

ISSN 0861 - 6604
ISSN 2534 - 8396

BUSINESS management



PUBLISHED BY
D. A. TSENOV ACADEMY
OF ECONOMICS - SVISHTOV

2/2026

2/2026

BUSINESS management

Editorial board:

Prof. Krasimir Shishmanov, Phd - Editor in Chief, Tsenov Academy of Economics, Svishtov, Bulgaria

Assoc. Prof. Marin Marinov, PhD – Co-editor in Chief, Tsenov Academy of Economics, Svishtov, Bulgaria

Prof. Mariana Petrova, PhD - Managing Editor Tsenov Academy of Economics, Svishtov, Bulgaria

Assoc. Prof. Aleksandar Ganchev, Phd - Tsenov Academy of Economics, Svishtov Bulgaria

Assoc. Prof. Irena Emilova, Phd - Tsenov Academy of Economics, Svishtov Bulgaria

Assoc. Prof. Ivan Marchevski, Phd - Tsenov Academy of Economics, Svishtov, Bulgaria

Assoc. Prof. Simeonka Petrova, Phd - Tsenov Academy of Economics, Svishtov Bulgaria

Assoc. Prof. Taner Ismailov, Phd - Tsenov Academy of Economics, Svishtov, Bulgaria

International editorial board:

Olena Sushchenko, Prof., DSc (Ukraine)

Dariusz Nowak, Prof., PhD (Poland)

Nurlan Kurmanov, Prof., PhD (Kazakhstan)

Ryszard Pukala, Prof., PhD (Poland)

Yoto Yotov, Prof., PhD (USA)

Badri Gechbaia, Prof., PhD (Georgia)

Mahmut Kadir Isguven, Assoc. Prof., PhD (Turkey)

Stefan-Alexandru Ionescu, Assoc. Prof., PhD, (Romania)

Proofreader: Elka Uzunova

Technical Secretary: Zhivka Tananeeva

Web Manager: Martin Aleksandrov

The printing of the issue 2-2026 is funded with a grand from the Scientific Research Fund, Contract KP-06-NP7/18/05.12.2025 by the competition "Bulgarian Scientific Periodicals - 2026".

The Scientific Research Fund is not responsible for the content of the materials.

Submitted for publishing on 16.06.2026, published on 18.06.2026,
format 70x100/16, total print 80

© D. A. Tsenov Academy of Economics, Svishtov,
2 Emanuil Chakarov Str, telephone number: +359 631 66298

© Tsenov Academic Publishing House, Svishtov, 11A Tsanko Tserkovski Str

BUSINESS **management**

D. A. Tsenov Academy
of Economics, Svishtov

Year XXXVI * Book 2, 2026

CONTENTS

MANAGEMENT theory

ASYMMETRIES OF THE EU SINGLE MARKET EFFECTS IN THE POLISH ECONOMY

Dariusz Nowak, Penka Shishmanova, Emil Tsanov..... 5

MANAGEMENT practice

CRITICAL FACTORS OF CAREER PERSPECTIVE AND CAREER MANAGEMENT IN HIGHER EDUCATION: A MULTI-CRITERIA SWARA APPROACH

Jurica Bosna, Zoran Mastilo, Adis Puška 25

THE ANTIDISSIPATIVE APPROACH TO OPTIMISING THE COSTS OF HOTEL BUSINESSES

Olena Sushchenko, Margaryta Boiko,
Myroslava Bosovska, Mariia Kulyk 41

LINKING CAREER EXPECTATIONS AND INTERNAL MARKETING: INSIGHTS FROM HIGHLY SKILLED PROFESSIONALS

Violeta Rapuano, Ausrine Greiciute-Soloveje, Rasa Rudaitiene..... 62

FINTECH'S ROLE IN IMPROVING ACCESS TO FINANCE FOR SMALL BUSINESSES IN UZBEKISTAN

Azam Akhmedov, Mariana Petrova,
Izzatulla Levakov, Mukhtorjon Makhmudov..... 88

THE GROWING ROLE OF SOVEREIGN WEALTH FUNDS IN MANAGING FOREIGN EXCHANGE ASSETS

Ivaylo Mihaylov 109

THE ANTIDISSIPATIVE APPROACH TO OPTIMISING THE COSTS OF HOTEL BUSINESSES

Olena Sushchenko¹,
Margaryta Boiko²,
Myroslava Bosovska³,
Mariia Kulyk⁴

Abstract: The costs incurred by hotel businesses are a key metric that, by influencing financial stability and revenue forecasting, determines the effectiveness of the revenue management system. The article states that the objectivity of costs arises from the objectivity of the factors that determine them. The issue of cost optimization involves a range of contradictions inherent in economic processes, which are clearly evident in the contradictions between limited resources and needs, as well as between the goal of maximizing revenue and the efficiency of business processes. Therefore, when determining scientific approaches to optimizing the costs of hotel businesses, it is advisable to rely on a methodology that enables the preventive identification of the prerequisites for cost dissipation at all stages of the hotel product production chain. Based on the results of the analysis of the state and trends of key performance indicators of hotel businesses, it has been established that: during periods of declining demand, it is natural for sales volumes to decrease and fixed costs to decrease, but at the same time, variable costs increase; crisis phenomena have negatively affected the profitability of hotel businesses, and the need to find ways to manage costs aimed at their optimisation, especially in turbulent internal and external conditions, is relevant from the perspective of the concept of revenue management. The principles of cost management have been defined, serving as fundamental rules that provide the basis for decision-

¹ Kyiv National University of Technologies and Design, Kyiv, Ukraine; Simon Kuznets Kharkiv National University of Economics, Kharkiv, Ukraine, e-mail: helen.sushchenko@gmail.com, ORCID: 0000-0002-2645-8015

² State University of Trade and Economics, Kyiv, Ukraine, e-mail: mboyko2006@ukr.net; ORCID: 0000-0003-0249-1432

³ State University of Trade and Economics, Kyiv, Ukraine, e-mail: bosovskam@ukr.net; ORCID: 0000-0002-6021-5228

⁴ State University of Trade and Economics, Kyiv, Ukraine, e-mail: kulikmariya@ukr.net ORCID: id 0000-0001-8732-7441

making on cost optimization. The principles of cost optimization ensure objectivity, consistency, and reproducibility. The article analyzes the principles governing management decisions on cost optimization and has been ranked under the study's basic concept, "anti-dissipative approach". Therefore, the study of cost optimization principles has been deepened through methods that implement them in specific situations. At the same time, it has been proven that the expediency of applying an anti-dissipative approach lies in optimizing costs to prevent their dispersion at all stages of the production chain, focusing on enterprises with a hotel business in Ukraine.

