchik (2023), particular attention was given to the management of tourism enterprises in Ukraine under martial law, focusing on specific changes that have occurred as a result of the aggression by the Russian Federation, and recommendations for management practices in such extreme conditions. For instance, the authors highlighted the importance of addressing the psycho-emotional state of employees and entrepreneurs, as well as the significant transformations in both external and internal business environments, which strongly influence decision-making processes within the tourism sector. Both I. Mustetsa & S. Luchik (2023) study and the present research analysed the impact of external factors, such as war, on the tourism industry, and underscore the necessity for tourism enterprises to adapt to new realities. Furthermore, both studies examined strategies that enable tourism enterprises to maintain competitiveness and stability during times of crisis.

The study of tourism destination competitiveness consistently shows that the key factors for maintaining competitiveness include effective infrastructure management, the development and promotion of cultural and natural resources, and the capacity to quickly adapt to changing external environments. Numerous studies emphasised the critical role of cooperation between public and private sectors, as well as collaboration with international partners, to stimulate tourist flows and ensure sector resilience. Despite these commonalities, research also highlighted differences in emphasis on particular aspects, such as the use of economic models, visa policy barriers, and strategies for enterprise adaptation in crisis situations. Therefore, to ensure the competitiveness of tourist destinations, it is necessary to integrate a variety of development strategies, carefully balancing local characteristics with global trends. This integrated approach allows regions to respond effectively to challenges and leverage their unique assets to sustain and grow their tourism sectors.

CONCLUSIONS

The study of the management of foreign economic activity of tourism enterprises in the Lviv Region highlighted several critical aspects that directly influence the competitiveness of these enterprises in the international market. Taking into account the realities of globalisation, the need for innovative management approaches, and the importance of regional integration, the tourism sector of the Lviv Region demonstrates significant potential for continued development. One of the key factors determining the competitiveness of tourism enterprises in the Lviv Region is the effective management of foreign economic activity. The conceptual management approaches examined in this study facilitate both the sustainable operation of enterprises and their adaptation to changes in the external environment. Through the application of strategic, process, and adaptive management approaches, tourism companies can mitigate risks associated with global economic fluctuations and strengthen cooperation with international partners. In analysing external factors influencing the activities of tourism enterprises, the study underscores the importance of elements such as political dynamics, international crises, and economic volatility. Nevertheless, despite these challenges, the Lviv Region possesses unique opportunities for tourism development, including its favourable geographical location, well-developed infrastructure, and rich cultural heritage. Strategic management of foreign economic activity allows tourism enterprises to leverage these advantages, fostering their integration into international tourism markets.

A crucial aspect addressed in the study is the implementation of innovative technologies to enhance both management processes and the provision of tourism services. Digitalisation, particularly through the use of CRM systems and online platforms, can significantly improve customer engagement and increase the competitiveness of tourism businesses. Moreover, the development of new tourism products targeted at foreign visitors plays a vital role in expanding the geographical reach of the region's tourism offerings. The findings of the study demonstrated that, in 2024, the tourism industry of the Lviv Region continues to show stable growth, despite facing economic and security challenges. In the first half of the year, the net income of tourism companies reached UAH 1.1 billion (representing 19.1% of Ukraine's total tourism sector income), while tax revenues increased by 27%, totalling UAH 314.9 million. Additionally, a record UAH 47 million was collected from the tourist tax, reflecting the ongoing activity and resilience of the industry. The structure of tourist flows has also undergone notable changes: the share of domestic tourists rose to 89%, while the proportion of foreign tourists declined to 11-15%. Moreover, the average length of stay increased, now ranging from 3-7 days for domestic tourists and 6-10 days for foreign visitors. The primary factors contributing to these shifts include the ongoing war, currency fluctuations, restrictions on international travel, and the development of regional infrastructure. These findings highlighted the critical importance of adapting tourism strategies in the Lviv Region to address contemporary challenges and ensure sustained competitiveness in the evolving global tourism landscape.

The SWOT analysis of the tourism industry in the Lviv Region identified a range of strengths, weaknesses, opportunities, and threats that influence the performance and development prospects of enterprises in this sector. Among the key strengths are the region's natural and recreational resources, access to international markets, and a well-developed transport infrastructure. However, several weaknesses remain, including insufficient infrastructure in certain areas, a low level of financial investment, and a weak marketing strategy, particularly for international promotion. To address these weaknesses, it is essential to implement an integrated approach to development, which should focus on the modernisation of tourism infrastructure, enhancing the quality of tourism services, and intensifying marketing efforts at the international level.

Among the threats faced by the tourism industry are the high level of competition in the global tourism market, political instability, and the risks associated with economic crises. Nonetheless, effective strategic management can mitigate the impact of these threats. This can be achieved through the development of innovative tourism products, optimisation of marketing strategies, and the strengthening of cooperation with international partners. In conclusion, to ensure the sustainable development of the tourism industry in the Lviv Region, a series of targeted measures is required. These should focus on improving the management of foreign economic activities, intensifying international marketing campaigns, investing in infrastructure modernisation, and introducing innovations that meet contemporary market demands. Focusing on these priorities will enable the Lviv Region to enhance the competitiveness of its tourism enterprises, attract new investments, and increase the flow of international visitors. Ultimately, this will contribute to the economic development of the region and strengthen the position of the Lviv Region as one of the leading tourist destinations in Ukraine and Europe.

• ACKNOWLEDGEMENTS None.

• CONFLICT OF INTEREST None.

