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BEYOND AGGREGATE PERFORMANCE: EXAMINING ORGANIZATIONAL CULTURE, STRUCTURE, AND INNOVATION STRATEGY THROUGH THE BALANCED SCORECARD FOR PAKISTAN'S HOSPITALITY SECTOR

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ABSTRACT

This study focuses on the impact of organizational culture, structure, and innovation strategy on four aspects of Balance Scorecard (BSC) performance of hotels operating in Pakistan. The research is based on survey data gathered from 255 managers working in the hotel industry in Pakistan. It uses structural equation modeling on Amos to examine these relationships. The results show that there is a positive impact of innovation strategy on the four performance dimensions. The impact of organizational culture on financial performance, internal business performance, and learning and innovation performance is significant and positive, but its effect is not significant on customer performance. Furthermore, the organizational structure significantly and positively predicts financial, customer, and internal business performance but not learning and innovation performance. Thus, the results indicate that organizational factors affect various performance dimensions in a differential manner. This study breaks organizational performance into four perspectives of the BSC, giving a more detailed understanding of the relationship between the organizational characteristics and performance in the hospitality sector. The study provides implications for hotel managers who want to match organizational culture, organizational structures and innovation strategies with specific performance targets. Specifically, it suggests that hotels must go for organic structure, adopt innovation strategy, and cultivate a culture that focuses on best management principles, and is employee centered as well as customer centered to bring out the best of BSC performance.

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Introduction

Organizational performance is now recognized as a multi-dimensional phenomenon and not just assessed with financial measures and indicators (Gutterman, 2023). Organizations need to deliver financial results, meet customer expectations, enhance internal processes, and build their learning and innovation capability in a highly competitive and dynamic business landscape. The Balanced Scorecard (BSC) is a comprehensive approach to measuring these interrelated aspects in terms of financial, customer, internal business process, and learning and innovation performance (Bukhari & Mehmood, 2022; Kumar, Lim, Sureka, Jabbour, & Bamel, 2024). This multi-dimensional view is of even greater importance as the improvement of the organization's competence and internal processes could affect customers and monetary results over time.

Although the BSC has been widely used as a management tool for performance, it is important to know whether organizations can be successful in all aspects of the BSC (Oyewo, Moses, & Erin, 2022). Organizational culture, organizational structure, and innovation strategy are three important organizational features that can impact the way resources are coordinated, the way strategies are executed, and the way performance goals are achieved (Lazarević-Moravčević & Mosurović Ružičić, 2023). These, however, may not impact equally on various aspects of organizational performance. Knowing the relationship between organizational factors and each dimension of BSC then can explain the organizational performance in more detail.

Organizational culture represents the shared values, beliefs, norms, and behavioral expectations that influence how organizational members interpret and respond to their work environment (Bogale & Debela, 2024). A supportive culture can facilitate coordination, knowledge sharing, adaptability, and employee involvement, thereby creating conditions conducive to organizational effectiveness (Vasumathi, Vasudevan, Razak, & Mohammad, 2025). A supportive culture can help coordinate, share knowledge, be flexible and include employees—all of which can help create the environment for organizational effectiveness. Innovation and organizational performance are still areas that are relevant to culture, as evidenced by recent empirical research and findings. Kuhn and Bhatiasevi (2024), for instance, combined the concepts of organizational culture, innovation and BSC, and observed that an adhocracy culture, which is characterized by innovativeness, is correlated with organizational innovation and organization performance, especially in financial and customer dimensions. Likewise, a recent study suggests that organizational culture may facilitate various types of innovation such as product innovation, process innovation, marketing innovation and organizational innovation (Harel, Schwartz, & Kaufmann, 2021).

Another basic organizational feature that affects the distribution of authority, responsibility, communication, and coordination is organizational structure (Caniago, 2024). Experts are of the view that structural configurations that are not well suited to organizational needs can impede responsiveness and innovation, while good ones can enable efficient decision-making and internal coordination. In the last few years, the link between structural features and innovation has been the focus of further studies, especially in the context of innovation in emerging-market SMEs. In particular, Iranmanesh, Kumar, Foroughi, Mavi, and Min (2021) explored the three factors of

departmentalization, decentralization, and formalization, and explained the role of organizational innovative culture between organizational structure and organizational innovation. The results indicate that structural factors need to be added to other organizational factors to explain performance and innovation.

