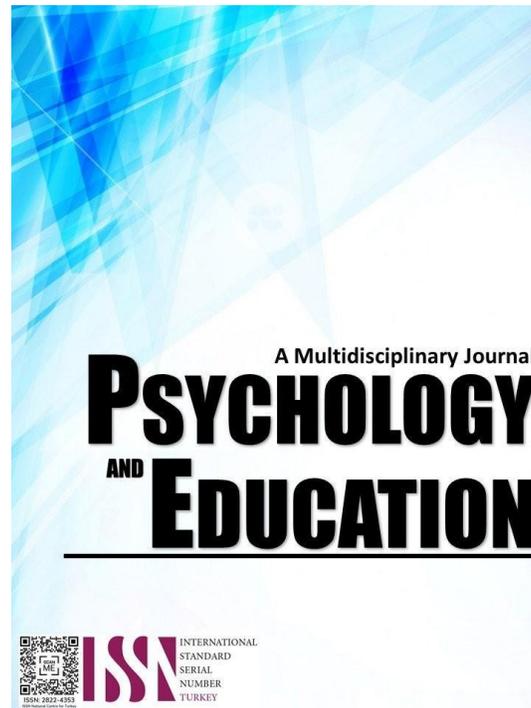


**MANAGERS' ASSESSMENT OF THE QUALITY OF THE
BUSINESS ENVIRONMENT AS CORRELATES WITH
COMPETITIVENESS OF SMALL AND MEDIUM
CONSTRUCTION ENTERPRISES
IN METRO ILOILO**



PSYCHOLOGY AND EDUCATION: A MULTIDISCIPLINARY JOURNAL

Volume: 38

Issue 3

Pages: 302-309

Document ID: 2025PEMJ3664

DOI: 10.70838/pemj.380308

Manuscript Accepted: 05-09-2025

Managers' Assessment of Quality of Business Environment as Correlates to Competitiveness of Small and Medium Construction Enterprises in Metro Iloilo

Kherzy P. Braza, Althea U. Denuuevo

For affiliations and correspondence, see the last page.

Abstract

This study investigates the relationship between the quality of the business environment and the competitiveness of small and medium construction enterprises (SMCEs) in Metro Iloilo, Philippines, employing Porter's Diamond Model as the theoretical framework. Utilizing a quantitative, descriptive-correlational research design, data were collected from 45 SMCEs selected through simple random sampling. Findings reveal that medium-sized enterprises exhibit superior business environments, particularly in customer service and firm strategy, and demonstrate higher levels of competitiveness in terms of brand image and product quality. The study also identifies significant associations between enterprise characteristics (size and location) and manager demographics (civil status and income) with both environmental quality and competitiveness outcomes. Notably, pricing quality and image emerged as the strongest correlates of competitive performance. These results underscore the need for strategic positioning, customer-centric practices, and operational efficiency to sustain competitiveness. Policy recommendations include the enhancement of technological infrastructure and the formulation of supportive regulatory frameworks to foster growth and resilience among SMCEs.

Keywords: *business environment, competitiveness, Porter's diamond model, small and medium construction enterprises, strategic management, Metro Iloilo*

Introduction

The construction industry has experienced notable growth, particularly in the Philippines, driven by sustained demand for real estate infrastructure such as residential complexes, commercial towers, and institutional facilities. This growth necessitates quality materials, skilled labor, and substantial financial investment, which, in turn, fosters a highly competitive landscape (Cherian, Munuswamy, & Jasim, 2021). The Philippine Statistics Authority reported a 10.8% year-over-year increase in the construction sector in Q1 2023, reinforcing the sector's robust momentum and potential, especially in regions such as Metro Iloilo. The rise in gross fixed capital formation (GFCF) further supports the trend, highlighting intensified construction activities and increased opportunities for small and medium construction enterprises (SMCEs) (Tupas, 2019).

