

Factors Contributing to the Failure of Emerging Construction Companies in South Africa

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Abstract

A high number of emerging construction companies in South Africa close down within the first three years of establishment. The construction industry plays a major role in the country's gross domestic product and closure of companies contribute to the increasing risk of high unemployment rate in South Africa. A comprehensive literature review identified eight factors which contribute to failure of emerging construction companies. Primary data was collected via a questionnaire which was distributed to owners and managers of emerging construction companies. The study reveals that a lack of financial management by leadership is the most prominent factor that leads to failure or success of companies.

Keywords

Construction, Emerging Companies, Financial Management

1. Introduction

The construction industry plays a major role in the ability to boost the economy of the country and to create employment opportunities unemployed citizens (Abdesamed and Wahab, 2014; Dlamini, 2012; Gordhan, 2012). Construction companies always have to find ways to improve and succeed in their business and to avoid failure. Emerging construction companies are mostly at risk because the majority of them close down within the first three years of establishment (Abor and Quartey, 2010). According to the Construction Industry Development Board of South Africa (CIDB), emerging construction companies can be identified as companies with Level 1 - 4 CIDB grading and have available capital of up to ZAR 200 000 (CIDB, 2011; Tenderpoint, 2014). Emerging construction companies must endeavor to sustain themselves by managing their projects and remaining within budget (Kirunda, 2005).

The purpose of the research is to identify factors which contribute to unsustainability of emerging construction companies. The research methodology included a comprehensive literature review, as well as a survey distributed to industry personnel who own a company or is in a management position in emerging companies. The paper concludes with a discussion on the findings and results.

2. Literature review

For companies to sustain themselves they have to avoid failure and endeavor to be successful. Success can be described as long term drive for sustainability (Dubazane, 2013) and failure can be described as lack of success (Kirunda, 2005). In order to ensure long-term sustainability, companies need to hire competent workers who are able to help the company to grow (Macozoma, 2016). Hiring of competent individuals in management positions who know what they are doing enables a company to deliver quality work and helps companies to keep a positive cash flow. Unqualified workers result in poor quality work being delivered and companies finding it difficult to attract new customers (Msani, 2016). Working on a project and not having a proper project plan to monitor the progress results

in scope creep during construction (Berman, 2007; Dubazane, 2013). Failure to monitor the scope of work results in extra costs incurred by the project (Dubazane, 2013). A scope of work usually consists of all work sections on a project and all information the contractor may need to plan for the project (Hotamisli and Yörük, 2011; Sylvester, Rani, and Shaikh, 2011).

Ineffective communication between management and staff hampers team building (Berman, 2007; Rose, 2013) and makes it difficult to exchange information (Debanjan, 2010). It is important for companies to set clear and attainable goals and objectives for the workers (Berman, 2007; Nhlapo, 2013). Poor handling of projects does not secure new customers (Msani, 2016) and unforeseen problems make it difficult for companies to survive (Berman, 2007; Nhlapo, 2013). Failure to embrace change in technology and working ideas will render a company unsuccessful and stuck in the past (Msani, 2016; Nguyen, 2004); and therefore unable to compete in the marketplace when tendering for jobs.

Table 1 lists all the factors which contribute to companies failing to ensure sustainability, and compares the factors to those of successful companies. Eight factors that contribute to failing emerging construction companies were identified.

