

THE EFFECT OF ENTREPRENEURIAL ORIENTATION OF SMES AND LABOUR- INTENSIVENESS IN THE CONSTRUCTION INDUSTRY

J. Mayombo
Mpumalanga, South Africa
E-mail: mayombo@blacktari.co.za

*N. Mouton**
North-West University Business School
Potchefstroom, South Africa
E-mail: Nelda.mouton@nwu.ac.za

ABSTRACT

Human resources are valuable and must be well managed to obtain optimal value. Best performances, entrepreneurial orientation and the labour-intensive nature of the construction industry are important factors to creating work, teaching new trades and poverty alleviation.

Objectives: The objectives aim to observe the influence of the construction sector in creating employment through SMEs' orientation and labour-intensive methods. The additional objectives clearly outlined the challenges of small and medium enterprises while describing possible opportunities that the state proposes in the construction industry and job creation within Labour-intensive (LI).

Research Methodology: This research used a quantitative method to describe how the entrepreneurial orientations of small and medium-sized enterprises and labour-intensive enterprises in the construction sector affect employment opportunities in the community.

Outcomes: The research results showed that effective Enterprise-orientation (EO) has a positive impact on SMEs, which

is a key factor in ensuring the success of enterprises. All participants were from the construction industry and most of them felt strongly that the construction industry can;– be the solution to addressing unemployment issues and could subsequently play a pivotal role in the alleviation of poverty,– create and implement policies and program to strengthen their role in the community,– produce opportunities for education and adult learning to correct the skills deficits,– promote fight against nepotism, crimes and corruption.

Keywords: entrepreneurial orientation; labour-intensive; SME; construction industry.

1. INTRODUCTION

Small and medium enterprise (SME) orientation and labour resources are valuable, and therefore they must be well managed to get optimal value and the best performances. The labour component in the construction industry is an important factor for job creation and poverty alleviation. Sub-Saharan countries face a similar challenge of an increasing rate of unemployment among the youth or young adults (Klopper, 2015:18). Individuals need to consider creating self-employment and shy away from the idea of being employed by organisations (Herrington, Kew, & Kew, 2014:19). Herrington et al (2014) further indicate that the corporate sector is failing to create jobs and even the government's efforts to curb unemployment are in vain. Individuals need to familiarise themselves with the fact that large companies and the government are not the sole providers of employment. According to StatsSA (2020), South Africa's official unemployment rate was sitting at 29.1% by the end of the third quarter of 2019.

SMEs in the construction sector are significant contributors to the well-being of the community. The construction industry has been dominated by SMEs (i.e. subcontractors) and it is inevitable to handpick appropriate subcontractors who

*Corresponding Author

will execute almost all the construction activities in projects (Ulubeyli, Kazaz, & Volkan, 2017). The construction sector is one of the largest drivers of employment in the country, with two-thirds of all skill-related employees being employed in the construction sector (Windapo, 2016).

2. BACKGROUND

Priority programmes in infrastructure development or construction are identified by the government to create jobs and alleviate poverty. The growth in poverty rates, sub-standard delivery of basic services and inadequacy of infrastructure are largely experienced around rural areas in South Africa (Skweyiya, 2003:2). This might be the reason why, when an infrastructure project starts in those areas, there is hope in the population not only because of the new infrastructure, but also for numerous opportunities that the project might bring.

3. STATEMENT OF THE PROBLEM

The rate of unemployment is still high despite government intervention, as observed, especially in this pandemic period where unemployment rate struck a record of 30.8% in the third quarter of 2020 (Winning, 2020). Furthermore, SMEs in the construction sector are keen to recruit workers from unemployed groups such as young people, adults and less qualified workers. In the first quarter of 2019, the unemployment rates in the Free State and Mpumalanga were, respectively, 34.9% and 34.2% (StatsSA, 2019). Although the construction sector can be a big generator of employment through SMEs and labour-intensive methods, it has seen a drop in employment during the last quarter of 2019 (Zama, 2019) (CCMA, 2019).