As companies grapple with new technologies, changing customer needs, and competition, innovation strategy has gained more significance. An innovation strategy provides strategic direction for developing and implementing new products, processes, services, and organizational practices (López & Oliver, 2023). New evidence shows that innovation strategies can make a significant impact on performance. Bogetoft, Kroman, Smilgins, and Sørensen, (2024) realized that various combinations of innovation strategies led to better firm performance results, with the product and other innovation strategies having a particularly strong performance improvement effect. It was based on more than 15,000 firm-year observations of manufacturing firms. Similarly, Guo (2024) analyzed the organizational culture, innovation strategy, and business performance, and also highlighted the interdependence of these organizational elements.

While the linkages among organizational culture, organizational structure, organizational innovation and organizational performance have been explored, there are some gaps in the previous studies. First, numerous studies focus on organizational performance as a composite measure, which actually presents a different sort of perspective (Nguyen & Luu, 2026). Second, studies typically examine each one of these: culture, structure and innovation strategy in isolation which, in turn, results in a lack of understanding of the relative contribution of each in a common performance context (Li, Yu, & Chen, 2025). Third, while there are recent studies that link organizational culture and innovation to BSC performance, few studies simultaneously link organizational culture, organizational structure and innovation strategy to all four BSC performance dimensions. While the recent study by Kuhn and Bhatiasevi (2024) serves as proof of the usefulness of combining the three approaches (culture, innovation, and BSC), it is also important to have some evidence in other contexts in terms of organizational and institutional frameworks.

Hence, this research's aim has been to explore the direct impact of organizational culture, organizational structure and innovation strategy on financial, customer, internal business management and learning and innovation performance. The study investigates whether there are dimension-specific or consistent effects on these relationships, and whether these relationships are found across organizations. The study makes a contribution on the following aspects: (1) it looks at BSC performance from four different perspectives; (2) it compared three important organizational predictors in one model; (3) evidence from the Pakistani context.

Literature Review and Hypotheses Development

The Balance Scorecard offers a multidimensional perspective of an organization's performance by looking at the organization through various perspectives including financial, internal business process, customer, and learning and innovation. Balance scorecard is conceptually multidimensional; however, empirical studies have used a variety of approaches to measure the BSC. A few studies focus on each of the four perspectives individually, while others integrate them

into a general BSC performance indicator. For example, Frederico, Garza-Reyes, Kumar, and Kumar (2021) analyzed the integrated performance measure using the four BSC perspectives, while Elbanna, Kamel, Fatima, and Eid (2022) studied the adoption of BSC and its relationship with overall hotel performance instead of quantifying its impacts on each of the four BSC perspectives. In the same way, Zaheer, Ramzan, Mahmood, and Nagra (2023) studied the impact of using BSC on overall financial performance and innovation results.

This variation is significant because an overall relationship can be derived from an aggregate BSC measure while differences among each of the performance dimensions can remain hidden. Studies at the level of the dimension, on the other hand, offer more diagnostic detail, but are more likely to be focused on certain viewpoints or in certain organizational contexts. For instance, research on Malaysian private hospitals assessed performance through internal processes, patient service quality, organizational learning and growth, and financial outcomes, demonstrating the usefulness of dimension-level BSC analysis (Shukri & Ramli, 2015). The dimension-level BSC analysis has been demonstrated to be useful, for instance, in measuring the performance of Malaysian private hospitals using internal processes, service quality to patients, organizational learning and growth, and financial measures. Therefore, additional research is needed to explore the dimensions and consistency of organizational antecedents on all four BSC perspectives.

Organizational Culture and Balanced Scorecard Performance

Organizational culture influences values, actions of employees, coordination, knowledge sharing and dedication to organization goals. Overall, previous studies tend to confirm the relationship between the organizational culture and organizational performance. A longitudinal study of more than 400 Korean firms found that several culture types were positively correlated with organizational performance over time, using the BSC as part of the performance framework (Kim & Chang 2019). Other research has investigated culture in the context of BSC adoption, instead of separate outcomes of the four BSC perspectives. Another study of 48 manufacturing companies was conducted in India, in which the researchers found that organizational culture had an impact on the scale of BSC utilization, but did not necessarily have the same impact on its various facets of performance management (Gupta & Salter, 2018).

