






“The role of operational innovation and external environment on the relationship between service quality and marketing performance in the hotel business”

AUTHORS	Abdel Hakim Akhorshaideh Jassim Al-Gasawneh  Dia Zeglat  Nawras Nusairat  Mahfuz Judeh 
ARTICLE INFO	Abdel Hakim Akhorshaideh, Jassim Al-Gasawneh, Dia Zeglat, Nawras Nusairat and Mahfuz Judeh (2022). The role of operational innovation and external environment on the relationship between service quality and marketing performance in the hotel business. <i>Problems and Perspectives in Management</i> , 20(2), 448-458. doi: 10.21511/ppm.20(2).2022.37
DOI	http://dx.doi.org/10.21511/ppm.20(2).2022.37
RELEASED ON	Thursday, 23 June 2022
RECEIVED ON	Thursday, 07 April 2022
ACCEPTED ON	Thursday, 12 May 2022
LICENSE	 This work is licensed under a Creative Commons Attribution 4.0 International License
JOURNAL	"Problems and Perspectives in Management"
ISSN PRINT	1727-7051
ISSN ONLINE	1810-5467
PUBLISHER	LLC “Consulting Publishing Company “Business Perspectives”
FOUNDER	LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

58



NUMBER OF FIGURES

1



NUMBER OF TABLES

1

© The author(s) 2022. This publication is an open access article.



BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives"
Hryhorii Skovoroda lane, 10,
Sumy, 40022, Ukraine
www.businessperspectives.org

Received on: 7th of April, 2022
Accepted on: 12th of May, 2022
Published on: 23rd of June, 2022

© Abdel Hakim Akhorrhaideh, Jassim Al-Gasawneh, Dia Zeglat, Nawras Nusairat, Mahfuz Judeh, 2022

Abdel Hakim Akhorrhaideh, Ph.D., Associate Professor, Faculty of Business, Department of Public Administration, the University of Jordan, Jordan.

Jassim Al-Gasawneh, Ph.D. in Digital Marketing, Assistant Professor, Faculty of Business, Department of Digital Marketing, Applied Science Private University, Jordan. (Corresponding author)

Dia Zeglat, Ph.D., Associate Professor, Faculty of Economics and Administrative Sciences, Department of Marketing, the Hashemite University, Jordan.

Nawras Nusairat, Ph.D., Associate Professor, Faculty of Business, Department of Marketing, Applied Science Private University, Jordan.

Mahfuz Judeh, Ph.D., Professor, President Consultant, Faculty of Business, Department of Business Administration, Applied Science Private University, Jordan.



This is an Open Access article, distributed under the terms of the [Creative Commons Attribution 4.0 International license](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.

Conflict of interest statement:
Author(s) reported no conflict of interest

Abdel Hakim Akhorrhaideh (Jordan), Jassim Al-Gasawneh (Jordan), Dia Zeglat (Jordan), Nawras Nusairat (Jordan), Mahfuz Judeh (Jordan)

THE ROLE OF OPERATIONAL INNOVATION AND EXTERNAL ENVIRONMENT ON THE RELATIONSHIP BETWEEN SERVICE QUALITY AND MARKETING PERFORMANCE IN THE HOTEL BUSINESS

Abstract

Economic sustainability allows hotel customers and other stakeholders to profit from hospitality services. Hotels can improve their marketing success by leveraging technologies and innovation strategy initiatives to suit guests' ever-changing needs. Thus, this paper investigated the effect of service quality on marketing performance among hotels in Jordan. In addition, it analyzed the moderating role of operational innovation and external environment on the relationship between service quality and marketing performance among Jordanian hotels. This study was quantitative and used the pretested questionnaire by interviewing general managers. The valid questionnaires were distributed stratified randomly to general hotel managers. The analyzed data were from 162 completed questionnaires, employing partial least squares analysis software. The results demonstrate a positive relationship between service quality and marketing performance. Moreover, this relationship was moderated by operational innovation and external environment. Clearly, the managers in Jordanian hotels might find and draw business strategies by linking the marketing performance with the service quality specifically (SERVQUAL) and employing management and technologies strategies through its operational innovation and external environment.

Keywords service quality, SERVQUAL, operational innovation, external environment, marketing performance, hotels

JEL Classification L19, M31, Q55

INTRODUCTION

Marketing performance interpretation is dictated by the individual who is assessing the organization. Additionally, the definition of this concept requires an understanding of the characteristics of the performance elements that exist within each accountability domain. Lynch and Wilson (2009) similarly claimed the need to quantify the results while reporting the organizations' performance levels. Thus, organizations must use key performance indicators to analyze whether they achieve their goals and demonstrate awaited marketing performance.

Additionally, among hotels, an increase in marketing expenditure and improvement in service quality may reinforce a hotel's competitive status. At the same time, it may increase their resilience in managing different disasters, such as, for instance, financial crises (Kim & Han, 2011). Furthermore, Parasuraman et al. (1985) indicated that service quality entails the difference between customers' hopes and observations about the service received from an organization.

The implementation of business strategies and effective quality strategies involving service quality and reputation could also increase marketing performance (Al-Habil et al., 2017). Meanwhile, it was found that the relationship status between marketing performance and service quality was inconsistent because previous studies found negative and positive relationships between them (Pan & Ha, 2021; Bowie et al., 2016). Hence, this relationship needs to be improved by applying some factors such as operational innovation and external environment (Yadav & Singh, 2014).