REFERENCES

- [1] Borkowski, K., Chowaniec, E., Durmała, M., & Kubasiak, M. (2021). Assessment of tourist traffic in Tatra National Park in 2018-2020. *Economics and Environment*, 79(4), 164-182. doi: 10.34659/2021/4/34.
- [2] Camisón, C. (2020). Competitiveness and sustainability in tourist firms and destinations. *Sustainability*, 12(6), article number 2388. doi: 10.3390/su12062388.
- [3] Cherchyk, L., & Lazhnik, A. (2021). Scientific approaches to the formation of management of tourist enterprises. *Journal of V.N. Karazin Kharkiv National University. Series: International Relations. Economics. Country Studies. Tourism*, 13, 209-215. doi: 10.26565/2310-9513-2021-13-21.
- [4] Díaz-Padilla, V.T., Travar, I., Acosta-Rubio, Z., & Parra-López, E. (2023). Tourism competitiveness versus sustainability: Impact on the World Economic Forum model using the Rasch methodology. *Sustainability*, 15(18), article number 13700. <u>doi: 10.3390/su151813700</u>.
- [5] Duraj, M., Niemiec, D., Kubáč, J., Marschalko, M., Pohanka, R., Sysala, D., Vlček, J., & Sombathy, E. (2023). UNESCO world heritage site Karlovy Vary and its geotourism development opportunities linked with architecture. *Web of Conferences*, 396, article number 13001. doi: 10.1051/matecconf/202439613001.
- [6] Gârdan, D.A., Dumitru, I., Gârdan, I.P., & Pasțiu, C.A. (2020). Touristic SME's competitiveness in the light of present challenges a qualitative approach. *Sustainability*, 12(21), article number 9191. <u>doi: 10.3390/su12219191</u>.
- [7] Gerasimenko, H. (2013). Formation of adaptive corporate international business management system in modern conditions. *Economy and State*, 11, 79-82.
- [8] Kmetik, Yu. (2023). *Lviv as a tourist destination. Who visits the city most often and for what purpose*. Retrieved from https://tvoemisto.tv/news/lviv_turystychnyy_hto_naychastishe_vidviduie_misto_i_z_yakoyu_metoyu_159066.html.
- [9] Kryvda, O., Boichuk, N., & Vovchenko, A. (2024). Mechanism of management of the foreign economic activity of the enterprise. *Economy and Society*, 76, 23-28. doi: 10.32782/infrastruct76-4.
- [10] Kuzmenko, O., & Kostenko, A. (2018). <u>Analysis of approaches to management of foreign economic activity of enterprises</u>. *Economics and Management*, 1(41), 159-165.
- [11] Kuzmynchuk, N.V., Liashevska, V.I., & Butenko, M.K. (2023). Improving the management of foreign economic activity and competitiveness of enterprise. *BusinessInform*, 12, 363-368. doi: 10.32983/2222-4459-2023-12-363-368.
- [12] Lagodiienko, V., Popelo, O., Zybareva, O., Samiilenko, H., Mykytyuk, Y., & Saif Alsawwafi, F.M. (2022). Peculiarities of the management of the foreign economic activity of enterprises in current conditions of sustainability. *International Journal of Sustainable Development and Planning*, 17(4), 1215-1223. <u>doi: 10.18280/ijsdp.170420</u>.
- [13] Lviv Region is second in Ukraine in terms of tourism revenues. (2024). Retrieved from <u>https://zemliak.com/news/vidpochynok/7903-lvivshchina-druga-v-ukrajini-za-dohodami-vid-turizmu</u>.
- [14] Malyarchuk, N. (2021). Ensuring competitiveness of tourist business entities based on marketing approach. *Economics*, *Finance and Management Review*, 2(6), 164-172. doi: 10.36690/2674-5208-2021-2-164.
- [15] Melnik, A., & Mamchur, A. (2020). Factors of impact on foreign economic activity of tourist enterprises. *Economy and Society*, 43, 66-71. doi: 10.32843/infrastruct43-13.
- [16] Mustetsa, I., & Luchik, S. (2023). Ways to improve the management of enterprises in the tourism industry of Ukraine in martial law. In *Management strategies and policies in the contemporary economy* (pp. 128-132). Chisinau: ASEM. doi: 10.53486/icspm2022.20.
- [17] Muzychenko-Kozlovska, O. (2022). Strategy of tourism development planning of Odessa Region of Ukraine on the basis of swot-analysis of its tourist attractiveness. *Black Sea Economic Studies*, 73, 148-154. doi: 10.32843/bses.73-23.
- [18] Ogutu, H., Adol, G.F., Bujdosó, Z., Andrea, B., Fekete-Farkas, M., & Dávid, L.D. (2023). Theoretical nexus of knowledge management and tourism business enterprise competitiveness: An integrated overview. *Sustainability*, 15(3), article number 1948. doi: 10.3390/su15031948.
- [19] Pankiv, N., & Eliseyeva, T. (2024). Lviv Region as a promising region of Ukraine for sustainable development of tourism and recreation. *Development Service Industry Management*, 2, 83-95. <u>doi: 10.31891/dsim-2024-6(13)</u>.
- [20] Pavlish, L.V. (2013). <u>Lviv Region as a promising region of Ukraine for the development of tourism and recreation</u>. *Trade, Commerce, Entrepreneurship*, 15, 124-128.
- [21] Pinyazhko, V. (2025). In 2024, the tourist tax in Lviv Region set a record of more than UAH 47 million. Retrieved from https://suspilne.media/lviv/919011-na-lvivsini-v-2024-roci-turisticnij-zbir-ustanoviv-rekord-ponad-47-miljonivgriven/.
- [22] Purwono, R., Esquivias, M.A., Sugiharti, L., & Rojas, O. (2023). Tourism destination performance and competitiveness: The impact on revenues, jobs, the economy, and growth. *Journal of Tourism and Services*, 28(15), 161-187. <u>doi: 10.29036/jots.v15i28.629</u>.
- [23] Saleh, A.S., Alsowaidi, S., Yap, G., & Saha, S. (2022). Destination competitiveness: The perceptions of foreign tourists visiting Qatar. Retrieved from <u>https://qspace.qu.edu.qa/bitstream/handle/10576/45352/SSRN-id3858560.</u> pdf;jsessionid=6B6DA5135FBD1C53EBCBD1C0AFE86A4C?sequence=2.
- [24] Salman, A., & Hasim, M.S. (2024). Factors and competitiveness of Malaysia as a tourist destination: A study of outbound Middle East tourists. *Asian Social Science*, 8(12), 48-54. <u>doi: 10.5539/ass.v8n12p48</u>.
- [25] Sevastyanov, R., & Donchenko, O. (2023). <u>Problems of green tourism development in Ukraine and the world</u>. *Management and Business*, 1(2), 246-257.

- [26] Shariffuddin, N.S., Azinuddin, M., Hanafiah, M.H., & Wan Mohd Zain, W.M. (2022). A comprehensive review on tourism destination competitiveness (TDC) literature. *Competitiveness Review*, 33(4), 787-819. <u>doi: 10.1108/CR-04-2021-0054</u>.
- [27] Slavik, R., Salyuk, M., & Mykyta, M. (2020). Valuation of socio-economic indicators of administrative regions of Transcarpathian Region in the context of construction of recreation-tourism infrastructure. *Human Geography Journal*, 28, 78-88. doi: 10.26565/2076-1333-2020-28-09.
- [28] Streimikiene, D., Svagzdiene, B., Jasinskas, E., & Simanavicius, A. (2020). Sustainable tourism development and competitiveness: The systematic literature review. *Sustainable Development*, 29, 259-271. doi: 10.1002/sd.2133.
- [29] Tourist tax in Lviv Region set a new record in 2023. (2024). Retrieved from <u>https://lzahid.com/info/turystychnyj-zbir-na-lvivshhyni-u-2023-rotsi-vstanovyv-novyj-rekord/</u>.
- [30] Tran, A.H. (2022). Improving the dynamic competitiveness of enterprises: Research in the field of tourism. *Journal of Economics, Finance and Management Studies*, 5(8), 2204-2212. doi: 10.47191/jefms/v5-i8-12.
- [31] Voloshchak, M. (2023). Lviv's hospitality revenues increased by 15% in 2022. Retrieved from <u>https://city-adm.lviv.ua/news/tourism/295240-u-2022-rotsi-nadkhodzhennia-z-haluzi-hostynnosti-lvova-zrosly-na-15protsent</u>.
- [32] Wang, X., & Liu, D. (2020). The coupling coordination relationship between tourism competitiveness and economic growth of developing countries. *Sustainability*, 12(6), article number 2350. <u>doi: 10.3390/su12062350</u>.
- [33] What does Ukraine's visa policy look like (map). (2019). Retrieved from <u>https://europewb.org.ua/yak-vyglyadaye-vizova-polityka-ukrayiny-karta/</u>.
- [34] Wizz Air opened a base in Lviv, and Ryanair, Turkish Airlines and Pegasus resumed flights! (2020). Retrieved from http://lowcostavia.com.ua/wizz-air-vidkryv-bazu-u-lvovi-a-ryanair-turkish-airlines-ta-pegasus-vidnovyly-rejsy/.
- [35] Wu, Y., Wang, D., Bao, J., & Qu, J. (2022). The role of regional formal institution and foreign direct investment in the performance of tourism firms. *International Journal of Business Management and Finance Research*, 5(2), 46-66. doi: 10.53935/26415313.v5i2.224.
- [36] Zhyhalkevych, Z., & Drahomoshchenko, A. (2021). Strategic planning of foreign economic activity of the enterprise. *Economy and Society*, 33. doi: 10.32782/2524-0072/2021-33-27.