Despite this growth, SMCEs in Metro Iloilo face persistent challenges that compromise their competitive position. These include limited infrastructure, restricted access to financing, and stiff competition from larger, resource-endowed firms (Magbanua, 2020; Pimentel, 2019). Moreover, the influx of new entrants spurred by regional economic expansion compels existing SMCEs to redefine their value proposition and cultivate strategic differentiation to survive (Montilla, 2020).

Understanding the determinants of competitiveness is essential for SMCEs operating in such dynamic contexts. Prior studies emphasize that firm size, age, and ownership structure shape a company's access to resources and capacity to compete (Abeyrathna & Priyadarshana, 2019). However, a major factor influencing enterprise performance is the quality of the business environment encompassing regulatory support, infrastructure, market demand, and supplier networks (Belas et al., 2019; Porter, 1990). Porter's Diamond Model underscores the interconnectedness of factor conditions, demand conditions, related and supporting industries, and firm strategy in enhancing competitive advantage (Porter, 1990; Grant, 1991).

In Metro Iloilo, a region undergoing rapid urbanization and infrastructure expansion, a context-specific examination of competitiveness is lacking. This research gap hampers policy formulation and targeted interventions for SMCEs. Furthermore, evolving market expectations necessitate empirical insights into how environmental quality impacts firm-level outcomes such as productivity, innovation, and brand image (Jaworski & Kohli, 1993; Tahir, Adnan, & Saeed, 2024).

Hence, this study addresses this void by examining the relationship between the quality of the business environment and competitiveness from the perspectives of construction enterprise managers. The aim is to generate contextually relevant insights that can inform practical strategies and policy recommendations to support SMCE development, particularly in the evolving socio-economic landscape of Metro Iloilo.

Methodology

Research Design

This study employed a quantitative, descriptive-correlational research design to examine the relationship between the quality of the business environment and the competitiveness of small and medium construction enterprises (SMCEs) in Metro Iloilo. A quantitative approach was deemed appropriate as it facilitates the systematic collection and analysis of numerical data to identify patterns and test relationships between predefined variables (Creswell, 2014). Descriptive-correlational designs are widely used to describe population characteristics and assess the strength and direction of associations among variables without manipulating them (Schwartz, Wilson, & Goff, 2019; Tabachnick & Fidell, 2019).

Respondents

The study utilized a simple random sampling technique to ensure that all eligible SMCEs in Metro Iloilo had an equal probability of being selected, thereby reducing sampling bias and enhancing the external validity of the findings (Daniel, 2012). A total of 45 SMCEs were surveyed. Eligibility was limited to firms that had been in operation for at least five years, in alignment with prior research suggesting that post-startup firms typically demonstrate more stable organizational structures suitable for strategic analysis (Storey, 2016).

Respondents were limited to managers aged 25 to 60 years, currently occupying managerial roles within their respective enterprises. This criterion was guided by the Upper Echelons Theory, which posits that managerial cognition, values, and experiences significantly influence firm-level outcomes (Hambrick & Mason, 1984; Hambrick, 2007). Managers within this age range are assumed to have accumulated relevant professional experience and maturity necessary for informed organizational decision-making.

Instrument

Data were collected using a researcher-developed structured questionnaire, which underwent content validation by field experts, including one with professional expertise in the construction sector. The instrument was divided into three sections:

Part I captured the demographic and enterprise profiles, including managers' age, civil status, and average monthly income, as well as firm characteristics such as ownership type, size, years of operation, and location.

Part II assessed the quality of the business environment, structured around Porter's Diamond Model dimensions: factor conditions (e.g., labor cost, market access), demand conditions, firm strategy, and related/supporting industries (e.g., customer service, product quality, delivery, and pricing). Each construct was measured using five items on a 5-point Likert scale (1 = Never to 5 = Always).

Part III evaluated business competitiveness across five dimensions: productivity, innovation, performance, image, and quality. Each dimension was also assessed through five items, rated on a 5-point Likert scale (1 = Least Competitive to 5 = Highly Competitive).

