

QUALITY COST ACCOUNTING AS A TOOL USED IN MANAGEMENT OF HOTELS DURING COVID-19 PANDEMIC

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Abstract: The hospitality industry has been hit particularly hard by the global COVID pandemic. The introduced restrictions and limitations, combined with the general drop in demand, changed the operating conditions of many enterprises. At the same time, hotels with the highest categorisation are expected to meet high quality requirements. This means the necessity to incur considerable costs of quality assurance. Taking into account the conditions resulting from the pandemic, it seems reasonable to analyse the current costs of quality assurance and the methods of accounting for them in hotel establishments as part of the management strategy. The purpose of this paper is to identify the application of quality cost accounting systems by hotels. The authors aim to verify the popularity and importance of this tool among hotel service providers. A critical analysis of the available scientific literature in the area of accounting and quality management was used to prepare the theoretical part of the publication. In the conducted research, the authors used the direct interview method as the main research tool. The research covered deliberately selected 128 hotel establishments from all over Poland. The added value of the work consists in filling the gap in the research on the application of quality cost accounting in Polish hotel establishments. The research was conducted at the end of 2021, so it concerns the current situation on the tourism market. It included a deliberately selected group of hotels from across the country. The results of the research leave no doubt as to the significant impact of the pandemic on the costs of ensuring adequate quality in the domestic hotel industry.

Keywords: Covid-19, hotels, management, quality costs, quality cost calculation

1. Introduction

Enterprises operating in the modern market economy pursue the maximisation of profits and minimisation of costs. An appropriate level of profitability in a business organisation is ensured by competent day-to-day management. And one of the most important areas of contemporary management is taking care of an appropriate level of quality. The hospitality industry is one of those sectors of the economy where the quality of provided services is of vital importance. In the case of establishments with the highest categorisation, quality plays an even more prominent role.

During the global COVID-19 pandemic, ensuring a required level of quality constitutes a considerable challenge for people managing hotel facilities.

The objective of this paper is to present the issue of quality cost accounting as a tool for efficient management in the hotel industry. In order to achieve this objective, a deliberately selected group of 128 hotels from all over Poland was analysed. For the purpose of their research, the authors have formulated three hypotheses.

The motivation to undertake the aforementioned analysis has resulted from their personal academic interests and the intention to bridge the research gap regarding the use of quality costing in hotel management across the whole country. Both Polish and foreign scientific publications explore the issue of quality costing rather selectively (Kuzucu et al., 2017; Mireva et al., 2019; Biadacz, 2020; Rogośi c, 2021; Tomov, Velkoska 2022). There is also a lack of recent research on this type of accounting maintained by hotels during the global pandemic. The related situation has significantly affected the calculation of quality costs.

2. Problem Statement

2.1 Quality costs and their calculation

Every type of economic activity, including the provision of services, involves the incurrence of costs. A significant part of the costs related to the provision of services concerns quality, and quality to a considerable degree determines how customers perceive bought and received services.

The issue of quality costs and their calculation has been addressed in the works of many authors, in both Poland and abroad. One of the pioneers of research on quality costing was the American scientist J.M. Juran (1962). He approached this issue as a tool for measuring quality.

Quality costing was treated similarly by A.V. Feigenbaum (1961), Y.S. Chen and K. Tang (1992), N. Chiadamrong (2003), A.R. Mukhopadhyaya (2004) and R. Biadacz (2020). A. V. Feigenbaum (1961) linked the costs of quality to a sequence of quality-oriented activities such as prevention, assessment, testing, control and reduction of errors associated with product life cycles.

Y.S. Chen and K. Tang (1992) were of the opinion that quality costs include the costs of control and prevention, as well as the costs generated by corrective measures and imperfect quality. N. Chiadamrong (2003) defined quality costs as the difference between the actual cost of a product/service and the hypothetical cost of its perfect quality. A.R. Mukhopadhyaya (2004) regarded quality costs as an element used in preventing, identifying and correcting defective work.

R. Biadacz (2020) emphasised the importance of quality costing as a way of ensuring an organisation's reasonable influence on the process of shaping and managing quality. A. Walaszczyk and M. Jędrzejczyk (2016) examined the problems with identifying quality costs in business enterprises. A. Kwintowski (2013) focused on the practical benefits of popularising the knowledge of quality costs. A. Hamrol (2017) combined management issues with the knowledge of quality engineering.