Стратегії менеджменту зовнішньоекономічної діяльності підприємств сфери туризму Львівщини, як чинник формування їх конкурентоспроможності

Анатолій Павленчик

Кандидат економічних наук, доцент Львівський державний університет фізичної культури імені Івана Боберського 79007, вул. Костюшка, 11, м. Львів, Ураїна https://orcid.org/0000-0002-2205-1883

Назарій Ціздин

Аспірант

Львівський державний університет фізичної культури імені Івана Боберського 79007, вул. Костюшка, 11, м. Львів, Ураїна https://orcid.org/0009-0001-2172-5815

Анотація. Дослідження було проведено з метою оцінки конкурентоспроможності туристичної галузі Львівщини на міжнародному рівні та розробки стратегій для її розвитку в умовах поточної політичної та економічної ситуації. Для цього було використано комплексний підхід, що включає SWOT-аналіз конкурентоспроможності та порівняння з іншими туристичними регіонами. У дослідженні також було розроблено стратегії виходу на нові ринки для підприємств туристичної сфери Львівщини, зокрема через міжнародне партнерство, створення спільних туристичних програм та розвиток інфраструктури. У дослідженні проаналізовано динаміку розвитку туристичної галузі Львівщини у 2022-2024 роках, зокрема чистий дохід у 2024 році туристичних компаній, який у першому півріччі склав 1,1 млрд грн (19,1 % від загального доходу галузі в Україні), податкові надходження на рівні 314,9 млн грн (+27 % порівняно з 2023 роком) та рекордний туристичний збір у 47 млн грн, що відображає тенденції змін у внутрішньому та іноземному туризмі, зростання середньої тривалості перебування туристів і адаптацію регіону до економічних і безпекових викликів. Основними результатами дослідження стали визначення сильних сторін Львівщини, таких як багата культурна спадщина, природні ресурси, розвинена інфраструктура та сприятливе географічне положення. Львівщина виявилася перспективною для розвитку культурного туризму, гастрономічного туризму та екологічного відпочинку. Виявлено, що Львівщина має великий потенціал для покращення своєї позиції на міжнародному ринку, проте потребує додаткових інвестицій у розвиток маркетингових стратегій, інфраструктури та цифрових технологій. Порівняння з іншими туристичними регіонами, такими як Татри в Польщі та Карловарський край у Чехії, показало, що Львівщина має конкурентні переваги завдяки культурній спадщині та природним ресурсам, але поступається в плані інфраструктури та розвитку сталого туризму. Стратегії інших регіонів фокусуються на покращенні інфраструктури, розвитку інтегрованих туристичних продуктів та активізації міжнародного маркетингу, що є важливим напрямком для Львівщини. Це свідчить про необхідність інвестування в розвиток інфраструктури, розширення туристичних маршрутів, розвиток транспортної доступності та покращення якості обслуговування

Ключові слова: стратегії; менеджмент; інноваційні підходи; міжнародне середовище; географічна близькість; розвиток інфраструктури



DEVELOPMENT MANAGEMENT

UDC 005.32 DOI: 10.63341/devt/1.2025.57

Vol. 24, No. 1. 2025 🤇

The influence of innovation climate and motivation on employee performance through innovative behaviour as a mediating variable

Sri Handari Wahyuningsin*

Postgraduate Student Muhammadiyah University of Yogyakarta 55183, Brawijaya Str., Yogyakarta, Indonesia https://orcid.org/0000-0002-8840-3220

Andrean Hafid

Postgraduate Student Muhammadiyah University of Yogyakarta 55183, Brawijaya Str., Yogyakarta, Indonesia https://orcid.org/0009-0003-2461-9377

Abstract. The researcher's attention to the importance of innovative climate to drive performance increases along with the complex competitiveness of the organisation. This study aimed to analyse the influence of innovation climate and motivation on employee performance through innovative behaviour as a mediating variable. The respondents of this study were 170 junior high and senior high school teachers in East Lampung Province. This study used a quantitative paradigm, by conducting a survey through distributing questionnaires to respondents, and then conducting quantitative analysis with SPSS. The results of the study indicated that an innovation climate is able to drive innovative work behaviour, motivation is able to drive employee performance, and innovative work behaviour can drive performance. However, this research was unable to prove the direct influence of the innovation climate on performance. The innovation climate can affect performance through the mediation effect of innovative behaviour. Additionally, this study did not prove that employee motivation can drive innovative work behaviour. Similarly, innovative work behaviour is not proven to mediate the influence of motivation on employee performance. The results of this study provided implications for the important role of innovative work behaviour as a mediator in explaining the influence of innovation climate on performance in organisations. This study suggested that to enhance employee performance, organisations must foster a supportive innovation climate, as innovative work behaviour serves as a crucial mediator between innovation climate and performance. Furthermore, methods to enhance motivation should be complemented by initiatives to cultivate a conducive environment, thereby encouraging employees to innovate within the workplace

Keywords: impact of motivation; organisational innovation; workplace innovation; work innovations; work environment

INTRODUCTION

In the disruptive age experienced by all organisations, the implementation of motivation and innovative climate can enhance employee performance, thereby improving the quality of the organisations, including institutions in Indonesia. As technology advances and the demand for excellence increases, every organisation must continually adapt and enhance its standards, particularly by boosting employee effectiveness. Employees are essential human

resources, and organisational support is essential to foster an innovative climate that promotes the execution of activities within the setting. To improve employee performance, organisations need to consider the factors that influence it, one of which is the innovation climate.

According to S. Bibi *et al.* (2020), innovation climate is a strong atmosphere that fosters and spreads creative mechanisms to achieve its goals. Research on corporate

Article's History: Received: 15.10.2024; Revised: 21.01.2025; Accepted: 25.03.2025

Suggested Citation:

Wahyuningsin, S.H., & Hafid, A. (2025). The influence of innovation climate and motivation on employee performance through innovative behaviour as a mediating variable. *Development Management*, 24(1), 57-66. doi: 10.63341/devt/1.2025.57.

*Corresponding author



Copyright © The Author(s). This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/)

climate focused on employee perceptions of the work climate, which affects their attitudes and behaviours in the workplace. According to P. He *et al.* (2019), innovation is a complex and high-risk condition. Many employees have difficulty in innovating. A good innovation climate can positively affect the performance of an organisation or individual, while a bad innovation climate can hinder performance. Innovation climate is important for organisations or individuals because with the existence of an innovation climate, new solutions can be created that can improve their performance. This is proven by B. Afsar & W.A. Umrani (2020), who said that "innovation climate is important for innovation practices and performance". Besides innovation climate, performance is also influenced by the motivation of the company itself.

