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Assessing the Role of Quality Culture in Driving Innovation and Sustainable Business Excellence

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ABSTRACT

The purpose of the study is to evaluate the role of quality culture to create an innovation capability and sustainability in business excellence development as of the current organisations in the highly digitalized and competitive environment. Even though there are earlier studies reviewing total quality management (TQM) and innovation independently, a range of empirical studies has researched neither quality culture, innovation, nor sustainable business excellence as a cohesive structure of framework. To fill this gap, the study will assume a quantitative research design in form of a cross-sectional survey on managers and professionals involved in quality across different industries. To test the measurement and the structural models, the Structural Equation Modelling (SEM) was applied, namely, the Partial Least Squares (PLS-SEM). The findings prove that the quality culture positively impacts greatly on innovation capability and sustainable business excellence, and the relationship has a role of innovation capability as a mediator. The structural model demonstrates a large share of variance in innovation (R^2= moderate) and sustainable business excellence (R^2= strong) that has a great predictive power. The implications of these findings on managers include its practical use as a way to understand the strategic nature of the decision to incorporate the values and continuous improvement methods with the focus on quality in the context of initiating the innovation process and long-term excellence. The research will add to the body of literature on quality management and innovation by empirically confirming a holistic model of SEM, which connects organisational culture, innovation process, and sustainable business.

1. INTRODUCTION

High-level Quality management has been developed during the last decades, moving away from the traditional inspection-based models on to the more inclusive goals of Total Quality Management (TQM) philosophy, and, more more recently, the digitally distributed Quality 4.0 paradigms in accordance with Industry 4.0 technologies [1], [4], [7], [11]. New quality management focuses on the standardisation of processes and the reduction of defects, but it also focuses on strategic integration and digitalization, and ongoing organisational learning [5], [6], [16]. This development indicates the transition to the operational control to the cultural and systemic outlook where quality is institutionalised in organisational values, organisational commitment of leadership and employee participation. In this scenario, culture of quality has turned out to be a decisive factor of success in the long term of the organisation. Quality culture denotes the values, beliefs, and behaviours that strive to cultivate attentive search of improving the product, the customers, and the excellence of the processes at all organisational levels [3], [13]. According to the recent research, it has been suggested that the higher the quality oriented culture of organisations the more adaptable, collaborative, and resilient to dynamic environments they become [4], [12]. Instead of perceiving quality as a technical set of tools, contemporary organisations perceive, more and more, quality as a strategic capacity deeply rooted in the culture and in the of the organisation system of governance [11], [16].

Quality culture has an important aspect of the impact on the capability of innovation. Although the old perspective saw standardisation and innovation as contradictory ideas, new research indicates that managed quality practise may generate innovation, expand knowledge sharing

and systematic problem-solving, to increase innovation performance [10], [15]. The combination of TQM principles with the strategies of innovations contributes to the organisational learning and to the enhanced ability of the firms to create new products, services, and processes [1], [10]. The culture of quality, therefore, can serve as a facilitating condition that can be used to trigger innovation performance because of disciplined but adaptable system of management. In addition to innovation there has been increased move towards sustainable business excellence within organisations that has gone beyond the conventional performance metrics to the long term competitiveness, value to the stakeholders and sustainable growth. Other models of excellence like the EFQM recognise the relations between leadership, culture, strategy, and innovation as those components that rely on each other to produce high-level organisational performance [15]. In the context of a speedy-changing business environment, where digital transformation and globalisation are moving towards it, sustainable excellence needs not just the efficiency of the operation but also the innovativeness-based flexibility [6], [11]. Therefore, it is now tactical to be aware of the cultural backgrounds of excellence and innovation.

Nevertheless, a considerable research gap exists, as despite all the research that has been done on TQM, Quality 4.0, and innovation, no study has empirically combined quality culture, innovation capability, and sustainable business excellence into one structural framework. Several previous researches have been investigating these constructs separately or conducted major discussions on concepts instead of strict modelling on structure [1], [13], [16]. There is scanty empirical information that confirms the mediating role of innovation between quality culture and business excellence employing the sophisticated statistical models like Structural Equation Modelling (SEM).