Data Analysis

Data were analyzed using IBM SPSS Statistics version 22. Descriptive statistics, including frequencies, means, standard deviations, and percentages, were used to summarize respondent profiles and variable distributions. To examine the relationships between dimensions of business environment quality and competitiveness, the Pearson Product-Moment Correlation Coefficient was employed. The strength and significance of relationships were interpreted based on the correlation coefficients (r) and corresponding p -values, with significance set at $p < 0.05$ and $p < 0.01$ levels.

The integrity of the analytical process was ensured through careful data screening, verification of completeness, and consistent interpretation procedures. The Likert-scale-based responses were categorized and interpreted according to established mean score ranges to support validity and clarity in findings.

Ethical Considerations

Ethical approval for this study was obtained from the Research Ethics Review Board of a private higher education institution in Iloilo City. The research protocol adhered to ethical standards involving informed consent, voluntary participation, anonymity, and confidentiality. All participants were informed of the study's objectives, their right to withdraw at any time, and the intended use of the data collected.

Results and Discussion

Profile of Construction Enterprises

A total of 45 small and medium construction enterprises (SMCEs) in Metro Iloilo participated in the study. The majority of respondents (91%) were classified as small enterprises, while only 9% were medium-sized. In terms of operational longevity, 60% of firms had been in operation for less than 15 years, whereas 40% had operated for 15 years or more. Regarding ownership structure, 82% were

sole proprietorships and 18% were corporations. In terms of location type, 82% operated as stand-alone entities, with the remaining 18% situated in warehouse-type facilities. These figures suggest that the SMCE landscape in Metro Iloilo is dominated by small-scale, independently operated firms with relatively limited corporate structure and centralized operations.

Profile of Construction Enterprise Managers

Among the surveyed managers, a significant majority were female (80%), compared to male (20%), indicating a notable gender disparity in managerial representation within the sector. Age-wise, 62% of managers were 40 years old or younger, while 38% were above 40. In terms of civil status, 64% were married, and 36% were single. When categorized by income, 60% of managers reported earnings below PHP 15,000 monthly, whereas 40% earned PHP 15,000 and above. Regarding professional tenure, 62% of managers had less than 10 years of service, and 38% had been in their roles for 10 years or more. These findings reflect a predominantly young, female-led managerial demographic with modest income levels and relatively limited industry tenure, which may have implications for strategic capacity and decision-making within SMCEs.

Table 1. *Quality of business environment when grouped according to the profile of construction enterprises.*

<i>Size of Business</i>	<i>Mean</i>	<i>SD</i>	<i>Remarks</i>	<i>Mean</i>	<i>SD</i>	<i>Remarks</i>
Small Business	3.75	0.50	Very Good	3.72	0.47	Very Good
Medium Business	4.40	0.71	Excellent	4.30	0.48	Excellent
<i>Years in Operation</i>						
Below 15 years	3.89	0.45	Very Good	3.75	0.50	Very Good
15 years and above	3.69	0.65	Very Good	3.81	0.50	Very Good
<i>Form of Ownership</i>						
Sole Proprietorship	3.81	0.53	Very Good	3.73	0.50	Very Good
Corporation	3.83	0.65	Very Good	3.98	0.43	Very Good
<i>Location</i>						
Stand-alone	3.78	0.47	Very Good	3.75	0.50	Very Good
Others: Warehouse Type	3.93	0.84	Very Good	3.90	0.50	Very Good

Table 1 present the most notable result from the analysis of the quality of the business environment, as grouped by the profile of construction enterprises, pertains to medium-sized businesses, which received the highest mean ratings in both customer service ($M = 4.40$, $SD = 0.71$) and firm strategy ($M = 4.30$, $SD = 0.48$), both categorized as excellent. These values represent the peak performance across all enterprise characteristics assessed. Conversely, the lowest recorded mean was observed in the customer service dimension for enterprises operating for 15 years and above ($M = 3.69$, $SD = 0.65$), although still classified as very good, indicating a relatively lower perceived business environment quality within this group.