Motivation can create enthusiasm and encouragement to the employees themselves. A boss must be able to understand the nature of employees. It can be said that if someone has strong motivation, then that person will be more active in working, and that causes their performance to increase. This is proven by H. Widyaningsih et al. (2021), which says that "motivation directly affects performance". With a strong climate of innovation and motivation, it will affect employee performance which will have an impact on the ease of the organisation to achieve its goals. Because employees are motivated to work harder and, and there is a good climate of innovation in the organisation, it will create innovative behaviour. According to H. Widyaningsih et al. (2021), innovative work behaviour is the introduction and application of new ideas, processes, products or procedures designed for better performance in the workplace; thus, good innovative work behaviour with the application of new ideas in solving problems in production can create or produce better performance.

Innovative behaviour also plays a role in influencing employee performance in an organisation. Innovative behaviour can improve employees' ability to work efficiently and productively. Because when employees are involved in the innovation process, they can find new ways to do their jobs more efficiently. This is evidenced by F.P. Adekanmbi & W.I. Ukpere (2022), who stated that "innovative behaviour has a significant relationship with performance". In addition to influencing employee performance, innovative behaviour is also influenced by two factors, such as innovation climate and motivation. Innovation climate is very important in facilitating innovative behaviour. If the organisation or environment encourages and supports innovation, then individuals or groups will feel more open to experimenting and trying new things. This is evidenced by B. Afsar & W.A. Umrani (2020), who stated that innovation climate has an impact on innovative work behaviour. Motivation can encourage someone to try new things, dare to take risks, and achieve the best results in their work. It is important for individuals or organisations to motivate employees to increase their innovative behaviour. D.S. Widodo & A. Yandi (2022) and Q. Dai et al. (2022) concluded that employee motivation has a significant positive effect on innovative work behaviour. However, R. Hidayat (2021) was unable to prove the positive influence of motivation on employee performance.

Based on the research gap, the authors wanted to re-examine the influence of innovation climate, motivation

on performance and mediation of innovative behaviour in an organisation, which was the purpose of this study. The hypotheses for this study were the following. H1: innovation climate has a significant positive effect on performance. H2: motivation has a significant positive effect on performance. H3: innovative behaviour has a significant positive effect on performance. H4: innovation climate has a significant positive effect on innovative behaviour. H5: motivation has a significant positive effect on innovative behaviour. H6: innovative behaviour mediates the positive influence of innovation climate on performance. H7: innovative work behaviour mediates the influence of motivation on performance.

THEORETICAL OVERVIEW

The influence of innovation climate on performance. Hypothesis development. Research conducted by A. Waheed *et al.* (2019) concluded that innovation climate is very important in creating good performance. S.M. Chege & D. Wang (2020) also raised the importance of innovation needed for company growth; it means that performance will increase. V. Ramadani *et al.* (2018) study supported innovation climate influence on performance and stated that product innovation has a positive impact on company performance in a transition economy. M.A.A.M. Harif *et al.* (2022) said that open innovation is very important to improve the organisation. S.G. Kebajikan & S. Sumartik (2023) concluded that innovation has a significant influence on employee performance. Based on the description above, the hypotheses were formulated as follows.

H1: Innovation climate has a significant positive effect on performance. The influence of motivation on performance. Individuals with high motivation will have the desire to carry out tasks well so that performance increases. This is because motivation basically describes the drive that arises from within the employee caused by the needs they have. H. Sembiring (2020) and N.T. Febrianti et al. (2020) has proven the influence of motivation on employee performance. H2: Motivation has a significant positive effect on performance. The influence of innovative behaviour on performance. Innovative work behaviour is needed to create superior performance. Employees who have high innovative work behaviour will be encouraged to generate creative ideas in solving problems related to tasks, so they can overcome difficulties found in the workplace and improve performance. Previous literature has proven this logic, including by N.N.K. Yasa et al. (2021) and D. Darmailenv et al. (2022).

H3: Innovative behaviour has a significant positive effect on performance. The influence of innovation climate on innovative behaviour. A supportive innovation climate will encourage each individual to find, create, and develop innovative ideas that support the implementation of tasks. Individuals who work in an environment full of innovation encouragement will find it easy to develop ideas or concepts, so they will tend to have innovative attitudes and behaviours compared to individuals who work in an environment that is less supportive of innovation. Research conducted by A. Ali *et al.* (2020) and Q. Dai *et al.* (2022) concluded that a good innovative climate will encourage innovative work behaviour of employees. H4: Innovation **behaviour. The influence of motivation on innovative behaviour.** Motivation describes the individual's driving force in carrying out actions related to work aspects. Individuals with high motivation will be driven to take creative actions and create ideas to complete tasks. B. Afsar & W.A. Umrani (2020) and Q. Dai *et al.* (2022) have shown that the higher the motivation of employees, the higher their innovative behaviour.

H5: Motivation has a significant positive effect on innovative behaviour. The role of innovative behaviour as a mediator of the influence of innovation climate on employee performance. Innovative behaviour is employee behaviour that always shows new ideas in carrying out its activities. Innovative work behaviour in the workplace describes a positive response from several organisational conditions that are built, such as an innovative climate. In addition, innovative work behaviour can also occur as a positive response to the high motivation of employees. This means that innovative work behaviour can play a role in mediating organisational factors and individual outcomes, namely performance. In this research, researchers try to use innovative work behaviour as a mediator between innovative climate on performance and motivation on performance. Research conducted by N.N.K. Yasa et al. (2021) revealed the influence of innovative climate on innovative work behaviour. The influence of motivation on innovative work behaviour is proven by B. Afsar & W.A. Umrani (2020) and Q. Dai et al. (2022). While N.N.K. Yasa et al. (2021) and D. Darmaileny et al. (2022) concluded that innovative work behaviour can drive performance. Based on this description, the researchers wanted to test whether innovative work behaviour mediates the variables of innovation climate and motivation on performance, with the following hypotheses. H6: Innovative behaviour mediates the positive influence of innovation climate on employee performance. H7: Innovative work behaviour mediates the influence of motivation on performance.

MATERIALS AND METHODS

Research model. Figure 1 is the theoretical framework of this study.

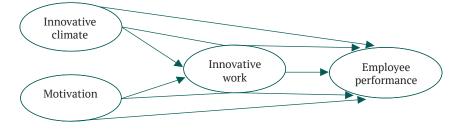


Figure 1. Research model

Source: created by the authors

Research design. This research was conducted in junior high school and senior high schools in Bandar Sribhawono Sub District, East Lampung, in 2024. This study used a positivist approach to test the relationship between research variables. Respondents in this study were 170 junior high school and senior high school teachers in East Lampung Regency. The questionnaires distributed were 170, with a total of 144 questionnaires collected, and 26 were damaged or not returned. Thus, the questionnaires processed in this study were 144. The number of respondents was obtained from saturation sampling, meaning that all members of the population were used as samples by (Bell *et al.*, 2022). Research with respondents was conducted in accordance with the American Sociological

Association's Code of Ethics (1997). Causality research as a representation of quantitative research uses a survey through the distribution of questionnaires that are distributed directly to respondents at school locations. In the questionnaire, there were 5 question items with a scale of 1-5. The Likert scale was used in the questionnaire (scale 1 – strongly disagree, scale 5 – strongly agree). Prior to data analysis, the validity, reliability, and included multiple linear regression using the SPSS software.

Measurement. Employee performance variable in this study refers to the concept used by S. Shan *et al.* (2015) which described the work results achieved by an employee in carrying out the tasks assigned to achieve target (Table 1).

