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**EXPLORING CAPACITY DEVELOPMENT INITIATIVES FOR
PROMOTING GROWTH AND SUSTAINABILITY OF SMALL AND
MEDIUM-SIZED QUANTITY SURVEYING FIRMS IN MALAYSIA**

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Abstract

The challenges faced by small and medium-sized quantity surveying (SME QS) consulting firms in Malaysia highlight the need for a structured and effective capacity development framework to ensure their sustainability and competitiveness. Despite the existence of various capacity development initiatives (CDIs), SME QS firms continue to struggle with financial constraints, limited market access, slow technology adoption, and skill development gaps. This paper seeks to explore the awareness and participation of SME quantity surveying consulting firms in capacity development initiatives (CDIs) and recommend relevant enhancements. Interviews with eight SME QS firm directors and principals were thematically analysed, revealing core challenges in capacity development, particularly gaps in financial accessibility, training participation, and networking opportunities. The results of the study indicate that while CDIs exist, many firms are either unaware of the existing initiatives or do not actively participate due to various barriers. Findings suggest that improvements in financial assistance, targeted professional development, and structured networking opportunities are essential to fostering a more resilient SME QS sector. This study reveals underexplored gaps in SME QS capacity development, highlighting the need for stronger policy enhancements and enforcement mechanisms to sustain competitiveness in Malaysia's transforming construction industry.

Keywords: quantity surveying, capacity development initiatives, SME quantity surveying consulting firms, financial constraints, professional development

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INTRODUCTION

SMEs play a vital role in the Malaysian economy, contributing significantly to employment and national GDP (Loo et al., 2023). According to OECD (2022), the small and medium-sized enterprises (SMEs) play a crucial role in the Malaysian economic landscape, constituting 97.2% of all business establishments, which contributes 38.2% to the national GDP and serving as employers for 7.3 million individuals. Over the past few decades, there has been a concerted effort to establish a robust financing ecosystem, encompassing a wide array of funding options for SMEs from both public and private entities. This strategic development has empowered Malaysian SMEs with access to a diverse range of financing sources, ensuring they can effectively meet their financial requirements across different stages of their developmental journey.

Ramdav and Harinarain (2020) suggest that the quantity surveying profession needs a strategic framework to address its threats and weaknesses while leveraging its strengths and opportunities, ensuring its survival and relevance in the ever-evolving construction industry. The increasing complexity of managing small and medium-sized quantity surveying consulting firms in Malaysia has further highlighted the need for a structured capacity development initiative (Wong et al., 2025). However, quantity surveying consulting firms face several challenges that hinder their growth, including financial constraints (Lee et al., 2020), limited access to networking opportunities (Yuen & Ng, 2021), slow adoption of technology (Ahmed et al., 2024), and inadequate governance structures (Islam et al., 2025).

Several capacity development initiatives (CDIs) have been introduced by governmental and non-governmental organizations, such as the Construction Industry Development Board (CIDB) (CIDB Malaysia, 2022), Malaysia Digital Economy Corporation (MDEC) (Linde et al., 2021), and Human Resource Development Corporation (HRD Corp) (Lee et al., 2020). These initiatives aim to enhance SME sustainability and competitiveness through financial assistance, professional training, and technology adoption. However, studies have indicated that existing initiatives are insufficient, leaving gaps in addressing key issues such as funding accessibility, business networking, and skills development (Dehdasht et al., 2022).

Several studies have argued that, despite the presence of capacity development initiatives, SME quantity surveying consulting firms continue to struggle with sustainability and industry competitiveness (Shari et al., 2024). The lack of enforceable policies, inadequate financial support, and limited engagement from key stakeholders have prevented SMEs from fully utilizing available initiatives (Lee et al., 2020). Additionally, disparities exist between the objectives of CDIs and their practical implementation, resulting in ineffective support for quantity surveying consulting firms (Mulei & Gachengo, 2021).