Keywords: antidissipative approach, key performance indicators, revenue management, cost optimization, efficiency of business processes

JEL: Z31, L81, M15.

DOI: <https://doi.org/10.58861/tae.bm.2026.2.03>

Introduction

The effective use of revenue management as a management resource for revenue growth is influenced by a complex set of external and internal factors. The costs of hotel businesses, as a factor not only in maximizing revenue but also in ensuring stable financial results, are a key metric of revenue management. Managing the costs of any socio-economic system at different levels of the hierarchy requires considering a complex set of technical, economic, organizational, and social aspects. The concept of revenue management aims to determine the conditions for maximizing income using available resource potential and to perform the task of rational distribution of expenses across revenue management subsystems.

The issue of cost optimization has been addressed in the scientific literature (Bhinami & Kongren, 2008; Hansen, 1997; Kulmala, 2002; Anderson, 2006; Foster, 1994; Cooper, 1998; Slagmulder, 1993; Shang, 1992, 1993; Cokins, 2002; McNaer, 2001; Garrison, 2021). In their works, scientists justify the need to maximize revenues by applying cost management methods and their combinations to optimize various cost types. These are standard costing, target costing, kaizen costing, anti-crisis costing, and digital consulting methods (Zhao, 2000; Diaz Perez, 2018).

Without getting into a debate with the authors about cost optimization methods, we have established that scientific research also widely supports the theoretical conclusion that hotel industry costs are a key metric that, by influencing financial stability and revenue forecasting, requires a scientifically sound approach to their optimization in order to achieve effective revenue management (Werner & Mcnamara, 2007; Hua, 2015). We agree that an important methodological problem is the optimization of objective costs. The

objectivity of the occurrence of costs stems from the objectivity of the factors that determine them. The issue of cost optimisation should be addressed in the context of the contradictions inherent in economic processes, which are clearly evident in the contradictions between limited resources and needs, as well as between the goal of maximising revenue and the efficiency of business processes (Hua et al., 2015; Kulmala et al., 2002; McNair et al., 2001; Meuwissen, 2011; Montgomery et al., 2015; Pereira & Cerqueira, 2022; Petricek et al., 2021; Rose et al., 1991; Okhrimenko, et al., 2019; Sushchenko et al., 2022).

Attention is drawn to approaches to assessing the effectiveness of management of activities, resources, and costs, considering the external conditions of the functioning of economic entities, industry characteristics (Mazaraki et al., 2018; Boiko et al., 2017), and regional differences, both to ensure sustainability (Hua, 2015; Trunina et al., 2021.; Petrova et al., 2026); and in conditions of crises and transformations and institutional changes (Petrova et al., 2025).

Revenue growth directly depends on cost growth, and the growth vector is oriented towards decline during periods of crisis. At the same time, the share of labour costs and social security contributions in total costs decreases significantly during these periods, reflecting budget constraints on incentives, training, and staff development. The share of variable expenses remains unchanged (as in 2020 compared to 2019) or fluctuates insignificantly (in 2022 compared to 2021), which can be explained by the need to ensure operational activities. In 2023, the share of other expenses and compensation payments, including costs for the digitalization and greening of hotels, decreased sharply. There is also a tendency for the depreciation share in total expenses to decrease, indicating a lack of renewal of fixed assets and the gradual physical and moral wear and tear of equipment.

Methodology

The article is based on the analysis of the state and trends of key performance indicators of hotel businesses.

The first studies devoted to the connection between increasing costs and declining demand reveal a natural dynamic: as sales volumes decrease, fixed costs per unit rise, while overall variable costs tend to decline.

The authors emphasize that the crisis has negatively impacted hotel profitability, underscoring the need to manage costs to optimize them amid turbulent internal and external conditions.

The approach counters rising variable costs amid falling sales and fixed costs by minimizing waste through resonance with internal system capabilities. It integrates revenue management tools like demand forecasting, dynamic pricing, and resource allocation to ensure financial stability in turbulent conditions. This builds on crisis impacts noted in studies like Chang (2015), emphasizing adaptive cost control.

The expert analysis method was used to rank the principles of cost optimization. In accordance with the objectives and rules of sociological research, the respondents were hotel managers. When determining the group of respondents, we proceeded from the assumption that: firstly, hotel businesses where managers work must use a revenue management system, i.e., optimize costs in accordance with tactical and strategic objectives; secondly, the surveys were comparable in terms of parameters such as the position and work experience of respondents. According to Meuwissen (2011), the following criteria were used when selecting enterprises for the study: sample size (in economic research, analysis may be conducted on the basis of small samples, with the size of a small sample ranging from 5 to 30 units, such as location, form of ownership, and size of enterprises), and market saturation.

The diversity of economic phenomena, along with the specific research objectives and heterogeneous initial data, necessitate the use of grouping techniques. Therefore, by dividing the statistical population into groups, homogeneous groups were formed based on typical characteristics.

To characterize the degree of homogeneity of the identified groups, we have determined the coefficients of variation, which range from 29% to 192%, which provides grounds for noting the sufficient homogeneity of the identified groups of hotel enterprises according to the selected characteristic and proceeding to analyze the impact of factors on their operation and development.

For further analysis, the hotel businesses were divided into three groups based on their category. The first group comprised 5* hotel businesses (3 hotels), the second – 4* (9 hotels), and the third – 3* (6 hotels). When identifying the groups, we considered that businesses within the same group should have equivalent economic operating conditions, operate in the same competitive market, and have similar locations, customer bases, service levels, product categories, and service scope. In other words, the indicator of 'proximity' or 'similarity' of objects based on a set of descriptive characteristics can be used as a measure of homogeneity (Heumann et al., 2016).

Results

Given that monitoring, the dynamics of costs by structural components (Fig. 1) is important for optimizing costs, it has been established that the main expenditure items for hotel businesses in Ukraine are material and service costs. During the crisis years of 2020 and 2022, their growth rate temporarily stalled, but in 2023 it increased significantly (by 50.9%).