This research will investigate how much work can be created by a construction project with a labour-intensive method and strategies taken to propel SMEs in the construction sector to create more employment.

4. RESEARCH OBJECTIVES

The objectives are as follows:

- Explore SMEs and LI as schemes for job creation in construction;
- Describe and discuss challenges faced by SMEs and LI in construction; and
- Determine possible opportunities that the state proposes to uplift SMEs and LI in the construction industry.

5. SCOPE OF THE RESEARCH

This research aimed at investigating how the construction sector through SMEs and LI creates jobs and emancipates poverty. People working in the sector from different backgrounds were interviewed to obtain accurate data. The researchers focused on two provinces, Mpumalanga and the Free State, where there are high employment rates in the construction and statistician companies. Furthermore, the possibility exists that SMEs' orientation and LI can be part of the entrepreneurial solution to create considerable employment. Therefore, the alleviation of poverty was explored.

6. LITERATURE REVIEW

For many years, governments around the world and the South African government, in particular have used public works programmes and the labour-intensive method as a way of creating employment for the poor, preferring the labour-based method of work in public works programmes rather than machinery work. Certain tasks have created programmes to promote labour employment, people to perform tasks and activities, and therefore creating work and reducing poverty, increasing income and infrastructure development; however, one question remained. Many studies have identified these factors as the main contributors to poor productivity and performance in the construction industry (Ninno, Subbarao, & Milazzo, 2009).

6.1 *The role SMEs play in the economy*

According to the research by Cant and Rabie (2018), the following are the roles SMEs play in the economy:



- They are major drivers of growth in the economy.
- They are essential if the market is to be competitive.
- They reduce poverty in developing countries.
- They can adapt faster and easier to changing market needs.
- They can also institute structural change as most small businesses introduce innovation that alters market conditions.

6.2 SMEs and the informal sector

SMEs contribute significantly in addressing the unemployment problem in South Africa by providing jobs to people. Additionally, the informal sector contributes to addressing unemployment issues in the country and the government tends to focus on the formal sector when reporting on employment trends within the country. The informal sector tends to be ignored, especially by the National Development Plan (NDP), when reporting about the economy and employment. The NDP's analysis and policy recommendations must include the informal sector, as it plays a pivotal role in addressing unemployment issues (Fourie & Kerr, 2017). However, the NDP expects the informal sector (plus domestic work) to come up with two million new jobs by 2030 (NPC, 2012:121-2). This generates many questions on how the sector should be included and approached in the NDP analysis and policy design as a critical contributor in job generation (Fourie & Kerr, 2017).

6.3 Social entrepreneurship

Some of the problems caused by government failures and unstable markets can be addressed by social entrepreneurship. With limited resources, social entrepreneurial firms or individuals tend to come up with a unique set of approaches and tactics to generate significant solutions for their communities. Recent trends have shown that women's participation in social entrepreneurship has increased due to the availability of training programmes and

local setups to upkeep women's business ownership. This continues to create a positive impact within communities around the world (Henry et al., 2013).

6.4 Labour-intensive (LI) method

SMEs tend to employ more labour-intensive production processes than large enterprises do (Olawale & Garwe, 2010). As a result, employment opportunities are created leading to the generation of income, and poverty reduction within communities (OECD2014). Labour-intensive construction methods entail finding the proper mix of labour and machines in producing quality products.

In present-day South Africa, the provision of urban infrastructure falls within the realm of socio-economic development. No longer is only the physical provision of infrastructure of importance, but also the livelihood of the beneficiary communities. Included are the creation of employment opportunities and an income for the people, the transfer of skills in equipping them for the future and the pursuit of opportunities for the development of small contractors. Some propagate a change in civil engineering construction methodology as one of the strategies to achieve these broader objectives. Labour-intensive construction techniques, with their larger employment multiplier, lower capital requirements and larger direct community interaction, are hailed as one of the solutions.