This study aims to explore the awareness and engagement of SME quantity surveying consulting firms with capacity development initiatives (CDIs) and propose necessary improvements. Ultimately, the study provides an overview of whether current CDIs are adequate to support the growth, competitiveness, and long-term sustainability of these firms in Malaysia.

LITERATURE REVIEW

Theories Underpinning the Study

The critical use of appropriate theories is important to support the study of CDIs in small and medium-sized consultation quantity surveying practices (CQSP) in Malaysia. Theories provide a framework through which to interpret innovation adoption and transformation of learning systems, particularly in dynamic and resource-scarce fields for this research. The theoretical foundation of this study is built on three key perspectives: Diffusion of Innovation Theory (Rogers, 2003), Transformative Learning Theory (Mezirow, 1991), and the Theory of Constraints (Goldratt, 1990).

The Diffusion of Innovation Theory explains how new technologies or practices are introduced and adopted within professional networks, influenced by stages such as awareness, decision-making, and implementation. This is particularly relevant to how consulting quantity surveying practices (CQSPs) in Malaysia adopt tools like BIM, cost software, and digital collaboration platforms. Meanwhile, Transformative Learning Theory focuses on internal change, highlighting the importance of critical reflection, mindset shifts, and value alignment in driving long-term learning and adaptation. It supports the idea that true capacity development must go beyond technical training to include ethical, strategic, and behavioural transformation. Complementing these two perspectives, the Theory of Constraints (TOC) focuses on identifying internal bottlenecks that limit performance in resource-constrained environments such as SMEs. It offers a practical approach to diagnosing and resolving inefficiencies like limited manpower, poor workflows, or resistance to change, which can hinder the success of capacity development initiatives (CDIs). When integrated, these three theories provide a comprehensive view: innovation diffusion shows how change is introduced; transformative learning explains how individuals and organisations internalise it; and TOC ensures that systems are optimised to sustain the change.

Capacity Development Initiatives (CDIs)

Capacity development initiatives, also known as capacity building initiatives, encompass a wide range of activities aimed at enhancing the abilities of individuals, organizations, and societies to perform functions, solve problems, and achieve their objectives (Pichler et al., 2019). It is essential to recognize that

capacity development goes beyond mere training and technical assistance; it involves nurturing knowledge, skills, attitudes, agency, and affordances required to achieve individual goals while addressing various barriers to change (Lussier, 2016). These initiatives are crucial for addressing institutional deficiencies and building the necessary skills and knowledge for sustainable development, particularly in developing countries (Ebohon et al., 1997). The initiatives offer intervention, often beginning with mapping exercises to design effective strategies and frameworks for monitoring and evaluating impact (LaFond et al., 2002). It is not a one-size-fits-all approach but rather a dynamic process that evolves through different stages of readiness, necessitating tailored interventions to enhance capacity effectively (Goodman et al., 1998).

Capacity development is a critical element in the sustainability and competitiveness of small and medium-sized enterprises (SMEs) within the Malaysian construction industry (Dehdasht et al., 2022). As a professional service sector, quantity surveying consulting firms play a significant role in managing costs, contracts, and project efficiencies throughout the construction lifecycle (Osunsanwo & Dada, 2020). However, many SME quantity surveying firms struggle to sustain growth due to financial limitations (Singh & Hanafi, 2020), lack of skilled manpower (Mustafa et al., 2023), slow adoption of technology (Saka & Chan, 2021), and limited access to structured business support (Loo et al., 2023).

The Malaysian government and various professional bodies have introduced several capacity development initiatives (CDIs) to enhance the competency and resilience of SMEs, including training programs (HRD Corp, 2022), financial assistance (CIDB Malaysia, 2022), digital transformation incentives (MDEC, 2022), and networking opportunities (MATRADE, 2022). Despite these efforts, the effectiveness of CDIs remains questionable, as SME quantity surveying firms continue to face barriers in funding accessibility, skill development, and industry integration (Islam & Aldaihani, 2022).