Dimensions	Item
	1. I contribute to my school's performance.
Perspectives on work effectiveness	2. I enjoy working as a teacher.
	3. I often think about how to do my job more effectively.
	4. I feel proud when I succeed in achieving the work standards that have been set.
Willingness to meet work standards	5. I feel proud when I successfully complete my work.

 Table 1. Employee performance

Source: compiled by the authors based on S. Shan et al. (2015)

Innovative behaviour is measured using the concept from J. De Jong & D. Den Hartog (2010) which describes individual behaviour in initiating, recognising, exploring ideas, processes, results related to work aspects (Table 2).

Dimensions	Item					
	1. I noticed problems that were not really my responsibility.					
Exploration of opportunities	2. I am often looking for ways to improve everything I have to do.					
opportunities	3. I often look for new methods, techniques or instruments in completing tasks.					
	4. I often generate solutions to a problem.					
Source of ideas	5. I often find new approaches in carrying out tasks.					
	6. I often make other teachers feel important with innovative ideas.					
	7. I often support innovative ideas.					
Support for	8. I often introduce innovative ideas into work practices.					
innovative ideas	9. I often contribute to the implementation of new ideas.					
	10. I often try to develop new things.					

Source: compiled by the authors based on J. De Jong & D. Den Hartog (2010)

Motivation is the mechanism that outlines the level of intensity, direction, and perseverance an individual displays in pursuits of their objectives. Motivation in this study was expressed as a drive to increase enthusiasm in completing a job or task. The instrument was adopted from M. Gagné *et al.* (2010) (Table 3).

Dimensions	Item
	1. I enjoy working as a teacher.
Intrinsic	2. I am happy with my job as a teacher.
	3. I was happy when I was given a job at this school.
	4. I do this job for the pay check.
Extrinsic	5. This job provides a certain standard of living.
	6. This job allows me to earn a lot of money.
	7. This job allows me to achieve my life goals.
Identification	8. This job fits my career plan.
	9. This job is in line with my life values.
	10. I have to be the best at this job.
Introspection	11. This job is my source of income.
	12. My reputation depends on this job.

Table 3. Motivation

Source: compiled by the authors based on M. Gagné et al. (2010)

Innovation climate is adopted from the concept presented by S.G. Scott & R.A. Bruce (1994) previously used by S.M. Siegel & W.F. Kaemmerer (1979), which explains the climate or atmosphere that supports innovation in an organisation. The indicators consist of support for creativity and tolerance for differences (Table 4).

Dimension	Item				
	1. In this school every teacher is encouraged to be creative.				
	2. The principal appreciated my creativity.				
	3. In this school, all teachers are allowed to solve problems in different ways.				
	4. Teachers at this school always follow the principal's orders.				
	5. In this school, teachers can get into trouble if they have different opinions.				
	6. In this school I easily adapt to changes.				
Tolerance of differences	7. In this school, teachers cannot do activities that are different from other teachers.				
uniterenceo	8. The best way to survive in this organisation is to follow the way other teachers work.				
	9. Teachers at this school usually solve problems in the same way.				
	10. This school supports change.				
	11. This school gives awards to people who have creative ideas.				
	12. In this school, teachers in carrying out their duties adhere strictly to existing regulations.				
	13. This school is resistant to change.				
Support for	14. This school provides facilities to develop creative ideas.				
creativity	15. The resources available at this school support the innovation process.				

Table 4. Innovation climate

Dimension	Item				
	16. In this school there is enough time to develop creative ideas.				
	17. Lack of funds to develop creative ideas is a problem in this school.				
	18. Lack of resources can hinder the development of innovation in this school.				
Support for creativity	19. In this school, you are allowed to develop creative ideas while working.				
cicutivity	20. At this school, there are awards for teachers who innovate.				
	21. This school openly recognises those who are innovative/ there is recognition or awards given to innovative teachers.				
	22. This school rewards creative teachers.				

Source: compiled by the authors based on S.G. Scott & R.A. Bruce (1994)

Research instrument testing. Validity and reliability tests were needed to ensure that the measuring instrument used is appropriate with validity and reliability testing. The validity test criteria were declared valid if the p < 0.05 and was invalid if the p > 0.05 (Bell *et al.*, 2022). **Descriptive statistics.** Description variables regarding innovative climate, motivation, innovative work behaviour and performance were presented using the following interval determination formula:

Class Interval =
$$\frac{Maximum value - Minimum value}{Number of class} = \frac{5-1}{5} = 0.8.$$
 (1)

From the calculation of the interval above, the interpretation of the class intervals based on the responses obtained from the respondents is as follows: 1.00-1.80 (very low), 1.80-2.60 (low), 2.60-3.40 (medium), 3.40-4.20 (high), and 4.20-5.00 (very high). **Validity testing.** Validity testing aimed to determine whether the research instrument to be measured. Validity testing criteria was declared valid if the p < 0.05 and is said to be invalid if the p > 0.05 (Bell *et al.*, 2022). To test the mediation effect, Sobel was used using a Sobel calculator. The test was conducted twice, namely testing the role of innovative work behaviour as a

mediator between the influence of innovative climate on performance and testing innovative work behaviour as a mediator of the influence of motivation on performance.

RESULTS AND DISCUSSION

The results showed that respondents were dominated by S1 graduates totalling 138 (96%), while the rest were S2 graduates totalling 6 (4%) respondents. In addition, the number of male respondents was 70 (49%) and female respondents were 74 (51%). Based on the test results (Table 5), there are 39 statement items that passed the validity and reliability tests. The validity test results indicated that the research instrument was valid, since all values had a significance level of 0.05. Consequently, it can be stated that the assertions regard each variable employee performance, innovative work behaviour, motivation, and climate of innovation. Cronbach's Alpha on the employee performance value variable is 0.838, on the innovative work behaviour variable is 0.644, on the motivation variable is 0.671. and on the climate of innovation is 0.861. Cronbach's alpha on all four variables is greater than 0.6, which indicates that the indicators used in the statement on each variable were declared reliable (Bell et al., 2022).

Variable	Item	Significance	Validity	Cronbach's Alpha	Information
	EP1	0.000	Valid		
-	EP2	0.000	Valid		
Employee	EP3	0.000	Valid	0.838	Reliable
performance -	EP4	0.000	Valid		
	EP5	0.000	Valid		
	IWB1	0.000	Valid		Reliable
	IWB2	0.000	Valid		
	IWB3	0.000	Valid		
T	IWB4	0.000	Valid		
Innovative work behaviour	IWB5	0.000	Valid	0.644	
Dellavioui	IWB6	0.000	Valid		
	IWB7	0.000	Valid		
	IWB8	0.000	Valid		
	IWB9	0.000	Valid		
	M1	0.000	Valid		
	M2 0.000		Valid		
	M3	0.000	Valid]	
Motivation	M4	0.000	Valid	0.671	Reliable
	M5	0.000	Valid		
	M6	0.000	Valid		
	M7	0.000	Valid		

