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Unified Capacity Building Model for Enhancing the Capacity of SMEs in Emerging Economies

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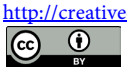

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Abstract

This study develops and empirically tests a unified model for enhancing the capacity of Small and Medium Enterprises (SMEs) in the construction industry of emerging economies. Using data from 120 Ghanaian construction professionals analyzed via PLS-SEM, the research integrates the Keynesian job creation theory, scientific management theory, and the Resource-Based View (RBV) to explain how the capacity of SMEs in emerging economies can be enhanced. The findings confirm that job creation policies, improved business management practices, and enhanced resource capabilities are significant predictors of SME capacity. These predictors were found to be significantly linked to increasing the technical/HR capacity, operational efficiency, social capital, financial capabilities and business management capabilities of SMEs. The ultimate outcome would be enhanced performance of the SMEs in terms of time, cost and quality delivery, and the competitiveness of SMEs in terms of revenue and profit margin, productivity, and growth and expansion. The findings of the research offer a useful policy to transform construction SMEs in developing economies.

Keywords

Capacity Building, Framework, SMEs, Emerging Economies, Project Management, Keynesian Theory of Job Creation, Scientific Management Theory, Resource Based View, Ghana

1. Introduction

In the global construction industry, small and medium-sized enterprises (SMEs)

are the foundation of economic growth (World Bank, 2020). Notably, SMEs play a vibrant role in the construction industry of emerging economies (World Economic Forum, 2016). Construction SMEs account for 56% of private employment and 36% of South Africa's GDP; and in Sierra Leone it employs 95% of the labor work force (Berry et al., 2002). In Nigeria's construction industry, SMEs account for 28% of its GDP (Usman & Alaezi, 2016). According to Amoah et al. (2011), SMEs in Ghana constitute over 90% of all contractors in the construction industry.

Owing to the critical role SMEs play in emerging economies and the potential to deliver high-level construction projects, it is imperative to explore measures and factors that can guide SMEs in the construction sector to survive and grow (Asante et al., 2017). Nonetheless, most studies continue to discover that, SMEs underperform in terms of project delivery and are usually confronted with the risk of collapse, with statistics showing that sixty percent of them fail within the first few years (Kristanti et al., 2019). The survival of SMEs in developing economies is typically hampered by numerous limitations. One key variable identified from extant literature is the lack of capacities of indigenous SMEs in emerging economies to compete with foreign competitors (Asante et al., 2017; Offei et al., 2019).

In developing economies, considerable number of studies have emerged on SMEs. For example, studies have investigated the opportunities for SMEs in developing nations (Humphrey, 2003), the challenges that SMEs face (Ametepey et al., 2022; Offei et al., 2019; Thwala & Phaladi, 2009), the critical success factors for managing SMEs (Sarvari et al., 2021), the capacity needs of SMEs (Asante et al., 2017), the contributions of SMEs to sustainable development (Faki, 2021), and the role of SMEs in economic development (Usman & Alaezi, 2016). Gancarczyk et al. (2021) employed the theoretical lenses of RBV to understand growth phenomena of SMEs. North et al. (2020) proposed a theoretical framework to guide SMEs to leverage on digitally enabled growth opportunities, as well project-based learning in order to remain competitive in turbulent environments.

While these prior studies provide useful insights, it is also apparent construction SMEs in emerging economies still lack the requisite capacity to be competitive (Strategy & Research Dept, 2023). The problem resides in the fact that, preponderances of the prevailing research on SMEs examined the capacity building mechanisms based on linearity assumptions and as if they existed completely in isolation. In reality, however, such linearity assumption is hardly meaningful in explaining the dynamic and interrelated behaviour of the mechanisms for building the capacity of SMEs. A study that offers an inclusive picture and understanding of the capacity building mechanisms of SMEs is still missing in the literature. Consequently, there are no comprehensive frameworks for building the capacities SMEs in the literature.

Hence, this study provides a unified model of Keynesian theory of job creation, scientific management theory, and Resource Based View theory (KBV) to explain how the capacity of SMEs can be enhanced to make them competitive. The findings to this aim provide a new theoretical lens on how construction SMEs can be

empowered.