Challenges Constraining SME Quantity Surveying Consulting Firms ***Capital and Financial Constraints***

Financial barriers have been consistently identified as one of the most significant challenges limiting the growth of SME quantity surveying firms (Al Mamun et al., 2021). These firms rely heavily on internal funding, with limited access to bank loans or government grants due to stringent eligibility requirements (Gebreselassie, 2020). A survey conducted among SMEs in Malaysia found that more than half of loan applications from small firms were rejected, highlighting the difficulty in securing external funding for business expansion and technology investment (Islam et al., 2025).

Additionally, the high cost of software and hardware for digital transformation presents a challenge for SME quantity surveying firms (Ahmed et al., 2024). Building Information Modeling (BIM), which is increasingly demanded by clients and regulators, requires substantial investment in software licensing, hardware upgrades, and employee training (CIDB Malaysia, 2022). Firms that fail to adopt BIM and other digital tools face reduced competitiveness, as they are unable to secure projects that require advanced cost estimation and management tools (Saka & Chan, 2021).

Workforce and Competency Development

The shortage of skilled professionals within SME quantity surveying firms hinders their ability to compete with larger consultancies (Spellacy et al., 2021). The lack of structured training programs and career development pathways leads to high employee turnover and a shortage of experienced quantity surveyors (Mustafa et al., 2023). Studies have shown that many SME QS firms struggle to retain talent, as qualified professionals often leave for higher salaries and better career progression opportunities in larger firms (Osunsanwo & Dada, 2020). In addition to adopting new technologies like BIM and AI-related tools, enhancing knowledge in sustainability, including green building practices and ESG, is also crucial for preparing the SME firms with a skilled and competent workforce, enabling them to explore new areas of specialization (Shayan et al., 2019; Zolkafli, 2021; Hamdan et al., 2025; Nizarudin & Zakariya, 2025).

Capacity development initiatives aimed at upskilling SME professionals exist but remain underutilized (HRD Corp, 2022). The Human Resource Development Corporation (HRD Corp), for instance, provides training grants and upskilling programs, but many SMEs lack awareness or find the application process too complex (Lee et al., 2020). This gap in professional development limits the long-term sustainability of SME QS firms, as they struggle to keep pace with industry advancements (Cheong et al., 2023).

Networking and Market Access

Networking opportunities are crucial for business growth, project acquisition, and industry recognition (Yuen & Ng, 2021). However, SME quantity surveying firms in Malaysia face difficulties in expanding their professional networks, particularly in securing large-scale projects and forming strategic partnerships with contractors and developers (Linde et al., 2021). While organizations such as the Malaysia External Trade Development Corporation (MATRADE) provide networking and business matching services for other industries (MATRADE, 2022), there is a lack of dedicated platforms for SME QS firms to connect with industry stakeholders (Saka & Chan, 2021). This hinders their ability to secure

high-value contracts, as networking plays a key role in project procurement and business development (Ramdav & Harinarain, 2020).

RESEARCH METHODOLOGY

This study adopted a qualitative research approach, utilizing semi-structured interviews to gather empirical data from industry practitioners. Given the exploratory nature of this research, a qualitative approach is deemed appropriate. The study focuses on small and medium-sized quantity surveying firms as the primary respondents. The qualitative method is chosen to gather insights into participants' experiences, perceptions, and perspectives on the research issues. DiCicco-Bloom and Crabtree (2006) assert that qualitative interviews are ideal for gaining an in-depth understanding of a specific research area, accurately documenting participants' thoughts and opinions.

According to Curry et al. (2009), qualitative research explores individuals' experiences, shedding light on the factors influencing their decision-making processes and how those decisions unfold. This study focuses on exploring SME quantity surveying consulting firms' awareness and engagement with capacity development initiatives (CDIs) and recommending necessary improvements. Hence, the qualitative method was chosen to provide a more comprehensive understanding of real-world constraints and opportunities (Ismail et al., 2017; Mohd Danuri et al., 2016), particularly as experienced by SME QS firms in this context.

