

Towards SWOT analysis as a strategic tool to develop economic sustainable construction business

Iruka Chijindu Anugwo

Department of Construction Management & Quantity Surveying,
Durban University of Technology,
IrukaA@dut.ac.za

Abstract:

In the area of strategic business management, the application of SWOT analysis as a business tool is considered a classical approach but effective, it has continued to gain more traction in terms of analysing and determining critical internal strengths and weaknesses as well as external opportunities and threats of any given organisations. The incessant and premature business failures across various sectors (especially the construction sector). The causes of premature business failure would be linked to the inability of start-ups or existing organisations to strategically undertake internal and external business analyses that would assist them to identify business attributes of strengths, weaknesses, opportunities and threats in their business' operating environment. This paper was an attempt to assess and determine the synergistic effect and impact of conscious application of SWOT analysis to develop, grow and maintain economic sustainable business within the construction industry. This study utilised a systematic examination of relevant literature between the years 2002 to 2022 on the subject of SWOT analysis as a business tool to determine the critical factors for growing sustainable construction business. The search and analysis of the study include published 23 academic articles out of 65 articles initially extracted from Google scholar. The study findings indicated through SWOT analysis as a business planning tool 13 factors (strengths), 11 factors (weaknesses), 6 factors (opportunities), and 10 factors (threats) were considered critical factors and business attributes for growing a sustainable business within the construction industry. Thus, conscious application of SWOT analysis among start-up and existing contractors in the construction industry would potentially minimise the incessant and premature business failure in the construction sector.

Keywords:

Construction contractors, critical factors, sustainable business, swot analysis

1 Introduction

The construction industry is one of the key economic sectors which plays a crucial in driving economic growth and sustainability in both developed and developing nations (Watkins et al., 2020). The construction and the built environment's businesses are saddled with the responsibility for creating enabling built environment's infrastructure and assets such as housing and capital infrastructure projects (McCabe, 2010). According to Bushe (2019) and Martin and Root (2010), Over 70% of small to micro and medium enterprises (SMMEs) in South Africa fails to grow into an economic sustainable firms within the first 5–7 years of

inception and the causes of premature business failures among construction businesses are linked to internal and external constraints. These constraints are various factors; such as lack of capacity, increasingly fierce competition in the industry, unprofitable tender prices in projects; systemic abuse by main contractors; poor general management skills; technological difficulties; problems in accessing finance; difficulties in securing contracts due to high competition and legal barriers (Martin and Root, 2010).

According to Harrison (2013), business entities and countries across the globe are increasing their strategic business efforts to understand how they can improve of survival and sustainable performance and growth of start-up businesses, especially in the construction industry. Small and medium enterprises (SMEs) constitute over 90% of the construction business and are vital to the construction industry operations (Arewa and Farrell, 2012). To be competitive, some strategic management scholars and policymakers have advocated for more strategic planning practices to be consciously adopted among start-up businesses- especial in the construction industry. However, there is an unresolved debate amongst researchers about the impact of strategic planning on business performance (Sandada, 2014). According to Bernroider (2002), SWOT analysis is a strategic business tool used to assess the 'key' or 'critical' factors, which are highly ranked as major factors contributing to a firm's growth and sustainability or premature failures. Bernroider (2002) affirmed that organisations undertaking external business analysis would aim to identify opportunities and threats in their business' operating environment, whilst the internal business analysis seeks to pinpoint the firms' strengths and weaknesses that would propel or hinder its potential and sustainable growth. Thus, the aim of this study is an attempt to assess and determine the synergistic effect and impact of conscious application of the SWOT strategic plan, and business survival and performance among the contractors in the construction market. Thus, to achieve the study aim, the following research questions were formulated to guide the systematic literature review that was conducted.

1.1 Research questions

1. What are the critical factors as an attribute of "Strengths" in growing a sustainable construction business using the SWOT analysis business tool?
2. What are the critical factors as an attribute of "Weaknesses" limiting the potentiality of growing a sustainable construction business using the SWOT analysis business tool?
3. What are the critical factors as an attribute of "opportunities" towards growing a sustainable construction business using the SWOT analysis business tool?
4. What are the critical factors as an attribute of "threats" that could hinder the potentiality of growing a sustainable construction business using the SWOT analysis business tool?