6.5 Sme's and LI contributions in rural development

By creating jobs, providing taxes and contributing to GDP, SMEs are one of the main drivers of economic development. However, among African SMEs, in addition to playing an active role in economic development, many SMEs also face many challenges. These challenges include corruption, poor management, shortage of capital and infrastructure (Muriithi, 2017). SMEs and LI are involved in all major sectors and are the link between simple to complex industries. They also provide an

opportunity to uplift the livelihoods of the rural inhabitants. However, SMEs in rural areas encounter numerous challenges that slow their growth and limit their long existence. Business failure is an everyday event and the rate of LI depends on the duration and number of projects to create employment (Lakew, 2017).

6.6 Entrepreneurial orientation

According to Lomberg et al. (2017:1), entrepreneurial orientation (EO) is a process where strategy is made and when an organisation is provided with a basis for decisions and actions that identify with entrepreneurial characteristics. This allows the organisation to create a competitive advantage. Wales and Covin (2012) further states that EO is a strategic decision-making process practised by a company within the entrepreneurial context. An entrepreneurially-oriented organisation can therefore be named as the one that is always innovating when coming to market products; it makes risky decisions and ventures, always thinks ahead of its competitors by bringing pro-active innovations, and also beats competitors by being highly competitive (Martínez, Galván, & Palacios, 2016:539).

By having a strategic dimension into EO, companies can be sustained over time as their entrepreneurial actions are repeatedly executed or recur frequently (Wales, 2016:4). This means that organisations consider managerial strategies and also sustainable entrepreneurial behaviour if they are to engage in uncertain, entrepreneurial activities over time. EO is also embarked upon because organisations and companies would like to have positive outcomes in their performance indicators such as firm growth, new venture creation, and financial performance (Boling, Pieper, & Covin, 2016:891).

EO has influenced many business-level outcomes such as marketing competencies, strategic alliances, and technology commercialisation. There are two ways in

which entrepreneurial orientation can be conceptualised, which are unidimensional and multidimensional constructs (McKenny, Short, Ketchen Jr, Payne, & Moss, 2018:505). The unidimensional construct of EO refers to processes that are undertaken by organisations that reflect their entrepreneurial intentions within their organisation as a whole or their business units (Covin & Wales, 2019:4; Lomberg et al., 2017:2).

The second construct of EO is a multi-dimensional approach. This is defined by Lumpkin and Dess (Covin & Wales, 2019:4; Lomberg et al., 2017:2) as looking at an organisation as an entrepreneurial attribute in that all entrepreneurial activities are applied across an organisation. Each dimension is independent of the other and has its effect on the performance of the firm or its desired outcome. Anderson, Kreiser, Kuratko, Hornsby and Eshima (2014) proposed some new structures that divide EO into two dimensions, namely the management attitude to the risk dimension and the entrepreneurial behaviour dimension (Covin & Wales, 2019:5). Entrepreneurial behaviour is a combination of innovativeness and proactiveness, while managerial attitude toward risk is the conceptual domain of the firm.

6.6.1 Autonomy

Hughes and Morgan (Ndang, 2017:69) refer to autonomy as “right and independence afforded by an individual or team to modernize a business concept and vision and to channel them toward completion”. This is the freedom that employees are given to think innovatively without being pressured and also to make very important decisions that can help the organisation progress without consulting anybody from the higher position.

If the organisation allows innovativeness, autonomy is practised, giving everyone the opportunity to make decisions and that promotes innovation among them. Autonomy therefore is the freedom of



employees to take risks that can help the organisation progress and also with the performance of the organisation (Verachia, 2017:27). For small businesses, it is their most powerful tool as they are mostly in a flatter structure.