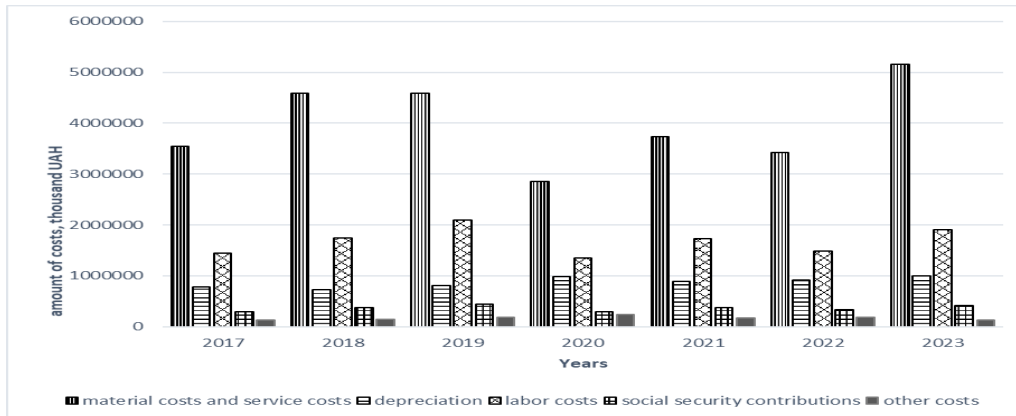


Figure 1. Dynamics of the cost structure of Ukrainian hotel businesses for 2017–2023

Source: Performance indicators of economic entities (2023)

It has also been determined that the dynamics of material cost structure in hotel businesses, relative to revenues, show significant deviations between variable and fixed costs, as well as disproportionate costs across different areas of the business, resulting in dissipation in 72% of the hotels studied. Dissipation of costs indicates inefficient use of resources, particularly financial resources, and points to excessive spending (Shank & Govindarajan, 1992; Shank & Govindarajan, 1993; Stine, 1987; Suanpang & Jamjuntr, 2024; Tse & Poon, 2012; Vives et al., 2018). That is why monitoring the cost structure of a hotel business is an important step in identifying areas for optimization, as the results of this monitoring enable not only financial control but also the identification of opportunities to optimize costs and resources, thereby improving efficiency.

Modeling costs and revenues is an important step in identifying cost-optimization methods, as it enables forecasting costs under various scenarios of volume and structural changes. The third stage involves constructing a regression model correlating hotel cost optimization with revenue growth. The interaction of the resulting income indicator (Y) with such a factor indicator as total costs (X) is described by a linear regression equation, which is determined by the formula

$$Y_i = \beta_1 + \beta_2 X_i, \quad (1)$$

where X_i is the i -th cost variable affecting income;

β_1 is the slope coefficient showing the dependence of the variable affecting income;

β_2 is the significance coefficient.

When studying the trends in the impact of expenses on income, using formula 2, significant fluctuations (0.159 to 0.163) were identified, resulting from uneven changes in the volume of expenses by type (Fig. 5).

$$\hat{\beta}_2 = \frac{\sum_{i=1}^n (X_i - \bar{X})(Y_i - \bar{Y})}{\sum_{i=1}^n (X_i - \bar{X})^2} \quad (2)$$

Analysis of correlation dependencies between structural components of costs is a tool for modeling demand and forecasting revenue volumes. Assessing costs and their correlations with service sales volumes enables forecasting changes in financial indicators in response to fluctuations in service volumes, which is important for optimizing costs. The importance of taking crisis phenomena into account in cost management is evidenced by the dynamics of indicators of the volume of products sold by hotels in Ukraine and production costs for 2017–2023 (Fig. 3), which shows periods of decline caused by the Covid-19 pandemic (2020) and the start of a full-scale invasion (2022).

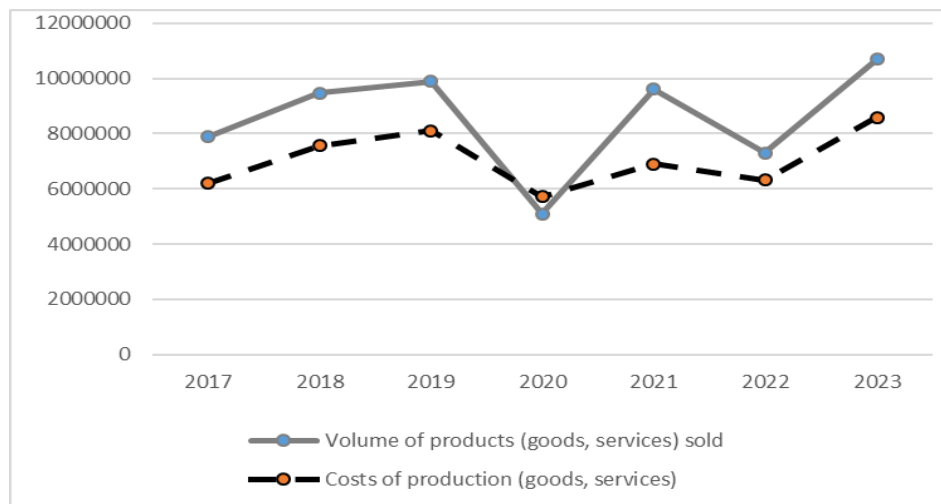


Figure 2. Correlation between the revenues and expenses of Ukrainian hotel businesses in 2017–2023.

Source: compiled by the author based on the Performance indicators of economic entities (2023)

Continuing to build a structural and logical sequence for implementing the scientific research task, the next stage defines the principles of cost

management, which serve as fundamental rules for decision-making on cost optimization. The principles ensure the objectivity, consistency, and reproducibility of the research results. Based on a critical review of various views of scientists (Woodworth & Mandelbaum, 2010; Young, 1999; Yildiz et al., 2017) on the application of cost management principles, we adhere to the scientific leitmotif that they should make it possible to determine and analyze how to optimize costs, considering the production chain of hotel product formation. That is why, based on USALI recommendations, we have formed a portfolio of universal principles for cost optimization.

Considering the issue of developing a scientific approach to solving complex scientific and applied problems, such as cost optimization, we ranked the principles (Boiko et al., 2023). At this stage, we relied on hypothetical logic, which suggests that it is advisable to first determine which principles are important to a business entity and will contribute to the adoption of a management decision on cost optimization, focusing on priority tasks.

Based on the study's results, we ranked the principles governing management decisions regarding cost optimization (Fig. 3), which allows us to comment on them. A positive conclusion is that 85% of the hotels surveyed consider it appropriate to consider the principles of cost optimization. 77.42% of respondents from Ukrainian hotels that participated in the survey stated that they implement the principle of purposefulness and consistency, which reflects the clear and coordinated nature of the cost management process. This is determined primarily by optimization goals, which are dynamic in a changing external environment, as well as by the need to eliminate the root causes of high costs and align business goals with revenue expectations.