Table 1 - Factors of failure vs factors of success

Why emerging companies fail	What successful companies do to be sustainable
<p><i>Financial management</i></p> <p>Fail to manage finances and work over budget on projects (Dubazane, 2013) (Thwala & Phaladi, An exploratory study of problems facing small contractors in the North West province of South Africa, 2009) (Thwala & Mvubu, Current challenges and problems facing small and medium size contractors in Swaziland, 2008)</p>	<p><i>Financial management</i></p> <p>Successfully manage their finances and do not overspend on projects (Msani, 2016) (Thwala & Mvubu, 2008) Current challenges and problems facing small and medium size contractors in Swaziland, 2008) (Aigbavboa, Thwala, & Tshikudo, 2014)</p>
<p><i>Scope</i></p> <p>Fail to understand the scope of works and therefore fail to deliver projects within time. (Dubazane, 2013) (Nguyen, 2004) (Jiang, McPherson, & Wittman, 2014)</p>	<p><i>Scope</i></p> <p>Complete and deliver projects within the required time frame (Dubazane, 2013) (Msani, 2016)</p>
<p><i>Resources</i></p> <p>Hiring incompetent and unqualified workers (Dubazane, 2013) (Macozoma, 2016) (Maccoby, 1984) (Jiang, McPherson, & Wittman, July 2014) (Abor & Quartey, 2010) (Thwala & Aigbavboa, 2014)</p>	<p><i>Resources</i></p> <p>Hiring competent and qualified workers (Dettmer, 1983) (Msani, 2016) (Nguyen, 2004)</p>
<p><i>Communication</i></p> <p>Not proper communication between workers and failing to transmit and share important information (Berman, 2007) (Abbasi, 2012) (Dubazane, 2013)</p>	<p><i>Communication</i></p> <p>Proper communication amongst workers and therefore investing time and money to further develop the workers' knowledge and skills (Msani, 2016) (Dubazane, 2013) (Insight, 2011) (Maccoby, 1984)</p>
<p><i>Project Management</i></p> <p>Managing projects badly and failing to read important contractual documents (Dubazane, 2013) (Rose, 2013) (Msani, 2016) (Jiang, McPherson, & Wittman, 2014) (Karayaz & Gungor, 2013) (Thwala & Aigbavboa, 2014) (Abor & Quartey, 2010) (Thwala & Aigbavboa, 2014)</p>	<p><i>Project Management</i></p> <p>Having total control of the project, managing every aspect of the company and giving support to junior staff members. (Macozoma, n.d.) (Dubazane, 2013) (Msani, 2016) (Thwala & Phaladi, An exploratory study of problems facing small contractors in the North West</p>

Why emerging companies fail	What successful companies do to be sustainable
	province of South Africa, 2009) (Bekele & Worku, 2008) (Aigbavboa, Thwala, & Tshikudo, 2014)
Leadership Poor leadership skills and failing to convert profit into investment (Bekele & Worku, 2008) (Thwala & Aigbavboa, 2014)	Leadership Ability to form good partnerships and keep clients happy (Dubazane, 2013) (Bekele & Worku, 2008) (Msani, 2016)
Technological Evolution Failure to embrace change in technological advancements (Abor & Quartey, 2010)	Technological Evolution Utilization of up to date technology (Nguyen, 2004)
Competition High competition when tendering reducing chances of being appointed (Thwala & Aigbavboa, 2014)	Competition Create partnerships and joint ventures with companies to increase chances of being appointed (Haroun, 2016)

3. Methodology

An online survey developed on Google forms was the chosen method employed to collect data on factors which contribute to unsustainable emerging construction companies. The different stages of the research methodology (Cooper, 2006) is demonstrated in Figure 1.

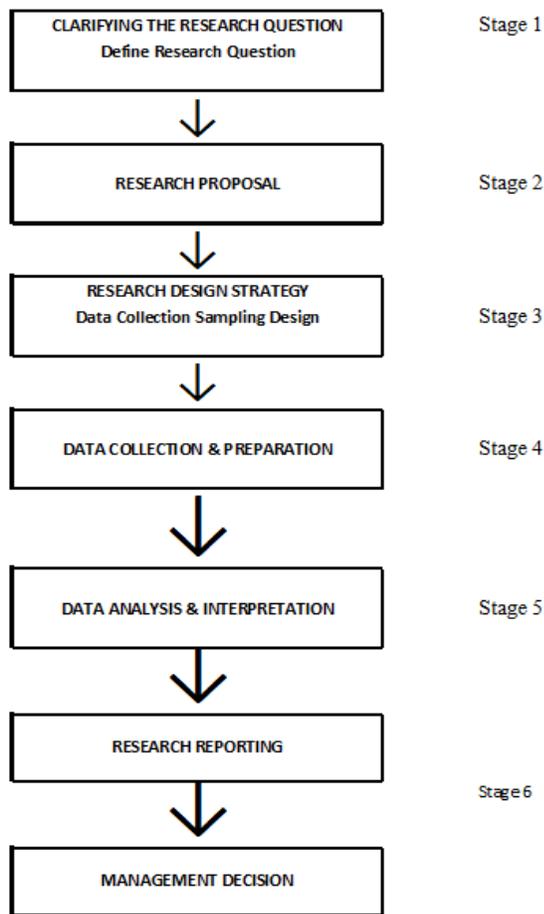


Figure 1: Research method (Cooper, 2006)

During Stage 1 the researchers clarified the research question and Stage 2 was employed to write the research proposal. Stage 3 was devoted to designing the research strategy and deciding on the relevant data collection sampling methodology. Stage 4 was the collection of data and Stage 5 represented data analysis and interpretation. The survey established why emerging construction companies fail to ensure sustainability and how do sustained companies manage to overcome failure. The target respondents where owners of emerging construction companies and people in management positions in the companies. The population size was 14 956 using an online sample calculator developed by CheckMarker (Berman, 2007). The results are indicated in Table 2.