6.6.2 Innovativeness

According to George W. Downs, Jr. and Lawrence B. Mohr, 1976:700-714 (Calabrò, Minola, Campopiano, & Pukall, 2016:511; Martínez, Galván, & Palacios, 2016:539), innovative organisations can easily restore themselves in terms of their products and their business lifecycle where they have an opportunity to create wealth, employment and remain sustainable. According to Lumpkin and Dess (Calabrò et al., 2016:511), innovativeness can be defined as an organisation's ability to engage, experiment through their research and design, as well as explore novel ways and innovative processes that produce new quality products. It is also with the acceptance of management that these innovations are given a chance to be implemented or introduced to the market (Taheri, Bititci, Gannon, & Cordina, 2019:1228). This process can result in one acquiring new knowledge from outside or developing one from the organisation's research and design team (Etriya, Scholten, Wubben, Kemp, & Omta, , 2018:972).

6.6.3 Proactiveness

Proactiveness refers to an organisation's decision to introduce new products or services before everyone else; putting in place sustainable strategies that will ensure that an organisation survives turbulent markets; looking at market trends and adjusting strategies to maximise performance, growth and profits; entering blue ocean markets before competitors; and also pursuing market leadership jobs (Lomberg, Urbig, Stöckmann, Marino, & Dickson, 2017:3).

Taheri et al. (2019:1228) further add that those organisations that aggressively and actively pursue initiatives and

opportunities where they intend to increase competitive capabilities by acquiring new businesses, being first in the market to introduce a product, and also putting in place strategies to avoid stagnation are being proactive or engage in proactive processes of entrepreneurial orientation. Proactive organisations can also predict future challenges and act to prevent them from affecting their performance (Hussain, Rahman, & Shah, 2016:390).

6.6.4 Risk-taking

Risk-taking is a tendency of an organisation to engage in high-risk activities in the pursuit of higher returns, which also involves taking bold decisions in uncertain environments (Taheri et al., 2019:1228). This includes committing large portions of company assets and borrowing heavily to projects that are risky and returns are uncertain.

Within the context of small businesses, risk-taking is almost calculated, but can also have adverse effects as the mortality of small businesses is very high (Ndang, 2017:66). The advantage of taking risks ensures that the organisation can manage uncertainty as opposed to encouraging the fear of taking risks as it can paralyse an organisation in uncertain market conditions. Risk-taking can also have a positive effect as it can encourage organisation growth if it is well planned, and also stimulate innovation that triggers growth and performance of small businesses.

6.6.5 Competitive aggressiveness

Competitive aggressiveness is characterised by beating competitors in the same market and customer by competing through aggressive marketing strategies, quality or competing on low cost that competitors cannot match (Sole, 2018:41). Other aggressive strategies can involve being highly innovative and proactive to beat industry uncertainty. Competitive aggressiveness lies in an organisation's strength to be innovative and be proactive as organisations put strategies in place to aggressively act towards any competitors.

One challenge for small businesses might be knowledge acquisition as it can be challenging for small businesses to enhance their human development programmes as employees acquire knowledge through human resource development programmes (Ndang, 2017:68). Through knowledge acquisition, they could innovate, and therefore they could be having trouble being aggressive if they do not have a proper knowledge acquisition system in place.

6.7 Relevance of EO

According to Covin and Miller (2014), (Eshima & Anderson, 2017:770), EO is a strength of organisations that favours entrepreneurial activities and processes. EO does not discriminate regarding organisation size and/or age. Arshad and Rasli (2018:28) found that organisations with higher levels of EO allow themselves to outperform other organisations that are non-entrepreneurial.

Organisations put in place strategies that ensure their sustainability in the market and therefore organisations look into themselves and decide on which strategies they will employ to compete in the market (Eshima & Anderson, 2017:770). EO is part and parcel of strategies employed by organisations that want to succeed in the market. Firms with high EO usually get high-performance results in that they are likely to avoid uncertainty in the market or worry about under-performance (Titus Jr, Parker, & Covin, 2019:2). According to Hussain et al. (2016:390), strategic EO that organisations undertake include organisational renewal, improving revenue streams in innovative ways, success in other regions like international markets or spreading nationally, increasing effectiveness, introducing innovative products and services, and using resources efficiently and effectively.