2. Theoretical Background and Hypotheses Development

2.1. Keynesian Job Creation Principles and Capacity Building of Construction SMEs

This section leverages the Keynesian theory of Job creation to explain how the capacities of SMEs are enhanced through job creation. Keynesian economics emphasizes government intervention to stabilize the economy, particularly during periods of economic downturn (Keynes, 1936). In the context of SMEs, this could mean policies that increase aggregate demand, such as fiscal stimulus packages or monetary policy adjustments (Nguyen et al., 2020). By boosting overall demand, SMEs can benefit from increased consumer spending, investment, and government purchases (Tcherneva, 2012).

Keynesian principles can be applied to promote the growth of SMEs. Access to contracts is crucial for the growth of construction SMEs (Adjabeng & Osei, 2022; Ametepey et al., 2022; Xia & Gan, 2020). Securing contracts provides a stable source of revenue, enabling firms to invest in resources, expand operations, and increase profitability (Rodríguez-Espíndola et al., 2022). Contract execution can help SMEs develop expertise, improve efficiency, and build capacity to tackle larger, more complex projects (Ho et al., 2016; Soluk et al., 2023). Contracts can drive innovation, encouraging SMEs to develop new technologies, materials, and processes (Odei & Hamplová, 2022; Udimal et al., 2019). By applying Keynesian principles in the construction sector, governments can create jobs, stimulate the growth, and capacity needs of SMEs. From the foregoing, the following hypothesis has been developed:

H1. SMEs' access to jobs has a positive relation to the capacity building of SMEs.

2.2. Scientific Business Management Principles and Capacity Building of Construction SMEs

The scientific management theory is explored from the literature to ascertain how it can aid in building the capacities of SMEs. Frederick Winslow Taylor created scientific management theory, or Taylorism, as a management philosophy in the late 19th and early 20th centuries (Jarašūnienė et al., 2017). The theory seeks to increase industrial efficiency by the application of scientific concepts to work management. According to Oberio (2022), the fundamental ideas of scientific management theory are: separation of planning and execution, standardization, specialization, training and development, performance measurement, incentivization, and elimination of waste.

In the context of SMEs, scientific management principles can be applied to streamline processes by eliminating waste and reduce inefficiencies (Mofolasayo et al., 2022). Scientific management principles could also be applied by SMEs to build the capacity of their workforce by enhancing their skills, knowledge, and productivity (Millers & Gaile-Sarkane, 2021). Scientific management principles

such as standardizing operations, division of work to maximize expertise, monitoring performance can enhance the operational capabilities of SMEs (Trieu et al., 2023). By encouraging experimentation and learning, continuous improvement, data-driven decision-making, SMEs can build their capacities to drive sustainable growth (Garrido-Moreno et al., 2024). In summary, SMEs can build capacity, enhance efficiency, and drive sustainable growth by applying scientific management principles. Hence, based on the related literature, the following hypothesis is suggested:

H2. Scientific management principles have a positive relation with capacity building of construction SMEs.

2.3. Resource Based View Principles and Capacity Building of Construction SMEs

A paradigm for strategic management known as the Resource-Based View (RBV) places emphasis on an organization's internal resources and skills as a means of gaining a sustained competitive advantage (Almarri & Gardiner, 2014). According to Mansour et al. (2022), the RBV's essential elements include valuable resources and capabilities (the ability to leverage resources to achieve competitive advantage). Key resources include: 1) Tangible resources (e.g., financial, physical, technological) and 2.) Intangible resources (e.g., human capital, innovation, reputation). RBV encourages SMEs to develop innovative products and services by leveraging their unique resources. SMEs can achieve sustainable competitive advantage by identifying and investing in valuable, rare, and imperfectly imitable resources (Mady et al., 2023). RBV enables SMEs to respond to changing environments by leveraging their internal resources and capabilities (El Nemar et al., 2022). By developing and strengthening these internal resources and capabilities, the technical and operational capacities of SMEs can be enhanced (Ho et al., 2016). The capacities of SMEs can be enhanced by identifying and leveraging core competencies, developing human resource capacity, investing in technology and innovation, enhancing financial capacity, and building strategic partnerships (Audretsch et al., 2023; Guribie et al., 2025). In general, therefore it seems, that:

H3. Resources have a positive relation with capacity building of construction SMEs.