Table 2. *Quality of the business environment of SMCEs when grouped according to the profile of construction enterprise managers.*

<i>Sex</i>	<i>Mean</i>	<i>SD</i>	<i>Remarks</i>	<i>Mean</i>	<i>SD</i>	<i>Remarks</i>
Male	3.91	0.70	Very Good	3.64	0.72	Very Good
Female	3.78	0.50	Very Good	3.81	0.43	Very Good
<i>Age</i>						
40 years old and below	3.91	0.51	Very Good	3.77	0.55	Very Good
Above 40 years old	3.64	0.56	Very Good	3.78	0.42	Very Good
<i>Civil Status</i>						
Single	4.04	0.59	Very Good	3.91	0.57	Very Good
Married	3.68	0.48	Very Good	3.70	0.44	Very Good
<i>Average Monthly Income</i>						
Below PhP15,000	3.96	0.50	Very Good	3.82	0.52	Very Good
PHP15,000 and above	3.59	0.54	Very Good	3.70	0.46	Very Good
<i>Number of Years in Service</i>						
Below 10 years	3.90	0.44	Very Good	3.79	0.49	Very Good
10 years and above	3.66	0.66	Very Good	3.74	0.53	Very Good

Table 2 presents the most prominent result regarding the quality of the business environment, as grouped according to the profile of construction enterprise managers, was observed among single managers, who rated customer service the highest ($M = 4.04$, $SD = 0.59$) and firm strategy at $M = 3.91$, $SD = 0.57$, both classified as *very good*. This indicates the most favorable perception among all categories assessed. In contrast, the lowest mean was reported by managers with a monthly income of PhP 15,000 and above in the customer



service dimension (M = 3.59, SD = 0.54), representing the least favorable evaluation within the dataset, though still falling under the *very good* classification.

Table 3. *Competitiveness when grouped according to the profile of construction enterprises.*

<i>Size of Business</i>	<i>Mean</i>	<i>SD</i>	<i>Remarks</i>	<i>Mean</i>	<i>SD</i>	<i>Remarks</i>
Small Business	3.71	0.48	Competitive	3.78	0.50	Competitive
Medium Business	4.50	0.48	Highly Competitive	4.60	0.43	Highly Competitive
<i>Years in Operation</i>						
Below 15 years	3.75	0.53	Competitive	3.88	0.51	Competitive
15 years and above	3.82	0.53	Competitive	3.80	0.61	Competitive
<i>Form of Ownership</i>						
Sole Proprietorship	3.73	0.49	Competitive	3.81	0.54	Competitive
Corporation	4.00	0.63	Competitive	4.05	0.55	Competitive
<i>Location</i>						
Stand-alone	3.72	0.50	Competitive	3.82	0.53	Competitive
Others: Warehouse Type	4.03	0.61	Competitive	3.98	0.65	Competitive

As presented in Table 3, the most important result in terms of competitiveness grouped according to the profile of construction enterprises was recorded among medium-sized businesses, which attained the highest mean scores in both image (M = 4.50, SD = 0.48) and quality (M = 4.60, SD = 0.43), both categorized as highly competitive. These figures represent the most favorable assessments across all enterprise characteristics. Conversely, the lowest mean in image was reported by small businesses (M = 3.71, SD = 0.48), while quality was rated lowest among enterprises operating for 15 years and above (M = 3.80, SD = 0.61), though still classified as competitive.