In order to fill this gap, the current study will: (1) study the direct effect of quality culture on innovation capability; (2) study the direct effect of quality culture on sustainable business excellence; (3) study the direct effect of innovation capability on sustainable business excellence; and (4) study the mediating role of the innovation capability using a SEM-based approach. Equipped with Partial Least Squares Structural Equation Modelling (PLS-SEM), the research gives a full assessment of measurement and structural correlations. This research has a tri-fold contribution. First, it fills the gap in quality management literature by empirically proving the role of quality culture as strategies. Second, it inlays innovation and sustainable business prowess into a single structural model, providing a comprehensive think-tank on the overall performance of an organisation. Third, it provides an input in terms of methodology since it uses SEM to determine the level of reliability, validity and predictive relationships and thus offers strong empirical data to scholars and practitioners in the fields of quality management and business excellence.

2. Literature Review and Hypotheses Development

Quality culture is the shared values, beliefs, norms, and behaviours that underline the persistence of continually improving, being customer-focused, teamwork, leadership dedication, and evidence-based decision-making in an establishment. However, in comparison with the standard quality control systems that mainly aim at inspection, compliance, quality culture implies what one can call the internalisation of the quality principles at all the organisational levels and functions [1], [13]. It combines the elements of soft support, employee empowerment, and learning orientation, and hard, process management, standardisation and performance measurement systems [1], [7]. With the shift of organizations to Quality 4.0, and digitally enabled management systems quality culture turns into a strategic capability that promotes flexibility, resilience, and long-term competitiveness [6], [16]. Higher scores and quality-based culture in organisations show that such organisations have better collaboration, systematic problem-solving, and performance consistency, which in turn bring improvement to the organisation and alignment of the organisation strategy, as is identified in the empirical studies [4], [11].

Innovation capability is the ability of an organisation to create and to put in operation new or entirely better products, processes and managerial practises. It is usually divided into product innovation, process innovation and managerial or organisational innovation [10], [15]. Innovating a product makes it more competitive in the market by offering new items, innovation in operations by enhancing efficiency and effectiveness of costs is more efficient and effective, and managerial innovation strengthens control and flexibility of strategies. Though the initial approaches to view quality management intimated that quality management could limit creativity because of its formalisation and standardisation, more recent studies indicate that structured and formal quality practises offer a disciplined basis of innovations [1], [10]. Continuous improvement processes, interfunctional teamwork, and the habit of sharing knowledge, which is incorporated in the quality

culture, provide the environment that is favourable to experimentation and organisational learning [4], [11]. Moreover, the incorporation of digital solutions into the Quality 4.0 systems improve data-based novelty and business agility [6], [12].

Sustainable business excellence is a development of the traditional view of organisational excellence to incorporate the long-term performance, stakeholder value, and sustainability. Models of excellence like EFQM focus on the involvement of leadership, strategy, and culture, partnerships, processes, and outcomes that are interdependent in excellent performance [15]. Sustainable excellence necessitates organisations to strike a balance between the economic performance and the ability to sustain innovation and social responsibility in modern business environments that are technologically disruptive and globally competitive [5], [11]. In this respect, performance measurement includes financial performance, operational effectiveness, innovation performance, customer satisfaction and long run strategic positioning. Although more studies are being done on TQM and Quality 4.0 and innovation, few empirical studies have combined the notion of quality culture, innovation ability as well as sustainable business excellence in one structural framework through rigorously calculated statistical validation tools.