6.8 EO on organisational performance

Organisational performance can be measured by its ability to generate profits, or its ability to meet or exceed its projected

output (Mafundu & Mafini, 2019:3). Many factors contribute to this. Internal factors may include organisational structure, management or leadership practices, operational efficiencies, and mergers and acquisitions. External factors may include political and social factors affecting the market.

Business performance therefore can influence profitability, customer service delivery, meeting or exceeding customers' demands and market needs. As much as EO is linked to accounting performances such as sales growth, return on assets and return on equity (McKenny et al., 2018:507), different dimensions of the EO construct can have a positive effect on certain portion of performance, while having negative effects on others (Núñez-Pomar, Prado-Gascó, Sanz, Hervás, & Moreno, 2016:5337).

Performance can also be measured by organisations' ability to maintain growth amid constraining factors such as competitive pressure from the market, resource acquisition, market changes, and management or shareholder desires (Eshima & Anderson, 2017:770). When organisation grow, they acquire new resources and therefore have more value, which then translates into better performance (Eshima & Anderson, 2017:771). EO therefore has growth as its number one outcome, followed by knowledge expansion, strategic learning and improved competitiveness.

7. RESEARCH ETHICS

All prescribed research protocols according to the NWU Research Ethics Policy were observed and Covid-19 protocols were strictly adhered to. Ethic number NWU-00834-20-A4.

8. RESEARCH METHODOLOGY

This is a quantitative research where a cross sectional research design approach was used by making use of a structured questionnaire to gather information from a pool of participants with varied characteristics. The cross sectional research design was



relatively quick and easy to conduct and contained multiple variables where the questionnaire developed was categorised into three sections, namely entrepreneurial orientation, labour-intensive and business success, and demographic information. The new questionnaire developed was based on existing questionnaires about enterprise orientation and new questions were developed for business success with labour intensive. The target population was managers, owners and employees of small and medium-sized enterprises in the construction industry, as well as colleagues in the construction industry (engineers, architects and project managers), consulting engineer companies, municipalities, as well as Mpumalanga Province and Liberty State's departmental province. The population was restricted to these two provinces because of budgetary and time constraints. This research used a stratified probability sample and snowball sampling. In this sampling strategy, one participant can recommend another participant who might be helpful for the research that will be done (Leavy, 2017:149). Therefore, various employees in small and medium-sized companies in the construction and consulting engineers' sectors and governmental sector were targeted, who then referred the researchers to other construction companies and local government or department employees. Targeted SMEs, companies and individuals were sent the questionnaires by emails, WhatsApp, using the Google Form link. Google form is HIPAA compliant thus protecting sensitive information and user authentication; also the feature for anonymity was enable through the form's setting. As the form was web-based and could be shared via the link, responses could be received and reviewed in the Google Form. The researchers distributed the questionnaire to ± 250 SME owners/managers, technicians, engineers, construction industry officials, and only 100 answered. The nature of the research and the characteristics of the collected data allow us to use the Social Science Statistical

Software Package (SPSS) as the most suitable analysis tool for data analysis). In this research, the McNemar-Bowker test analysis technique was used to analyse the data in detail. The inferential statistics of the data for the respondents who participated are based on the chi-square test statistics for the association between significant variables only.

8.1 Validity

Validity is defined as the number of elements of the evaluation tool that fit and explain the target hypothesis for a specific evaluation purpose (Yusoff, 2019). The assessment instrument in this research refers to the questionnaire, which is the method used to gather data and it must be sound and refer to all aspects of the measurement procedure, like assessing the entrepreneurial orientation of SMEs while creating more jobs with labour-intensive methods and at the same time enhancing the operation of SMEs. Content validity should be used together with structure validity to evaluate research and clearly define research questions. Before distributing the questionnaire for the main research, the preliminary version of the questionnaire was distributed to some colleagues in the construction field. During the preliminary research process, it was established that 15 to 20 minutes are required to complete the questionnaire. Bertram and Christiansen (2014:186) stipulate that structure validity can determine whether the data collection methods and tools used can measure and answer research questions. The effectiveness of the construct can be measured by measuring sampling adequacy (MSA) or Kaiser-Meyer-Olkin (KMO), ranging from 0 to 1; in this research we used the KMO with a minimum value of 0.70 as acceptable (Field, 2013) and the KMO was 0.883.