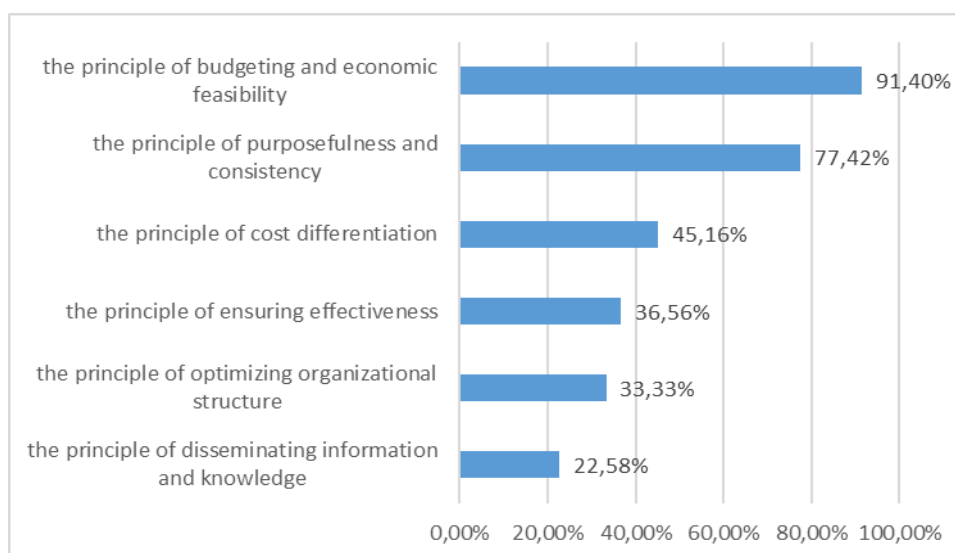


Figure 3. Ranking of principles for optimizing hotel costs by priority criterion

Source: compiled by the authors based on survey results

This principle forms the basis for the selection of cost management methods that are appropriate to specific circumstances and shape the content of the situational approach to its understanding. As the results of the study have shown, most hotel businesses use a strategic approach such as cost reduction, in particular, wages, bonus funds, rationalization of production, and other expenses related to the enterprise's budget. To ensure effective cost management, it is necessary to develop measures aimed at ensuring control over compliance with all daily processes that take place at the enterprise and lead to an excess of employees and expansion of production lines. Some of them are unprofitable and do not create added value. Considering the potential of hotel businesses to comply with this principle, the possibility of justifying and implementing more effective management systems has been considered. Some of them are unprofitable and do not create added value. For example, in enterprises with low costs, certain key cost-determining factors are used as profitability criteria, such as production planning, efficiency maintenance, production diversification, or technical knowledge (professional know-how). Each of these factors can be a tool for economic efficiency or a "cause-and-effect basis" for low costs. For effective cost management, it is essential to understand the difference between the correct allocation of overhead costs using scientifically determined cost factors and the allocation of costs using arbitrary cost factors. If the objectives are clearly and precisely defined, the results should meet expectations. By organizing effective marketing, adding new products to the existing product line, applying carefully studied packaging options, or expanding distribution channels in different market categories, revenues will be secured and even increased, thereby supporting the success and benefits predicted by the company's cost management goals. In order to ensure effective cost management, goals must be aligned in such a way as not to offset the achievements made in other processes at the enterprise level by increasing costs for other enterprise processes.

Most respondents from Ukrainian hotels (91.4%) follow the principle of budgeting and economic feasibility in cost management, which means that the costs of developing a comprehensive system should not exceed the benefits of making management decisions based on it. Developing a project budget based on cost estimates, including a reserve for unforeseen expenses, is the basis for effective control over project costs. It is this principle that justifies the need to form a process approach, which is the basis for the implementation of one of the functions of enterprise management – the control function. Under these circumstances, management decisions will

be more objective, as they will be made by analysts who are independent of the influence of managers of other structural units of the enterprise, and thus the degree of validity of the management decisions made will increase. In addition, reducing the cost of diagnosing the state of the enterprise should be based on a clear division of functional responsibilities within the department, which will ensure the rapid diffusion of new information technologies into the practice of assessment and analysis.

Unlike the previous two principles, which hotels mainly implement to optimize costs, 45% of the respondents answered affirmatively regarding the principle of cost differentiation. Standard cost is a key component of decision-making, from budget preparation, reporting actual costs and identifying variances, to formulating strategies and performance indicators based on specific planning. The data obtained from processing standard production costs mostly leads to the establishment of new advertising and marketing prices and complex decisions regarding capital invested in the enterprise. The importance of the data obtained from processing standard costs raises the issue of their accuracy. As is well known, the cost of production consists of material costs and direct labor costs, as well as overhead costs. In modern conditions, personnel costs account for 10%, and material costs increase to 30% of total production costs. Overhead costs account for only 50–60 percent of total production costs (Afwika et al., 2025).

In this context, when overhead costs are an important part of total production costs, the factors that determine them are related not only to the volume of production, but also to other factors. Experts generally agree that the incorrect allocation of overhead costs can lead to significant distortions in the assessment of product costs. Traditional cost management strategies tend to allocate more overhead costs to less complex products that are produced on a larger scale. On the other hand, overhead costs significantly underestimate the complexity of products and services that are produced on a smaller scale. Since these information costs are often used to evaluate the profitability of different production strategies, incorrect cost allocation can lead to managers making the wrong decisions. Understanding and accepting the need for real production costs has always been a difficult task for business leaders. It is extremely difficult to admit that the information databases on which most decisions are based can be the negative cause of many short-term business failures. This is especially true for production costs and product prices, as well as the justification of new products or their implementation. Until these cost distortions are recognized and corrected,

management decisions at the enterprise level, particularly the formulation of long-term strategies, remain extremely difficult to justify.

It has been determined that 36% of hotels apply the principle of ensuring effectiveness. This principle is decisive in revenue management in the context of effectiveness and is related to the motivation of employees who participate in its achievement. If the management of the enterprise considers the fact that the involvement of employees in daily activities is determined by the desire to perform their duties as best as possible, then their motivation and performance will be significantly higher. To achieve the optimum balance between production volume, production costs, and revenues from product sales, the personnel responsible for planning costs and generating profits must have a thorough knowledge of: the stages of the production process at the enterprise; forecasting and setting standard (pre-calculated) product costs; the impact that the introduction of new products may have on market segments; customer decisions to introduce new products to the market; the relevance of the fact that each of these affects customers, costs, inventory, and production management. The same principle applies to cost management. To facilitate and ensure effective cost control, managers must: know the specific factors that affect costs in their particular activities; understand the difference between variable and fixed costs; understand production and sales processes from a technical point of view; be well informed about day-to-day operations at the enterprise. Continuous improvement of the enterprise's activities is achieved by comparing previous and current indicators. Currently, the main focus is on setting standards of excellence that must satisfy both customer requirements and the needs of the enterprise and management. Most enterprises select suppliers based on the following parameters: 100% quality, zero delivery delays, zero damage during transportation, gradual and annual reduction in production costs, regular improvement of employees' qualifications and technical and technological knowledge – “know-how” or “professional savoir-faire.” Bringing the above factors into line with the results of the enterprise's activities actually contributes to improving the culture of production and cost management.