Based on past findings, this study perceives the need for the hotel industry to improve its marketing performance. Hence, the paper attempted to investigate the impact of service quality on marketing performance among hotels in Jordan. Moreover, it examined the moderating role of operational innovation and the external environments in that relationship.

1. LITERATURE REVIEW

1.1. Service quality

Organizations are obliged to provide quality service because quality service is considered a crucial strategy for the organization to remain competitive in the market in this rapidly expanding business environment (Lian et al., 2020). Therefore, hotel managers need to develop techniques that could optimally fulfill the expectations of customers. As perceived by the customers of services providers like hotels, the infrastructure, physical ambiances, and the attitude and behavior of hotel staff are elements of service quality (Koziol & Mikos, 2019).

Lewis and Booms (1983) were pioneering scholars in the concept of service quality. According to them, it entails the degree to which the provided service matches the customer's anticipations. Equally, service quality concerns a general deduction of the superiority of a given service, even though it is rather unclear as to the specific characteristics of such deduction.

Several scholars have investigated elements of service quality. Sasser et al. (1978) found service quality to have three dimensions: physical facilities, materials, and staff. According to Grönroos (1984), service quality carries two aspects of technical quality and functional quality. Similarly, Rust and Oliver (1993) found three aspects of service quality: technical quality, functional quality, and environment. Parasuraman et al. (1985) relevantly proposed ten elements a customer would consider in the evaluation of service quality. These elements include security, reliability, credibility, tangibles, communication, competence, respon-

siveness, and courtesy. Additionally, Parasuraman et al. (1988) introduced five aspects of service quality: responsiveness, reliability, empathy, tangibles, and assurance. These aspects have been included as the SERVQUAL model components to measure service quality effectively.

Bowie et al. (2016) claimed that service quality propels organizations' economic and marketing performance. Appositely, in examining service quality issues within the government sector, Akroush (2008) found the increasing significance of the provided service quality, especially in developing nations. Furthermore, service quality and marketing performance were generally positively related in past studies.

1.2. Operational innovation

Operational innovation is associated with instruments employed in increasing the organizational processes necessary to accomplish effective and unified exchanges involving staff, administrators, and customers (Lee et al., 2011; Hammouri et al., 2021; Nusairat et al., 2021). As reported by Cox Pahnke et al. (2015), operational innovation decreases cost and lead time, produces effective operational strategies, strengthens service quality, and guarantees customer protection.

Adler et al. (2003) reported that an organizational environment that promotes continuous innovation facilitates the achievement of successful process improvement. In healthcare organizations, the use of an efficient operational process decreases cost by applying the best practices or approaches. Furthermore, McFadden et al. (2009) found the impact of process improvement on organizational

goals achievement by way of improved employee work performance. This demonstrates the significance of effective operational innovation over cost reduction and pressuring staff to increase hospitality. In addition, operational innovation efforts could enhance the processes of service delivery. Some hotels have applied these innovation tools as value chain innovation for process improvement, lean management and six sigma concepts, and the Baldrige criteria necessary to attain excellent performance (Lee et al., 2011).

For this study, operational innovation involves tools that enhance operational activities by improving processes and IT systems in hotels. Operational innovation is essential for improving process efficiency and information flow amongst units within a hotel. Therefore, operational innovation for the context of this study can be broken down into process improvement and the IT system of hotels. The items of measurement for the proposed operational innovation model were adapted from Lee (2015).

In service firms, innovative activities involve constructing systems that methodically include customers in the service generation process and the prompt discovery of customer evaluations of the service (Rew et al., 2021). Relevantly, Tsai et al. (2020) found a positive effect of operational innovation on marketing performance. Indeed, marketing performance is positively affected by service quality, but the effect would be negative if the provided service had poor quality. This statement demonstrates inconclusiveness between service quality and marketing performance. Hence, a moderating variable is included in this study, following Baron and Kenny (1986) and Bibi et al. (2016). Accordingly, in this study, operational innovation would moderate the correlation between marketing performance and service quality.

1.3. External environment

It is impossible for both profit and non-profit organizations to survive standing alone, and organizations are generally formed and administered following their environment. Otache and Mahmood (2015) have mentioned that organizations embrace an open system working alongside their environment.

Clearly, the performance and activities of organizations are substantially affected by their environment. In fact, Sul et al. (2002) found that business planning and decision-making activities are generally executed taking into account the changes that occur within the environment. Thus, a successful organization would consistently tailor its resources, services, and strategies following the environment it operates in.

It is very challenging for any organization to survive in an extremely competitive market. García-Sánchez et al. (2018) relevantly mentioned that the internal resources of an organization must match with its external environment conditions so that the organization can effectively function. Sul et al. (2002) highlighted the need for organizations to keep updated with their environment to retain effective and efficient functioning. Fu et al. (2021) indicated that an organization could achieve long-term competitiveness by aligning its policies, capabilities, and resources with the external environment.

External environment can also affect the organizational resource and the organization's internal capacities (e.g., service quality), irrespective of the tangibility level of the resources (Fu et al., 2021; van Breda et al., 2001). Additionally, external environment positively affects marketing performance (Ziyadat, 2019). Service quality positively affects marketing performance as well, but poor service quality has an adverse impact on marketing performance (Pan & Ha, 2021). This implies an unpredictable relationship between service quality and marketing performance. Therefore, following Baron and Kenny (1986) and Bibi et al. (2016), this study included a moderating variable to the relationship between both constructs. Specifically, external environment was chosen as the moderator.

1.4. Marketing performance

Performance management has a crucial goal of accomplishing the organization's key objectives, generally by improving employee performance and organizational performance in general. In business administration domains, such as manufacturing, product development, and logistics (to name a few), performance management has been regarded as a primary strategy.