Table 5. Construct reliability and validity

					Table 5, Continued	
Variable	Item	Significance	Validity	Cronbach's Alpha	Information	
	M8	0.000	Valid			
	M9	0.000	Valid			
Motivation	M10	0.000	Valid	0.671	Reliable	
	M11	0.000	Valid			
	M12	0.000	Valid			
	IC1	0.000	Valid			
	IC2	0.000	Valid			
	IC3	0.009	Valid		Reliable	
	IC4	0.000	Valid			
	IC5	0.026	Valid			
	IC6	0.009	Valid			
Innovation climate	IC7	0.000	Valid	0.861		
	IC8	0.000	Valid			
·	IC9	0.000	Valid			
	IC10	0.000	Valid			
	IC11	0.000	Valid			
	IC12	0.000	Valid			
	IC13	0.000	Valid			

Table 5, Continued

Source: created by the authors

The results of the first stage regression are used to test the effect of innovation climate, motivation and innovative work behaviour on performance. Based on the results of the analysis presented in Table 6, it can be seen that the direction of the β of innovation climate and performance is negative -0.292 with a *t* value of -3.453 (*p* < 0.05). Thus, it can be concluded that H1 is not supported. The direction of the β of motivation on performance shows a value of 0.550 with a *t* value of 6.971 (p < 0.05). Thus, H2 is supported. Likewise, the direction of the β of innovative work behaviour on performance shows a figure of 0.170 with a *t* value of 2.178 (p < 0.05) so it is concluded that H3 is supported.

]	Model	Unstandardised coefficients		Standardised coefficients	t	Significance
		В	Std. error	β		
	(Constant)	2.055	0.537		3.829	0.000
1	X1	-0.328	0.095	-0.292	-3.453	0.001
	X2	0.671	0.096	0.550	6.971	0.000
	М	0.263	0.121	0.170	2.178	0.031

Source: created by the authors

The results of the second stage regression are presented in Table 7, which shows the β of innovation climate towards innovative work behaviour with a positive β of 0.401 and a *t* value of 0.4728 (p < 0.05) so it is concluded that H4 is supported. The β of motivation towards innovative work behaviour shows a negative value of 0.079 with a *t* value of -0.929 (*p* > 0.05). Thus, H5 is not supported.

Model		Unstandardised coefficients		Standardised coefficients	t	Significance	
		В	Std. error	β			
	(Constant)	3.157	0.263		11.996	0.000	
1	X1	0.291	0.061	0.401	4.728	0.000	
	X2	-0.062	0.067	-0.079	-0.929	0.354	
	Dependent variable: Innovative work behaviour						

Table 7. Stage-2 regression test

Source: created by the authors

The first Sobel test result found a Sobel value of 1.978 (>1.96). However, the second Sobel test result showed a Sobel value of -0.851 (<1.96). This result shows that innovative work behaviour plays a mediating role between the influence

of innovative climate on performance, but innovative work behaviour is not proven to mediate the influence of motivation on performance. Based on the analysis results, the following is a summary of the hypothesis testing.

	Hypothesis Statement	Conclusion
H1	Innovation climate has a significant positive effect on performance	Not supported
H2	Motivation has a significant positive effect on performance	Supported
H3	Innovative behaviour has a significant positive effect on performance	Supported
H4	Innovation climate has a significant positive effect on innovative work behaviour	Supported
H5	Motivation has a significant positive effect on innovative work behaviour	Not supported
H6	Innovative work behaviour mediates the influence of innovation climate on performance	Supported
H7	Innovative work behaviour mediates the influence of motivation on performance	Not supported

Table 8. Summary of hypothesis testing

Source: created by the authors

Performance basically describes the work results shown by each employee in the context of job responsibilities. Individual performance shows the results achieved in the sense of achieving goals and objectives that have been or are being set, including information on the efficiency of resource use in producing goods or services, the quality of goods or services, comparison of work results with targets and the effectiveness of actions in achieving goals. Every institution has an interest in encouraging employee performance to improve organisational performance.

These results reteach that employee's performance is in the very high (very good) category, while innovative work behaviour, motivation and innovative climate are in the high category. Teachers are the main asset in realising quality learning outcomes that have an impact on graduates. Creating an environment that encourages innovation is an urgent matter that needs to be encouraged, considering the disruptive era that has an impact on the challenges of the education process that places teachers as a key role in the success of the delivered process. This study shows that innovative work behaviour mediates with the nature of full mediation of the influence of innovative climate on performance. Innovative climate does not have a direct effect on performance but through innovative work behaviour.

The results of this study are in line with previous studies conducted by S. Hamzali & A. Arwin (2022) which also did not prove the direct influence of innovative climate on performance. In addition to the climate of innovation, motivation can affect a person's performance, because the higher the motivation in a company, the higher the employee performance is going to be. This is supported by the opinion D.S. Widodo & A. Yandi (2022) that motivation is a process that explains the intensity, direction, and persistence of an individuals to achieve their goals. The three main elements in this definition include intensity, direction, and persistence. Motivation is a driver or motivator for someone to want to act and work diligently according to their duties and obligations. Then motivated employees understand their goals and actions very well and also believe that these goals will be achieved according to what has been planned.

The study concludes the influence of positive motivation towards employee's performance. However, these results do not prove that motivation affects innovative work behaviour. The motivation possessed by employees can directly improve performance. The results also prove that innovative work behaviour possessed by teachers may be influenced by other aspects besides motivation, in this model the innovative climate is the determining variable. The results of this research are in line with the results of H. Sembiring (2020) and N.T. Febrianti *et al.* (2020) which concluded the influence of motivation on performance. Other studies conclude that employee motivation does not always encourage innovative behaviour. This means that innovative work behaviour is more influenced by other aspects and motivation does not always affect innovative behaviour, because innovative behaviour does not depend on motivation (Pebrian *et al.*, 2023).

Innovative work behaviour is important to encourage by building strategies such as fostering an innovative climate in the workplace. Educational organisations that are able to create a climate of innovation will have a positive effect on teachers' attitudes towards things faced in the workplace, such as creating increasingly effective media and learning methods or fostering students' enthusiasm for learning so as to encourage their performance. This study is in line with the research conducted by N.N.K. Yasa et al. (2021) and D. Darmaileny et al. (2022) which stated that the higher the innovative behaviour of an employee, the more it will improve their performance. Employees who assess that their work environment has an innovative climate will feel comfortable working, thus encouraging their innovative behaviour. The results of this study are in line with the research from L. Alviani & A. Nuvriasari (2022) and Y. You et al. (2022) which concluded that the higher the climate of innovation in an organisation, the more innovative behaviour of existing individuals will increase.

In this study, junior high school and senior high school teachers in East Lampung showed that motivation did not have a positive effect on innovative behaviour. This implies that a high level of motivation alone may not be sufficient to foster innovation. The job allows to earn a significant amount of money. This can cause a lack of innovative behaviour carried out by employees. These findings align with the findings of the studies by B. Afsar & W.A. Umrani (2020) and S. Jiang et al. (2023). This study found that innovative behaviour does not mediate the effect of motivation on employee performance. One of the influencing factors is low motivation related to income. When employee motivation is low, it can reduce innovative behaviour, especially in an environment that prioritises financial results. This finding is important for management, which needs to focus more on how to directly increase employee motivation, such as through incentives or career development. When employee motivation is low, it can reduce innovative behaviour, especially in an environment that prioritises financial results (Afsar & Umrani, 2020; Chaban & Chaban, 2022; Jiang et al., 2023). This finding is

important for management, which needs to focus more on how to directly increase employee motivation, such as through incentives or career development.