The importance of the principle of optimizing the organizational structure, which consists in the fact that enterprises with the most efficient management costs apply monitoring of relevance and value by type of activity, was noted by 33.3% of respondents. Based on the centralization of cost monitoring by levels of the organizational structure, solutions are sought to improve cost management efficiency.

The use of the principle of information and knowledge dissemination was confirmed by 22.58% of the respondents, which indicates a low level of cost management culture. It often happens at the enterprise whose busy staff do not participate in many activities because it is not provided for in their job descriptions, or because they are not interested or unaware. As is well known, promotions to higher positions are made over time, considering the professional and personal qualities of the employee. These two elements – knowledge and involvement – are the key to success and excellence in the context of cost efficiency. Excellence depends on what expert Edwards Deming called “deep knowledge” (Deming, 1990). The ability to solve problems that arise during a particular activity and to ensure quality in the decision-making process are important factors in staff engagement or empowerment, i.e., employees who have in-depth knowledge and are decisive in their decision-making. Understanding and accepting the fact that most organizational costs are also structural is the most important principle of cost management efficiency.

To summarize the above results, we note that ranking the principles of cost optimization provides information for informed decision-making to identify potential for resource savings, ensure stable cost reductions in the future, and, accordingly, financial stability.

Considering the applied context of performing the cost optimization task, it can be scientifically proven that the tools for applying the principles are methods that implement these principles in specific situations. Above, we have highlighted stereotypical (classical) approaches to cost management: standard costing, target costing, kaizen costing, anti-crisis, and consulting-digital methods.

These methods are pragmatic, so, it is logical to study priority methods of cost optimization. It has been found that 92% of hotel businesses use a combination of cost management methods (Fig. 4).

The survey results show that:

- In cost management practice, 67% of hotels use the target costing method, which implements the functions of planning the production of new products, preventive cost control, and calculating the target cost with a focus on the optimal market price level. The product's cost is calculated based on the preset selling price. This price is determined through marketing research, i.e., it is actually the expected market price of the product;

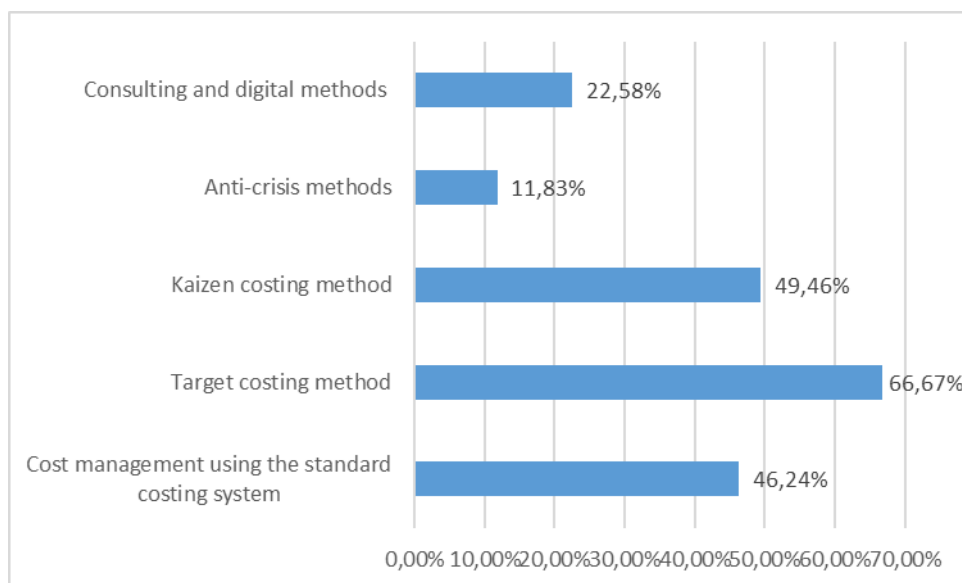


Figure 4. Cost optimization methods used by hotels in Ukraine (survey results)

Source: developed by the authors

- 49% of hotel financial managers use the kaizen costing method, which allows them to implement a policy of reducing costs in an organized and targeted manner and thus increase the profitability of the enterprise. The method can be applied in the product manufacturing process, helping to identify inefficient products and ensure production profitability.

- 46% of respondents say they systematically control production costs using the standard costing method. The application of this method involves a constant search for reserves and ways to reduce costs based on the assumption that the enterprise operates under normal conditions, i.e., an optimistic forecast is made, which can be considered a disadvantage in a dynamically changing environment.

- The smallest number of respondents, namely 22% and 11% respectively, indicate that they use consulting-digital and anti-crisis methods in cost management practice, which indicates insufficient study and popularization of these approaches. Consulting and digital methods align the cost management system with local-type digital economic information systems, which use modern software products and are designed to perform specific cost optimization tasks. In contrast, anti-crisis methods involve using tools to counteract current and potential crises within the enterprise, preventing cost dissipation and revenue loss.

Summarizing the results obtained, we note that to achieve the goal of optimizing the costs of hotel businesses, it is necessary to shift the focus from

the use of classical methods of revenue management (“standard costing,” target costing, kaizen costing, anti-crisis, and consulting-digital methods) to the use of methodological tools that can identify and prevent the dissipation (scattering) of resources. This refers to the uneven distribution of fixed and variable costs, investments in unprofitable areas of development, payments for employee downtime, disproportionate expenses for marketing, distribution, digitalization, and greening, i.e., dissipation concerns the inefficient use of all types of resources, including financial ones. At the same time, scientific sources (Shank & Govindarajan, 1993; Pereira & Cerqueira, 2022; Kulmala et al., 2002; McNair et al., 2001) state that only a combination of cost optimization methods can prevent dissipation. Disagreeing with such an unambiguous conclusion that it is precisely the combination of cost optimization methods that can prevent cost dissipation, we note that in 2015, experts from Massey University (New Zealand), based on the results of an analysis of the activities of US companies, proposed a scientific approach to cost optimization based on an anti-dissipative approach (Zhao, 2000). Its essence lies in enterprises assessing the causes of cost dissipation at all stages of product manufacturing, thereby preventing further dissipation, especially during periods of crisis. At the research stage, a hypothesis was formulated regarding the feasibility of applying the anti-dissipative method of cost optimization, also known as the “Tallock paradox,” which enables justifying the cost structure based on forecast changes in product demand. It has been proven that the anti-dissipative approach increases profitability by at least 20%, reduces losses by 80%, and prevents negative feedback from hotel product consumers by 25–30%. This experience has been used by the international hotel chain Marriott International and the airlines American Airlines and Emirates (Nataraja, 2011).