According to the official website of Board of Quantity Surveyors Malaysia (BQSM), there are 150 registered firms in Selangor and 112 registered firms in Wilayah Persekutuan Kuala Lumpur (WPKL) which contribute a total of 262 registered firms in Selangor and WPKL out of the 412 registered quantity surveying firms in Malaysia under BQSM (BQSM, 2023). The research engaged eight directors and principals from SME QS firms operating within Selangor and Wilayah Persekutuan Kuala Lumpur (WPKL). These participants were selected through purposive sampling to ensure they had at least ten years of experience in the industry and that their firms had been operational for a minimum of three years. The study also employed snowball sampling, where participants referred other qualified respondents to contribute their perspectives.

For the purpose of this research, all necessary information about the targeted firms was obtained from the official website of the Board of Quantity Surveyors Malaysia (BQSM). The data collection process resulted in only eight completed interviews. While this relatively small number of participants may raise concerns about the generalizability of the findings, it is important to recognise that qualitative research emphasizes depth of understanding rather than breadth of representation. Braun and Clarke (2013) recommend a minimum of 12 interviews to reach data saturation, but they also caution against treating this as a

rigid threshold. In practice, saturation is achieved when additional interviews fail to yield new insights. In this study, saturation was observed between the sixth and eighth interview, when recurring patterns and consistent narratives began to emerge.

The modest sample size can also be justified in light of prior methodological literature. In their seminal work, Guest et al. (2006) found that data saturation in qualitative interviews often emerges between six and twelve interviews. They noted that basic elements of themes can be discerned as early as the sixth interview, which is critical for informing data collection strategies in qualitative research. This finding aligns with the observations made by Hennink et al. (2016), who similarly identified that data saturation is typically reached within a comparable range of interviews (i.e., between seven and twelve), emphasizing the significance of recognizing the emergence of themes early in the interviewing process.

Moreover, Boddy (2016) supports this notion by asserting that qualitative studies often utilize smaller sample sizes not to achieve statistical representativeness but to attain analytical depth and richness in the data. This argument is reinforced by Malterud et al. (2016), who indicate that while there is no standard sample size for qualitative research, sizes around ten may suffice in certain homogeneous populations. The emphasis on depth rather than breadth further illustrates the qualitative research paradigm, as highlighted by Saunders et al. (2017), who discussed the relationship between sample size and the concept of saturation, proposing that the quality of data rather than its quantity primarily dictates the sufficiency of the sample. Thus, qualitative researchers often prioritize focused inquiry and thorough thematic exploration, reinforcing the validity and robustness of their findings.

Practical considerations further contextualize the sample size. SME quantity surveying firms which consist of 150 registered firms in Selangor and 112 registered firms in Wilayah Persekutuan Kuala Lumpur (WPKL) represent a niche and relatively small professional community, which makes participant access inherently challenging. Despite an initial outreach of 80 email invitations and five targeted LinkedIn invitations, only eight firms agreed to participate before the project deadline. This reflects a common challenge in organisational research, where participation rates are shaped by time pressures, workload demands, and perceived sensitivities around professional practices.

Although the limited number of respondents restricts the statistical generalizability of the findings, the study strengthens its credibility through analytical generalization. The consistent emergence of themes across interviews suggests that the insights are not isolated but are likely transferable to similar contexts. By prioritizing the richness and recurrence of perspectives over

numerical thresholds, the findings remain trustworthy and valid within the qualitative research paradigm.

Interviews were conducted in both physical and online formats to accommodate participant availability and convenience. The responses were recorded, transcribed, and subjected to thematic analysis, allowing key themes and trends to be identified. The thematic analysis provided a structured interpretation of the collected data, categorizing the findings into relevant areas that reflect the core challenges and areas for improvement in capacity development initiatives. The following section presents the study's findings, organized around key themes and sub-themes identified through the analysis.

FINDINGS AND DISCUSSION

SME QS firms' awareness and engagement with CDIs

The findings on SME QS firms' awareness and engagement with CDIs provided by governmental and non-governmental organizations indicate that many firms are either unaware of the existing initiatives or do not actively participate due to various barriers. The study found that despite the availability of subsidized training programs offered by organizations such as the Human Resource Development Corporation (HRD Corp), the Construction Industry Development Board (CIDB), and the Board of Quantity Surveyors Malaysia (BQSM), participation among SME QS firms remains low.

