## IMPLEMENTATION OF HOTEL REVENUE MANAGEMENT STRATEGIES DURING A MARTIAL LAW

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Abstract: The Hotel Revenue Management strategy is used to measure the future occupancy, ADR, REVPAR, TREVPAR. Prices impact on the further development of business models implemented by the hotels is analysed. The purpose of this study is to determine the influence of Revenue Management Strategy on KPI and Revenue indicators at hotels in Ukraine. The research method used is a quantitative descriptive research method. The study used a sample of 12 respondents with 8 statements. Data were collected by observing participants, reviewing company documents, and seeking input from key informants. In crisis conditions, in particular caused by martial law in Ukraine, hotels reorient themselves to new segments, study needs and adapt services to new security requirements. One of the ways to increase efficiency and occupancy can be revenue management strategies adapted to crisis or post-crisis situations. We have proposed a typology of income management strategies adapted to new conditions.

Keywords: Revenue management, strategy, hotels, occupancy, ADR, REVPAR.

## **INTRODUCTION**

The full-scale invasion and imposition of martial law has had a significant impact on the hotel industry in Ukraine, leading to significant revenue losses in the tourism industry as a whole. Analysing the dynamics of tax revenues before and during the introduction of martial law, according to research published in 2024, the Ukrainian tourism industry demonstrates uneven fluctuations in tax revenues from the tourism industry by region for 2021-2023. The report showed that the growth of taxes in 2023 compared to 2022 was observed in the capital and in 18 regions of Ukraine. However, in comparison with the same period of the previous year, only 13 regions of the country showed an increase. In addition, the largest decline in tax revenues from the tourism industry was recorded in four regions of Ukraine that are in the area of active hostilities. Thus, the decline in Kherson region amounted to 84%, in Luhansk region 74%, in Donetsk region 53%, and in Zaporizhian region 42%. Despite these challenges, the hotel and tourism industries are showing signs of recovery. According to forecasts, in 2025, 35

new hotels will be commissioned, creating new jobs and generating tax revenues. According to the Hotel Matrix report (Hotel Matrix, 2023) "Ukrainian Hotel Market in 2021-23. Trends 2024", it is expected that new destinations and services in hotels will increase occupancy and reorient to new segments in the markets of Kyiv, Lviv and Bukovel. The hospitality industry has been and remains one of the most affected industries in times of uncertainty, first facing quarantine restrictions related to the Covid-19 crisis, today martial law has led to the need for many hotels to suspend their operations (Zhuravka, Nebaba, Yudina, Haponenko & Filatova, 2023). Due to the closed airspace, the hotel industry, with its extension to the travel industry, has suffered huge losses from 2022 to the present (UHRA, 2022). Since 2012, the hotel industry in Ukraine has become an important component of the Ukraine's state socio-economic development model. From an economic point of view, the construction of five-star hotels and the development of outbound tourism have led to tourism and the hotel industry becoming strong points of development and economic growth for most regions of the country. Several authors have used and discussed the crisis effect on hospitality industry, referring to different countries (Breier et al., 2021; Crespi-Cladera et al., 2021; Dimitropoulos, 2018; Gehrels et al., 2013; Kapiki, 2012; Lee et al., 2024). The positive impact of implementation the anticrisis strategies has been to create new jobs and reduce unemployment (del Mar Alonso-Almeida & Bremser, 2013).

An important task in a crisis is to find new and innovative ways to implement changes. Adapting all sectors to the conditions of accelerated development requires understanding of certain aspects. In particular, among the attributes of the modern economy that indicate the nature and direction of its transformation processes, the term "digital" is often used.

The modern economy is called digital because, in today's conditions, a part of the economic result is obtained exclusively or mainly from digital technologies or using a business model based on digital goods or services (Bukht & Heeks, 2017). The driving forces behind digitalization are economic and political, but of course it is also driven by technological innovation. Technological innovations are an important resource for enterprises, and the development of new information technologies is quite rapid. In the 1990s, economic changes were mainly associated with the emergence of the Internet, which led to the development of the digital economy.