Thus, the essence of the anti-dissipative approach is to optimize costs by avoiding dispersion and to optimize the use of resource potential at all stages of the production chain. In the hotel sector, this means optimizing fixed and variable costs, transaction costs, marketing costs, and the costs of digitizing and greening the design, production, and sale of hotel products. To investigate the reasons for inefficient use of resource potential, we conducted a study whose results were used to model the cost-dissipation profile of hotel businesses (Fig. 5).

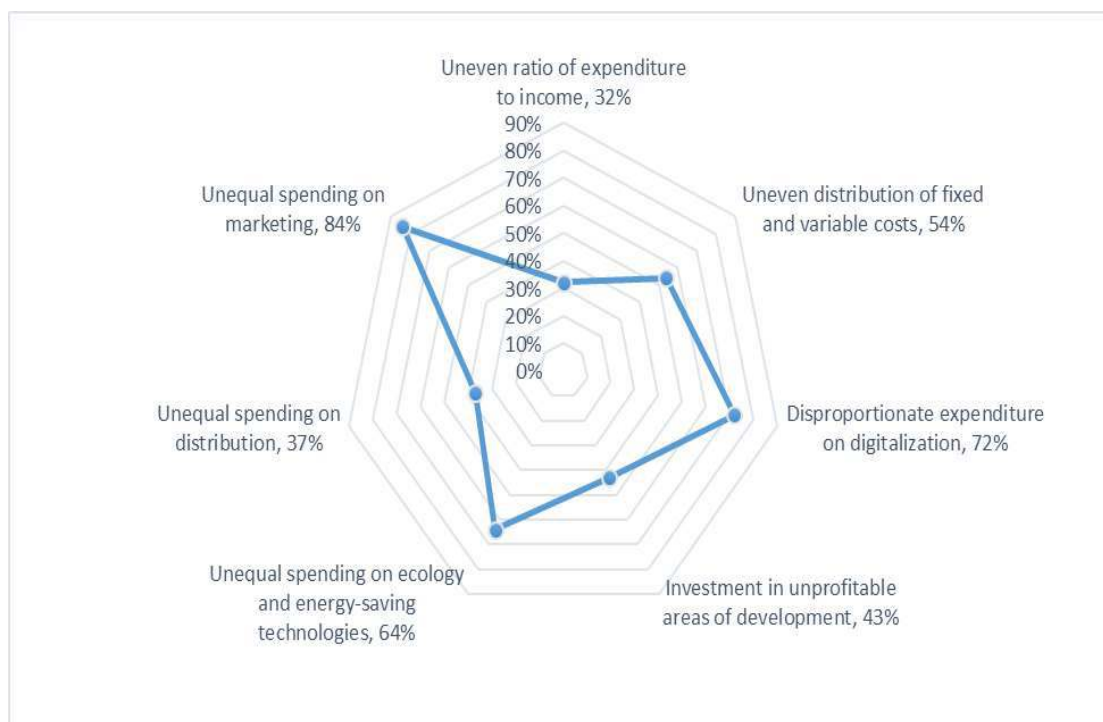


Figure 5. Summary profile of cost dissipation in the hotel industry

Source: developed by the authors

Enterprises assessed the reasons for cost dissipation at various stages of hotel product production.

Having identified the causes of cost dissipation in hotel businesses based on an anti-dissipative approach to cost structuring in the revenue management system, we conclude that minimizing cost dissipation is achieved not so much by the regulatory influence of revenue management but rather by its resonance with the internal capabilities of the system, which leads to positive changes in ensuring the balance of business processes based on the justification of the cost structure based on the results of forecasting changes in: trends in the formation of key competitive advantages in terms of costs; factors of information and analytical support for modeling demand for hotel products; the development of partnership models for interaction with stakeholders within horizontal and vertical links to overcome systemic crises, which creates an opportunity for the redistribution of resources in order to meet consumer demand during periods of cyclical, seasonal, trend, irrational (speculative), and random fluctuations.

To confirm the main thesis of the revenue management concept, namely that cost optimization is a key factor in achieving efficiency, the consequences of dissipation were determined based on the results of identifying asymmetries at the stages of the hotel product production chain,

i.e., based on the cost structure. Accordingly, we conclude that it is asymmetries, as an imbalance in the distribution of information, resources, knowledge, and opportunities, that lead to inefficient use of resources, causing an increase in costs and resulting in dissipation.

Thus, 82% of hotel businesses were found to have informational, energy-saving, functional, and marketing asymmetries in their costs. Within the informational asymmetries in costs identified in 72% of hotels, the following were highlighted: software (level of automation of business processes and service provision), service (differentiation of distribution channels and CRM systems), integrative-disintegrative (integration of software product modules and disruption of cost structure), and stimulating-detering (stimulation of digitalization, digital technologies, and their limitations).

Energy-saving asymmetries in costs in 64% of hotels are caused by: first, the gap between the optimal cost structure of international hotel chains and the low environmental costs of independent hotels. In particular, as of February 24, 2022, 13% of hotels have undergone environmental certification; second, the level of environmental awareness is caused by insignificant costs per hotel room (US\$12–74). However, it should be noted that, worldwide, this figure averages US\$320. Third, there are disparities in the types of services and infrastructure (80.0% are temporary accommodations, while 20.0% are hotels with energy-intensive functional revenue centers, such as spa areas, restaurants, conference services, and casinos). Fourth, the geographical location of the hotel: 68.6–82.4% of hotels are located in regions with high temperatures or cold winters; fifth, uneven energy consumption, namely, 30.2% of hotels are on average 50% occupied. Marketing cost asymmetries in 84% of hotels are characterized by significant volatility in investment dynamics in their own distribution channels, low adaptation of marketing budgets to changes in market conditions, and a lack of analysis of the effectiveness of marketing campaigns and monitoring of ROI and conversion, which indicates the response of hotel businesses to external influences. Proactive measures to address asymmetry and balance cost subsystems include creating a reserve fund to cover the shortfall in resources needed to ensure sustainable development.

Discussion

When developing and gradually testing an anti-dissipative approach to optimizing the costs of hotel businesses, it is important to consider the logic

of the scientific and methodological process we propose, which is aimed at identifying and overcoming the dissipation of costs in hotel businesses, creating the possibility of forming a reserve fund for the redistribution of resources necessary to achieve the goals of revenue management.

Functional asymmetries in costs, namely investments in unprofitable areas of development (43%), are driven by the high costs of architectural, structural, and planning solutions for hotel businesses, necessitating the rationalization of fixed and variable costs. In 54% of hotels, asymmetry was also identified as a cause of dissipation. In an effort to get as much income as possible from their activities, hotel businesses cut back on service costs, which in 32% of hotels causes asymmetry between the growth rates of costs and income, resulting not only in actual cash costs but also in opportunity costs that arise from the choice between different economic decisions.