Table 4. *Competitiveness when grouped according to the profile of construction enterprise managers.*

<i>Sex</i>	<i>Mean</i>	<i>SD</i>	<i>Remarks</i>	<i>Mean</i>	<i>SD</i>	<i>Remarks</i>
Male	3.76	0.72	Competitive	3.82	0.64	Competitive
Female	3.78	0.47	Competitive	3.86	0.53	Competitive
<i>Age</i>						
40 years old and below	3.82	0.56	Competitive	3.91	0.54	Competitive
Above 40 years old	3.71	0.46	Competitive	3.75	0.56	Competitive
<i>Civil Status</i>						
Single	3.93	0.63	Competitive	3.95	0.59	Competitive
Married	3.70	0.45	Competitive	3.79	0.52	Competitive
<i>Average Monthly Income</i>						
Below PhP15,000	3.78	0.52	Competitive	3.93	0.54	Competitive
PHP15,000 and above	3.78	0.54	Competitive	3.72	0.55	Competitive
<i>Number of Years in Service</i>						
Below 10 years	3.81	0.47	Competitive	3.92	0.45	Competitive
10 years and above	3.72	0.61	Competitive	3.73	0.67	Competitive

As shown in Table 4, the most notable result regarding competitiveness when grouped by the profile of construction enterprise managers was observed among those who were single, recording the highest mean scores in both image (M = 3.93, SD = 0.63) and quality (M = 3.95, SD = 0.59), both rated as *competitive*. These values reflect the most favorable assessments among all managerial categories. In contrast, the lowest mean for image was recorded among married managers (M = 3.70, SD = 0.45), while the lowest mean for quality was noted among managers earning PHP 15,000 and above (M = 3.72, SD = 0.55), still within the *competitive* classification.

Table 5. *Relationship between the quality of the business environment and competitiveness.*

<i>Variables</i>	<i>Productivity</i>		<i>Innovation</i>		<i>Performance</i>		<i>Image</i>		<i>Quality</i>	
	<i>r</i>	<i>p-value</i>	<i>r</i>	<i>p-value</i>	<i>r</i>	<i>p-value</i>	<i>r</i>	<i>p-value</i>	<i>r</i>	<i>p-value</i>
Customer Service	0.605**	0.000	0.469**	0.001	0.464**	0.001	0.657**	0.000	0.582**	0.000
Inventory Management	0.540**	0.000	0.428**	0.003	0.000	0.000	0.556**	0.000	0.395**	0.007
Pricing Quality	0.690**	0.000	0.702**	0.000	0.586**	0.000	0.705**	0.000	0.489**	0.001
Product Quality	0.520**	0.000	0.445**	0.002	0.483**	0.000	0.565**	0.000	0.515**	0.000
Credit Terms	0.458**	0.002	0.368**	0.013	0.000	0.000	0.326**	0.029	0.000	0.000



Delivery	0.396**	0.007	0.000	0.000	0.000	0.000	0.341*	0.021	0.347*	0.020
Access to Market -Suppliers	0.379*	0.010	0.000	0.000	0.353*	0.017	0.335*	0.025	0.000	0.000
Labor Cost	0.438**	0.003	0.686**	0.000	0.392**	0.008	0.624**	0.000	0.545**	0.000
Demand Condition	0.582**	0.000	0.645**	0.000	0.541**	0.000	0.674**	0.000	0.530**	0.000
Conditions of Competition	0.000	0.011	0.416**	0.004	0.410**	0.005	0.498**	0.000	0.312*	0.037
Firm Strategy	0.681**	0.000	0.573**	0.000	0.439**	0.003	0.702**	0.000	0.536**	0.000

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

As presented in Table 5, the most important result was the strongest correlation between pricing quality and image ($r = 0.705, p < 0.001$), followed closely by its correlation with innovation ($r = 0.702$) and productivity ($r = 0.690$), indicating high consistency of this variable across multiple competitiveness dimensions. Additionally, firm strategy also showed a strong correlation with image ($r = 0.702$) and productivity ($r = 0.681$).

The least important results were observed in the variables delivery and access to market–suppliers, which showed comparatively lower but still statistically significant correlations. Specifically, delivery had the lowest correlations with productivity ($r = 0.396, p = 0.007$) and image ($r = 0.341, p = 0.021$), while access to market–suppliers had minimal correlation with innovation and quality.