During the 2000s and 2013s, new information and information and communication technologies (ICTs) contributed to the spread and diffusion of economic change. From 2014 to 2022, the Digital Economy and Society Index (DESI) summarized the digital performance of Europe and tracked the progress of EU countries (Bureau of Economic Analysis, 2023). According to this index, most European countries have reached a high level of digital economy development and have developed strategies to secure their future. The Bureau of Economic Analysis (BEA) defines the digital economy primarily in terms of the Internet and related information and communication technologies (ICT) (Bureau of Economic Analysis, 2023). The BEA measures the digital economy in terms of GDP, value added, employment, and wages. The digital economy is seen as a way to promote high-quality regional development, and the necessary integration of the Internet, BigData, artificial intelligence and the real economy (European Commission, 2023). Thus, the main features of the digital economy were presented by Erkin To'rayev Eshkabilovich (2023) in the form of a chain reaction: high level of use of

## IMPLEMENTATION OF HOTEL REVENUE MANAGEMENT STRATEGIES DURING A MARTIAL LAW

technological innovations; embedding of connected sensors in more and more objects (Internet of Things); market saturation with new devices for end users (mobile phones, smartphones, tablets, netbooks, laptops, 3D printers); oversaturation of the information space with data using a new digital model (cloud computing, digital platforms, digital services); spread of Big Data, data analysis and algorithmic decision-making; process automation and robotics technologies.

#### METHODS

#### Sample and population

Managers of all 5, 4 and 3-star hotels in Kyiv, Lviv, Odesa and Bukovel were invited to the survey. The final mailing list included 120 e-mail addresses, of which 32 hotel managers responded to the survey, representing 26.7% of the total sample. In the last sample, 37.5% of managers confirmed that they use the revenue management system in their work and agreed to an interview to determine the factors affecting revenue management under martial law. According to the entire population of certified hotels (DART, 2021), the sample can be considered representative of the market of hotel services in Ukraine.

#### **Data Collection Process and Methods**

The quantitative empirical study was conducted in late 2022 and early 2023, i.e., during the period of martial law in Ukraine. The questionnaire was developed in accordance with the specifics of hotel operations under martial law, considering the peculiarities of different categories of hotels and the use of the revenue management system to improve performance.

The study used two stages of research: during the first stage the 32 survey answers were conducted and during the second stage 12 respondents were interviewed with 8 statements. Data were collected by observing participants, reviewing company documents, and seeking input from key informants.

#### RESULTS

The use of a revenue management system is important to achieve effective hotel management and improve its performance. Digitalization processes used to optimize data processing affect efficiency at many levels, from individual to strategic, and are important for both enterprises and the economy as a whole. It is worth noting that revenue management, according to most authors, is a system of processes and practices aimed at achieving better results and increasing revenues and profitability (Ortega, 2016; Piga et al, 2021; Radwan, 2017). The transformation of digital technologies into one of the most important resources of an enterprise has become possible due to the globalization of the information technology market. The need for information support for effective enterprise (process) management has always existed, but the possibility of virtually unlimited access to a large number of information sources and adequately fast filtering, systematization and analysis of the data obtained has emerged due to the emergence of modern software products and information networks. This leads to two conclusions: first, the globalization of markets for any other goods would be impossible without the processes that have already taken place in the information market; second, the level of use of information technology is a kind of indicator of the level of competition and globalization of a particular market.

The positive dynamics of recovery of key performance indicators of the revenue management in the conditions of crisis and uncertainty, as well as intensive integration processes taking place in the global hotel services market since the 80s of the twentieth century, indicate, on the one hand, a high level of economic attractiveness of the hospitality sector, and on the other hand, the growth of competition and the need to ensure sustainable development and strong competitive positions for the market players. The hotel industry in Ukraine is increasingly integrating into the international economic space, which, on the one hand, leads to an increase in the volume of services and supply in the market, and on the other hand, may lead to the takeover of national hotel companies by international chains. In today's environment, when the struggle for a guest is no longer between individual hotel companies or even between chain establishments, but between hotels of international operators, the problem of developing and implementing methods that will allow hotel companies to operate efficiently and maintain their competitive position has become particularly acute.