Conclusion. An anti-dissipative approach to optimizing hotel business costs leads us to conclude that these costs are a key metric and, by influencing financial stability and forecasting revenue indicators, determine the effectiveness of the revenue management system. It has been established that uneven growth in material costs for hotel businesses relative to revenues, significant deviations in the cost structure, and disproportionate costs across business areas lead to dissipation. The proposed anti-dissipative approach to structuring the costs of hotel businesses, the praxeological concepts of which are: optimization of business processes, digitalization, intellectualization of operational activities, risk management, and forecasting of future changes in market trends in hotel services for a reasonable distribution of resource potential, will make it possible to minimize costs and maximize income and staff productivity.

Based on the results of an analysis of the current situation and trends, key performance indicators for enterprises in the hotel industry have shown that: during periods of falling demand, it is natural to see a decline in sales volumes and a reduction in fixed costs, whilst variable costs rise; the crisis has hurt the profitability of hotel businesses; the need to identify cost management strategies aimed at optimising costs is particularly relevant in the context of revenue management, especially given the turbulent conditions of the internal and external environment. The principles of cost management have been identified as fundamental rules that establish basic guidelines for decision-making on cost optimization. The principles of cost optimization ensure objectivity, systematicity, and reproducibility. The principles governing management decisions on cost optimization have been ranked. The study of cost optimization principles has been deepened through

methods that implement these principles in specific situations, and the feasibility of applying an anti-dissipative approach has been demonstrated; this approach optimizes costs to prevent their dissipation at all stages of the production chain.

References

- Afwika, R., Anggraini, T., & Nasution, Y. S. J. (2025). The Influence of Raw Material Costs, Direct Labor Costs, Overhead Costs, and Operational Costs on Sales Turnover. *Journal La Sociale*, 6(4), pp. 1150-1170. DOI:10.37899/journal-la-sociale.v6i4.2193
- Anderson, S. (2006). Managing costs and cost structure throughout the value chain: research on strategic cost management. *Handbooks of Management Accounting Research*, 2, pp. 481-506. DOI:10.1016/S1751-3243(06)02001-3
- Bayoumi, A. E. M., Saleh, M., Atiya, A. F., & Aziz, H. A. (2013). Dynamic pricing for hotel revenue management using price multipliers. *Journal of Revenue and Pricing Management*, 12, pp. 271-285. DOI:10.1057/rpm.2012.44
- Bera, A. K., & Higgins, M. L. (1997). ARCH and bilinearity as competing models for nonlinear dependence. *Journal of Business & Economic Statistics*, 15(1), pp. 43-50. DOI: 10.2307/1392072
- Bhimani, A., & Horngren, C. T. (2008). *Management and cost accounting*. Vol. 1. Pearson Education.
- Boiko, M., Kulyk, M., Bondar, S., Romanchuk, L., & Lositska, T. (2023). Consumer engagement in the conditions of business digitization: A case study of the hotel industry in Ukraine. *Problems and Perspectives in Management*, 21(3), pp. 113. DOI:10.21511/ppm.21(3).2023.09
- Boiko, M., Bosovska, M., Vedmid, N., Melnychenko, S., & Okhrimenko, A. (2017). Development of the tourism cluster. *Problems and Perspectives in Management*, 15 (4), pp.134-149. DOI:10.21511/ppm.15(4).2017.12
- Box, G. Box & Jenkins, G. (2013). Time series analysis, forecasting and control. In *A Very British Affair: Six Britons and the Development of Time Series Analysis During the 20th Century*. London: *Palgrave Macmillan* UK. pp. 161-215

- Chang, Y. Y., & Young, M. (2015). Dissipative Competition: Evidence from a Quasi-Natural Experiment. *International Review of Finance*, 15(2), pp. 169–198. DOI: 10.1111/irfi.12050
- Chen, C., & Kachani, S. (2007). Forecasting and optimization for hotel revenue management. *Journal of revenue and pricing management*, 6, pp. 163-174. DOI:10.1057/palgrave.rpm.5160082
- Clements, M. P., & Smith, J. A. (1999). Monte Carlo study of the forecasting performance of empirical SETAR models. *Journal of Applied Econometrics*, 14(2), pp. 123-141.
- Cokins, G. (2002). *Activity-based cost management: an executive's guide*. John Wiley & Sons.
- Cooper, R., & Slagmulder, R. (1998). What is strategic cost management? *Strategic Finance*, 79(7), pp.14-28.
- Diaz Perez, F. J., Chinarro Vadillo, D., Pino Otin, R., & Guardiola Mouhaffel, A. A. (2018). Reduction of energy consumption in hotels with aerothermal energy. *Case study: Canary Islands (Spain)*. DOI:10.14419/ijet.v7i3.32.18412
- Dikhaminjia, I., Tireuov, K., Qajaia, T., Khussainova, Z. (2025). Research of some factors affecting discrimination in the organization and its impact on conflict situations. *Business Management*, 2025(2), pp. 47–63. DOI: 10.58861/tae.bm.2025.2.03
- Egrioglu, E., Yolcu, U., Aladag, C. H., & Bas, E. (2015). Recurrent multiplicative neuron model artificial neural network for non-linear time series forecasting. *Neural Processing Letters*, 41, pp. 249-258. DOI:10.1007/s11063-014-9342-0
- Farouk El Gayar, N., Saleh, M., Atiya, A., El-Shishiny, H., Alkes Youhanna Fayez Zakhary, A., & Abdel Aziz Mohammed Habib, H. (2011). An integrated framework for advanced hotel revenue management. *International Journal of Contemporary Hospitality Management*, 23(1), pp. 84-98. DOI:10.1108/095961111111101689
- Fiori, A. M., & Foroni, I. (2020). Prediction accuracy for reservation-based forecasting methods applied in revenue management. *International Journal of Hospitality Management*, 84, 102332. DOI: 10.1016/j.ijhm.2019.102332
- Foster, G., & Gupta, M. (1994). Marketing, cost management, and management accounting. *Journal of Management Accounting Research*, 6, pp. 43.
- Garrison, R. H., Noreen, E. W., & Brewer, P. C. (2021). *Managerial accounting*. McGraw-Hill.