2.4. The Influence of SMEs Capacity on Their Performance and Competitiveness

There is a significant positive relationship between SMEs' human resource capacity and their overall performance (Harney et al., 2022). SMEs with advanced technological capacity will have a higher level of competitiveness in the market compared to those with limited technological capacity (Ho et al., 2016). Financial capacity is positively correlated with SMEs' ability to innovate and adapt to changing market conditions (Costa et al., 2023). SMEs with strong managerial capacity will exhibit better financial performance compared to those with weak managerial ca-

pacity (Millers & Gaile-Sarkane, 2021). Innovative capacity is a significant predictor of SMEs' competitiveness and market share (Donkor et al., 2018). Training and development programs are positively related to employee productivity (Guribie et al., 2022). SMEs with skilled employees will have higher quality products/services (Darus et al., 2017). Adoption of digital technologies can improve the operational efficiency of SMEs (Radicic & Petković, 2023). Access to finance is positively correlated with SMEs' growth (Amadasun & Mutezo, 2022). Effective financial management reduces SMEs' risk of bankruptcy (Agyapong, 2021).

H4. There is a positive relationship between the capacity of SMEs and their performance/competitiveness.

For the development of a hypothetical model, these three capacity building theories (*Keynesian job creation theory, scientific management theory and RBV*) are hereafter referred to as "Job creation policy for SMEs (JP)", "enhancing SMEs business management capabilities (BM)" and "building the resource capabilities of SMEs (RC)". See Table 1 for the constructs and measurement items and Figure 1 for the hypothetical model for the above discussions.

Table 1. Constructs and measurement items.

Constructs	Code	Measurement
Capacity Building Actions		
Job creation policy for SMEs	JP1	Frequent access of SMEs to jobs
	JP2	Contract reservations (reserve a large proportion of government contracts for SMEs)
	JP3	Joint ventures between large contractors and SMEs
	JP4	Subcontracting (Require large contracts to sublet a portion of their work to SMEs.
Enhancing SMEs Business management practices	BM1	Applying scientific analysis to optimize workflows
	BM2	Efficient administrative and site management practices
	BM3	leveraging technology and modern equipment & plants to enhance productivity
	BM4	Material management
	BM5	Job and practice analysis
	BM6	Competency modelling
	BM7	Workforce planning
Building the resource capabilities of SMEs	RC1	Access to plants and equipments
	RC2	Access to competent human capital
	RC3	SMEs development funds (Government backed funds to support the growth of SMEs)
	RC4	Asset-Based financing (using assets like equipment as collateral for loans
	RC5	Mobilization
	RC6	Government grants and loans
	RC7	Payment security of SMEs (Ensure Prompt payment to SMEs for contract executed)
	RC8	Ability of SMEs to form alliances and partnerships
	RC9	Ability of SMEs to build on past experience
	RC10	Providing training to improve worker efficiency
Effects		
Capacity outcomes	CB1	Business management capabilities
	CB2	Technical/HR Capacity

Continued

	CB3	Operational Efficiency
	CB4	Social Capital
	CB5	Financial capabilities
	PC1	Time performance
	PC2	Cost performance
Performance & competitiveness outcomes	PC3	Quality performance
	PC4	Revenue and profit margin
	PC5	Productivity
	PC6	Growth and expansion

Source: Authors own work.

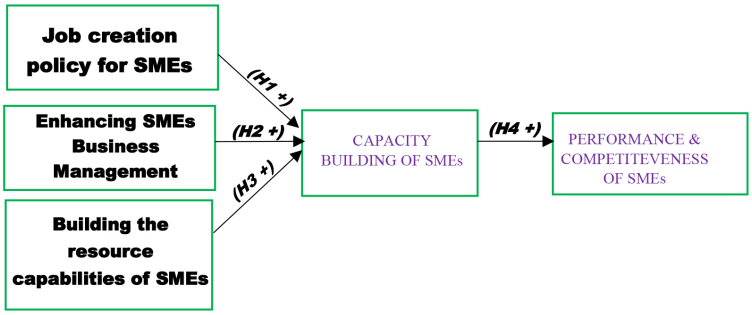

Figure 1. Hypothetical model.

3. Method

3.1. Research Question

The research question that guided the study is "How can the capacity of construction SMEs in emerging economies be developed to enhance their performance?" Three sub interrelated research question arises:

RQ1. Can the Keynesian job creation principles explain capacity building of SMEs?

RQ2. Can scientific management principles explain capacity building of SMEs?

RQ3. Can RBV principles explain capacity building of SMEs?

3.2. Population and Sampling Procedures

Population refers to a defined group or units of audiences within specific geographical locations (Taherdoost, 2016). Sampling, on the other hand, is choosing a small portion of the population as your research participants. The target population of the study is the owner managers and workers of construction SMEs in Ghana. Due to the lack of readily available data on the number SMEs in the construction industry of Ghana, the study adopts a non-probabilistic sampling approach. Purposive sampling was used to attain a valid and effective overall sample size. Representativeness can be achieved via this non-probabilistic sampling procedure (Patton, 2002). The inclusion criteria for selecting respondents were

1) The respondent should have fallen in the category of a construction professional in general, or working in an SME.