A significant number of firms reported being unaware of the specific training programs available to them, while others cited time constraints as a limiting factor in engaging with these initiatives. Many industry professionals prioritize project commitments over continuous learning, which results in low participation rates in professional development programs. Additionally, several respondents expressed concerns that existing training modules are often too generic and fail to address the specific challenges faced by SME QS firms, particularly in contract administration, cost control, and risk management. The findings are reported and illustrated in Figure 1.

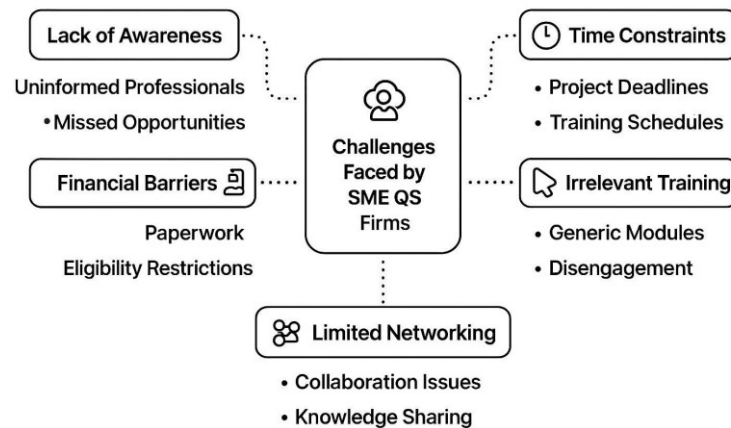


Figure 1: SME QS firms' awareness and engagement with CDIs
Note. Based on authors' research findings (2025).

Similarly, barriers to accessing financial assistance programs hinder the ability of SME QS firms to leverage government-backed loans and grants. While financial programs such as those offered by SME Bank Malaysia and Malaysia Digital Economy Corporation (MDEC) aim to support digital transformation and business expansion, many SME QS firms struggle to meet eligibility criteria. Interview participants highlighted that loan applications often require extensive documentation and collateral, making it difficult for smaller firms to qualify. Moreover, many financial aid schemes are primarily designed for manufacturing or technology-based SMEs, with limited provisions for professional consultancy firms within the construction industry.

Networking remains another unaddressed gap in CDIs. While industries such as manufacturing and export-oriented businesses benefit from structured trade fairs and business-matching events, there is a notable absence of dedicated networking platforms for SME QS firms. Without these opportunities, many firms struggle to establish connections with larger contractors and developers, limiting their access to new projects. Expanding professional networks is crucial for securing larger contracts and forming strategic partnerships, yet this remains a challenge for many SMEs in the quantity surveying sector.

Recommendations for Enhancing Capacity Development Initiatives

The findings further suggest that improvements in CDIs are necessary to support the long-term growth of SME QS firms. Several key enhancements were identified as crucial to overcoming the existing challenges in financial access,

skill development, and industry integration. Based on the findings, the following are the recommendations to enhance CBI are developed and shown in Figure 2.

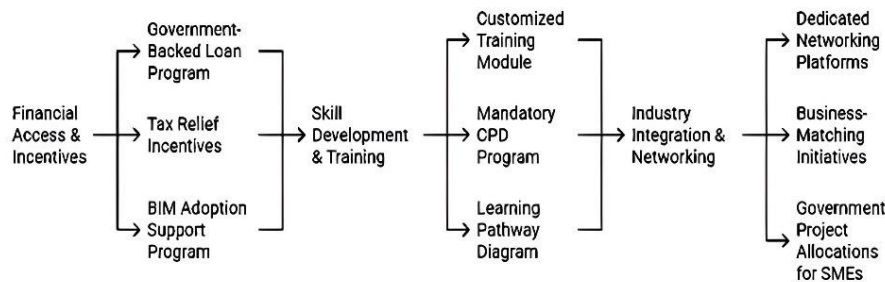


Figure 2: Recommendations for Enhancing Capacity Development Initiatives
Note. Based on authors' research findings (2025).