- Hansen, D. R., Mowen, M. M., & Heitger, D. L. (1997). *Cost management*. South-Western College Publishing, pp. 300-351
- Heumann, C., & Shalabh, M. S. (2016). *Introduction to statistics and data analysis*. Springer.
- Performance indicators of economic entities (2023). Available online: https://ukrstat.gov.ua/operativ/menu/menu_u/sze_20.htm
- Hua, N., Morosan, C., & DeFranco, A. (2015). The other side of technology adoption: Examining the relationships between e-commerce expenses and hotel performance. *International Journal of Hospitality Management*, 45, pp. 109–120. DOI:10.1016/j.ijhm.2014.12.001
- Kulmala, H. I., Paranko, J., & Uusi-Rauva, E. (2002). The role of cost management in network relationships. *International Journal of Production Economics*, 79(1), pp. 33–43. DOI:10.1016/S0925-5273(00)00061-X
- Mazaraki, Anatoly & Boiko, Marharyta & Bosovska, Myroslava & Vedmid, Nadiia & Okhrimenko, Alla. (2018). Formation of the national tourism system of Ukraine. *Problems and Perspectives in Management*. 16. pp.68-84. DOI:10.21511/ppm.16(1).2018.07.
- McNair, C. J., Polutnik, L., & Silvi, R. (2001). Cost management and value creation: The missing link. *European Accounting Review*, 10(1), pp. 33–50. DOI:10.1080/0963810020025321
- Meuwissen, K. (2011). *Using mathematical models in the hotel industry: Maximizing revenues through discount strategies*. Thesis. Rochester Institute of Technology.
- Montgomery, D. C., Jennings, C. L., & Kulahci, M. (2015). *Introduction to time series analysis and forecasting*. John Wiley & Sons.
- Nataraja, S., & Al-Aali, A. (2011). The exceptional performance strategies of Emirates Airlines. *Competitiveness Review: An International Business Journal*, 21(5), pp. 471-486. DOI:10.1108/10595421111171966
- Okhrimenko, A., Boiko, M., Bosovska, M., Melnychenko, S. & Poltavska, O. (2019). Multisubject governance of the national tourism system. *Problems and Perspectives in Management*, 17(2). DOI:10.21511/ppm.17(2).2019.12
- Pereira, L. N., & Cerqueira, V. (2022). Forecasting hotel demand for revenue management using machine learning regression methods. *Current Issues in Tourism*, 25(17), pp. 2733–2750. DOI:10.1080/13683500.2021.1999397
- Persons, W. M. (1916). Construction of a business barometer based upon annual data. *The American Economic Review*, 6(4), pp. 739–769.

- Petricek, M., Chalupa, S., & Melas, D. (2021). Model of price optimization as a part of hotel revenue management—Stochastic approach: Mathematics, 9(13), Article 1552. DOI:10.3390/math9131552
- Petrova, M., Sushchenko, O., Vovk, K., Akhmedyarov, Y., & Pohuda, N. (2026). Comparative Analysis of the Features of Remarketing Implementation in the Context of Digital Transformation: Service vs. Manufacturing Sectors. *Sustainability*, 18(4), 1777. DOI: 10.3390/su18041777
- Petrova, M., Sushchenko, O., Pohuda, N., & Vovk, K. (2025). International Indices and Their Impact on Tourism Competitiveness: Analysis in the Context of Global Instability. In E. Alaverdov & G. Abuseridze (Eds.), *Globalization, Global Security, and New International Realities for Modern Democracies* (pp. 433-464). *IGI Global Scientific Publishing*. DOI:10.4018/979-8-3373-1355-9.ch017
- Rose, K. A., Smith, E. P., Gardner, R. H., Brenkert, A. L., & Bartell, S. M. (1991). Parameter sensitivities, Monte Carlo filtering, and model forecasting under uncertainty. *Journal of Forecasting*, 10(1–2), pp. 117–133.
- Shank, J. K., & Govindarajan, V. (1992). Strategic cost management: The value chain perspective. *Journal of Management Accounting Research*, 4.
- Shank, J. K., & Govindarajan, V. (1993). *Strategic cost management: The new tool for competitive advantage*. Simon and Schuster.
- Stine, R. A. (1987). Estimating properties of autoregressive forecasts. *Journal of the American Statistical Association*, 82(400), pp. 1072–1078.
- Suanpang, P., & Jamjuntr, P. (2024). Optimizing service scheduling by genetic algorithm support decision-making in smart tourism destinations. *Decision Making: Applications in Management and Engineering*, 7(1), pp. 624–650. DOI: 10.31181/dmame7120241273
- Sushchenko, O., Kasenkova, K., & Sushchenko, S. (2022). Innovative marketing technologies in the development of the tourism specialized types. *Business Management*, 3, pp.5–16.
- Sushchenko, O., Tireuov, K., Stoyanova-Asenova, S., Tymkovan, V., Kozubova, N. (2026). *Sustainable Agrobusiness Development: Implications for Responsible SME Practices*. In: *Reshaping Socially Responsible Business Practices in Small and Medium Enterprises*. Pages: 40 (pages 245-284), DOI: 10.4018/979-8-3373-3805-7.ch008

- Tireuov, K., Mizanbekova, S. and Aitmukhanbetova, D. (2022). Impact of the Profile of Public-Private Partnership Projects on the Economic Potential of Central Asian Countries. *Eastern-European Journal of Enterprise Technologies*, 6(13 (120), 67–77, 2022; doi.10.15587/1729-4061.2022.268242
- Trunina I., Moroz O., & Herasymchuk V. (2021). Implementation of Marketing Tools in the Development of Industry 4.0. *Proceedings of the 20th IEEE International Conference on Modern Electrical and Energy Systems, MEES 2021*. DOI: 10.1109/MEES52427.2021.9598551
- Tse, T. S., & Poon, Y. T. (2012). Revenue management: Resolving a revenue optimization paradox. *International Journal of Contemporary Hospitality Management*, 24(4), pp. 507–521. DOI:10.1108/09596111211226798
- Vives, A., Jacob, M., & Payeras, M. (2018). Revenue management and price optimization techniques in the hotel sector: A critical literature review. *Tourism Economics*, 24(6), pp. 720–752. DOI:10.1177/1354816618777590
- Werner, B. T., & McNamara, D. E. (2007). Dynamics of coupled human-landscape systems. *Geomorphology*, 91(3–4), pp. 393–407. DOI:10.1016/j.geomorph.2007.04.020
- Woodworth, R. M., & Mandelbaum, R. (2010). Seventy-five years of US hotel revenues, expenses, and profits. *Cornell Hospitality Quarterly*, 51(1), pp. 20–26. DOI:10.1177/1938965509356774
- Yildiz, B., Bilbao, J. I., & Sproul, A. B. (2017). A review and analysis of regression and machine learning models on commercial building electricity load forecasting. *Renewable and Sustainable Energy Reviews*, 73, pp. 1104–1122. DOI:10.1016/j.rser.2017.02.023
- Young, P. C. (1999). Nonstationary time series analysis and forecasting. *Progress in Environmental Science*, 1, pp. 3–48.
- Zhao, H. (2000). Raising awareness and signaling quality to uninformed consumers: A price-advertising model. *Marketing Science*, 19(4), pp. 390–396. DOI: 10.1287/mksc.19.4.390.11788