Table 6. Dimensions of the quality of the business environment correlate with competitiveness.

Variables	Productivity		Innovation		Performance		Image		Quality	
	r ²	p-value								
Customer Service	0.366**	0.000	0.220**	0.001	0.215**	0.001	0.432**	0.000	0.339**	0.000
Inventory Management	0.292**	0.000	0.183**	0.003	0.000	0.000	0.309**	0.000	0.156**	0.007
Pricing Quality	0.476**	0.000	0.493**	0.000	0.343**	0.000	0.497**	0.000	0.239**	0.001
Product Quality	0.270**	0.000	0.198**	0.002	0.233**	0.000	0.319**	0.000	0.265**	0.000
Credit Terms	0.210**	0.002	0.135**	0.013	0.000	0.000	0.106**	0.029	0.000	0.000
Delivery	0.157**	0.007	0.000	0.000	0.000	0.000	0.116*	0.021	0.120*	0.020
Access to Market -Suppliers	0.144*	0.010	0.000	0.000	0.125*	0.017	0.112*	0.025	0.000	0.000
Labor Cost	0.192**	0.003	0.471**	0.000	0.154**	0.008	0.389**	0.000	0.297**	0.000
Demand Condition	0.339**	0.000	0.416**	0.000	0.293**	0.000	0.454**	0.000	0.281**	0.000
Conditions of Competition	0.000	0.011	0.173**	0.004	0.168**	0.005	0.248**	0.000	0.097*	0.037
Firm Strategy	0.464**	0.000	0.328**	0.000	0.193**	0.003	0.493**	0.000	0.287**	0.000

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

As shown in Table 6, the most important result was the strongest coefficient of determination ($r^2 = 0.497, p < 0.001$) between pricing quality and image, followed closely by its correlation with innovation ($r^2 = 0.493$) and productivity ($r^2 = 0.476$). These indicate that a significant portion of the variance in competitiveness can be explained by pricing quality, making it the most influential factor across multiple dimensions.

In contrast, the least important results were observed in the relationships involving delivery and access to market suppliers, which consistently showed the lowest r^2 values across all competitiveness indicators. For example, delivery and productivity ($r^2 = 0.157, p = 0.007$) and access to market–suppliers and innovation ($r^2 = 0.000$) represent the weakest associations in the dataset, indicating minimal explanatory power of these variables in predicting competitiveness outcomes.

Discussion

This study provides empirical evidence on the critical role that the quality of the business environment plays in enhancing the competitiveness of small and medium construction enterprises (SMCEs) in Metro Iloilo. Among the examined dimensions, pricing quality, firm strategy, and customer service emerged as the most salient predictors of competitiveness, specifically across image, productivity, and innovation core indicators of sustainable performance in the construction sector.

The most robust correlation was identified between pricing quality and image ($r = 0.705, p < 0.001$), underscoring the strategic role of

pricing in shaping consumer perceptions and brand equity. This aligns with Kotler and Armstrong's (2010) proposition that pricing reflects perceived value and plays a pivotal role in influencing customer retention and market position. Additionally, pricing quality demonstrated strong associations with innovation ($r = 0.702$) and productivity ($r = 0.690$), suggesting that firms employing strategic pricing mechanisms are better positioned to maintain cost efficiency and foster adaptive capabilities key principles emphasized in resource-based and competitive advantage theories (Barney, 1991; Porter, 1990).

Similarly, firm strategy was significantly correlated with all dimensions of competitiveness, particularly image ($r = 0.702$) and productivity ($r = 0.681$). These findings reinforce the theoretical foundation that firm-level strategic orientation—whether through cost leadership, differentiation, or innovation enhances organizational resilience and performance (Grant, 1991; Aaker, 1996). Strategic alignment, as posited by Porter's Diamond Model, enables enterprises to capitalize on factor and demand conditions to gain competitive leverage.