On the basis of this theoretical background, quality culture is supposed to have a favourable impact on the innovation capability through creating orderliness of learning, employee involvement, and ongoing improvement activities [1], [10]. Whenever an organisation infiltrates the values of quality in its entire systems, it stands a good chance of developing institutionalised structures of generating and executing innovative ideas. Thus, it is hypothesised that quality culture has positive impacts on the capacity to innovate (H1). Further, quality culture also leads to operational stability, stakeholders trust and strategic coherence which leads to business excellence in a sustainable manner [13], [15]. Based on this, it is hypothesised that the culture of quality can affect sustainable business excellence positively (H2). The ability to be innovative in itself is a key predictor of performance in the long term and adaptability as organisations that constantly innovate are in a better place to maintain competitive advantage and organisational excellence [10], [15]. Therefore, innovation capacity is supposed to have a positive impact on sustainable business excellence (H3). Last, the innovation ability can become a mediating factor where quality culture concurrently pursues sustainable business excellence where quality-based cultures facilitate the innovation processes which, in the long-run lead to high performance results. Therefore, it is present that innovation capability will mediate the correlation between quality culture and sustainable business excellence (H4). The conceptual map that depicts these relationships will be displayed in Figure 1.

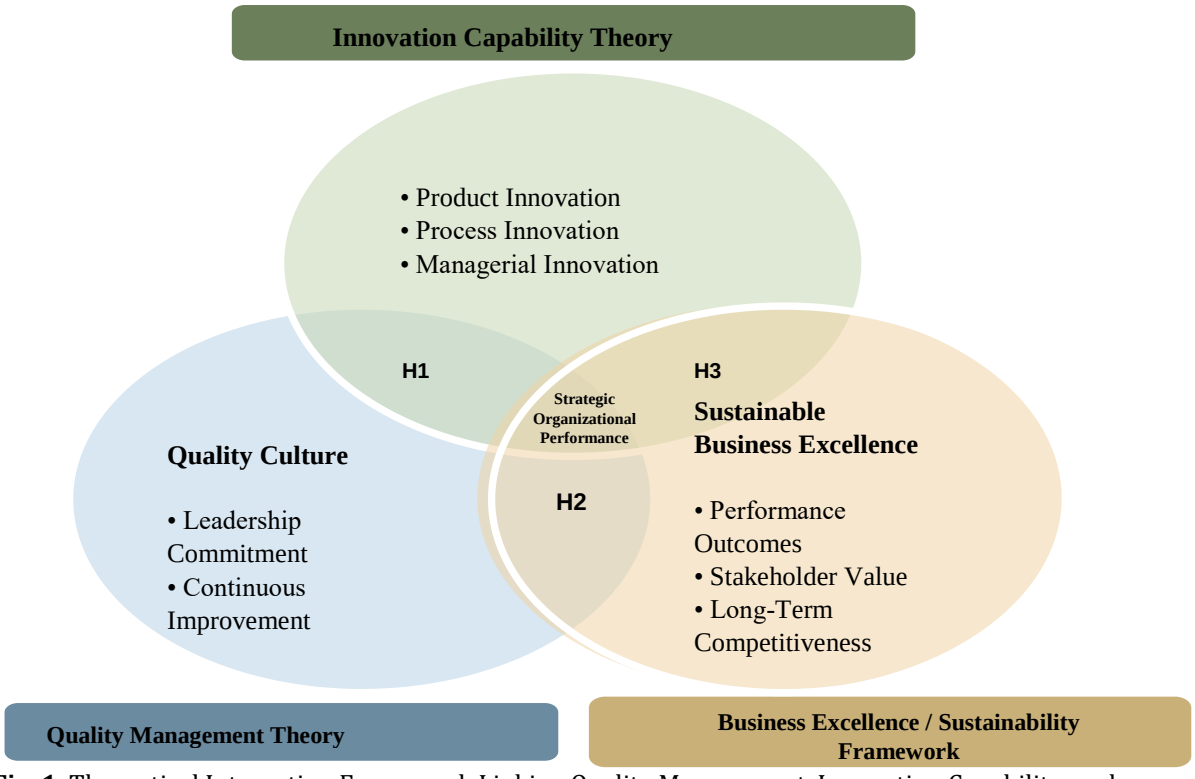

Fig. 1. Theoretical Integration Framework Linking Quality Management, Innovation Capability, and Sustainable Business Excellence.