2) The respondent must have had a minimum of one year working experience in the construction industry.

3.3. Data Collection

A structured questionnaire was used to collect primary data from the respondents. A Likert scale of 1 to 5 is used to assess the perception of the respondents on the various questions which are contained in the questionnaire. A new measure was developed using measurement items derived from the review of literature. During the creation of a new measure, it's vital to make sure that enough pilot work is done. This can reveal unclear items or inappropriate and discriminative items (Rattray & Jones, 2007). As suggested by Frazer and Lawley (2000), two separate groups, mainly researchers and workers in construction SMEs were the audiences of the pretest. Following the pre-testing of the questionnaire with these two groups, it was amended based on their feedback. The questionnaire was self-administered for a period of two months, with 120 valid responses returned out of a total of 150 distributed questionnaires representing a response rate of 80%.

3.4. Data Analysis

After the fieldwork, the raw data was gathered and processed in a suitable form for analysis. After this session, a test methodology for the statistical tool to be used for data analysis was defined. Possible analytical tools were reviewed and their suitability considered. Generally, inferential statistics was employed to give an in-depth analysis of the study results. More specifically, PLS-SEM was deployed for the analysis. Table 2 shows the background information of the respondents.

Table 2. Background information of the respondents.

	Frequency	Percent
Profession		
Contractor	32	26.7
Project manager	23	19.2
Quantity surveyor	34	28.3
Site supervisor	31	25.8
Total	120	100.0
Highest education qualification	-	
Highest National Diploma (HND)	21	17.5
Bachelor degree	61	50.8
Master's degree	32	26.7
Doctor of philosophy (PhD)	6	5.0
Total	120	100.0
Number of employees		
Small (1-9 employees)	85	70.8
Medium (20-199 employees)	27	22.5
Large (+200 employees)	8	6.7
Total	120	100.0
Company's approximate financial turnover for the last full financial year	-	

Continued

Less than GH¢100,000	18	15.0
GH¢100,000 - GH¢499,999	8	6.7
GH¢500,000 - 999,999	14	11.7
GH¢1,000,000 - GH¢5,000,000	48	40.0
Over GH¢5,000,000	32	26.7
Total	120	100.0
Number of years working in the company	-	
< 5 years	24	20.0
5 - 10 years	4	3.3
11 - 15 years	24	20.0
16 - 20 years	34	28.3
Over 20 years	34	28.3
Total	120	100.0
Contractor classification of the company	-	
D2K2	29	24.2
D3K3	34	28.3
D4K4	57	47.5
Total	120	100.0

Source: Authors own work.

4. Results

This section presents the PLS-SEM results that guided the framing of the capacity building model. The Reliability and Validity Measures of the PLS-SEM, Discriminant Validity using Cross loadings, Path Coefficients and Test of Significance, Diagram for the Measurement Assessment and the Path Coefficient and Significance are presented in Tables 3-5 and Figures 1-2 respectively.

Evaluation of Measurement Models

In Table 3, the factor loading of the measurement item **JP4 (***Subcontracting***)** was lower than 0.50. Hence, it was deleted from the list of measurement items. As can also be seen in Table 3, all of the Cronbach's alpha coefficients and composite reliability scores of the included variables were greater than 0.70, indicating that the measurement items had adequate internal consistency reliability. Furthermore, all factor loadings and average variance extracted (AVEs) were greater than 0.50, indicating that the constructs were convergently valid.

Table 3. Reliability and validity measures.

Constructs/items	Loadings	Weight	t-value	CA	CR	AVE
Jobs creation policy for SMEs	-					
JP1	0.922	0.523	33.798	0.858	0.909	0.770
JP2	0.866	0.347	15.402			
JP3	0.842	0.258	13.713			
Enhancing SMEs business management practices	-					
BM1	0.901	0.176	23.773	0.940	0.951	0.736
BM2	0.863	0.196	20.038			
BM3	0.891	0.203	23.434			