There is also evidence providing dimension-specific evidence. For instance, Baskaran, Ganesan, and Devagaran (2022) investigated the lean organizational culture and its relation to BSC performance dimensions, and they found that there was a significant relationship between culture and BSC based performance dimensions among the Malaysian manufacturing organizations. Likewise, recent work on organizational culture and the performance of a BSC has reported on the relationship between innovation-oriented culture and various BSC outcomes (Aziz, Tajarahim, Fadzilah, & Azis, 2024). Unfortunately, the co-existence of aggregate and dimension-specific approaches suggests that the impact of culture may not be equal across the four dimensions of BSC. Hence, the following hypotheses are put forward:

H1: Organizational culture has a significant effect on financial performance.
H2: Organizational culture has a significant effect on customer-based performance.

H3: Organizational culture has a significant effect on internal business management.
H4: Organizational culture has a significant effect on learning and innovation performance.

Organizational Structure and Balanced Scorecard Performance

Organizational structure defines authority, responsibilities, communication, departmentalization, formalization, and decision-making. Several studies have examined the connection between organizational structure and performance among which few have used BSC as a measure of firm performance. Lee and Yang (2011) discovered that there is a relationship between organizational structure and the nature of performance measurement systems that include integrated measures of the four perspectives in the BSC. Their findings thus confirm that structure is relevant to BSC-oriented performance management, but do not prove that structure has the same impact on each BSC dimension.

This has a slightly different outlook in terms of dimension-specific evidence. The study by Shukri and Ramli (2015) conducted in Malaysian private hospitals focused on the organizational structure and performance using the BSC in this context, which comprised financial, internal process, service-quality, and organizational-learning outcomes. The results showed that there was a correlation between the structural attributes and performance in a BSC framework, highlighting the importance of considering more than one performance measure and indicators. In the hospitality industry, Arasli, Alphun, and Arici (2019) also demonstrated that the relationship between BSC adoption and hotel performance depended upon the organizational decision-making structure, suggesting that structure and performance related to BSC use are not the same for all organizations.

So, an organizational structure can help to optimize financial results, responsiveness, and information sharing with customers, and optimize internal business management through coordination and process control. It can impact learning and innovation in ways that can be contingent on flexibility, decentralization, and knowledge sharing (Almazrouei, Sarker, Zervopoulos, & Yousaf, 2024; Huettermann, Berger, Reinwald, & Bruch, 2024; Luo & Tong, 2024). These are possible differing mechanisms and warrant a discussion of the four BSC perspectives separately.

H5: Organizational structure has a significant effect on financial performance.
H6: Organizational structure has a significant effect on customer based performance.
H7: Organizational structure has a significant effect on internal business management
H8: Organizational structure has a significant effect on learning and innovation performance.

Innovation Strategy and Balanced Scorecard Performance

Innovation strategy can impact organizational performance in the following ways: new products and services, improvements to processes, adoption of innovative technologies, creation of customer value, and organization learning. Innovation and learning have always been featured in the strategic performance measurement research with reference to BSC. For instance, a study of

innovation-process measurement has explicitly used BSC to determine the indicators for measuring the innovation performance (Ivanov & Avasilcăi, 2014). Other empirical studies look at the impacts of BSC usage (but do not estimate the effects of innovation) on the four BSC perspectives separately. For instance, Malagueño, Lopez-Valeiras, and Gomez-Conde (2018) studied 201 Spanish SMEs and identified the impact of BSC on financial performance and exploitative innovation. Likewise, BSC studies and competitive research have employed the overall scores of the key BSC dimensions to measure organizational performance suggesting a more holistic rather than dimension-specific perspective (Hristov, Cristofaro, Camilli, & Leoni, 2024; Kumar et al., 2024). These studies show the validity of BSC as an overall performance indicator, but they raise the question whether the innovation related organizational factors impact all the performance perspectives equally.

Innovation strategy can thereby contribute to improvements of the financial results of the company, whether in terms of generating new revenues or improving efficiency, to the performance of customers by delivering new value and service quality, to internal business management through process innovation, and to learning and innovation through knowledge building and continuous improvement. These mechanisms are not necessarily the same and analyses of the four dimensions separately could uncover effects which would not be apparent in an overall BSC measure. Thus, following hypotheses are developed.