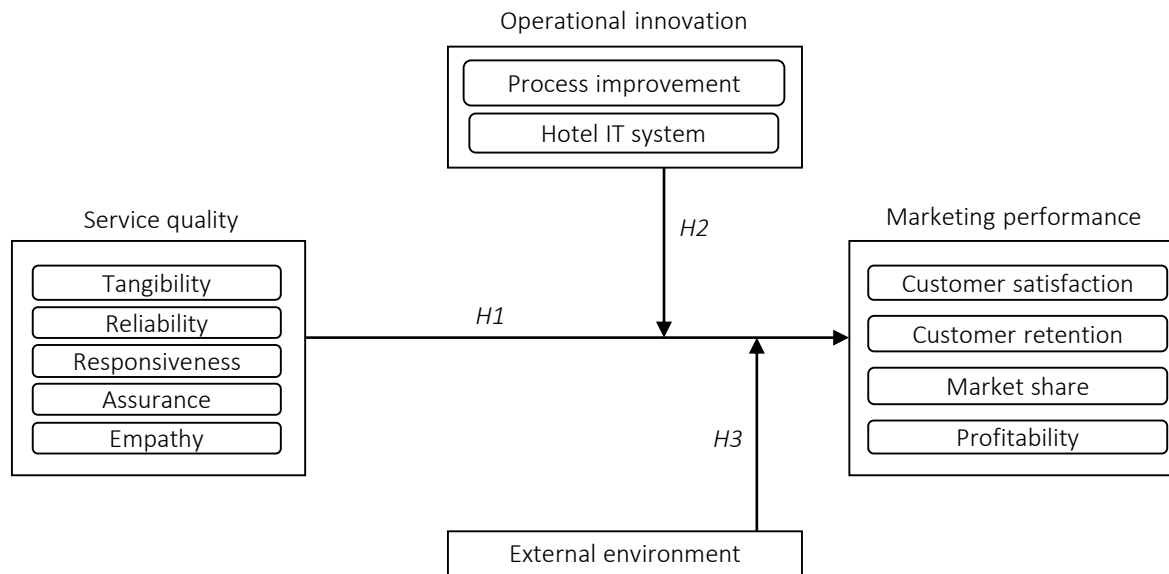


Figure 1. Proposed research model

Essentially, marketing performance management comprises marketing performance measurement, management, and analysis, to increase return on investment and organizational effectiveness (Halimi et al., 2021). It can also be referred to as the evaluation of the connection between business performance and marketing activities (Clark & Ambler, 2001). It was reported that shareholder wealth is substantially affected by the investment in marketing activities (O'Sullivan et al., 2009). However, such a connection may not be discernible in some organizations. Marketing managers thus have the responsibility to prove the value of their marketing investments.

Market performance is arbitrage to the organization's key objectives and productivity (Chang et al., 2018). It is also a capability in the producing and marketing services and products to accomplish the set goals. Notably, marketing performance of an organization reflects how effective the organization is in using its resources to satisfy customers' needs. Therefore, in market performance evaluation, the applied dimensions are market share and profitability, customer retention, and customer satisfaction.

Marketing performance measurement (MPM) has been utilized by marketing experts in depicting the marketing effectiveness analysis (O'Sullivan et al., 2009). MPM connects all activities that are associated with marketing, strategies, and metrics with business goals (Collins et al., 2007). It involves

the use of a metrics framework usable in marketing performance monitoring. To this end, MPM dashboards were created, covering the following: advertising and promotional share, brand recognition and satisfaction, contribution margin, turnover, market share, profit, purchase intent, customer penetration, loyalty and satisfaction, distribution level, profitability of intermediaries, and innovativeness.

The essence of marketing performance and organizational orientation toward its performance are two factors that make the core structure of organizations different from that of marketing performance metrics. Marketing performance measures can be classed into two major metrics, including sales, cash flow, profitability, and sales growth (Farris et al., 2010). Others include market share, adaptation, innovation capacity, new product success, customer satisfaction, and customer loyalty (Clark & Ambler, 2001). Accordingly, profitability, market share, innovation or creativity, sales growth, customer satisfaction, customer retention, and customer loyalty are among the factors to be considered in evaluating marketing performance (Albakri & Hadi, 2014).

2. AIM AND HYPOTHESES

The present paper aims to assess the moderating effect of external environment and operational innovation on the correlation between service

quality and marketing performance in the hotel business. Hence, the following hypotheses are proposed (Figure 1):

- H1: *Service quality has a positive impact on marketing performance.*
- H2: *Operational innovation moderates the relationship between service quality and marketing performance.*
- H3: *External environment moderates the relationship between service quality and marketing performance.*

3. METHODS

This study examined the moderating effect of external environment and operational innovation on the relationship between marketing performance and service quality of star-rated Jordanian hotels. As well, the current study is quantitative in nature. Accordingly, data were obtained using a questionnaire that included quantitative indicators as the following details. Section one contained 20 items covering the five factors of service quality (empathy, reliability, responsiveness, assurance, and tangibles) adapted from Parasuraman et al. (1988). Section two contained seven items covering two factors (process improvement and hotel IT systems) adapted from Lee (2015). Next section contained 20 items on marketing performance represented by four factors of customer satisfaction (5 items), customer retention (5 items), market share (5 items), and profitability (5 items). Finally, section four contained 15 items representing the construct of external environment adopted from Fu et al. (2021). All constructs in the questionnaire were handled as multidimensional construct, except for the construct of external environment, which was handled as a uni-dimensional construct. In addition to the four sections of construct items, one section was added, and this section contained six demographic questions. Altogether, there were 68 items in the questionnaire broken down into five sections.