Continued

BM4	0.863	0.181	18.797			
BM5	0.867	0.131	15.976			
BM6	0.794	0.119	10.924			
BM7	0.819	0.154	13.371			
Building the resource capabilities of SMEs	-					
RC1	0.815	0.139	16.302	0.948	0.955	0.679
RC2	0.898	0.190	21.253			
RC3	0.876	0.132	20.584			
RC4	0.788	0.108	12.971			
RC5	0.823	0.088	12.657			
RC6	0.796	0.114	16.068			
RC7	0.847	0.123	20.933			
RC8	0.822	0.077	16.035			
RC9	0.828	0.144	19.075			
RC10	0.740	0.088	12.029			
Capacity outcomes	-					
CB1	0.782	0.218	18.138	0.914	0.937	0.748
CB2	0.906	0.237	51.630			
CB3	0.915	0.224	49.187			
CB4	0.903	0.253	40.418			
CB5	0.809	0.225	21.712			
# Performance & competitiveness outcomes	-					
PC1	0.837	0.209	25.046	0.922	0.939	0.720
PC2	0.798	0.160	16.750			
PC3	0.849	0.202	30.146			
PC4	0.839	0.194	23.955			
PC5	0.878	0.215	39.832			
PC6	0.884	0.197	34.994			

CA: Cronbach's Alpha, CR: Composite Reliability and AVE: Average Variance Extracted. Source: Authors own work.

As indicated in Table 4, no correlation between any two constructs exceeded the square roots of their AVEs, demonstrating the prime evidence of discriminant validity of the constructs.

Table 4. Discriminant validity using Heterotrait-Monotrait ratio and Fornell-Larcker criterion.

Constructs	CB	JP	BM	PC	RC
Heterotrait-monotrait ratio (HTMT)	-				
CB					
JP	0.317				
BM	0.381	0.153			
PC	0.700	0.439	0.451		
RC	0.294	0.161	0.254	0.192	-
Fornell-Larcker criterion	-				
CB	**0.865**				

Continued

JP	0.304	**0.877**			
BM	0.361	0.132	**0.858**		
PC	0.648	0.398	0.426	**0.848**	
RC	0.293	0.133	0.253	0.193	**0.824**

Source: Authors own work.

Examining the cross loadings of the measurement items provides additional evidence of discriminant validity. There is no cross-loading concern, as each measurement item had the maximum loading on its related construct, as shown in Table 5. These findings show that the measurement models were reliable and valid for the structural path modeling.

Table 5. Cross loadings of the constructs.

Constructs	CB	JP	BM	PC	RC
CB1	**0.782**	0.225	0.398	0.498	0.212
CB2	**0.906**	0.188	0.377	0.553	0.343
CB3	**0.915**	0.200	0.271	0.567	0.266
CB4	**0.903**	0.322	0.240	0.636	0.293
CB5	**0.809**	0.377	0.283	0.536	0.140
JP1	0.346	**0.922**	0.120	0.394	0.136
JP2	0.229	**0.866**	0.092	0.305	0.026
JP3	0.170	**0.842**	0.146	0.335	0.204
BM1	0.321	0.151	**0.901**	0.410	0.274
BM2	0.357	0.094	**0.863**	0.390	0.290
BM3	0.368	0.074	**0.891**	0.409	0.206
BM4	0.329	0.132	**0.863**	0.359	0.185
BM5	0.238	0.106	**0.867**	0.320	0.161
BM6	0.216	0.098	**0.794**	0.306	0.144
BM7	0.280	0.146	**0.819**	0.327	0.219
PC1	0.581	0.362	0.339	**0.837**	0.208
PC2	0.446	0.338	0.353	**0.798**	0.101
PC3	0.562	0.303	0.423	**0.849**	0.140
PC4	0.540	0.335	0.346	**0.839**	0.204
PC5	0.599	0.391	0.343	**0.878**	0.165
PC6	0.548	0.298	0.366	**0.884**	0.151
RC1	0.262	0.129	0.273	0.160	**0.815**
RC10	0.167	0.046	0.113	0.053	**0.740**
RC2	0.359	0.106	0.295	0.268	**0.898**
RC3	0.249	0.140	0.245	0.170	**0.876**
RC4	0.204	0.080	0.159	0.096	**0.788**
RC5	0.166	0.126	0.211	0.129	**0.823**
RC6	0.216	0.121	0.048	0.129	**0.796**
RC7	0.233	0.143	0.267	0.186	**0.847**
RC8	0.146	0.108	0.228	0.155	**0.822**
RC9	0.273	0.086	0.172	0.147	**0.828**

Source: Authors own work.