Customer service was also significantly linked to competitiveness outcomes, notably image ($r = 0.657$), productivity ($r = 0.605$), and quality ($r = 0.582$). These findings affirm previous research emphasizing the role of customer engagement in fostering trust, satisfaction, and brand loyalty (Jaworski & Kohli, 1993; Belas et al., 2019). For construction firms, where service delivery and client relationships are integral to project success, customer-centricity becomes a strategic asset.

In contrast, dimensions such as delivery and credit terms exhibited comparatively weaker correlations with competitive indicators. For instance, delivery was modestly associated with quality ($r = 0.347$) and image ($r = 0.341$), while credit terms demonstrated limited relationships with performance metrics. These results suggest that while logistical and financial components are operationally necessary, they function more as supporting mechanisms than as core strategic drivers of competitiveness in SMCEs (Tahir, Adnan, & Saeed, 2024; Maravilla & Flores, 2024).

Enterprise size further contextualizes competitiveness outcomes. Medium-sized enterprises consistently outperformed small firms in customer service ($M = 4.40$) and firm strategy ($M = 4.30$), as well as in image ($M = 4.50$) and quality ($M = 4.60$). This corroborates earlier findings that organizational scale and resource availability enhance strategic capability and service delivery (Abeyaratne & Priyadarshana, 2019; Lafuente et al., 2020). Larger firms are more likely to formalize systems and invest in capacity-building, yielding higher competitive outcomes.

Interestingly, younger managers (≤ 40 years) and those earning less than PHP 15,000 monthly reported slightly higher competitiveness ratings. This suggests that younger managerial cohorts may exhibit higher adaptability, openness to innovation, and responsiveness to market trends, traits associated with dynamic capability in volatile environments (Hambrick, 2007; Dong & Zhang, 2022). These findings challenge traditional assumptions that tenure and income directly equate to managerial effectiveness, instead highlighting the strategic value of youth and agility in decision-making roles.

Collectively, these results underscore the primacy of internal strategic and relational factors, specifically pricing strategy, customer responsiveness, and coherent firm strategy, in enhancing the competitiveness of SMCEs. While operational efficiencies such as inventory control and delivery logistics are essential, they function more effectively when embedded within a broader strategic framework. These findings validate Porter's (1990) assertion that firm-specific strategies, supported by favorable environmental conditions, are critical in securing and sustaining competitive advantage.

In light of these findings, targeted interventions that prioritize strategic planning, pricing intelligence, and customer engagement capabilities are recommended for SMCEs. Future research may further explore how technological adoption and digital transformation mediate these relationships, particularly in the context of post-pandemic construction recovery and market disruption.

Conclusions

This study examined the relationship between business environment quality and the competitiveness of small and medium construction enterprises (SMCEs) in Metro Iloilo using Porter's Diamond Model. Findings revealed that pricing quality, firm strategy, and customer service significantly predicted competitiveness, particularly in productivity, innovation, image, and quality. Medium-sized enterprises exhibited a performance advantage, while younger, lower-income managers reported higher competitiveness, suggesting that agility and innovation are key drivers. The study highlights the importance of aligning internal capabilities with external conditions to enhance competitiveness. Consequently, strategic recommendations include investing in employee development, adopting sustainable and digital practices, fostering innovation, and strengthening policy support through capacity-building, infrastructure development, and regulatory improvements. Future research should explore additional variables such as sustainability, legal compliance, and digital transformation, and consider longitudinal and cross-industry analyses to deepen understanding of competitiveness in emerging economies.

References

Abeyrathna, P., & Priyadarshana, W. (2019). Impact of firm size on profitability. *International Journal of Scientific and Research Publications*, 9, 562.