H9: Innovation strategy has a significant effect on financial performance.
H10: Innovation strategy has a significant effect on customer based performance.
H11: Innovation strategy has a significant effect on internal business management.
H12: Innovation strategy has a significant effect on learning and innovation performance

Research Gap

Overall, there is evidence that confirms both integrated BSC measurement and dimension-specific BSC analysis. While dimension-level studies show the value of the perspectives of a scorecard for capturing different organizational outcomes, studies with an overall BSC or organizational-performance measure show the value of the scorecard as an integrated performance-management framework.

Fewer studies, however, have focused on investigating the effects on all four BSC perspectives of multiple organizational antecedents, and on whether they have similar or different effects. Although organizational culture, structure, and innovation strategy have often been explored in context of organizational performance, or some specific BSC outcomes, the relative impact of these elements on financial, customer, internal business management, and learning and innovation outcomes within one BSC model is not well understood. The present study tackles this gap by considering the effect of these three organizational factors together on the four BSC dimensions separately. This way, the study can see if they affect the performance equally from various BSC perspectives or if specific organizational factors have differing impact on certain performance dimensions.

Research Methodology

Research Design and Population

This study used a quantitative research design, survey method and a structured questionnaire for data collection with the aim of examining the impact of organizational culture, organizational structure, and innovation strategy on the four dimensions of organizational performance. It was done in the Pakistan's hospitality industry, using hotels as unit of analysis. Data were gathered from the higher-level management of the hotels, and one response was received from each of the participating hotels. The targeted population was hotels with 3- to 5-star ratings in various cities and regions of Pakistan. Because of the lack of a complete hotel database, the population list was compiled from the hotel information sources available. A total of 342 questionnaires were sent out, of which 255 were returned, giving a response rate of 74.56%.

Questionnaire Development

Measurement scales that were already established were adopted. The scale for innovation strategy was borrowed from Crespell and Hansen (2008), the scale for organizational structure from Nandakumar, Ghobadian, and O'Regan (2010), and the scale for organizational culture from Dawson, Abbott, and Shoemaker (2011). Organizational structure was measured on a mechanistic–organic continuum. The measures for the four dimensions of BSC were adapted from Kaplan and Norton (1992).

Validity and Reliability of Questionnaire

Both SPSS and AMOS were used for data analyses. The measurement model was drawn in Amos and all the items with loading less than 0.5 were deleted (Hair, Black, Babin, & Anderson, 2010). The composite scores were then created. The VIF values (variance inflation factors) ranged from 1.02 to 1.18 suggesting no multicollinearity issues. The relationships between the three organizational antecedents and four performance dimensions were estimated using the structural equation modeling (SEM) method with maximum likelihood estimation. Non-significant paths were dropped in order to attain a parsimonious model. The last model showed satisfactory fit: $\chi^2 = 3.39$, df = 2, p = .183, CFI = .995, RMSEA = .052, and SRMR = .021, which means that the model was assessed to be adequate in terms of the fit between the model and the observed data.

To gain confidence in the quality of the measures used, the reliability and validity of the measurement instrument was evaluated. The Cronbach alpha reliability values for innovation strategy, organizational culture, organizational structure and organization performance were 0.712, 0.728, 0.854 and 0.797 respectively which are greater than the recommended value of 0.70 (Vaske, Beaman, & Sponarski, 2017). The same occurred with the composite reliability (CR) scores, which were satisfactory at 0.72, 0.91, 0.78, and 0.91, respectively (Hair, Gabriel, & Patel, 2014). AVE values for innovation strategy (0.64), organizational culture (0.55), organizational structure (0.62), and organizational performance (0.60) were all greater than 0.50, indicating convergent

validity (Fornell & Larcker, 1981). The retained items also exhibited good factor loadings with no problematic cross loadings found. Absence of no higher cross loading for all retained items confirmed discriminant validity. Overall, the measures were reliable and valid enough to be used for further structural analysis.

Analysis and Findings

The analysis aimed to analyze the four Balanced Scorecard perspectives separately. The model as drawn in AMOS is presented in the figure 1 below.