Evaluation of Structural Model

Table 6, Figures 2 and 3 show the bootstrapping results for the capacity building model. The findings suggest that the path linking the path linking "Job creation policy for SMEs" (JP) to capacity building (CB) had a t-statistics = 3.139; p value = 0.090), implying that, at the 0.05 level, it was statistically significant. Therefore, hypothesis H1 was supported. Similarly, the path linking "Enhancing SMEs Business management practices" (BM) to capacity building (CB) t-statistics = 2.293; p value = 0.022), indicating that it was statistically significant at the 0.05 level. Hence H2 was supported. Likewise, the path linking the path linking "Building the resource capabilities of SMEs" (RC) to capacity building (CB) had a t-value (2.315) with corresponding p-value (0.021) and hence H3, was supported. Finally, the path linking "capacity building" (CB) to SMEs performance/competitiveness (PC) had a t-value (10.693) greater than 1.96, implying that it was statistically significant at the 0.05 level. Therefore, hypothesis H4 is also supported.

Table 6. Path coefficients and test of significance.

Paths	Coeff.	Sample Coef.	Std. dev.	t-value	p-value	Confidence Int.	
						2.5%	97.5%
JP -> CB	0.242	0.250	0.077	3.139	0.002	0.090	0.390
BM -> CB	0.281	0.276	0.123	2.293	0.022	0.057	0.515
RC -> CB	0.190	0.208	0.082	2.315	0.021	0.044	0.344
CB -> PC	0.648	0.650	0.061	10.693	0.000	0.511	0.749

Source: Authors own work.

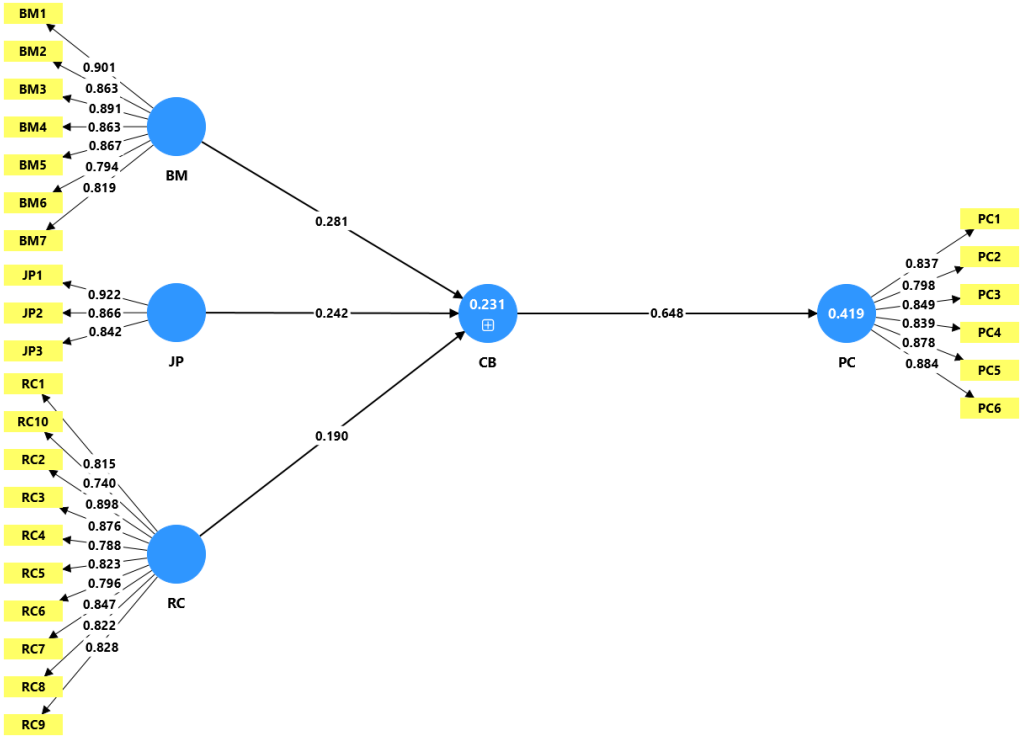

Figure 2. Diagram for the measurement assessment.