Prior to the current survey, the established questionnaire was validated by three university scholars who were experts in the field related to the study topic. The feedback that these experts pro-

vided was used for questionnaire amendments – the amending process took place after receiving feedback from these experts. This was to assure that the questionnaire was valid for the study context. Next, the amended questionnaire underwent the pretesting process, as recommended by Akroush et al. (2015). In the pretest, interviews were carried out involving 30 general managers to gain their viewpoints concerning the sufficiency and clarity of the items in the questionnaires. Their inputs were taken into account.

A Likert-type scale was used in this study to measure the response to the questionnaire items. This type of scale has been popular and has been extensively tested within marketing and social sciences (Garland, 1991). In the scale, the quantity of points is determined based on the study context. Hence, specific rules on this do not exist. However, generally, the use of 5, 7, or 10 points has been common in studies, with the five-point scale being considered most effective for the present study, as proposed by Sekaran and Bougie (2013).

The study population comprised 236 hotels rated with between 1 and 5 stars. In line with the suggestions of Lo et al. (2010), this study employed the critical informant method in selecting the study sample. Specifically, general hotel managers were the study informants, and they were regarded as high-level respondents for their deep knowledge of their respective organizations. According to Smith and Chang (2010), informants as respondents would provide answers to the questionnaire items based on their professional knowledge and practices as much as they could. Meanwhile, the minimal sample size was established using G-power technique, which is grounded upon the number of predictors.

The determined minimum sample size was 74. However, considering that the survey method has a weak response rate, Hair et al. (2010) had recommended that the number of respondents should be more than 100 to increase the rate of response and hence the accuracy of results. This study thus distributed to a total of 212 questionnaires. The selection of hotel categories was based on stratified sampling, while the respondents for each hotel were selected using a simple random sampling technique. SPSS Version 18 and PLS Version 3.3.6

were used in the data analysis. The response rate and the respondents' profiles were determined using descriptive statistics, while the relationship between the variables and (service quality and market performance) was determined through inferential analyses.

4. DATA ANALYSIS

4.1. Demographic characteristics

Out of 160 obtained responses, 22 were incomplete and hence dismissed, resulting in 138 responses usable for analysis. The outcomes of the analysis are as follows: males made up the majority of respondents at 61.2%; 59.6% were single. Most respondents were between 40 and 44 years old (59.2%), and 54.1% had at least one degree (education-wise). Data normality was ascertained in this study by evaluating the multivariate skewness and kurtosis of the data. The evaluation of skewness and kurtosis in determining data normality has been proposed by Hair et al. (2014). The results were showing that the data were of non-multivariate normal as follows: Mardia's multivariate skewness ($B = 9.003$, $p < 0.01$) and Mardia's multivariate kurtosis ($B = 61.777$, $p < 0.01$).

Next, this paper employed Smart-PLS to estimate relationships between the constructs. It consisted of two steps. First, confirmation of the measurement model was made through convergent validity and discriminate validity affirmation. Second, the hypothesis testing or the confirmation of the structural model was done. In this study, external environment was the inspected key variable of first-order construct. Service quality as reflective-reflective structures was the second-order construct represented by the following variables: credibility, trustworthiness, expertise, experience, and physical appearance. Second-order constructs extend the understanding of pertinent logical and consent functions.

Hair et al. (2019) suggested reducing the number of interactions and assumptions in the structural model in the second stage. The purpose was to ease understanding. Therefore, this study simplified the direction model of PLS 3.3.6. Here, there were two phases involved, whereby the former in-

volved using the technique of repetitive indicator to gain the first-order scores for first-order constructs. In contrast, the latter involved the computation of CR. Finally, a calculation was made to obtain the AVE value of second-order constructs, utilizing the weighting of the first-order variables.

Table 1. Convergent validity values for the CFA of the research model

CONSTRUCT	ITEM	FL	CR	AVE
First-order				
Tangibility (TNG)	TNG1	0.839	0.904	0.702
	TNG2	0.870		
	TNG3	0.847		
	TNG4	0.792		
Reliability (RLB)	RLB1	0.853	0.909	0.714
	RLB2	0.860		
	RLB3	0.867		
	RLB4	0.797		
Responsiveness (RSP)	RSP1	0.839	0.901	0.695
	RSP2	0.856		
	RSP3	0.840		
	RSP4	0.798		
Assurance (ASU)	ASU1	0.807	0.872	0.630
	ASU2	0.825		
	ASU3	0.813		
	ASU4	0.727		
Empathy (EMP)	EMP1	0.835	0.923	0.750
	EMP2	0.884		
	EMP3	0.890		
	EMP4	0.855		
Profitability (PRF)	PRF1	0.844	0.932	0.733
	PRF2	0.859		
	PRF3	0.854		
	PRF4	0.872		
	PRF5	0.851		
Market share (MKS)	MKS1	0.862	0.925	0.711
	MKS2	0.873		
	MKS3	0.857		
	MKS4	0.856		
	MKS5	0.764		
Customer retention (CSR)	CSR1	0.825	0.923	0.705
	CSR2	0.823		
	CSR3	0.858		
	CSR4	0.841		
	CSR5	0.850		
Customer satisfaction (CSS)	CSS1	0.816	0.922	0.702
	CSS2	0.829		
	CSS3	0.851		
	CSS4	0.879		
	CSS5	0.813		
Process improvement (PI)	PI 1	0.984	0.933	0.743
	PI 2	0.911		
	PI 3	0.923		
	PI 4	0.896		