Thus, the above research questions would enable the synthesis of valuable qualitative data within the subject of investigation in eliciting, extracting, analysing and drawing more accurate and concrete conclusions (Watkins et al., 2020).

2 Literature Review

According to Anugwo (2017) SWOT analysis is an important strategic business tool for achieving the long-term survival of any organisation as it provides insights into an

organisation's current market position and what is required to thrive in future. Bernroider (2002) states that it is evident that numerous organisations are consciously carrying out a SWOT analysis as part of their strategic planning process towards identifying their organisations' strengths, weaknesses, opportunities and threats before developing and formulating a business or a corporate strategy. It can be augured that SWOT analysis has the potential of shielding organisations from premature collapse. Bernroider (2002) further acknowledges that strategic planning processes among organisations are mostly approached in a cyclic iteration (five elements) such as follows: the strategic planning process begins with a statement of the business or corporate mission and goals (step 1); this is followed by the analysis of the organisation's external competitive environment (step 2) and the analysis of the organisation's internal operating environment (step 3); the internal analysis is followed by the selection (step 4) and the implementation of strategies (step 5); the last step also involves the design of the organisational structure and control systems necessary to implement the chosen strategy. In general, strategic planning entails actions such as identifying a company's mission, long-term objectives, opportunities, and threats, evaluating different plans, and finally selecting the strategies that must be implemented to meet the company's objectives (David 1999).

According to Ommani (2011) SWOT analysis is a basic business tool that can be used to assess the capability of an organisation's business, as well as its potential opportunities and threats. The process of SWOT analysis usually emanates from elicited information from a given business environment which would dissect the internal business factors (strengths and weaknesses) and external business issues/ factors (opportunities and threats) (Ommani, 2011). Ommani (2011) further explains that once the process of SWOT analysis is completed, it would assist an organisation to determine strategic means to accomplish its objectives, as well as understanding the potential obstacles that need to be overcome or minimised to achieve the desired business performance and growth. Thus, any strategic manager or business owner or contractor should match the firm's strengths and weaknesses with the surrounding before choosing the best and most effective alternative strategy to be implemented (David, 1999). As a result, the SWOT analysis technique can be utilised to improve a company's management effectiveness. This method combines the internal and external study of a company. It assesses the firm's strengths and vulnerabilities to prepare for external risks and opportunities.

3 Research Methodology

This study assessed the synergistic effect of conscious application of the SWOT strategic plan and its impact on business survival and growth among construction contractors. To achieve the aim and focus of this research, a systematic review research method was adopted which comprises searching and collection of articles on the impact of conscious application of SWOT strategic plan as an effective business tool to grow a sustainable construction business. Watkins et al., (2020) state that a systematic literature review is a “systematic, explicit, and reproducible method for identifying, evaluating, and synthesizing the existing body of completed and recorded work produced by researchers, scholars, and practitioners. The use of systematic review as an emerging research methodological review is useful for thoroughly examining research existing data on any given subject matter. This study adopted a google scholar search engine/ database using the Boolean operators' concept with keywords:

“swot analysis” AND “sustainable business” AND “critical factors” AND “construction contractors” through which the initial search recorded a total of 65 articles, and only 23 were found relevant and related of the subject matters within 2002 to 2022. Thus, 23 relevant academic articles were elicited extensively reviewed and analysed through a content analysis research approach. The final stage involved content analysis discussions, conclusions, and recommendations based on the findings from the literature.

4 Findings and Discussion

According to the 23 elicited and reviewed qualitative data obtained through systematic review and based on a content analysis approach the below statistical figures and theme were presented as the study sought to assess the synergistic effect of conscious application of SWOT analysis as a business tool on growing sustainable business among construction contractors. The critical factors are described under SWOT.