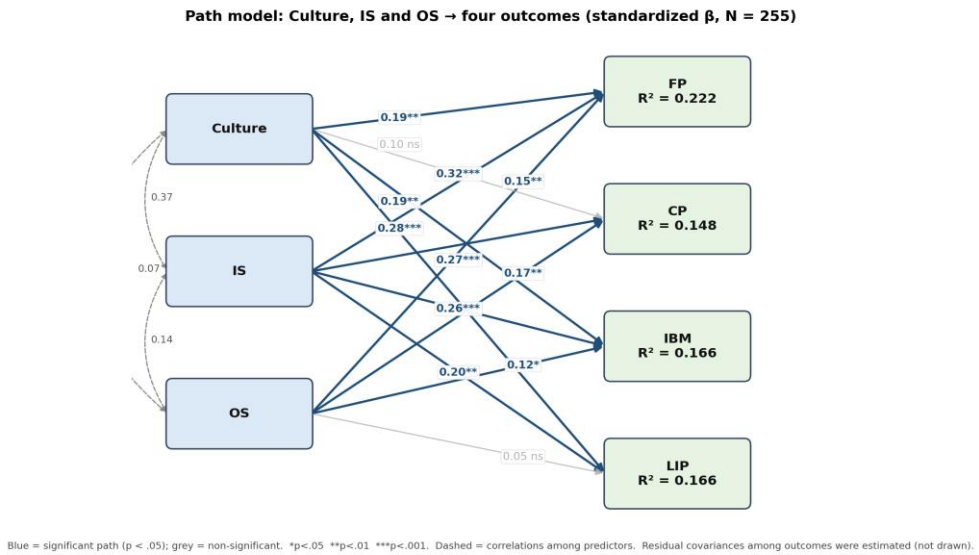


Figure 1. Structural model

Table 1: Structural Model Results

Hypothesis/Path	β	p-value	Conf. Interval Lower bound	Conf. Interval Upper bound	Decision
OC → FP	.191	.002	.082	.296	Supported
IS → FP	.318	<.001	.207	.425	Supported
OS → FP	.148	.009	.053	.241	Supported
OC → CP	.103	.101	-.028	.232	Not supported
IS → CP	.269	<.001	.150	.380	Supported
OS → CP	.172	.004	.078	.268	Supported
OC → IBM	.189	.003	.067	.310	Supported
IS → IBM	.262	<.001	.105	.403	Supported
OS → IBM	.117	.046	.012	.221	Supported
OC → LIP	.282	<.001	.156	.399	Supported

IS → LIP	.196	.002	.066	.328	Supported
OS → LIP	.047	.421	-.075	.167	Not supported

Structural Model and Hypotheses Testing

The structural analysis showed that all three organizational factors did not affect all the Balanced Scorecard perspectives in the same way. Furthermore, the strength and importance of the relationship differed for each dimension of performance.

Innovation strategy was found to have a strong positive impact on all four perspectives. For instance, the impact of innovation strategy on financial performance was significant and positive ($\beta = .318$, $p < .001$). Likewise, innovation strategy was a significant predictor of customer based performance ($\beta = .269$, $p < .001$) and internal business management ($\beta = .262$, $p < .001$). It also had a significant relationship with learning and innovation performance too ($\beta = .196$, $p = .002$). Hence, innovation strategy was found to be a significant predictor of all four Balanced Scorecard performance dimensions (H9, H10, H11 & H12 accepted).

Next, the organizational culture had significant impact on three out of four dimensions of BSC. Financial performance, internal business management and learning and innovation performance were significantly predicted by culture ($\beta = .191$, $p = .002$; $\beta = .189$, $p = .003$; and $\beta = .282$, $p < .001$, respectively). But it was not statistically significant when related to customer performance ($\beta = .103$, $p = .101$). This means that the impact of organizational culture was not consistent across the four performance perspectives (H1, H3, H4 accepted, H2 rejected).

Finally, considering organizational structure, financial performance ($\beta = .148$, $p = .009$), customer performance ($\beta = .172$, $p = .004$) and internal business management performance ($\beta = .117$, $p = .046$) were significantly predicted by the organizational structure. Its relationship with learning and innovation performance was not statistically significant however ($\beta = .047$, $p = .421$). Thus, H5, H6, H7 were accepted and H8 was rejected. Higher scores on the structure measure are indicative of a structure being more organic, therefore positive relationships suggest that more is the organization structure organic, more it would lead towards increased levels of the performance outcomes.

In sum, there were 10 out of 12 proposed structural relationships that were supported statistically. The explained variance revealed that the predictors explained 22.2% of the variance in financial performance; 14.8% of the variance in customer performance; 16.6% of the variance in internal business management performance and 16.6% of the variance in learning and innovation performance. The final trimmed model demonstrated good overall fit: $\chi^2 = 3.39$, $df = 2$, $p = .183$, CFI = .995, RMSEA = .052, and SRMR = .021. The chi-square test was also non-significant, along with the low residual values, which indicate a good model-data correspondence, and the high value of the CFI.