Table 1 (cont.). Convergent validity values for the CFA of the research model

CONSTRUCT	ITEM	FL	CR	AVE
First-order				
Hotel IT systems (HS)	HS 1	0.876	0.854	0.877
	HS 2	0.843		
	HS3	0.821		
External Environment (EE)	EE 1	0.769	0.843	0.644
	EE 2	0.871		
	EE 3	0.832		
	EE 4	0.881		
	EE 5	0.893		
	EE 6	0.843		
	EE 7	0.811		
	EE 8	0.791		
	EE 9	0.785		
	EE 10	0.881		
	EE 11	0.843		
	EE 12	0.838		
	EE 13	0.992		
	EE 14	0.921		
	EE 15	0.923		
Second-order				
Service quality	Tangibility	0.942	0.852	0.657
	Reliability	0.933		
	Responsiveness	0.912		
	Assurance	0.951		
	Empathy	0.899		
Operational Innovation (OP)	Process improvement	0.898	0.930	0.729
	Hotel IT systems	0.857		
Marketing performance (MP)	Profitability	0.860	0.910	0.718
	Market share	0.762		
	Customer retention	0.889		
	Customer satisfaction	0.872		

5. RESULTS

In this study, PLS 3.3.6 was used to extract the results, where convergent validity was determined according to Hair et al. (2019). Hence, the convergent validity is affirmed if loadings and AVE are greater than 0.5 and composite reliability is greater larger than 0.7. Values displayed in Table 1 are all larger than the proposed cut-off value. Hence, the model proposed in this study has convergent validity. As well, in this study, the constructs in the CFA model all obtained values between 0.080 and 0.796, which is clearly lower than 0.90. Based on the suggestion of Henseler et al. (2015), each latent construct measurement was fully discriminated.

The structural model was evaluated to estimate the capability of service quality in foresting the marketing performance. Marketing performance (MP) scored R² value of 0.511. In other words, 51% of the disparity in MP is describable via service quality, which functions as a predictor variable. The obtained R² value fulfills Chin’s (1998) proposed cut-off value of 0.19. Also, for MP, the obtained Q² value was 0.240, which, according to Chin (2010), shows that the model has predictive relevance and acceptable fit because the value was higher than 0. Table 1 also shows that the variance inflation factor (VIF) value was smaller than Hair et al.’ (2014) recommended cut-off value of 5 (2.050). For MP prediction, the p-value of SERVQUAL was 0.000, denoting that the potential of accomplishing an absolute p-value is 0.000, while the standard (SB) was 0.715. MP was thus positively affected by SERVQUAL.

The results of the moderating impact of external environment and operational innovation on the correlation between marketing performance and service quality of hotels operating in Jordan can be viewed as follows. The negative link between marketing performance and service quality and their relationship was moderated by operational innovation with the following details: B = 0.402, t = 3.757: p < 0.05. Equally, external environment also moderated the relationship between marketing performance and service quality: B = 0.418, t = 2.235: p < 0.05. Accordingly, the correlation between service quality and marketing performance will be moderated by the high-level influence of both operational innovation and external environment.

6. DISCUSSION

This paper examined the effect of service quality on marketing performance, moderated by operational innovation and external environment. A positive significant direct impact of service quality on marketing performance was found. Thus, H1 was supported. Relevantly, past studies (e.g., Al-Habil et al., 2017; Kalinova, 2014; Lee & Lambert, 2008) that considered the influence of service quality on marketing performance have concluded a positive effect of service quality on loyalty and marketing performance. Hence, for hotels, their service qual-

ity could be improved by paying attention to the service quality element, which consequently will increase marketing performance. This means that unique, uncommon, non-replaceable, and distinctive marketing talents and tangible and intangible resources are sources of competitive advantage that lead to an organization's better performance.

The moderating role of operational innovation on the relationship between marketing performance and service quality was affirmed. Hence, *H2* was supported. In this regard, the utilization of tools that increase operational activities by way of process improvement and hotels IT systems increases process efficiency and smoother information flow amongst units within a hotel. Thus, improvements result in increased marketing performance, as well the innovative capacity to produce varied innovations, which will guarantee effective development and boost the performance of a hotel. This is exemplified by the inventive trend in the hospitality

business. Moreover, it is shown by the capability to initiate innovations, ensuring efficient development and hence, increased hotel performance.

Lastly, the external environment was proved to moderate the relationship between marketing performance and service quality. Therefore, *H3* was supported. Worded another way, events occurring in the external environment (e.g., activities performed by competitors and the progression of competitors) will push hotels to restructure their services and products to increase their marketing performance. Meanwhile, external environments are significant because they can, directly and indirectly, influence business operations, people, and income. The external environment of a company changes regularly in ways that are beyond the hotel's control. However, executives and managers may watch these changes, mitigate their effects, and influence them to be powerful factors in improving performance.

CONCLUSION

This study finds out that service quality improves marketing performance of Jordanian hotels. Furthermore, this study proved that operational innovation and external environmental moderate the relationship between marketing performance and service quality. In other words, this study found direct and indirect linkages between marketing performance and service quality. On the one hand, this study affirmed the idea that any investments in innovation programs and initiatives such as process improvement and IT systems will lead to better efficiency and marketing performance. However, on the other hand, this study also validated the assumption that the external environment, such as advancements and progress actions by competitors, will encourage hoteliers to improve their services and products, which will lead to better marketing performance.