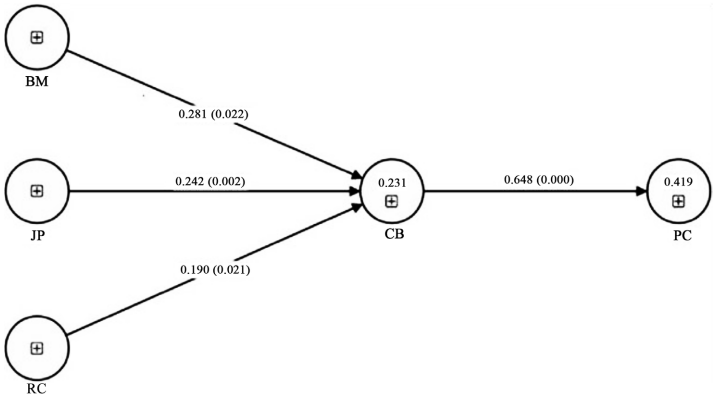

Figure 3. Path coefficient and significance.

5. Discussion of Empirical Results

The results show that the path linking "Job creation policy for SMEs" to capacity building had a t-value (3.139) greater than 1.96, implying that it was statistically significant at the 0.05 level. Therefore, hypothesis H1 is supported. This finding suggests a deliberate policy to create jobs of SMEs can impact their capacity developments. The capacity of SMEs can be enhanced if they have frequent access to jobs through contract reservations, and also through Joint ventures between large contractors and SMEs.

Likewise the results show that the path linking "Enhancing SMEs business management practices" to capacity building had a t-value (2.293) greater than 1.96, implying that it was statistically significant at the 0.05 level. Therefore, hypothesis H2 is also supported. To enhance their capacities, SMEs must begin to apply scientific analysis to optimize workflows, adopt efficient administrative and site management practices, leverage technology and modern equipment & plants to enhance productivity, practice proper material management, conduct job and practice analysis, competency modelling and workforce planning.

Furthermore, the path linking "Building the resource capabilities of SMEs" to capacity building had a t-value (2.315) greater than 1.96, implying that it was statistically significant at the 0.05 level. Therefore, hypothesis H3 is also supported. The capacities of SMEs can be enhanced by SMEs access to plants and equipment, access to competent human capital, and providing training to improve worker efficiency. The resource capabilities of SMEs could also be improved by an SMEs development fund (Government backed funds to support the growth of SMEs), Asset-Based financing, Mobilization, Government grants and loans, Payment security of SMEs (Ensure Prompt payment to SMEs for contract executed). SMEs could also enhance their capacities by forming alliances and partnerships (Guribie et al., 2024), and building on past experience.

Finally, the path linking "capacity building" to SMEs performance/competitiveness had a t-value (10.693) greater than 1.96, implying that it was statistically significant at the 0.05 level. Therefore, hypothesis H4 is also supported. This finding implies that when the capacity of SMEs (Technical/HR Capacity, Operational Ef-

ficiency Social Capital, Financial capabilities and Business management capabilities) is enhanced, this would translate into performance and competitiveness of SMEs (Time performance, Cost performance, Quality performance, Revenue and Profit Margin, Productivity, and Growth and expansion).

The findings confirm that job creation policies, improved business management practices, and enhanced resource capabilities are significant predictors of SME capacity. By applying Keynesian principles in the construction sector, governments can create jobs, stimulate the growth, and capacity needs of SMEs. Likewise, scientific management principles can be applied by SMEs in emerging economies to build the capacity of their workforce by enhancing their skills, knowledge, and productivity (Millers & Gaile-Sarkane, 2021). SMEs can also achieve sustainable competitive advantage by identifying and investing in valuable, rare, and imperfectly imitable resources (Mady et al., 2023). These, in turn will drive the performance and competitiveness of SMEs in emerging economies.

6. Developing a Capacity Building Framework for Construction SMEs

SME job creation Policy, Building the resource capabilities of SMEs, Enhancing SMEs Business management practices were found as measures when instituted can enhance the operations of SMEs in Ghana. These variables have positive effects on capacity building, and consequently the performance of SMEs. The foregoing became the basis of conceptualizing and proposing a unified capacity building framework for construction SMEs. A relationship of themes and theories of the framework is presented in Figure 4.