4.1 “Strengths” in growing a sustainable construction business using the SWOT analysis tool

The statistics shown in Figure 1 were based on the most frequently rated critical factors that are considered to have a significant impact on growing sustainable construction business. According to the ranking in relation to factors that are considered as an attribute of “strengths for construction contractors towards growing a sustainable business, the following factors such as good quality workmanship (14/23 =61%); experienced personnel/ staff (14/23 =61%); effective usage of technological innovation application (12/23 = 52%); strong market leadership and expansion in the area of operation (12/23 = 52%) were highly rated as most critical factors contributing as "strengths" towards developing and growing a sustainable construction business. Also, factors such as effective organisational structure (11/23 = 52%); level of specialisation (11/23 = 52%) adequate capacity of plant and equipment (10/23 = 43%); good business reputation/ image (10/23 =43%), good suppliers' relationship (8/23 = 35%); good relationship with subcontractors (8/23 =35%); strong financial capabilities (7/23 = 30%); customer/ clients' satisfaction (6/23 =26%); and good strategic vision and effective business planning were considered as business elements as “strengths” towards growing a sustainable business whilst utilising SWOT analysis. The statistics in figure 1 imply that there is a strong synergistic effect of utilising a SWOT analysis as strategic business tool in understanding internal strengths of construction business as critical factors such as good quality workmanship, having experienced personnel/ staff, and effective usage of a technological innovation application, as well as strong market leadership and expansion in the area of operation, were mostly rated as an attribute of business strengths among construction contractors towards growing sustainable construction businesses.

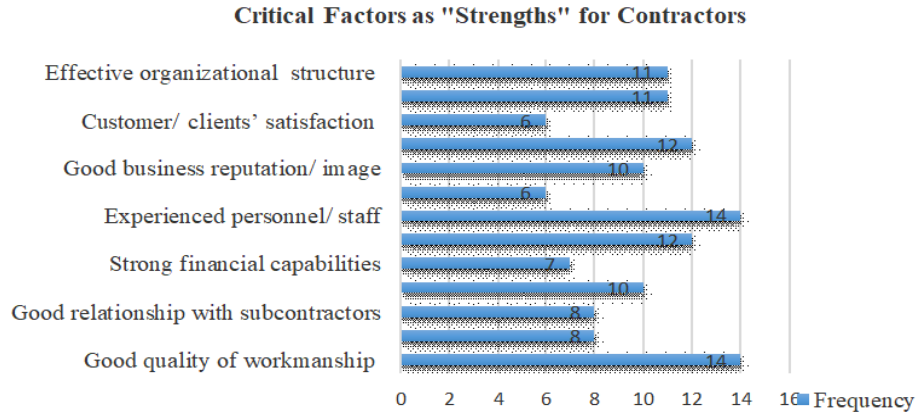


Figure 1: Strengths of SWOT Analysis in growing construction business

4.2 "Weaknesses" limiting the potential of growing a sustainable construction business using the SWOT analysis tool

Figure 2 indicates the frequency at which scholars assessed the synergistic effect and impact of SWOT analysis as a strategic business tool in identifying limiting critical factors that are considered as “weaknesses” towards growing a sustainable business within sectors such as the construction industry. The statistics results shown in Figure 2 were based on the most frequently rated critical factors that are considered as limiting factors and "weaknesses" that negatively impact the potentiality of growing sustainable construction business. As a result, limiting factors such as lack of innovative and technological application (14/23 =61%), inexperienced personnel/staff (14/23 =61%), poor market leadership in the area of operation (14/23 =61%); inadequate capacity of plant and equipment for industry (13/23 =57%); poor workmanship (12/23 =52%); and lack of research and development (10/23 =43%) were rated as critical factors limiting the potentiality of developing and growing a sustainable business in the construction industry. In addition, poor relationship with subcontractors (9/23 =39%); lack of internationalisation of business operations (5/23 =22%); and lack of effective strategic vision and effective business planning were considered as critical limiting factors (weaknesses) for contractors who are striving to grow sustainable businesses.



Figure 2: Critical factors limiting construction contractors’ potential growth using a SWOT analysis as a business tool (Weaknesses)

4.3 “Opportunities” in Growing a Sustainable Construction Business using the SWOT analysis tool

Figure 3 below indicates the frequency at which scholars assessed the synergistic effect and the impact of SWOT analysis as a strategic business tool in identifying critical factors that are considered as potential factors “opportunities” towards growing a sustainable business within sectors such as the construction industry. The statistics result shown in Figure 3 below, were based on the most frequently rated critical factors that are considered as potential factors as “opportunities” that would significantly impact the potentiality of growing a sustainable construction business if properly harnessed. Accordingly, critical factors such as availability of technological innovation to improve business operations (13/23 =57%), large size market and low entrant barriers (16/23 =70%), strong strategic alliance and joint venture business opportunities (16/23 =70%), available government support for local businesses (11/23 = 48%), favourable government policies (10/23 =43%), and employees qualifications (5/23 = 22%) were rated as potential factors that would impact significantly in the growth trajectory of construction contractors if the factors are creatively harnessed.