These results expanded the knowledge of service quality, as well as its impact on marketing performance. Moreover, this study used and applied the RBV theory to investigate the moderating roles of operational innovation and external environment on the linkage between marketing performance and service quality in the Jordanian hotel sphere. The findings of this study give practitioners the right tools and philosophy for leveraging the marketing performance in the hotel industry.

AUTHOR CONTRIBUTIONS

Conceptualization: Abdel Hakim Akhorshaideh, Dia Zeglat, Nawras Nusairat, Mahfuz Judeh.

Data curation: Jassim Al-Gasawneh, Nawras Nusairat.

Formal analysis: Abdel Hakim Akhorshaideh, Jassim Al-Gasawneh, Nawras Nusairat, Mahfuz Judeh.

Funding acquisition: Jassim Al-Gasawneh, Nawras Nusairat, Mahfuz Judeh.

Investigation: Jassim Al-Gasawneh.

Methodology: Abdel Hakim Akhorshaideh, Jassim Al-Gasawneh, Dia Zeglat.

Project administration: Jassim Al-Gasawneh, Dia Zeglat, Nawras Nusairat, Mahfuz Judeh.

Resources: Dia Zeglat, Nawras Nusairat, Mahfuz Judeh.

Software: Abdel Hakim Akhorshaideh.

Supervision: Abdel Hakim Akhorshaideh, Jassim Al-Gasawneh, Dia Zeglat.

Visualization: Jassim Al-Gasawneh, Dia Zeglat, Mahfuz Judeh.

Writing – original draft: Abdel Hakim Akhorshaideh.

Writing – review & editing: Abdel Hakim Akhorshaideh.

REFERENCES

- Adler, P. S., Riley, P., Kwon, S. W., Signer, J., Lee, B., & Satrasala, R. (2003). Performance improvement capability: keys to accelerating performance improvement in hospitals. *California Management Review*, 45(2), 12-33. Retrieved from <http://faculty.marshall.usc.edu/Paul-Adler/research/Adler,%20Riley,%20et%20al%20PIC%20hospitals.pdf>
- Akroush, M. N. (2008). The Effect of Service Quality on Banks Marketing Performance: An Empirical Investigation of Managers Perspectives. *Dirasat, Administrative Sciences*, 35(1), 236-271. Retrieved from <https://journals.ju.edu.jo/DirasatAdm/article/view/274>
- Akroush, M. N., Al-Mohammad, S. M., & Odetallah, A. L. (2015). A multidimensional model of marketing culture and performance: A different approach to the use of Webster's marketing culture measurement scale. *International Journal of Contemporary Hospitality Management*, 27(7), 1442-1478. <https://doi.org/10.1108/IJCHM-02-2014-0088>
- Al-Adamat, A. (2015). *The impact of information and communication technology on the marketing performance of Jordanian hotels*. Edinburgh: Queen Margaret University. Retrieved from <https://eresearch.qmu.ac.uk/bitstream/handle/20.500.12289/7461/1910.pdf?sequence=1&isAllowed=y>
- Albakri, T., & Hadi, A. (2014). The impact on the customer relationship marketing performance management (Analytical study on a sample of Jordanian commercial banks. *Journal of Economics and Administrative Sciences*, 208(13), 1-35. (In Arabic). Retrieved from <https://search.emarefa.net/detail/BIM-542571>
- Alfoul, M. N. A., & Nayel, M. (2022). *Effects of ICT Investment and Usage on Economic Growth in MENA Countries: Does Governance Matter?* Swinburne University of Technology.
- Al-Habil, W. I., Al-Hila, A. A., Al Shobaki, M. J., Abu Amuna, Y. M., & Abu Naser, S. S. (2017). The Impact of the quality of banking services on improving the marketing performance of banks in Gaza governorates from the point of view of their employees. *International Journal of Engineering and Information Systems*, 1(7), 197-217. Retrieved from <https://hal.archives-ouvertes.fr/hal-01610720>
- Asadi, S., Pourhashemi, S. O., Nilashi, M., Abdullah, R., Samad, S., Yadegaridehkordi, E., & Razali, N. S. (2020). Investigating influence of green innovation on sustainability performance: A case on Malaysian hotel industry. *Journal of Cleaner Production*, 258, 120860. <http://dx.doi.org/10.1016/j.jclepro.2020.120860>
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182. <https://doi.org/10.1037/0022-3514.51.6.1173>
- Bibi, P., Pangil, F., & Johari, J. (2016). HRM practices and employees' retention: The perspective of job embeddedness theory. *Asian Journal of Multidisciplinary Studies*, 4(5), 41-47. Retrieved from <http://repo.uum.edu.my/id/eprint/18284/1>
- Bowie, D., Buttle, F., Brookes, M., & Mariussen, A. (2016). *Hospitality marketing*. Routledge.
- Chang, Y., Wang, X., & Arnett, D. B. (2018). Enhancing firm performance: The role of brand orientation in business-to-business marketing. *Industrial Marketing Management*, 72, 17-25. <https://doi.org/10.1016/j.indmarman.2018.01.031>
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2), 295-336.
- Chin, W. W. (2010). Bootstrap cross-validation indices for PLS path model assessment. In *Handbook of partial least squares* (pp. 83-97). Springer, Berlin, Heidelberg. Retrieved from https://link.springer.com/chapter/10.1007/978-3-540-32827-8_30
- Clark, B. H., & Ambler, T. (2001). Marketing performance measurement: evolution of research and practice. *International journal of business performance management*, 3(2-4), 231-244. Retrieved from <http://www.inderscience.com/link.php?id=101>
- Collins, C. M., Steg, L., & Koning, M. A. (2007). Customers' values, beliefs on sustainable corporate performance, and buying behavior. *Psychology & Marketing*, 24(6), 555-577. <https://doi.org/10.1002/mar.20173>
- Cox Pahnke, E., McDonald, R., Wang, D., & Hallen, B. (2015). Exposed: Venture capital, competitor ties, and entrepreneurial innovation. *Academy of Management Journal*,