M. Tomov and C. Velkoska (2022) proposed a new concept of quality costs connected with responsible decisions for sustainable, smart, and inclusive development of the social and economic community, then the challenge related to the need for sustainability through promoting products, people, and the planet will be successfully overcome.

Quality costs play a key role in quality cost accounting, which is a system for their recording, analysis and assessment. For quality-oriented entities, this type of accounting is one of the most important decision-making tools (Balon 2012, p. 447). Quality cost accounting has a fundamental applicatory function for managers in taking measures to improve quality.

In her research on quality costing, M. Ciechan-Kujawa (2005) adopted a broader approach. She identified the position of quality costs in business management and the elements of quality cost accounting. The author attached considerable importance to the sources of information on costs and the analysis of quality costs. She also explained the role of cost accounting in business management. The issues of quality cost accounting in manufacturing enterprises were dealt with by K. Michałowska (2016). In particular, she drew attention to the differences in the treatment of quality costs in traditional cost accounting and management accounting systems. A. Astapczyk (2011) wrote about quality costing as a determinant of an enterprise's development. According to the author, maintaining a quality costing system increases the

effectiveness of the functioning of an enterprise by supporting managers in decision-making processes.

Quality costing is an important element of economic analysis which improves the management of an organisation, provides an opportunity to assess the necessity of incurring a given cost and its impact on improving the efficiency of processes (Rehacek 2018). As for foreign authors, the issues related to the calculation, application and usage of quality costs were addressed by Wood (2012). The author described the basic rules conducive to the effective implementation of quality management. He also focused on the practical application of correct cost calculation procedures. A. Rogošić (2021) emphasised that quality costing is also one of contemporary accounting methods. The issues related to the benefits of implementing a quality cost accounting system were examined by Murumkar, Teli and Loni (2018). Doing so, the authors demonstrated the obvious benefits achievable by enterprises through cost reduction.

2.2 COVID-19

The global Covid-19 pandemic and the restrictions associated with it have had a dramatic impact on the global economy. According to Spalding et al. (2021), the hospitality sector was one of those that were particularly strongly hit by the pandemic. According to the data provided by the UNWTO, global tourism in 2021 grew by 4% compared to 2020, but this was enough to reach only 72% of the pre-pandemic level (UNWTO, 2022). The decline concerned the number of tourist trips taken and revenues from the tourism business.

Difficulties in travelling and new legal regulations triggered by the pandemic put accommodation facilities in a difficult position (Savan et al., 2020), (Kakkar, 2021). They also exerted a strong influence on quality costs. In 2020, Poland recorded a 5.2% decrease in the number of hotels and bed places compared to 2019. In the same year, the value of investments in the Polish hotel sector fell by 36% in comparison to the previous year (ISSUU, 2021).

Losses to the global economy due to the collapse of tourism as a result of the pandemic during 2020 and 2021 are estimated at around \$5 billion. At the same time, experts do not foresee a rapid return to the pre-pandemic levels of business intensity before 2023 (PAP, 2021).

The value of pandemic-related losses for the Polish tourism industry as a whole is relatively difficult to estimate. For example, the estimated decrease in the number of tourists using accommodation facilities in November and December 2020 compared to the same months of 2019 was 77.4% and 80.4%, respectively (CSO, 2020). In Poland, the largest declines were suffered by hotel businesses in the Mazowieckie and Małopolskie provinces, where the

numbers of tourists using accommodation facilities plummeted by 50% in September and as much as 80% in November 2020 (Stojczew, 2021). Given the fact that the pandemic has not reached a definite end yet, estimating its impact and consequent losses will require further research and analysis.

2.3 Hotel management

Hotel management includes the totality of activities, processes and decisions relating in particular to resources, people, capital and intended to provide conditions for effective operation leading to the achievement of established objectives. As in the case of any business entity functioning in the market economy, the overriding aim of hotel management is to maximise profits and reduce costs (Brilman, 2002). The key element of effective hotel management is concern for proper planning, organisation, leadership and control (Kozmiński, Jemielniak 2011).

According to C. Witkowski (2002), the special challenges facing hotel managers include ensuring safety, comfort and appropriate atmosphere for customers staying in their establishments. Discussing issues related to hotel management, M. Turkowski (2010) emphasises the key role of the customer in hotel operations. The primary task of hotel management is to ensure that the customer's needs are met. M. Stróżycki (2004) has focused on the aspect of business continuity and organisation. In his analysis of the hotel industry, T. Knowles (2001) has paid particular attention to the strong connections between the management of accommodation and catering services. R. F. Sandvik (2011) has indicated managers' practical skills as an important factor determining effective management in the hotel industry.