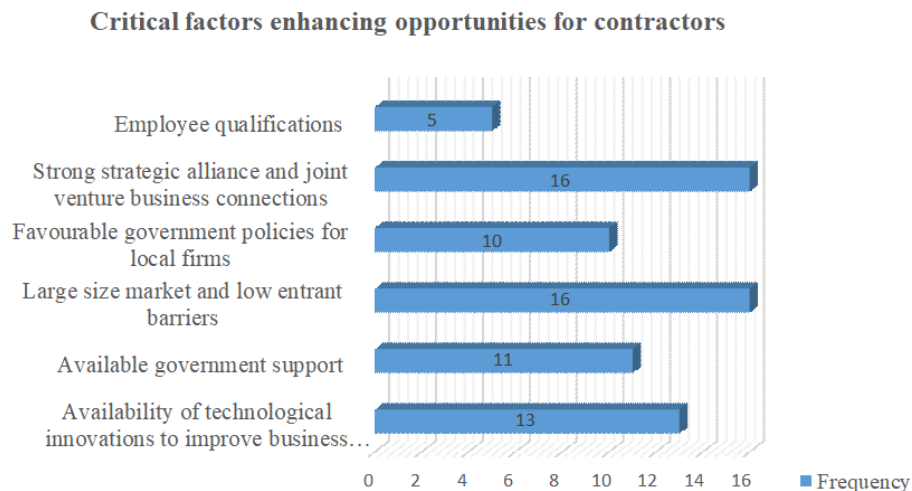


Figure 3: Potential opportunities towards growing construction business using a SWOT Analysis

4.4 “Threats” in growing a sustainable construction business using the SWOT analysis tool

Figure 4 below indicates the frequency at which scholars assessed the synergistic effect and impact of SWOT analysis as a strategic business tool in identifying critical factors that are considered as potential threats towards growing a sustainable business within sectors such as the construction industry.

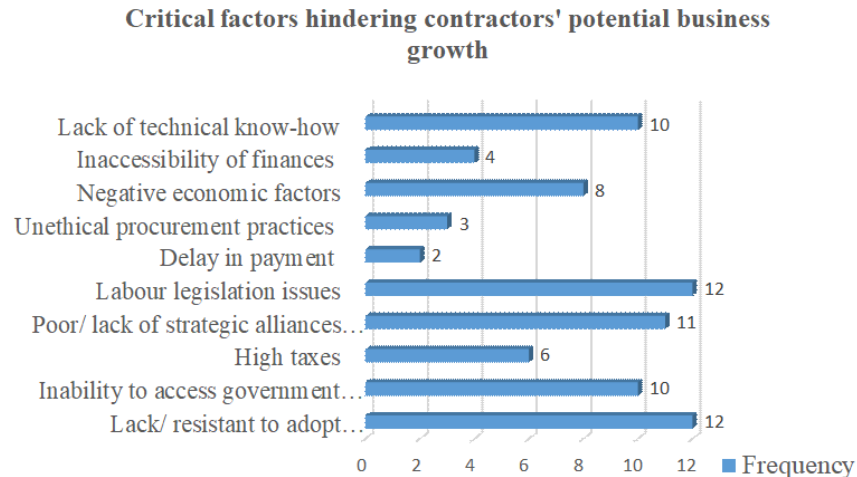


Figure 4: Potential threats towards growing construction business using a SWOT Analysis

The statistics result shown in Figure 4 were based on the most frequently rated critical factors that are considered as potential factor “threats” that would significantly impact negatively towards growing a sustainable construction business if not properly and creatively addressed. For that reason, critical factors such as lack/resistance to adopting technological innovation to improve business operations ($12/23 = 52\%$), lack of technical know-how ($10/23 = 43\%$), poor/ lack of strategic alliance and joint venture business activities ($12/ 23 = 52\%$), labour legislation issues ($12/23 = 52\%$), inability to access government support ($10/23 = 43\%$), and negative economic factors were considered as most factors threatening the potentiality towards growing sustainable construction business. In addition, factors such as high taxes ($6/23 = 26\%$), inaccessibility of finances ($4/23 = 17\%$), unethical procurement practices ($3/23 = 13\%$), and delays in payments were also considered as “threatening factors” that would negatively impact in the development or growth trajectory of construction business if identified factors are not strategically and constructively tackled.