Discussion

The results showed that organizational strategy, structure and culture have an impact on each dimension of Balanced Scorecard (BSC) performance differently. These impacts can be seen in different dimensions of financial, customer, internal-process and learning outcomes, indicating the need to consider BSC performance as a multidimensional phenomenon.

The effect of innovation strategy on all four dimensions of BSC performance was significant and positive as shown in table 1 already. A significant impact on financial performance indicates that innovation-driven approaches can leverage organizational outcomes by contributing to service quality, efficiency, differentiation and competitive positioning. It is in line with Kallmuenzer (2018) and Tajeddini, Martin, and Altinay (2020) who highlighted innovation as a key component of hospitality performance and service creation. The results also suggest that innovation strategy also had a significant impact on customer responsiveness, internal processes, and organizational learning.

Next, the financial performance, customer based performance, and internal business management performance, were all significantly affected by the organizational structure, while learning and innovation performance was not related with this antecedent. The results indicate that the more 'organic' the structure, and more flexible it is, the more it may enable decision making, coordination, responsiveness and operational adaptability. These positive relationships between organizational structure and financial, customer, and internal business management performance are in line with the evidence from previous research indicating that organizational structure can have an impact on organizational effectiveness and performance (Hajdari & Jupa, 2023; Uster, Vashdi, & Beeri, 2022). Alternatively, the non-significant relationship between organizational structure and learning and innovation performance could be explained as follows: An organic structure can be flexible, decentralized and allow for the rapid transmission of information (Mehmood, Sonia, & Umar, 2016), but such flexibility alone might not lead to learning or innovation. Organizational learning requires a favorable organizational culture, knowledge sharing, employee development and a conscious innovation strategy (Cabrilo & Dahms, 2020) that could all interact together with structure for better learning and innovation.

Finally, the organizational culture was found to significantly predict the financial performance, internal business management performance, and learning and innovation performance, but it did not impact customer perspective. The highest level of connection to learning and innovation implies that positive cultural traits can help build knowledge sharing, involvement of employees, creativity, and ongoing improvement. The non-significant relationship between customer performance and culture suggests that culture, in addition to strategy and structure, may have a less direct impact on customer outcomes than other factors like service processes and innovation. The significant effects of organizational culture on financial, internal-process, and learning and innovation performance are supported by previous research linking organizational culture with organizational and financial performance (Reino, Rõigas, & Müürsepp, 2020; Savić, Jelić, & Ostojić, 2023).

Conclusion and Implications

In general, innovation strategy had a significant impact on all four BSC dimensions, and organizational structure and culture were significant for three dimensions. The two non-significant relationships support the notion that organizational antecedents do not all affect all aspects of performance equally. Analyzing the BSC dimensions individually, therefore, gives an alternative perspective for looking at organizational performance than using a single aggregate performance measure. The results support the three theoretical approaches that are the foundation of the study. The theory of the diffusion of innovations (Rogers, 2003) is supported by the fact that the impact of the innovation strategy was significant in relation to all four perspectives of the balanced scorecard, which means that the innovation strategy can have a wide impact on the organization's results. The results concerning the positive relationship among organizational structure and some dimensions of performance, but not to all dimensions of learning and innovation, confirms contingency theory (Donaldson, 2006), which indicates that organizational effectiveness is contingent on both the dimension of performance and the organizational context. The positive and significant role of organizational culture in influencing financial, internal-process, and learning-oriented performance justifies the Resource Based View (Barney, 1991), where culture can be an important organizational capability. From a practical perspective, hotel managers need to create clear innovation plans, institute systems which provide flexibility and coordination, and establish cultures that promote learning, creativity, employee involvement, and ongoing innovation. Managers should also track all four Balanced Scorecard perspectives and key performance indicators and not just the financial scores.

Study's Limitations and Future Research

The methodological limitations of this study are cross-sectional design, use of questionnaire only and exclusive focus on the hospitality sector of Pakistan. These features constrain applicability of the results to other sectors and settings. Longitudinal and multi-source designs could be used in further studies, as well as responses from several organizational levels could be taken, and various hotel categories or countries could be compared. Future research could also study other factors such as organizational learning, communication, skill of employees, and transferring knowledge that mediate or moderate the relationship between organizational structure and culture and specific dimensions of the Balanced Scorecard.

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