The change in indicators during martial law shows positive dynamics in 2023 in three of the four regions studied as it is presented in Table 1. As shown in the table, since the beginning of the full-scale invasion, hotel performance indicators have almost been halved in Kyiv and Odesa, as these cities were regularly under missile attack and the threat of further military offensive remained. Lviv and Bukovel were considered safer regions and also became places of shelter for internally displaced people, so the performance remained approximately at the pre-war level and even improved.

#### Table 1

Region	Indicators	2021	2022	2023	2022 over 2021 Growth	2023 over 2022 Growth
Kyiv	ADR	1997	1936	2355	-3,1	21,6
	RevPar	1038	445	848	-57,1	90,4
	Occupancy %	52	23	36	-55,8	56,5
Odesa	ADR	2095	1362	2061	-35,0	51,3
	RevPar	964	341	536	-64,7	57,4
	Occupancy %	46	25	26	-45,7	4,0
Bukovel	ADR	1936	2354	3623	21,6	53,9
	RevPar	1162	1271	2101	9,4	65,3
	Occupancy %	60	54	58	-10,0	7,4
Lviv	ADR	2322	2540	2732	9,4	7,6
	RevPar	1138	1448	1421	27,2	-1,9
	Occupancy %	49	57	52	16,3	-8,8

Key revenue management indicators of four regions in Ukraine about the YoY analysis during martial law

Complex transformation processes have a significant impact not only on the revenue of Ukrainian hotels, but also on their profitability. The decline in profits during the introduction of quarantine restrictions during the Covid19 pandemic was followed by slow growth after the end of the pandemic. However, since February 2022, the downward trend in profitability has continued. The operating profit in hotels and accommodation facilities fell from 25.5% in 2019 to -28.5% in 2020, and then recovered to 16.6% in 2021 (Zagoruichyk, Savytskyi, Kopytsia & O'Callaghan, 2023).

## IMPLEMENTATION OF HOTEL REVENUE MANAGEMENT STRATEGIES DURING A MARTIAL LAW

The most promising is the approach, the starting points of which are as follows:

- The new era of digitalization and digitalization requires a change in the strategies of management (Zubko, Hanechko, Trubei & Afanasyev, 2021). Thus, a hotel company should not be limited to setting profitability targets and monitoring their achievement. Instead, a comprehensive analysis of opportunities and active counteraction to crisis factors in setting prices, both on the basis of cost and in interaction with competitors in the direction of developing a common information and communication environment in the common economic space, should become a priority vector of this management system. After all, due to the specifics of the hotel services market (in particular, the significant dependence of demand on hard-to-predict natural, political and other factors), economic synergy can also be achieved through the development of partnerships between competitors (Boiko, Kulyk, Bondar, Romanchuk & Lositska, 2023).
- Hospitality enterprises in a globally competitive environment can be competitive if they use the latest organizational and management mechanisms that provide for targeted cooperation with enterprises of the national tourism industry, partners to obtain the expected marginal income from the provision of related services to expand the service range. Integration with partners in the development and implementation of a joint product implies a high level of coherence of missions, programs and actions of the system participants, their involvement, and therefore motivation. In addition, in the presence of chain hotels owned by multinational companies, it is important to take into account the transfer pricing policy and their impact on the national economy (Ivan & Ladar, 2017).
- An important reserve for revenue growth of a hotel company is the transformation and differentiation of distribution channels for hotel services (including segmentation). There are several approaches to differentiating distribution channels in the hotel business. One of them is to identify the target market and guest preferences and select appropriate distribution channels based on the target audience (Kulyk, Boiko, Bosovska & Okhrimenko, 2023). Another approach is to consider channel costs, commission rates, and potential long-term partnerships. It is also important to implement a channel management system to optimize operations and manage business processes. Regular monitoring and analysis of channel performance to optimize efficiency is crucial. In addition, optimizing distribution channels involves choosing the most relevant and profitable channels for the hotel's target audience. Hotels should evaluate the effectiveness of each channel based on factors such as booking volume, revenue generated, and guest acquisition costs. By identifying the channels that deliver the best results, hotels can effectively allocate resources and marketing efforts. This will help to increase the level of involvement of consumers, as well as all employees of the partner hotel company in the process of providing / selling / booking services, as well as the interest of each participant in the effectiveness and efficiency of this process.
- Hospitality enterprises, implementing the Revenue Management System in a high-risk and unstable external environment, should use social and ethical adaptation of strategy and tactics of market behavior to ensure sustainable development.