5 Conclusion and Further Research

The study conclusions emanate from the research findings concerning the study aim, which was an attempt to assess and determine the synergistic effect and impact of conscious application of SWOT strategic plan, and business survival and performance among the contractors in the construction market. The aim of the study necessitated the formulation of research questions that guided the systematic literature review that was conducted. Thus, this study was set out to assess, examine, analyse and determine the critical factors that are considered as business "strengths", "weaknesses", "opportunities" and "threats" towards developing and growing a sustainable business within the construction industry through utilisation of SWOT analysis as a strategic business tool. The study findings identified factors of good quality workmanship, experienced personnel/ staff, effective usage of a technological innovation application, strong market leadership, and expansion in the area of operation as critical factors "strengths" that significantly contributes towards developing and growing a sustainable business within the construction industry. Whilst the following factors such lack of innovative and technological application, inexperienced personnel/staff, poor market

leadership in the area of operation, inadequate capacity of plant and equipment for industry, poor workmanship; and lack of research and development as major limiting factor” weaknesses” that significantly impair the potentiality of developing and growing a sustainable business in the construction industry.

In addition, the study concludes from the findings that the identified factors such as availability of technological innovation to improve business operations, large size market and low entrant barriers, strong strategic alliance and joint venture business opportunities, available government support for local businesses, favourable government policies, and employees qualifications are considered as critical factors that would impact positively towards developing and growing a business in the construction industry if the identified factors are exploited and harnessed constructively. The study further concludes that the following factors such as lack/resistance to adopting technological innovation to improve business operations, lack of technical know-how, poor/ lack of strategic alliance and joint venture business activities, labour legislation issues, inability to access government support, and negative economic factors were identified as most critical threatening factors that would potentially thwart the possibility towards growing a sustainable business within the construction industry. Therefore, this study further concluded and recommends that it is of utmost importance that construction contractors should consciously apply the use of SWOT analysis as a business tool towards identifying and determining their internal business "strengths", "weaknesses", and external business "opportunities" and "threats" towards developing and growing a sustainable business.

6 References

- Anugwo, I. C. (2017) The sustainability of South African Construction Small, Medium and Micro Enterprises. Port Elizabeth: Nelson Mandela Metropolitan University: Unpublished PhD Thesis in Constitution Management
- Amusan, L., Aigbavboa, C., Nkom, U., and Aniefiok. (2021). Corporate Social Responsibility, Challenges, Instigators and SWOT Analysis of Construction SMEs towards Strategic Development of Sustainable Enterprises. *Academy of Strategic Management Journal*, vol. 20 issue: 6, pp.1-12.
- Arewa, A.O, Farrels, P, 2012. A review of compliance with health and safety regulations and economic performance in small and medium construction enterprises.
- Bernroider, E. (2002). Factors in SWOT Analysis Applied to Micro, Small-to-Medium, and Large Software Enterprises: An Austrian Study. *European Management Journal* Vol. 20, No. 5, pp. 562–573.
- Bushe, B., 2019. The causes and impact of business failure among small to micro and medium enterprises in South Africa. *Africa’s Public Service Delivery and Performance*.
- Coman, A and Ronen, B. (2009). Focused SWOT: diagnosing critical strengths and weaknesses. *International Journal of Production Research*, 47:20, 5677-5689.
- David, F.R.1999. "Strategic Management Concepts", 7th Edition, Prentice Hall, Upper Saddle River, New Jersey.
- Frimpong, B.E., Sunindijo, R.Y., and Wang, C. (2020). Towards Improving Performance of the Construction Industry in Ghana: A SWOT Approach. *Civil Engineering Dimension*, Vol. 22, No. 1, pp.37-46.