Results showed that while employee performance is categorised as very high, innovative work behaviour, motivation, and innovative climate are also at high levels. The study emphasised that motivation positively affects employee performance, but does not directly impact innovative behaviour. Innovative work behaviour, in turn, is influenced more by an innovative climate than by motivation alone. The study supports prior research suggesting that an innovative climate fosters better performance by encouraging innovative behaviour. However, it also found that in certain cases, such as in East Lampung's schools, motivation alone may not be enough to foster innovation, as financial incentives may outweigh intrinsic motivation. The study concluded that management should focus on directly enhancing motivation through incentives and career development, especially in environments where financial rewards are prioritised.

CONCLUSIONS

The objective was to explore the role of innovative work behaviour as a mediator between innovative climate and employee's performance, as well as to understand how innovative climate and motivation affected employee's performance; the objective was achieved. The results demonstrated that innovative work behaviour significantly mediates the relationship between innovative climate and performance, with a mediation value of 1.978, derived from regression analysis. However, the direct effect of innovative climate on employee performance was found to be negative and significant in one model ($\beta = -0.292, p < 0.05$), but in another model, the direct effect was not significant ($\beta = 0.354$, p > 0.05), suggesting that the relationship may vary depending on the analytical approach. The study also found that an increasingly innovative climate fosters innovative behaviour and improves performance, and employees with higher motivation tend to perform better, while those with lower motivation show reduced performance.

However, the innovative climate does not directly influence employee performance in the model where no significant effect was found. Furthermore, innovative work behaviour was not found to be influenced by motivation, nor did it mediate the relationship between motivation and employee performance, as confirmed by the Sobel test, which yielded a mediation value of -0.851 (p > 0.05), indicating no significant mediation effect of innovative work behaviour in the relationship between motivation and performance. These results highlight the complex and indirect nature of the factors affecting employee performance. This is proven by the results of the Sobel test, which shows that the mediation value of innovative behaviour is -0.851.

However, this research has limitations. The data taken with cross section has weaknesses in information that is only obtained once, does not describe behavioural changes that reflect organisational dynamics. In addition, this research was only conducted in one object, namely schools, so it has limitations in research generalisation. Future research is recommended to employ longitudinal methods to achieve a deeper understanding of the dynamics of employee behaviour and performance. It is also advisable to involve a broader range of contexts, such as different organisations, businesses, institutions or settings, to enhance the generalisability of the results. By addressing these limitations, future studies can contribute more significantly to managerial practice and policy development.

ACKNOWLEDGEMENTS

This research was supported by Muhammadiyah University of Yogyakarta. We would also like to thank the Principal of the School who gave permission so that researchers could carry out this research.

CONFLICT OF INTEREST

None.

REFERENCES

- [1] Adekanmbi, F.P., & Ukpere, W.I. (2022). The relational effects of perceived leadership 4.0, workplace ostracism, and innovative work behavior on organizational performance in the fourth industrial revolution (4IR). *EUREKA: Social and Humanities*, 2, 3-14. doi: 10.21303/2504-5571.2022.002317.
- [2] Afsar, B., & Umrani, W.A. (2020). Transformational leadership and innovative work behavior: The role of motivation to learn, task complexity and innovation climate. *European Journal of Innovation Management*, 23(3), 402-428. <u>doi: 10.1108/EJIM-12-2018-0257</u>.
- [3] Ali, A., Farooq, W., & Khalid, M.A. (2020). The relationship between organizational climate for innovation and innovative work behavior: Mediating role of employee engagement in Pakistan. *Malaysian Management Journal*, 24, 195-218. doi: 10.32890/mmj.24.2020.8776.
- [4] Alviani, L., & Nuvriasari, A. (2022). The effect of innovative behaviour, work motivation, and teamwork on employee performance at Yayasan Lautan Cendikia Mulia. *Eqien – Journal of Economics and Business*, 11(1), 231-238. doi: 10.34308/eqien.v11i1.700.
- [5] American Sociological Association's Code of Ethics. (1997, June). Retrieved from <u>https://www.asanet.org/wp-content/uploads/savvy/images/asa/docs/pdf/CodeofEthics.pdf</u>.
- [6] Bell, E., Harley, B., & Bryman, A. (2022). *Business research methods*. New York: Oxford University Press.
- [7] Bibi, S., Khan, A., Qian, H., Garavelli, A.C., Natalicchio, A., & Capolupo, P. (2020). Innovative climate, a determinant of competitiveness and business performance in Chinese law firms: The role of firm size and age. *Sustainability*, 12(12), article number 4948. doi: 10.3390/su12124948.
- [8] Chaban, G., & Chaban, V. (2022). Motivating employees of the management apparatus to increase the innovative activity of the enterprise. *University Economic Bulletin*, 17(4), 17-23. doi: 10.31470/2306-546X-2022-55-17-23.