3. Conceptual Framework

This study is developed on the theoretical framework based on the quality management principle, innovation capability theory and business excellence models. Based on previous work, the conceptualization of quality culture as a resource of strategic organisations that promotes continuous improvement, involvement of employees, dedication of leaders and discipline of the processes. These cultural characteristics produce the internal climate of the knowledge sharing, organised problem-solving and organisational learning, which in turn fuel the innovation prowess. Innovation capability, its turn, is the capability of the organisation to produce and introduce innovations in products, processes, and management that would improve its adaptability and competitiveness. The final stage of this integrated process is sustainable business excellence, and it is a combination of long-term performance, value creation by the stakeholders, operational efficiency, and strategic sustainability. The framework postulates direct and indirect correlations of the latent constructs. First, it was hypothesised that quality culture directly and positively influences the capability of innovation since organisations that entrench quality-oriented values will tend to develop systematic innovation processes. Second, quality culture is also anticipated to have a direct impact on sustainable business excellence in increasing levels of operational consistency, strategy alignment, and performance management practises. Third, the capability of innovation is suggested to have a positive impact on sustainable business excellence, where the innovation processes sustained enhance the competitive capability and resiliency of the long-term organisational performance.

Notably, the model includes a type of indirect (mediated) relationship, where innovation capability is a mediating process that ensures the relationship established between the quality culture and the sustainable business excellence. This mediation hypothesises that the presence of quality culture does not just influence excellence but there is another impact that quality culture has on outstanding performance since it is a facilitating factor through which the processes of innovations make their way to excellence. Therefore, the conceptual model represents an integrative structural association where quality culture will be the antecedent position, innovation capacity will be the medium strategy, and sustainable business excellence will be the final organisational outcome. The proposed relations are depicted in Figure 1.

4. RESEARCH METHODOLOGY

The study has a quantitative and cross-sectional survey, which will be used to undertake empirical test on the connexion between quality culture, innovativeness capability, and sustainable business excellence. The concept of the work is suitable to quantitative research since the aim is to test the hypotheses that are formulated theoretically and determine the structural relationships between the latent constructs through the statistical modelling methods. The analysis utilises an empirical research design whereby the primary data is gathered through the organisational respondents and submitted to Structural Equation Modelling (SEM). Since the model is predictive and the research will consider mediation effects, the Partial Least Squares Structural Equation Modelling (PLS-SEM) will be used since it has the appropriate characteristics as to a complex model and theory development in management studies.

The respondents of interest are the managers, quality professionals, senior executives and department heads or managers of a manufacturing and service organisation that have established formal quality management systems. These people are deemed as suitable informants since they are thoroughly versed with organisational culture, innovation behaviours and performance achievements. A purposive sampling was applied in order to make sure that the respondents possessed some relevant experience in managing or quality aspects, which would be supported by convenience sampling in order to make the data accessible. The structured questionnaires were used to gather data over a specified period by the use of online and offline platforms.

In the case of SEM analysis, sufficient sample size is required to guarantee that the analysis has statistical power and it is model stable. A sample size of 200 or more respondents is deemed sufficient in models with more than two constructs and a series of mediation. Only full and valid responses make it into the final dataset, which was filtered against inconsistency and missing data before its analysis.

The measurement tool was built in relation to already tested scales included in the quality management, innovation and business excellence literature. Measurement was done on all things through a seven-point Likert scale, 1-7, strongly disagree to strongly agree, which is more sensitive and flexible in responses. Quality Culture construct was also quantified by six measures of the commitment of the leadership, the orientation towards continuous improvement, the involvement of employees as well as the process discipline. The concept Innovation Capability was measured using five items indicating product innovation, process innovation, and managerial innovation capability. The Sustainable Business Excellence was measured based on the six items

that included the long-term performance, stakeholder value, operational effectiveness, and strategic sustainability. The concepts were preserved but minor adjustments in wording were done to make the text relevant. A pilot study was done to ensure clarity and content validation in advance to full-scale data collection. Table 1 is a summary of the measurement constructs and structure.