- 58(5), 1334-1360. Retrieved from <https://journals.aom.org/doi/10.5465/amj.2012.0777>
18. Farris, P. W., Bendle, N., Pfeiffer, P. E., & Reibstein, D. (2010). *Marketing metrics: The definitive guide to measuring marketing performance*. Pearson Education.
 19. Fu, Q., Sial, M. S., Arshad, M. Z., Comite, U., Thu, P. A., & Popp, J. (2021). The Inter-Relationship between Innovation Capability and SME Performance: The Moderating Role of the External Environment. *Sustainability*, 13(16), 9132. <https://doi.org/10.3390/su13169132>
 20. García Sánchez, F. A., Rubio Gómez, N., Orcajada Sánchez, N., Escorcía Mora, C. T., & Cañadas Pérez, M. (2018). Necesidades de formación en prácticas centradas en la familia en profesionales de atención temprana españoles. *Bordón: revista de pedagogía*, 70(2), 39-55. (In Spanish). Retrieved from <https://dialnet.unirioja.es/servlet/articulo?codigo=6397980>
 21. Garland, R. (1991). The mid-point on a rating scale: Is it desirable? *Marketing Bulletin*, 2(1), 66-70.
 22. Grönroos, C. (1984). A service quality model and its marketing implications. *European Journal of Marketing*, 18(4), 36-44. <https://doi.org/10.1108/EUM0000000004784>
 23. Hair Jr, J., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modelling (PLS-SEM) An emerging tool in business research. *European Business Review*, 26(2), 106-121. <https://doi.org/10.1108/EBR-10-2013-0128>
 24. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
 25. Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European business review*, 31(1), 2-24. <https://doi.org/10.1108/EBR-11-2018-0203>
 26. Halimi, F., Gabarre, S., Rahi, S., Al-Gasawneh, J., & Ngah, A. (2021). Modelling Muslims' revisit intention of non-halal certified restaurants in Malaysia. *Journal of Islamic Marketing*. <https://doi.org/10.1108/JIMA-01-2021-0014>
 27. Hammouri, Q., Majali, T., Almajali, D., Aloqool, A., & Al-Gasawneh, J. (2021). Explore the Relationship between Security Mechanisms and Trust in E-Banking: A Systematic Review. *Annals of the Romanian Society for Cell Biology*, 25(6), 17083-17093. Retrieved from <https://www.analsofscb.ro/index.php/journal/article/view/8998>
 28. Henseler, J., Ringle, C., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modelling. *Journal of the academy of marketing science*, 43(1), 115-135. <https://doi.org/10.1007/s11747-014-0403-8>
 29. Kalinova, N. (2014). Service quality and market performance of Bulgarian banks. *International Journal of Economic Practices and Theories*, 4(5), 918-925.
 30. Kim, B., & Han, I. (2011). The role of utilitarian and hedonic values and their antecedents in a mobile data service environment. *Expert Systems with Applications*, 38(3), 2311-2318. <https://doi.org/10.1016/j.eswa.2010.08.019>
 31. Koziol, W., & Mikos, A. (2019). Comparison of Labor Productivity in Tourism and the Economy, Analysis of Selected Countries. In A. Kavoura, E. Kefallonitis, & A. Giovanis (Eds.), *Strategic Innovative Marketing and Tourism* (pp. 1047-1056). Cham: Springer. https://doi.org/10.1007/978-3-030-12453-3_121
 32. Lee, D. (2015). The effect of operational innovation and QM practices on organizational performance in the healthcare sector. *International Journal of Quality Innovation*, 1(1), 1-14. <https://doi.org/10.1186/s40887-015-0008-4>
 33. Lee, D., Kim, S., & Sohn, Y. (2017). The relationship between flight crew's individual cultural values and crew resource management (CRM) performance: Psychological safety as a moderator. *Journal of the Korean Society for Aviation and Aeronautics*, 25(4), 1-23. <https://doi.org/10.12985/ksaa.2017.25.4.001>
 34. Lee, H., & Lambert, C. (2008). The influence of technology-enabled customer relationship management on customers' attitude toward service quality and loyalty. *Journal of Foodservice Business Research*, 11(4), 363-381. <https://doi.org/10.1080/15378020802519694>
 35. Lee, S., Lee, D., & Schniederjans, M. (2011). Supply chain innovation and organizational performance in the healthcare industry. *International Journal of Operations & Production Management*, 31(11), 1193-1214. <https://doi.org/10.1108/01443571111178493>
 36. Lewis, R., & Booms, B. (1983). *The Marketing Aspects of Service Perspectives on Services Marketing*. Chicago: American Marketing Association.
 37. Lian, F., He, Y., & Yang, Z. (2020). Competitiveness of the China-Europe Railway Express and liner shipping under the enforced sulfur emission control convention. *Transportation Research Part E: Logistics and Transportation Review*, 135, 101861. <https://doi.org/10.1016/j.tre.2020.101861>
 38. Lo, A. S., Stalcup, L. D., & Lee, A. (2010). Customer Relationship Management for Hotels in Hong Kong. *International Journal of Contemporary Hospitality Management*, 22(2), 139-159. <https://doi.org/10.1108/09596111011018151>
 39. Lynch, A., & Wilson, C. (2009). To identify performance measurement priorities and associated decision-making scenarios in the SME. *Journal of Academic Research in Economics*, 1(2), 145-159. Retrieved from http://jare-sh.com/downloads/num_1_issue_2_2009/lynch.pdf
 40. McFadden, K., Henagan, S., & Gowen III, C. (2009). The patient