Table 2 - Representative Sample size (Berman, 2007)

Population Size	Margin of Error	Confidence Level	Required Sample Size	Estimated Response Rate	Number to send invite too
14 956	5%	95%	375	30%	1 250

Invitations were sent to a minimum of 1 250 participants to achieve a required sample size of 375. A large sample was selected to ensure more accuracy of the results in terms of estimating population values (Scheuren, 2004). Sampling of the participants was done using the snowballing method (Scheuren, 2004). The survey consisted of eight sections ranging from personal questions to the eight factors identified in literature review. A 7-point Likert scale (Vagias, 2006) was employed to determine the responses for factors affecting emerging construction companies. The data from the questionnaire was exported to Microsoft Excel for analysis.

4. Findings and Discussions

A total of 440 responses were received for the survey of which 390 were from CIDB Grade 1 - 4 companies which are identified as emerging. The remaining responses were from established companies and an average weighted mean was calculated for each response. Each factor discussed in literature had sub-factors, and Table 3 highlights the significant trend derived from the finding.

Table 3. Research result

Rank	Factor		Weighted mean
1	Financial management	7.4 Poor spending on projects	5.56
2	Financial management	7.5 Not recovering outstanding money owed	5.55
3	Financial management	7.3 Working on a tight budget	5.52
4	Financial management	7.7 Exhausting profits	5.51
5	Financial management	7.6 Failure to get funding for projects	5.49
6	Financial management	7.2 Late or non-payment from client	5.48
23	Resources	6.4 Low labour efficiency which in turn affects production	5.32
24	Resources	6.3 Being understaffed in a project	5.27
25	Technological evolution	11.1 Lack of access to appropriate technology	5.22
26	Communication	9.1 Lack of clear guidelines from management	5.20
27	Competition and scope	10.1 High competition when tendering reducing chances of being appointed	5.20
28	Resources	6.2 Investing in workers and sending them for training to further their education	5.20
29	Resources	6.1 Lack of skilled professionals	5.10

There were a total of 29 sub-factors and they were ranked from highest to lowest by the weighted mean. The top six factors are assigned to financial management. The findings indicate that financial management is the biggest factor that causes failure of companies. The findings also revealed that the last seven sub-factors are assigned to the primary factor Resources.

The findings can be interpreted in two ways. It provides an indication that respondents believe that owners are responsible for the company finances; and that leaders of companies must ensure that effective management practices are implemented.

5. Conclusion

The study set out to determine the factors which contribute to unsustainable emerging construction companies. Literature review revealed eight contributing factors which were tested via an online survey. The research revealed that the two primary factors that contribute to failing emerging construction companies are ineffective financial management and a lack of resources.

Future research could be done to include a spectrum of companies from the different industries. The knowledge generated could lead to collaborative partnerships between aspiring owners and established companies to increase awareness amongst the different types of businesses and to share relevant information to understand real world challenges.

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Biographies

Mr Benito Novela completed his undergraduate studies with a National Diploma in Civil Engineering at the University of Johannesburg in 2009. He went on to obtain a B-tech degree in Construction Management in 2011 also at the University of Johannesburg. In 2018 he completed his Masters Degree in Engineering Management at the University of Johannesburg. He has 7 years' work experience in the construction industry working on different mines and key projects in and around South Africa, most notably the construction of the 2010 Fifa world cup stadium Soccer City commonly known as FNB stadium and the fourth Biggest coal-fired power stations in the world Kusile and Medupi power station. In 2015 he left the construction industry and joined the consulting world working in the project management field on water projects. Currently he is working on 2 projects, one being the Lesotho Highlands water project phase 2 and the other being the Olifants Water Resource Development project phase 2D.

Professor Annlize Marnewick is an Associate Professor at the Postgraduate School of Engineering Management, Faculty of Engineering and the Built Environment, University of Johannesburg where she focuses on the supervision of research master's and doctoral students. Before joining the academia she has been involved in the industry with a technical record of 15 years in architecture, design and the implementation of system and software engineering projects with specialisation in requirements engineering. She is a registered professional engineer (Pr Eng) with the Engineering Council of South Africa (ECSA).

Dr Hannelie Nel is a Senior Lecturer at the Postgraduate School of Engineering Management, Faculty of Engineering and the Built Environment, University of Johannesburg. She holds a Doctorate in Engineering Management with twenty years' experience in both industry and academia. Dr Nel is a Fellow of the Southern African Society for Industrial Engineering and currently serves on the Boards of Denel and the Society for Engineering Education. She is an Associate Member of the Institute of Directors in South Africa; and a Member of the International Women's Association.