Table 1. Measurement Constructs and Structure

Construct	Number of Items	Key Dimensions
Quality Culture	6	Leadership commitment, continuous improvement, employee involvement
Innovation Capability	5	Product, process, managerial innovation
Sustainable Business Excellence	6	Performance outcomes, stakeholder value, long-term competitiveness

5. Data Analysis and Results (SEM-Based)

The results were processed with the help of Partial Least Squares Structural Equation Modelling (PLS-SEM). The evaluation was conducted in two steps, the first step involved the measurement model, followed by structural model. The hypothesised relationship tests were done with the use of 5,000 resamples of bootstrapping to test their significance.

Measurement Model Assessment

The reflective measurement model was first checked in terms of reliability and validity. The results of the reliability analysis showed that all the constructs possessed satisfactory internal consistency because the Cronbachs Alpha and Composite Reliability (CR) values were higher than the recommended value of 0.70. Convergent validity was tested and it was confirmed because all factor loadings were above 0.70 and statistically significant. Moreover, the values of the Average Variance Extracted (AVE) of all the constructs are bigger than the minimum value of 0.50, which demonstrates that every construct predicted more than a half of the variance of the indicators. Fornell-Larcker criterion and HeterotraitMonotrait (HTMT) ratio were used to analyse the discriminant validity. The inter-construct correlations were lower than the square roots of AVE of individual constructs, and this passes the Fornell-Larcker test. Also, the entire HTMT values were less than the conservative standard of 0.85, which demonstrates sufficient discriminant validity. The result of the detailed measurement model are provided in Table 2.

Table 2. Measurement Model Results

Construct	Cronbach's Alpha	Composite Reliability (CR)	AVE	Min. Loading	Max. Loading
Quality Culture	0.89	0.92	0.65	0.74	0.86
Innovation Capability	0.87	0.91	0.67	0.76	0.88
Sustainable Business Excellence	0.91	0.93	0.69	0.78	0.90

All values meet recommended reliability and validity thresholds.

Structural Model Assessment

At this point, the evaluation of the structural model was conducted as a result of confirmation of the measurement model. Bootstrapping (5,000 resamples) was used to analyse path coefficients (β), t-values, and p-values. The findings show that Quality Culture is an important factor impacting Innovation Capability ($\beta = 0.62$, $p < 0.001$) and Sustainable Business Excellence ($\beta = 0.34$, $p < 0.01$). The correlation between Innovation Capability and Sustainable Business Excellence is also very strong, positive ($\beta = 0.48$, $p < 0.001$). H1, H2 and H3 are supported by these results. Coeficient of determination (R^2) shows that Quality Culture can be used to explain Intelligent Capability of Innovation ($R^2 = 0.38$) and Quality Culture and Innovation Capability collectedively can be used to explain Sustainable Business Excellence ($R^2 = 0.61$) implying they both have strong explanatory power. The analysis of effect size (f^2) shows Quality Culture has a huge impact on Innovation Capability ($f^2= 0.41$), and the effect of Innovation Capability on Sustainable Business Excellence is medium-large ($f^2= 0.29$). Quality Culture direct impact on Sustainable Business Excellence has limited-to-medium effect size ($f^2= 0.12$). The predictive relevance (Q^2) measured on the basis of the blindfolding exercise produced positive values in both the model predictive Innovation Capability ($Q^2= 0.25$) and Sustainable Business Excellence ($Q^2= 0.39$), which

demonstrates the predictive relevance of the model. The Mediation analysis was to establish the influence of Quality Culture on Sustainable Business Excellence indirectly through Innovation Capability. The significance of indirect effect was high (β = 0.30, p < 0.001)which shows that it is partly mediated. Thus, H4 is supported. Table 3 provides an overview of the results of the structural relationship and hypothesis test, and Figure 2 represents the structural model with the standard path coefficients.