- Aaker, D. A. (1996). *Building strong brands*. Free Press.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99–120.
- Belas, J., Dvorský, J., Strnad, Z., Valaskova, K., & Čera, G. (2019). Improvement of the quality of business environment model: Case of the SME segment. *Engineering Economics*, 30, 601–611.
- Cherian, T., Munuswamy, S., & Jasim, K. (2021). Strategic sourcing: An empirical study among Indian construction retailers. *International Journal of Construction Supply Chain Management*, 11(1).
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approach* (4th ed.). Sage Publications, Inc.
- Daniel, J. (2012). *Sampling essentials: Practical guidelines for making sampling choices*. Sage Publications, Inc.
- Deming, W. E. (1986). *Out of the crisis*. MIT Press.
- Dong, Z., & Zhang, Z. (2022). Does the business environment improve the sustainable development of enterprises. *Journal name not provided*.
- Grant, R. M. (1991). The resource-based theory of competitive advantage: Implications for strategy formulation. *California Management Review*, 33, 114–135.
- Guo, H., & Lu, W. (2022). Measuring competitiveness with data-driven principal component analysis: A case study of Chinese international construction companies. *Engineering, Construction and Architectural Management*. <https://doi.org/10.1108/ecam-04-2020-0262>
- Hambrick, D. C. (2007). Upper echelons theory: An update. *Academy of Management Review*, 32, 334–343.
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9, 193–206.
- Hayes, R. H., & Wheelwright, S. C. (1984). *Restoring our competitive edge: Competing through manufacturing*. John Wiley & Sons.
- Jaworski, B. J., & Kohli, A. K. (1993). Market orientation: Antecedents and consequences. *The Journal of Marketing*, 57(3), 53–70.
- Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard: Measures that drive performance. *Harvard Business Review*, 70(1), 71–79.
- Kotler, P., & Armstrong, G. (2010). *Principles of marketing* (13th ed.). Pearson Prentice Hall.
- Kumar, N., Smith, M., & Johnson, A. (2014). The impact of innovation management on business sustainability. *Journal of Business Ethics*, 124, 231–244.
- Lafuente, E., Szerb, L., & Rideg, A. (2020). A system dynamics approach for assessing SMEs' competitiveness. *Journal of Small Business and Enterprise Development*, 27, 555–578.
- Magbanua, R. P. (2020). Challenges faced by SMEs in the construction industry. Unpublished manuscript.
- Maravilla Jr., V. S., & Flores, G. (2025). Entrepreneurial competency, resilience, and financial literacy: Drivers of sustainable performance in SMEs for societal welfare. *Journal of Sustainability, Society, and Eco-Welfare*, 2(2), 159–176. <https://doi.org/10.61511/jssew.v2i2.2025.1374>
- Montilla, R. A. (2020). Impact of new entrants on the construction industry in Metro Iloilo. Unpublished manuscript.
- Pimentel, R. G. (2019). Competitiveness of SMCEs in the Philippine construction industry. Unpublished manuscript.
- Porter, M. E. (1990). *The competitive advantage of nations*. Harvard Business Review Press.
- Porter, M. E., & Kramer, M. R. (2006). Strategy & society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84(12), 78–92.
- Postrado, C. M. I., & Matildo, E. L. L. (2023). Employee engagement and job performance among employees in higher education institution: A Philippine illustration. *International Journal of Health Sciences*, 7(S1), 1813–1835.
- Schumpeter, J. A. (1934). *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle*. Harvard University Press.
- Schwartz, B. M., Wilson, J. H., & Goff, D. M. (2019). *An easyguide to research design and SPSS*. Sage Publications, Inc.
- Storey, D. J. (2016). *Understanding the small business sector*. Routledge.
- Tabachnick, B. G., & Fidell, L. S. (2019). *Using multivariate statistics* (7th ed.). Pearson Education.



Tahir, A. H., Adnan, M., & Saeed, Z. (2024). The impact of brand image on customer satisfaction and brand loyalty: A systematic literature review. *Heliyon*, 10(16), e36254.

Tupas, M. R. (2019). Labor shortages in the construction industry: A challenge for SMCEs. Unpublished manuscript.

Affiliations and Corresponding Information

Kherzy P. Braza

Central Philippine University – Philippines

Althea U. Denuovo

Central Philippine University – Philippines