8.2 Reliability

The questionnaire is reliable when another researcher can still obtain the same results from the reproducibility of the same research in the original research. If the collected

results are the same or similar, the same process must be repeated in the future to achieve reliability (Singh, 2017: 795). The consistency between similar questions should be observed, and different people answering the same questionnaire should be graded in the same way. This study used Cronbach's alpha's coefficient to measure the reliability and internal stability of the data collected by the questionnaires. An alpha coefficient of 0.70 is regarded as reliable (Field, 2013) and the value obtained was 0.964.

9. DATA ANALYSIS

9.1 Entrepreneurial orientation

There are 29% and 19% of respondents who agree and strongly agree respectively that they have autonomy in doing their jobs and that they are not continually supervised to do their work, while 35% of respondents remained neutral about the matter. This latter statement is represented by the mean of 3.43 (higher than 3) and a skewness value of -0.391 (negative). This means that, the minority of respondents respectively disagree and strongly disagree.

The analysed data indicated that the average of A2 results is 3.65 and the skewness is -0.486, which means that most respondents agree and strongly agree that their business allows them to be creative and try different methods at work. Regarding A3, the average is 2.72 and the skewness is 0.364, which shows that most of the interviewees strongly disagree and do not allow employees in their businesses to make decisions without going through detailed formulation, argumentation and approval procedures. There is an approval process in the business structure of the respondents. The mean value is 3.77 and the skewness value is -0.366, indicating that most of the respondents responded to the categories of strong agreement and agreement. Some people held a neutral attitude and believed that they encouraged employees to manage their work and were flexible to solve the problem. This reflects employees who work independently. In short, most respondents

chose categories that strongly agree, and agree that an average value greater than 3 and the negative skewness is at least -1. Their business is always looking for new opportunities. In the past few years, their processes, services and product lines have undergone tremendous changes. There is a strong relationship between the number of new ideas generated and the number of new ideas successfully implemented. Their business attaches great importance to continuous improvement of product/service delivery/process. When faced with uncertain decisions, their business usually takes a bold stance to maximise opportunities. Usually, their business tends to take on high-risk projects. Due to environmental reasons, their companies believe that bold and extensive behaviour is necessary to achieve corporate goals. Employees are often encouraged to take a planned risk on new ideas. The term risk-taker is seen as a positive attribute in an employee's business.

9.2 Labour-intensive and business success

According to Table 1 in column B1, the median is 3.7429, which means that most respondents agree and strongly agree that their business has experienced labour-intensive methods and achieved positive results in the past few years. The standard error of the average is 0.9482, which is relatively small and can confirm the reliability, which shows that our average is relatively close to the true average of the population. The skewness close to zero indicates that most respondents are neutral on the statement. A negative value of skewness indicates that the respondent is consistent and very consistent with the statement, while a positive value indicates that most respondents disagree and strongly disagree with the given statement. Therefore, a skewness of -0.522 means that most respondents agree and strongly agree that their business has experienced labour-intensive methods and achieved positive results in the past few years.