Table 3. Structural Model Results and Hypothesis Testing

Hypothesis	Path	β	t-value	p-value	Result
H1	Quality Culture → Innovation Capability	0.62	10.84	<0.001	Supported
H2	Quality Culture → Sustainable Business Excellence	0.34	3.92	<0.01	Supported
H3	Innovation Capability → Sustainable Business Excellence	0.48	8.15	<0.001	Supported
H4	Quality Culture → Innovation → Sustainable Business Excellence	0.30	6.47	<0.001	Supported (Partial Mediation)

The Figure 2 designates the structural model diagram with standardised path coefficients and R^2 values. Moreover, the predictive strength of the model in explaining Innovation Capability and Sustainable Business Excellence is allowed by explaining the predicted variables through a graphic representation, as shown in Figure 3. In general, the SEM findings can be considered an excellent empirical evidence of the stated model, as it proves that quality culture is a cornerstone that supports the capability of innovation and sustainable business excellence.

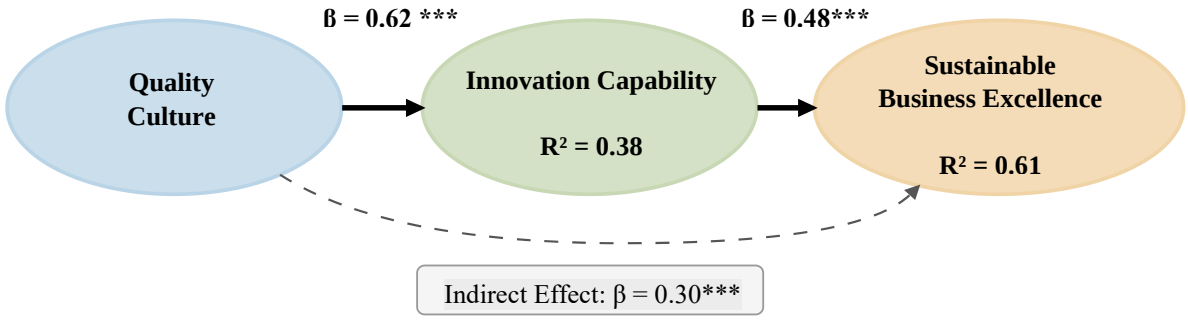

Fig. 2. Structural Model with Standardized Path Coefficients.

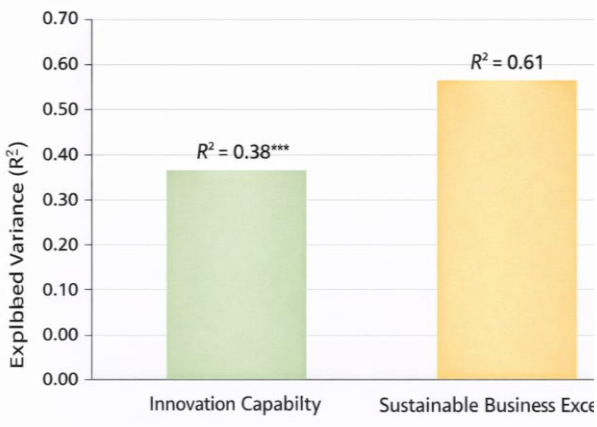

Fig. 3. Explained Variance (R^2) for Innovation Capability and Sustainable Business Excellence.