From a policy and regulatory perspective, the introduction of a standardized fee structure for quantity surveying consultancy services would ensure fair pricing and financial stability for SME firms. A more structured approach to taxation and financial incentives should also be considered, particularly by introducing tax relief programs for SME firms that invest in digital transformation and professional development. Expanding financial assistance programs is another critical area for improvement. Simplifying the loan application process and reducing bureaucratic barriers would enable more SME QS firms to access funding for business expansion and technology adoption. Additionally, introducing government-backed incentives for BIM adoption would encourage more firms to transition to digital tools, making them more competitive in the market.

Efforts should also be made to improve training and professional development programs. The development of industry-specific training modules tailored to SME QS firms would ensure that capacity development programs align with the actual needs of the industry. Continuous professional development (CPD) programs should also be made mandatory for SME QS firms, ensuring that employees receive ongoing training in contract administration, digital project management, and cost estimation techniques.

Furthermore, the establishment of structured networking platforms would help SME QS firms expand their business opportunities. Industry-focused networking events, business-matching programs, and strategic partnership initiatives should be introduced to connect SME QS firms with larger industry players, government agencies, and international markets. The allocation of specific government projects to SMEs would also ensure fair competition within

the quantity surveying sector, allowing smaller firms to secure larger consultancy contracts.

The findings on SME QS firms' awareness and engagement with CDIs can be more clearly interpreted through relevant theoretical perspectives. From the perspective of Diffusion of Innovation Theory (Rogers, 2003), the low uptake of subsidized training and financial programs reflects barriers in knowledge dissemination and perceived relative advantage, where many firms do not see immediate value or remain unaware of available innovations. Transformative Learning Theory (Mezirow, 1991) helps explain why generic training programs fail to engage QS professionals, as transformative learning requires industry-specific, experience-based reflection to shift existing mindsets and practices. Finally, constraints such as time pressures, complex loan requirements, and limited networking opportunities reflect the Theory of Constraints (Goldratt, 1990), where systemic bottlenecks prevent firms from fully leveraging CDIs. Together, these theories provide a stronger conceptual grounding for understanding the limited participation of SME QS firms in CDIs and highlight areas for targeted improvement.

CONCLUSION

This study has been able to explore the capacity development initiatives (CDIs) necessary for small and medium-sized quantity surveying consulting firms in Malaysia. Thus far, this study finds that despite the availability and implementation of capacity development initiatives, their adoption and impact remain limited. The accessibility and effectiveness of CDIs require further enhancements to better serve SME QS firms in overcoming financial, technological, and competency-related barriers. There remains a need for more structured financial support mechanisms, targeted training programs, enforced digital transformation policies, and improved industry networking opportunities to strengthen the overall growth and competitiveness of SME QS firms.

The analysis concludes that the most common constraints hindering SME QS firms include the lack of financial accessibility for technology adoption, insufficient professional upskilling opportunities, and weak industry linkages. Despite the presence of financial grants, training programs, and digital transformation incentives, many SME QS firms struggle to utilize these initiatives due to complex application processes, low awareness, and mismatched program objectives. Regulatory bodies such as CIDB, MDEC, HRD Corp, and BQSM play a crucial role in facilitating these initiatives, but greater enforcement and monitoring are needed to ensure that CDIs effectively reach and benefit SME QS firms.

As the construction industry in Malaysia continues to evolve and integrate digital transformation, the government and industry stakeholders are expected to enhance capacity development efforts to ensure that SME QS firms remain competitive and sustainable. Stronger enforcement of financial support accessibility, digitalization policies, and competency development programs is necessary to bridge the gaps in the existing capacity development initiatives. Further study is required for future policy refinements and the development of a more integrated, inclusive, and effective capacity development ecosystem for SME quantity surveying consulting firms in Malaysia.

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