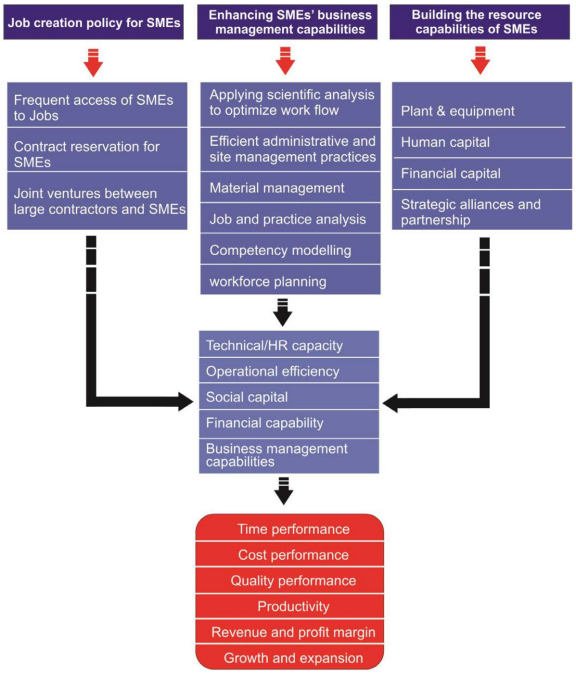

Figure 4. A unified model for building the capacities of construction SMEs to enhance their performance & competitiveness.

Discussion of the Proposed Capacity Building model

To build the capacities of SMEs to enhance their performance and competitiveness, the current study proposes a three phased capacity building framework for construction SMEs: a job creation policy for SMEs, building the resource capabilities of SMEs and enhancing SMEs' business management practices.

Develop an SME job creation Policy

The first enabler to build capacity of construction SMEs in developing economies is the creation of an SME job creation policy. This entails SMEs' frequent access to jobs, reservation of large proportion of government contracts for SMEs and joint ventures between large contractors and SMEs.

Building the resource capabilities of SMEs

Having instituted an SME job creation policy, another important enabler is building the resource capabilities of SMEs. This entails SMEs' access to diverse resources such human, technical, financial and social capital.

Enhancing SMEs Business management practices

The final enabler is to enhance SMEs' business management practices. Business management practices in this context entails efficient administrative and site management practices through scientific management principles.

Outcomes/Impact of the processes

When these three principles (job creation policy for SMEs, building the resource capabilities of SMEs and enhancing SMEs business management practices) are initiated, the prime benefits would be an increase in SMEs' Technical/HR Capacity, SMEs' Operational Efficiency, Social Capital, the financial capabilities of SMEs and SMEs' business management capabilities. The ultimate outcome would be improved performance and competitiveness of construction SMEs in developing economies.

7. Conclusion

There is no comprehensive capacity building framework for construction SMEs in the literature. Hence, this study provides a unified model of the Keynesian job creation theory, RBV theory and scientific management theory to explain how the capacity of SMEs can be enhanced to make them competitive. The main research question addressed in this study is: "How can the capacities of construction SMEs in developing economies be enhanced to improve their performance and competitiveness?" This research question was answered from the empirical study of 120 construction SMEs in the Ghanaian construction industry. The findings demonstrated that, building the capacities of construction SMEs in emerging economies involves three thematic phases viz.: a job creation policy for SMEs, building the resource capabilities of SMEs and enhancing SMEs business management practices.

7.1. Theoretical and Practical Implications

Theoretically, the study findings address the paucity of studies into the issues confronting SMEs in developing countries. Consequently, the study's findings add to

the body of knowledge by prioritizing the issues for building the capacities of construction SMEs in developing countries. By consolidating the findings into a unified model, the findings of this study address the capacity building mechanisms of SMEs from wider lens, and also, can serve as springboard for future studies. For construction stakeholders, implications are offered practically to use the findings of this study for construction industry development. The research also offers a useful policy document to transform construction SMEs in developing economies.

7.2. Limitations and Future Research

While this study highlights significant insights into capacity building, it's worth mentioning that the study has some limitations. Firstly, the survey data was gathered exclusively from Ghanaian stakeholders, and Ghana represents a single cultural setting. Every country has its own culture and methods based on its construction industry's history and project management experiences. Consequently, as a result of the soft and contextual distinctions, the findings may not be generalizable to other jurisdictions. Also, the capacity building framework presented in this research is based on SMEs in the construction industry. Therefore, the model presented constitutes a theoretical proposition that scholars and practitioners can now study, implement, and test in various types of SMEs in different industries. Future research could benefit from a mixed-method approach, with the Delphi technique being used first to validate the indicators acquired from the literature before moving on to other quantitative methods of evaluation. This will aid in the development of a more subjective perspective on the capacity building indicators. To catalyse capacity building of SMEs in the construction industry, best practice frameworks from advanced economies other than a localized framework can be developed to complement any inherent limitations of the proposed framework. Further quantitative studies on the phenomenon are also recommended.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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