6. DISCUSSION

The results obtained in this study are credible and empirical evidence of the hypothesised structural relationships between quality culture and innovation capability as well as sustainable business excellence. The findings show that quality culture has a significant and positive impact on innovation capability, proving the hypothesis that the organisations, which incorporate the leadership commitment, continuous improvement, and employee engagement, have higher chances of having systematic innovation processes. This implies that culture of quality is not just an operational control system but a strategic enabler which enhances organisational learning, teamwork and flexibility. The strength between quality culture and sustainable business excellence further proves the significance of quality values embedded in culture in a strategic manner. Companies that develop rigorous process management and stakeholder practises have a high likelihood of high long-term performance results. This observation supports the view that business excellence is not merely an outcome of efficiency accruals in the short-term but the outcome of

cultural and managerial practises that go deep and align strategy, operations and performance goals.

The high impact of innovation capacity on sustainable business excellence proves that innovation is an imperative source of long-term competitive advantages and organisational sustainability. Companies that constantly implement product, process, and managerial innovations stand at greater chance to adjust to the changes in the environment and maintain the benefits of performances. This is consistent with the modern perspectives that innovation capability is a dynamic organisational competence that is needed in maintaining excellence in more dynamic and digitalized marketplaces. Notably, the mediation analysis shows that innovation capability mediates the relationship between quality culture and sustainable business excellence to a partial extent. This means that quality culture improves excellence in both direct and indirect ways due to the manner in which it affects the innovation process. Practically, quality oriented environments develop organised structures, which include systematic problem solving, knowledge sharing, and continuous improvement, which lead to innovation and which then in turn, is converted into better performance within the organisation. Due to the existence of the partial mediation, it is assumed that although innovation represents a good mechanism, the effects of the quality culture can affect the results of business excellence in an independent, strategic form.

These findings are congruents with the previous studies that highlight the complementary nature of TQM practises and innovation performance when compared to previous studies. The previous arguments were based on possible trade-off between standardisation and the creativity, but the recent findings prove the existence of more recent outlines of structured quality systems as a source of the disciplined innovation. Moreover, the research builds on prior studies in the sense that it incorporates quality culture, innovation ability, and sustainable business excellence in a single structural form as opposed to researching them separately. Theoretically, this study is useful to the quality management literature in a number of ways. First, it contributes to the development of quality culture as the advanced strategic construct but not as an instrument of operations. Second, it facilitates a gap between quality management and innovation capability theories as it empirically proves their relationship. Third, it relates business excellence research with sustainability and long-term performance and structural framework. The study presents solid empirical dimensions to enhance the theoretical association between organisational culture, the process of innovation, and the sustainability of top excellence results by using SEM to verify direct and indirect relationships.

7. Practical and Managerial Implications

The results of this research would provide a number of significant implications to managers and business leaders aiming at increasing innovation capacity and attaining sustainable excellence of the companies. First, companies must place the emphasis on the formation of effective quality culture systems that extend beyond compliance with the procedures and involve the instillation of common values of constant improvement, customer orientation, accountability, and collaboration. Managers are to promote the environment, in which employees are expected to be involved into problem-solving interaction, share knowledge and improve the processes. The institutionalisation of quality as a strategy instead of a technical process can be achieved by instituting systematic quality practises like scheduled performance guiding sessions and cross-departmental enhancement teams and through transparent communication systems. Second, organisations need to base their innovation strategies on central values of quality. Companies should not consider quality management and innovation as mutually exclusive issues, but they should combine continuous improvement procedures with innovation planning procedures. Disciplined innovation efforts can be facilitated by quality-driven data analysis, root cause identification and systematic experimentation. Through organised quality systems, the organisations can minimise uncertainty within the innovation endeavours and increase the success rate of the new product, process, and managerial innovation. This is alignment; such that innovation does not happen in a random manner or in an ad hoc manner, but aligned strategically through organisational learning and performance preferences.