- Ghani, K.D.A., Nayan, S., Ghazali, S.A.I.S.M., Shafie, L.A and Nayan, S. (2010). Critical Internal and External Factors that Affect Firms Strategic Planning. *International Research Journal of finance and economics*..
- Harrison, J.S. (2013). *Strategic Management of Resource and Relationships*. New York. NY: John Wiley and Sons
- Jiang, R., Mao, C., Hou, L., Wu, C., and Tan, J. (2017). A SWOT analysis for promoting offsite construction under the backdrop of China's new urbanisation. *Journal of Cleaner Production xxx (2017) 1-10*.
- Keskin, H and Şentürk, C. (2010). The Importance of Small and Medium-Sized Enterprises (SMEs) In Economies: SWOT Analyses of the SME Sector in Turkey and Albania. *Niğde Üniversitesi İİBF Dergisi, 2010, Cilt: 3, Sayı: 1, s.116-132*
- Lee, H. H and Leem, C.S. (2018). SWOT Analysis for Small and Medium Enterprise in Smart Factory introduction. *Journal of the Korea Convergence Society Vol. 9. No. 3, pp. 1-14*.
- Luu, T, Kim, S., Cao, H And Park, Y. (2008). Performance measurement of construction firms in developing countries. *Construction Management and Economics*, 26, 373–386.
- Milosevic, I.N. (2010). Practical Application of SWOT Analysis in the Management of a Construction Project. *Leadership and Management in Engineering*, 10(2): 78-86
- Mulje, S. A and Kanade, G.N. (2021). A Study and Analysis for Assessment of Factor Impacting the Expansion of Real Estate Business in Kolhapur Region, Maharashtra, India. *Journal of Analysis and Computation (JAC), Volume XIV, ISSUE –V*.
- Odubiyi, T.B and Oke, A.E. (2016). Strengths, weaknesses, opportunities and threats of virtual teams in the Nigerian construction industry. *Organisation, Technology and Management in Construction* 2016; 8: 1422–1428
- Oke, A.E., Aghimien, D and Adedoyin, A. (2018). SWOT analysis of Indigenous and foreign contractors in a developing economy. *International journal of quality and reliability management, vol. 35 No.6, pp. 1289-1304*.
- Ommani, A.R. (2011). Strengths, weaknesses, opportunities and threats (SWOT) analysis for farming system businesses management: Case of wheat farmers of Shadervan District, Shoushtar Township, Iran. *African Journal of Business Management* Vol. 5(22), pp. 9448-9454,
- Othman, A.A.E. (2015). An international index for customer satisfaction in the construction industry, *International Journal of Construction Management*, 15:1, 33-58
- Ranadewa, K.A.T.O., Sandanayake, Y.G. And Siriwardena, M. (2018). A SWOT Analysis for Sri Lankan Construction SMEs. In: *Proceedings, 7th World Construction Symposium 2018, 29th June – 2nd July 2018, Galadari Hotel, Colombo*
- Rao, Y.S. (2017). C5 model for the consortium management: SWOT analysis. *Library Management Vol. 38 No. 4/5, pp. 248-262*.
- Salar, M and Salar, O. (2014). Determining pros and cons of franchising by using swot analysis. *Procedia - Social and Behavioral Sciences* 122, 515 – 519.
- Sandada, M., Poee, D. and Dhurup, M., 2014. Strategic planning and its relationship with business performance among small and medium enterprises in South Africa. *International Business & Economics Research Journal (IBER)*, 13(3), pp.659-670.
- McCabe, S. (2010). *Corporate Strategy in Construction: Understanding today's theory and practice*. United Kingdom: Wiley-Blackwell.

- Shang, G and Pheng, L.S. (2014). The Last Planner System in China's construction industry — A SWOT analysis on implementation. *International Journal of Project Management* 32 (2014) 1260–1272
- Stewart, R.A, and Jiang, Z. (2004). China's Construction Industry after WTO Accession: Opportunities, Challenges and Strategies In: CIB- International Symposium on Globalisation and Construction AIT Conference Centre, Bangkok, Thailand 17-19 November 2004
- Watkins, J. and Sunjka, B.P. (2020). Combining green building and lean construction to achieve more sustainable Development in South Africa. *South African Journal of Industrial Engineering November Vol 31(3), pp 133-143*
- Zagidullina, G, Ivanova, R., Nugumanova, G., Sirazetdinov, R and Zaripova, A. (2020). The improvement of construction industry innovative potential through the creation of a cluster. IOP Conf. Series: Materials Science and Engineering 890 (2020) 012121