**TABLE 1: LABOUR-INTENSIVE AND BUSINESS SUCCESS DESCRIPTIVE STATISTICS**

		Statistics							
		B1	B2	B3	B4	B5	B6	B7	B8
N	Valid	100	100	100	100	100	100	100	100
	Missing	0	0	0	0	0	0	0	0
Std. error of mean		.09482	.10587	.10200	.10664	.10469	.09434	.10964	.12082
Median		3.7429a	3.5714a	3.5522a	3.3438a	3.5143a	3.6957a	4.0746a	3.6667a
Std. deviation		.94815	1.05868	1.02000	1.06643	1.04693	.94340	1.09637	1.20818
Skewness		-.522	-.340	-.379	-.250	-.565	-.321	-.690	-.483
Std. error of skewness		.241	.241	.241	.241	.241	.241	.241	.241
Kurtosis		.058	-.563	-.384	-.591	-.061	-.415	-.467	-.609
Std. error of kurtosis		.478	.478	.478	.478	.478	.478	.478	.478
		Statistics							
		B9	B10	B11	B12	B13	B14	B15	
N	Valid	100	100	100	100	100	100	100	
	Missing	0	0	0	0	0	0	0	
Std. error of mean		.11290	.09721	.11753	.10778	.11254	.11534	.09640	
Median		3.5246a	3.6761a	2.8214a	3.7778a	3.8226a	3.8966a	4.3544a	
Std. deviation		1.12900	.97214	1.17529	1.07778	1.12542	1.15343	.96400	
Skewness		-.481	-.582	.107	-.657	-.835	-.862	-1.105	
Std. error of skewness		.241	.241	.241	.241	.241	.241	.241	
Kurtosis		-.616	.152	-.806	.067	.216	.122	.568	
Std. error of kurtosis		.478	.478	.478	.478	.478	.478	.478	

a. Calculated from grouped data

In column B2, the median is 3.5263 and the skewness is -0.340, which implies that most respondents agreed and strongly agreed that their business has experienced labour-intensive methods with positive outcomes over the past few years. The standard error of the mean of 0.09482 is relatively small and confirms reliability with an indication that the mean is relatively close to the true mean of our overall population.

Overall, Table 1 revealed the median values greater than 3 and the negative skewness values. This is an indication that the majority of the 100 respondents

had selected the response categories of strongly agree and agree from questions posed in the questionnaire about labour-intensive and business success. Therefore, with the implementation of labour-intensive methods, the competitive position of enterprises has improved in the past few years. In the past few years, the effectiveness of implementing labour-intensive methods has increased. In the past few years, the business efficiency of respondents has improved. In an enterprise, employees and labour are regarded as the most valuable assets in the enterprise or project. Where possible, companies are highly committed

to labour-intensive companies. In the past few years, the moral satisfaction of our employees has improved. Additionally, our business image has improved relative to our competitors. The presence of skilled and professional technical staff such as supervisor/designer/engineer/project manager, with relevant experience and knowledge to implement labour intensive, is indicated. The respondents' businesses monitor and measure labour productivity. They look at issues that affect labour productivity. The more jobs the respondents' businesses create in the community, the more it helps to alleviate poverty. It is known in this regard that the success of a business and its entrepreneurial endeavours cannot be separated from the labour-intensiveness of teams and individuals that institute the wider employee base of the business success.

In column B11, shows to be the only variable with a median of 2.8214, which is less than 3 and the positive skewness of 0.107, indicating the majority of respondents in this regard have chosen the category of strongly disagree and disagree. Therefore, in difficult economic times, labour-intensive methods and development will not continue, and fiscal cuts will be drastically reduced. According to Lyubomirsky, King, & Diener, (2005:804), a behaviour that shows a positive work attitude toward a new goal may be similar to showing an active attitude. This behaviour is called a positive effect. Therefore, the respondents in this section have shown characteristics related to positive influence, including self-confidence, optimism and self-efficacy.

9.3 Demographic information

9.3.1 Respondents' age

The results showed that the majority of 29% and 26% of the respondents strongly agree that their business can enable them to be creative at work and try different methods. Although 31% of the respondents held a neutral attitude, 9% and 5% of the minority of respondents held different opinions and strongly opposed the matter.

9.3.2 Highest academic qualification

The majority of 41% of respondents have a degree, followed by 26% of 100 respondents with a diploma and 12% with a master's degree. Among the 100 respondents, only 2% and 5% had certificates and others, respectively.