Third, business excellence models need to incorporate aspects of sustainability. The findings show that a sustainable business excellence is the product of the synergistic impact of quality culture and innovation ability. Thus, the long-term performance indicators of excellence models (i.e., stakeholder satisfaction, operational resilience, environmental responsibility, and social impact) promote by the organisations should be included in the excellence models. It can be ensured that innovation activities lead to the achievement in terms of sustainability by incorporating sustainability metrics into quality dashboards and strategic performance systems. Lastly, leadership is very crucial in encouraging quality based innovation. Top managers and executives should be able to show their visible willingness to quality

values and be active in helping to encourage innovation efforts. The cultural background that leads to innovation and excellence may be reinforced by transformational leadership behaviours which include ability to make clear vision, encouragement of experimentation and the ability to acknowledge the contributions of employees. The influence of continuous learning and evidence-based decision-making set by leaders leads to a trusting and motivational environment in the organisation, which strengthens the connexion between the quality cultures, the potential of innovations, and business sustainability. In general, quality culture can be considered by the managers as a strategic resource which not only improves operational efficiency but also encourages the innovation process and the long-term excellence as well. Through a consistent combination of quality ideals, innovation policy, and sustainability goals, and robust commitment towards leadership, the organisation can establish robust systems that can support the creation of competitive edge in the dynamic environment.

8. Limitations and Future Research

Although this study offers great information on the relationship amongst quality culture, innovation ability, and sustainable business excellence, the study is prone to various limitations that can be identified. First, the study follows a cross-sectional design that does not make it possible to investigate a causal relationship among the constructs. Though Structural Equation Modelling enables testing hypothesised paths with great force, it was necessary to collect the data in one occasion, which limited analysis of change of quality culture and innovation capability with time. Longitudinal research designs should be represented in future research on the subject to determine the changing nature of organisational culture, organisational innovation processes, and the long term performance outcomes. Second, the research might be limited to the industry and geographical limits. Potentially, generalisation of the results might be narrow in case the sample is included on select industries or a certain country background. Different institutional settings and industries may differ in terms of organisational culture and practises of innovation. Thus, the model should be replicated in the further studies in various industries, such as high-technology sector, manufacturing sector, and service sector, and in other different cultural and economic backgrounds to achieve higher external validity. Third, the use of self-reported survey data can also result in common method bias and tendencies of subjectivity in the responses. Even though such concerns can be alleviated through statistical procedures, the perception of respondents may not necessarily be objective organisational performance. To enhance the soundness of the findings, future research would facilitate the use of multi-source data, including archival performance measures, managerial measures, or secondary financial data. With respect to methodological improvement, a hybrid SEM-Artificial Neural Network (ANN) methodology can be used in future studies. Although SEM is useful in testing linear relationships and mediation effects, ANN methods can be used to obtain possible nonlinear trends and have a higher predictive accuracy. The integration of SEM in testing the theory and ANN in validating the predictions would add more information to the intrinsic mechanisms behind the relationship between quality culture, innovation and business excellence.

Also, multi-country validation would increase the generalizability of the conceptual framework. It has been suggested that comparative studies conducted in the developed and emerging economies may identify a contextually different outcome of the quality culture in the ability to innovate and sustainable excellence. Such researches would bring a more universal comprehension of quality based organisational performance. In general, overcoming these drawbacks in subsequent studies will enhance the theoretical work and offer more detailed evidence on the argument of strategic importance of quality culture in promoting innovation and sustainable business excellence.

CONCLUSION

This paper aimed to investigate the application of quality culture in enhancing innovation capacity and business excellence sustainability using a systematic SEM guided empirical model. The results support the hypothesised structural relationships given the fact that quality culture is found to strongly improve the capability of innovation and has a direct role in creating sustainable business excellence, and that innovation capability mediates such association to some extent. Such findings accentuate quality culture as a supporting strategic driver that does not only empower internal processes but also drives innovation and long term organisation performance. Given that the study empirically validated the integrated model, the significance of integrating quality-driven values, leadership dedication, and on-going improvement practises into the organisational systems is established. Finally, sustainable business excellence is the result of a synergistic alliance between firms with robust culture of quality and actively innovating potentials, and this amplifies the impression that long-term competitiveness is anchored in culturally ingrained quality principles and

innovation initiatives that are technologically aligned to each other.

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