Issues related to hotel management have been addressed in many publications. For example, B. De Lollis (2007) has dealt with management efficiency and the advantages of operating within hotel chains. Y. Chu (2014) has drawn attention to the specifics and challenges of managing luxury hotels. The unique character of managing boutique hotels has been described in the publications by C. Balekjian and L. Sarheim (2011) and L. Anhar (2001).

Various issues concerning revenue management in the hospitality industry have been discussed by D. K. Hayes, J. D. Hayes, P. A. Hayes (2021). Problems related to proper service management and the rules prevailing in this area have been considered by J. Kandampully (2021). P. Dominik (2015) has concentrated on the issues of human resources management, the role of managerial positions, as well as franchising and outsourcing in the hotel industry. E. Koniuszewska and E. Mitura (2015) have discussed issues relating to work organisation in hotel establishments. The topic of management in connection with services has been addressed,

among others, by A. Panasiuk and D. Szostak (2009). Modern forms of hotel management based on corporations and cooperatives, as well as operating strategies adopted by basis hotel industry units have been discussed by J. Sala (2008). The issue of service quality management in the hotel industry, factors determining quality, as well as methods of influencing quality have been taken up by C. Witkowski and M. Kachniewska (2005). The issues of hotel management and functioning of hotels have appeared in the papers published by M. Milewska and B. Włodarczyk (2018).

The added value of this paper results from the bridging of the existing research gap by way of examining a large representative sample of hotels all over Poland. The paper extends the existing knowledge by providing new information on the calculation of and accounting for quality costs in the new reality changed by the Covid-19 pandemic. Due to the timing of the research, the obtained data should be considered as very much up-to-date and compatible with the current state of affairs.

5.1. Research hypotheses

The aim of the paper is to identify the scope in which hotels use quality cost accounting systems. The authors attempt to verify the popularity and importance of this tool among hotel service providers.

For the purposes of the planned research, three hypotheses have been formulated. Their verification will be based on the answers provided to the questions asked in direct interviews.

H1: Hotel managers are interested in and pay attention to quality costs.

H2: Quality cost accounting is a popular tool used in hotel management.

H3: The COVID-19 pandemic has changed the level of quality costs in hotel establishments.

This paper is to fill the research gap concerning the issue of quality costing in enterprises providing hotel services.

5.2. Research Methods

The main objective of the conducted research was to identify the application of quality costing in hotel services. The direct interview method was used to achieve the objective. The authors wanted to obtain information on the popularity and importance of this management tool, the awareness and knowledge of quality costing issues, as well as the impact of the COVID-19 pandemic on the level of quality costs. Quality costs was defined within the performed study as all costs of measures implemented in order to ensure an appropriate level

of quality of offered services as well as the costs of actions taken in the event of failure to achieve the desired service quality level.

The research was conducted in 2021 on a deliberately selected group of hotels of different sizes and categories located in the territory of Poland. The research group consisted of 128 hotel establishments, such selection of entities for the study was purposeful and determined by their ability to access and provide information.

It should be stressed that the hotels participating in the research constitute only a small section of the sector under analysis, therefore, drawing any far-reaching conclusions would be unjustified. Nevertheless, the results and conclusions presented below may form the basis for further extended research in hotel services in the near future. The authors take a very cautious approach to the obtained results.

7. Findings

The research group consisted of small (63.28%), medium (28.91%) and large (7.81%) enterprises. Only 19.40% of them had a quality management system confirmed ISO certificates; the vast majority (80.60%) did not have either. The persons representing particular establishments held such positions as owner (38.28%), director (25%), manager (24.22%), administration employee (4.69%), management board president (3.13%), commercial proxy (3.13%) and attorney (1.56%). For the vast majority of the hotels participating in the research (almost 91%) the main long-term business objective was to provide services of the highest quality and ensure customer satisfaction.

During the course of the research it was found that training in the area of quality was provided by the vast majority of the hotel, i.e. 79.10%, while 20.90% of them did not do it. Proper training is the basis for improving the skills and competencies of employees. The higher qualifications and awareness of the personnel should translate into a guarantee of the required quality of provided services.