These practices will include:

- Environmental initiatives: Implementation of environmentally friendly technologies and practices, such as reducing energy, water and waste consumption, using renewable energy sources and green technologies.
- Social responsibility: Developing programs and initiatives to improve working conditions, support local communities and ensure social justice (Kulyk, Lipowski & Boiko, 2024).
- Ethical stewardship: Developing ethical standards and governance practices aimed at maintaining high standards of business ethics and responsible behavior.
- Cooperation with local communities: Development of programs and projects aimed at supporting local communities, developing local infrastructure and ensuring mutually beneficial relations with local partners.

These practices contribute to the sustainable development of the hotel industry and increase its responsible behavior towards society and the environment.

Hotels face several challenges in the social and ethical adaptation of their strategies. One of the main challenges is the costs associated with implementing such practices. Training employees, developing policies, and implementing sustainable practices takes time and money. Another problem is the lack of awareness and understanding of the importance of social and ethical responsibility among employees and hotel management.

In addition, hotels may face resistance from stakeholders who favor short-term profits over long-term sustainability. Finally, measuring the impact of socially and ethically responsible behavior on a hotel's financial performance can be difficult, which may prevent some hotels from investing in such practices. However, despite these challenges, hotels can benefit from doing business in an ethical and responsible manner, as it can lead to increased employee morale, guest loyalty and long-term profitability.

#### DISCUSSIONS/CONCLUSIONS

Solving the problems of adaptation of hotels to work under martial law reveals the content of the elements of the concept of crisis management in hospitality management developed by us, the essence of which is revealed by the following definition: Anti-crisis management in hospitality management is a discrete process of applying forms, methods and procedures aimed at socio-economic recovery of financial and economic activities, on the one hand, and maximizing revenues and using innovative opportunities to improve business processes, provided that hotel enterprises have access to complete information about the market situation and make subsequent decisions based on it, on the other. Hotels facing problems during the crisis should adapt their revenue management strategies by focusing on such approaches.

Thus, crisis management in hospitality management should be considered in at least three aspects. Firstly, as a concept that asserts the economic feasibility of using the tools of revenue management to optimize revenues in order to analyze and identify areas for diversification of activities during periods of low occupancy using market analytics tools. A customer relationship management (CRM) system and social media management tools play a

## IMPLEMENTATION OF HOTEL REVENUE MANAGEMENT STRATEGIES DURING A MARTIAL LAW

fundamental role in creating the conditions for the implementation of this concept to interact with guests and promote offers tailored to diversified distribution channels.

Secondly, as a strategy aimed at using digital technologies and selecting tools, such as channel managers, rate management software and booking engine functions, to manage online distribution channels and optimize pricing strategies and attract customers and partners, as well as manage them and optimize their value in the long term based on the relevant corporate culture, including the development of philosophy, traditions, systems and quality standards for service provision. At the same time, the strategic goals of a hotel company include ensuring an optimal model of behavior in the market, which involves differentiating the range of services from competitors by selecting and developing unoccupied niches, and therefore minimizing conflicts and finding and expanding the number of points of partnership cooperation to better meet the needs of consumers. In today's digital world, it's becoming essential for any manager or entrepreneur to be well aware of the impact of digital marketing on consumer behavior (Kaur, 2023).

Thirdly, as a methodology for coordinating and combining methods of pricing and managing the profitability of individual services throughout their life cycle using a set of modules united by a single business logic and integrated into the corporate information environment, as well as for coordinating actions with partners and competitors.

The feasibility of introducing the concept of crisis management in the revenue management into the activities of hotel enterprises can be proved by considering the prerequisites (the state of development of the hotel services market and the peculiarities of demand determined by it, as well as possible sources of risk) according to the scheme used by us when considering the previous concepts. The presence of objective and subjective prerequisites for the implementation of the proposed concept in the Ukrainian hotel services market indicates its relevance

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