- safety chain: Transformational leadership's effect on patient safety culture, initiatives, and outcomes. *Journal of Operations Management*, 27(5), 390-404. <https://doi.org/10.1016/j.jom.2009.01.001>
41. Ministry of Tourism Jordan (MOTA). (2020). *Statistical Newsletter*. (In Arabic). Retrieved from <https://www.mota.gov.jo/Contents/Statistics.aspx>
 42. Nusairat, N., Al-Gasawneh, J., Aloqool, A., Alzubi, K. N., Akhorshaidh, A. K. O., Joudeh, J. M., & Ibrahim, H. S. (2021). The relationship between Internet of things and search engine optimization in Jordanian Tele-Communication Companies: The mediating role of user behavior. *International Journal of Data and Network Science*, 5(3), 163-172. <http://dx.doi.org/10.5267/j.ijdns.2021.6.016>
 43. O'Sullivan, D., Abela, A., & Hutchinson, M. (2009). Marketing performance measurement and firm performance: Evidence from the European high-technology sector. *European Journal of Marketing*, 43(5/6), 843-862. <https://doi.org/10.1108/03090560910947070>
 44. Otache, I., & Mahmood, R. (2015). Corporate entrepreneurship and business performance: The role of external environment and organizational culture: A proposed framework. *Mediterranean Journal of Social Sciences*, 6(4), 524-531. <http://doi.org/10.5901/mjss.2015.v6n4s3p524>
 45. Pan, H., & Ha, H. (2021). Service Quality and Satisfaction in the Context of Varying Levels of Restaurant Image and Customer Orientation during the COVID-19 Pandemic. *Sustainability*, 13(17), 9694. <https://doi.org/10.3390/su13179694>
 46. Parasuraman, A., Zeithaml, V., & Berry, L. (1985). A conceptual model of service quality and its implications for future research. *Journal of marketing*, 49(4), 41-50. <https://doi.org/10.2307/1251430>
 47. Parasuraman, A., Zeithaml, V., & Berry, L. (1988). Servqual: A multiple-item scale for measuring consumer perceptions of Service Quality. *Journal of Retailing*, 64(1), 12-40.
 48. Rew, D., Jung, J., & Lovett, S. (2021). Examining the relationships between innovation, quality, productivity, and customer satisfaction in pure service companies. *The TQM Journal*, 33(1), 57-70. <https://doi.org/10.1108/TQM-10-2019-0235>
 49. Rust, R. T., & Oliver, R. L. (Eds.). (1993). *Service quality: New directions in theory and practice*. Sage Publications. Retrieved from <https://sk.sagepub.com/books/service-quality/n1.xml>
 50. Sasser, W. E., Olsen, R. P., & Wyckoff, D. D. (1978). *Management of service operations*. Boston: Allyn and Bacon. Retrieved from <https://www.worldcat.org/title/management-of-service-operations-text-cases-and-readings/oclc/3893812>
 51. Sekaran, U., & Bougie, R. (2013). *Research Methods for Business. A Skill Building Approach* (7th ed.). Hoboken: John Wiley and Sons, Ltd.
 52. Shaaban, M., & Ghoneim, S. (2017). Assessing the effect of customer relationship management on hotels' marketing performance: The mediating role of marketing capabilities evidence from Sharm El-Sheikh, Egypt. *Tourism Research Institute*, 18(1), 84-104. Retrieved from <https://ideas.repec.org/a/jtr/journal/v18y-2017i1p84-104.html>
 53. Smith, M., & Chang, C. (2010). Improving customer outcomes through the implementation of customer relationship management: Evidence from Taiwan. *Asian Review of Accounting*, 18(3), 260-285. <http://dx.doi.org/10.1108/13217341011089658>
 54. Sul, Y. T., Johansson, C. B., Röser, K., & Albrektsson, T. (2002). Qualitative and quantitative observations of bone tissue reactions to anodised implants. *Biomaterials*, 23(8), 1809-1817. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/11950051/>
 55. Tsai, M., Chang, J., Lin, Y., & Cheng, K. (2020). *The Impact of Product innovation on Performance: The Influence of Uncertainty and Managerial Accounting Information Systems* (MPRA Paper No. 102898). Retrieved from https://mpra.ub.uni-muenchen.de/102898/1/MPRA_paper_102898.pdf
 56. van Breda, L., van Bussel, T. T., Liu, C., & van Luijk, A. (2001). *Creating Ollie the Happiness Agent – Designing for Happiness in Education*. Retrieved from <https://www.drhu.eu/reports/2020-van-Breda-CreatingOllieTheHappiness.pdf>
 57. Yadav, B., & Singh, A. (2014). Analyzing the influence of customer relationship management on firm performance: A study of hotel industry in India. *International Journal of Customer Relationship Marketing and Management*, 5(3), 69-97. <http://dx.doi.org/10.4018/ijcmm.2014070105>
 58. Ziyadat, A. Y. (2019). The Effect of External Environment on Marketing Performance of Retail Stores: Applied Study on Amman City of Jordan. *International Journal of Marketing Studies*, 11(3), 36-48.