- [9] Chege, S.M., & Wang, D. (2020). Technology in society the influence of technology innovation on SME performance through environmental sustainability practices in Kenya. *Technology in Society*, 60, article number 101210. <u>doi: 10.1016/j.techsoc.2019.101210</u>.
- [10] Dai, Q., Dai, Y., Zhang, C., Meng, Z., Chen, Z., & Hu, S. (2022). The influence of personal motivation and innovative climate on innovative behavior: Evidence from university students in China. *Psychology Research and Behavior Management*, 15, 2343-2355. doi: 10.2147/PRBM.S381494.
- [11] Darmaileny, D., Adriani, Z., & Fitriaty, F. (2022). The influence of governance and competence on organisational performance mediated by innovative behaviour in village-owned enterprises (Bum Desa) in Tanjung Jabung Barat Regency. *Jurnal Ekonomi Manajemen Sistem Informasi*, 3(6), 599-612. doi: 10.31933/jemsi.v3i6.1099.
- [12] De Jong, J., & Den Hartog, D. (2010). Measuring innovative work behaviour. *Creativity and Innovation Management*, 19(1), 23-36. doi: 10.1111/j.1467-8691.2010.00547.x.
- [13] Febrianti, N.T., Suharto, S., & Wachyudi, W. (2020). The effect of career development and motivation on employee performance through job satisfaction in PT Jabar Jaya Perkasa. *International Journal of Business and Social Science Research*, 1(2), 25-35. doi: 10.47742/ijbssr.v1n2p3.
- [14] Gagné, M., Forest, J., Gilbert, M.-H., Aubé, C., Morin, E., & Malorni, A. (2010). The motivation at work scale: Validation evidence in two languages. *Educational and Psychological Measurement*, 70(4), 628-646. doi: 10.1177/0013164409355698.
- [15] Hamzali, S., & Arwin, A. (2022). The effect of organisational learning and organisational innovation on organisational performance. *Eqien – Journal of Economics and Business*, 9(1), 241-249. doi: 10.34308/eqien.v9i1.299.
- [16] Harif, M.A.A.M., Nawaz, M., & Hameed, W.U. (2022). The role of open innovation, hotel service quality and marketing strategy in hotel business performance. *Heliyon*, 8(9), article number e10441. doi: 10.1016/j.heliyon.2022.e10441.
- [17] He, P., Wu, T., Zhao, H., & Yang, Y. (2019). How to motivate employees for sustained innovation behavior in job stressors? A cross-level analysis of organizational innovation climate. *International Journal of Environmental Research and Public Health*, 16(23), article number 4608. doi: 10.3390/ijerph16234608.
- [18] Hidayat, R. (2021). The effect of motivation, competence and work discipline on performance. Widya Cipta: Jurnal Sekretari Dan Manajemen, 5(1), 16-23. doi: 10.31294/widyacipta.v5i1.8838.
- [19] Jiang, S., Wang, J., Zhang, R., & Liu, O. (2023). Innovation climate for individual motivation and innovation performance: Is innovative behavior a missing link? *Journal of Innovation and Knowledge*, 8(4), article number 100440. <u>doi: 10.1016/j.jik.2023.100440</u>.
- [20] Kebajikan, S.G., & Sumartik, S. (2023). The effect of knowledge, leadership style and work stress on employee performance with innovation as an intervening variable. *Indonesian Journal of Law and Economics Review*, 18(1). doi: 10.21070/ijler.v18i0.855.
- [21] Pebrian, R., Mutiara, R., & Ruswanti, E. (2023). The effect of transformational leadership style, organisational culture and work motivation on innovative behaviour at Rs Prabumulih. *Indonesian Impression Journal*, 2(3), 266-278. doi: 10.58344/jii.v2i3.2250.
- [22] Ramadani, V., Hisrich, R.D., Abazi-Alili, H., Dana, L.-P., Panthi, L., & Abazi-Bexheti, L. (2018). Product innovation and firm performance in transition economies: A multi-stage estimation approach. *Technological Forecasting & Social Change*, 140, 271-280. doi: 10.1016/j.techfore.2018.12.010.
- [23] Scott, S.G., & Bruce, R.A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *The Academy of Management Journal*, 37(3), 580-607. doi: 10.2307/256701.
- [24] Sembiring, H. (2020). The effect of motivation and work environment on employee performance at Bank Sinarmas Medan. Jurakunman (Jurnal Akuntansi dan Manajemen), 13(1), 10-23. doi: 10.48042/jurakunman.v13i1.37.
- [25] Shan, S., Ishaq, H.M., & Shaheen, M.A. (2015). Impact of organizational justice on job performance in libraries. *Library Management*, 36(1/2), 70-85. doi: 10.1108/LM-01-2014-0003.
- [26] Siegel, S.M., & Kaemmerer, W.F. (1979). Measuring the perceived support for innovation in organizations: Correction to Siegel and Kaemmerer. *Journal of Applied Psychology*, 64(2), article number 118. doi: 10.1037/h0078047.
- [27] Silaen, N.R., et al. (2021). <u>Human resource management</u>. Solokan: Penerbit Widina.
- [28] Waheed, A., Miao, X., Waheed, S., Ahmad, N., & Majeed, A. (2019). How new HRM practices, organizational innovation, and innovative climate affect the innovation performance in the IT industry: A moderated-mediation analysis. *Sustainability*, 11(3), article number 621. doi: 10.3390/su11030621.
- [29] Widodo, D.S., & Yandi, A. (2022). Employee performance model: Competence, compensation and motivation, (HRM literature review). *Jurnal Ilmu Multidisplin*, 1(1). <u>doi: 10.38035/jim.v1i1.1</u>.
- [30] Widyaningsih, H., Darmawan, R., & Pelana, R. (2021). Influence of organizational climate and teaching motivation on the performance of physical education teachers. *Journal of Physical Education and Sport*, 21(4), 2408-2412. doi: 10.7752/jpes.2021.s4323.
- [31] Yasa, N.N.K., Rahmayanti, P.L.D., Sugianingrat, I.A.P.W., Dharmanegara, I.B.A., & Suharto, R.B. (2021). The role of innovative behaviour and organisational commitment in mediating the effect of job happiness on employee performance. *Scientific Journal of Management*, 11(2), 258-273. doi: 10.22441/mix.2021.v11i2.008.
- [32] You, Y., Hu, Z., Li, J., Wang, Y., & Xu, M. (2022). The effect of organizational innovation climate on employee innovative behavior: The role of psychological ownership and task interdependence. *Frontiers in Psychology*, 13, article number 856407. doi: 10.3389/fpsyg.2022.856407.

Вплив інноваційного клімату та мотивації на продуктивність працівників через інноваційну поведінку як медіаторну змінну

Срі Хандарі Вахюнінгсін

Аспірант Університет Мухаммадії в Джок'якарті 55183, вул. Бравіджая, м. Джок'якарта, Індонезія https://orcid.org/0000-0002-8840-3220

Андріан Хафід

Аспірант Університет Мухаммадії в Джок'якарті 55183, вул. Бравіджая, м. Джок'якарта, Індонезія https://orcid.org/0009-0003-2461-9377

Анотація. Увага дослідників до важливості інноваційного клімату для підвищення продуктивності зростає разом з комплексною конкурентоспроможністю організації. Це дослідження мало на меті проаналізувати вплив інноваційного клімату та мотивації на продуктивність працівників через інноваційну поведінку як посередницьку змінну. Респондентами дослідження стали 170 вчителів молодших та старших класів середньої школи у провінції Східний Лампунг. Використано кількісну парадигму, шляхом проведення опитування через розповсюдження анкет серед респондентів, а потім проведення кількісного аналізу за допомогою SPSS. Результати дослідження показали, що інноваційний клімат здатен стимулювати інноваційну робочу поведінку, мотивація стимулює продуктивність працівників, а інноваційна робоча поведінка може стимулювати продуктивність. Однак не підтверджено прямий вплив інноваційного клімату на продуктивність. Інноваційний клімат може впливати на продуктивність через посередницький ефект інноваційної поведінки. Водночас не було доведено, що мотивація працівників може стимулювати інноваційну поведінку на роботі. Так само не було підтверджено, що інноваційна робоча поведінка опосередковує вплив мотивації на продуктивність працівників. Результати цього дослідження вказують на важливу роль інноваційної робочої поведінки як посередника в поясненні впливу інноваційного клімату на продуктивність в організаціях. Показано, що для підвищення продуктивності працівників організації повинні сприяти створенню сприятливого інноваційного клімату, оскільки інноваційна робоча поведінка слугує важливим посередником між інноваційним кліматом та продуктивністю. Крім того, методи посилення мотивації повинні доповнюватися ініціативами щодо створення сприятливого середовища, що заохочуватиме працівників до інновацій на робочому місці

Ключові слова: вплив мотивації; організаційні інновації; інновації на робочому місці; робочі інновації; робоче середовище

УПРАВЛІННЯ РОЗВИТКОМ Міжнародний економічний журнал

Том 24, № 1 2025

Відповідальний редактор: К. Нікітішина

Підписано до друку 25.03.2025 Формат 60*84/8 Ум. друк. арк. 10 Наклад 50 прим.

Видавництво: Харківський національний економічний університет імені Семена Кузнеця 61166, пров. Інженерний, 1-А, м. Харків, Україна E-mail: info@devma.com.ua https://devma.com.ua/uk

DEVELOPMENT MANAGEMENT

International Economic Journal

Volume 24, No. 1 2025

> Managing Editor: K. Nikitishyna

Signed to the print 25.03.2025 Format 60*84/8 Conventional Printed Sheet 10 Circulation 50 copies

Publisher: Simon Kuznets Kharkiv National University of Economics 61166, 1-A Inzhenerny Ln., Kharkiv, Ukraine E-mail: info@devma.com.ua https://devma.com.ua/en