The problem of quality costs was identified by more than half of the surveyed hotels (52.34%). This issue was ignored by 14.06% of the participating enterprises, while one-third (33.59%) of them were unable to determine whether it was relevant to their operations. The distribution of the responses regarding the recording of quality costs in the accounting system was very similar. Less than 49% declared accounting for quality costs (identifies and registers these costs in accounting system), 15.63% answered that they did not use any quality costing

systems, and the issue remained unresolved in 35.94% of the hotels participating in the research. These results are quite unexpected, because this tool is not so popular in service companies (Sadkowski, Jedynek 2022, p. 69). The authors also attempted to find out whether the level of quality costs had increased as a result of the COVID-19 pandemic. Over 76% of the hotels confirmed this in their responses (additional costs were incurred mainly for purchasing personal protective equipment such as masks, gloves, disinfectant fluids, ozonators; for adapting workplaces to new conditions, for example by installing plexiglass partitions or enclosures; and for disposing of trade goods due to loss of value). 14.63% of the respondents had no opinion on the matter, and 8.54% of them stated that the pandemic had no significant impact on their quality costs.

The issue of identification of quality costs is crucial for accurate and reliable quality cost accounting. According to the respondents, this task was fulfilled the best by department managers (62.69%), accounting departments (13.43%) and quality teams (8.96%). The allocation of responsibility for quality cost identification to department managers is a good solution, as they are very well positioned to supervise all processes or actions carried out within their respective departments.

In the scope of the research, the authors also attempted to identify the most popular sources of information on quality costs in the hotel industry. These turned out to be mainly accounting documents (42%), records of complaints and claims (18.84%), as well as materials from audits and inspections (13.04%). The obtained responses indicated that accounting documents played a key role in the process of identifying quality costs.

The knowledge of quality costs is the necessary basis for the implementation of a quality cost accounting system (A cost accounting system for decision-making purposes. It constitutes the basis for making long-term and short-term business decisions). The possession of such a system was declared by 19.40% of the hotels included in the research sample. 34.33% of the respondents indicated that they did not use any quality costing system, while 46.27% had no opinion on this issue. The respondents mentioned the following as the most important objectives of using a quality cost accounting system: improving the quality of the provided services (approximately 30%), improving the efficiency of the management system (approximately 30%) and optimising overall costs (22.45%). Operating a quality cost accounting system involves preparing periodic reports on quality costs. According to the results of the research, only 17% of the respondents regularly prepare such reports. Almost 45% of them do not create such reports, and 38.30% do not have an opinion on this issue because of the lack of the necessary knowledge of the subject.

The pandemic situation and financial losses incurred by hotels due to the shutdown of the tourism industry motivated the authors to search for an answer to the question about the approximate period needed to make up for the resulting losses. It turns out that the hotels participating in the research optimistically forecast that the required time would range from 1 to 5 years (71.25%). Every tenth enterprise declared having incurred losses that could not be made up for. A period of recovery longer than 5 years was indicated by only 2.5% of the respondents. This question was of great significance in the context of quality costs and quality cost accounting because additional costs caused by the pandemic exert a negative impact on hotels' bottom line, which may constitute a serious challenge to overcome.

6. Conclusions

The presented results of the research conducted in 128 hotels allow for verifying the formulated hypotheses.

The issue of quality costs is addressed by more than half of the establishments participating in the research, and quality costs are recorded in the accounting system by almost half of them. Furthermore, training on quality issues for employees is provided by almost 80% of the hotels in the analysed group. All these conclusions confirm the correctness of hypothesis H1.

Fewer than 20% of the enterprises providing hotel services declare having and operating a quality cost accounting system, and only 17% of them draw up periodic reports on quality costs. Therefore, hypothesis H2 has to be regarded as incorrect.

More than 3/4 of the surveyed businesses confirmed the negative impact of the COVID-19 pandemic on their quality costs. Almost all of them (with one exception) suffered financial losses. They estimate that they will need from 1 year to 5 years to recover them. Based on these findings, hypothesis H3 is positively verified.

A serious limitation for the research was a very large number of hotels that have the limited knowledge and awareness of quality costs and quality cost accounting or general unwillingness to cooperate with academic institutions.

The hotels that participated in the research represent a small fraction of the total industry, therefore, drawing any far-reaching or generalising conclusions would be unjustified. The obtained results and formulated conclusions may constitute the basis for further research on hotel services in the near future. The authors take a very cautious approach to the obtained results.

In conclusion, quality costing is an excellent complement to cost accounting models, and because of its usefulness as a tool supporting the improvement of service quality, it should be given special attention in hotel management.

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