9.3.3 Management level

There is a majority of 25% of respondents in the category of senior management level. Twenty-three percent (23%) of respondents are in middle management, followed by 21% of respondents on director level. Only a minority of 8% and 4% of respondents are respectively in the supervisor and other management levels.

9.4.4 Years of experience

It was noted that 36% of respondents have experience of 11 to 15 years, followed by 28% of respondents with four to 10 years of working experience. 16% of 100 respondents have experience of 16 to 20 years. Only 9%, 7%, and 4% of respondents, respectively, have zero to three years, 21 to 25 years and 25+ years of working experience.

9.4.5 Category of employee's business operation

The majority of 42% of respondents operate in consulting engineering, followed by 16% of respondents who operate in civil construction. 15% are in services, 14% are in building construction, 5% are in the department, 4% are in architectural and 2% are in supplies. Only 1% of respondents are respectively in municipality and agencies.

9.4.6 Number of jobs that were created in the latest project

The majority of 60% of respondents have indicated that fewer than or equal to 20 jobs were created in the latest project. This is followed by 23% of respondents with fewer than or equal to 50 jobs, 9% of respondents with fewer than or equal to 100 and 2% of respondents with fewer than or equal to 150 jobs. Only 6% of respondents have at least 150 jobs from the latest project.



10. DISCUSSION OF FINDINGS

According to Adedokun and Burgess (2012:126), the McNemar hypothesis testing is applied for testing the binary responses are unchanged; whereas, Bowker (1948:572) extended the McNemar test by introducing the multi-response testing on the nominal variable with the same categories. The method applied in this research for comparison of responses is known as the McNemar-Bowker test. According to Schober, Boer, & Schwarte, (2018:1763-1764) and Cohen (2013), the correlation coefficient (r) can be divided into three categories. For the statistical results of this inference, the impact size is set to 0.3, which has practical significance.

Inferential statistics need to be applied to datasets to determine the relationship between responses to entrepreneurial attitudes and the success of labour-intensive companies. The following discussion describes the evaluation of propositions through inferential statistics.

Proposition 1, the research found that the more employees become independent in their work and business, the more businesses regard them as the most valuable asset. According to Lumpkin et al. (2009), autonomy provides organisational members with the freedom and flexibility to develop and formulate entrepreneurial plans. The research findings are in line with that of Lumpkin et al. (2009). An entrepreneurial orientation viewpoint on autonomy, by contrast, suggests decision-making and action outside of the construction institutional chain of command involving choices about entrepreneurial initiatives that have strategic implications. One of those strategic implications can be encourage sub-contractors or consultants on implying the LI framework to stimulate job creation.

Proposition 2, the research results found that the more the business continually pursues new opportunities, the more it becomes efficient, which has led to business

improvement over the past few years and therefore can assist the state on creating new policies for new job opportunities in the sector and supervise pilot project to experiment those new policies.

Proposition 3 revealed that the more the business continually pursues new opportunities, the more the image statue of the business grew over the years, i.e. relative to their competitors. Competition in the sector is one of the biggest challenge encounter by SMEs with new opportunities it gives a bigger fields of operation where others are not interested or well equipped to accomplish those.

Proposition 4 further reveals that the more the business continually pursues new opportunities, the more the business focuses on issues that affect labour productivity. Use the initiative, risk and innovation of EO to collect the purpose of business improvement. This finding is consistent with the market knowledge view that SMEs and more collaborators and EOs have more market information, and there are signs of exploring new market opportunities, which will be better completed (Ferreira et al., 2015; Cheng & Krumwiede, 2012). The objective of exploring the entrepreneurial orientation of SMEs and labour-intensive methods as schemes for job creation in construction is met been through Proposition 4. Where it is revealed that the more the business continually pursues new opportunities, the more the business focuses on issues that affect labour productivity. In this case, labour productivity refers to job creation in the construction sector. This is evidence that when business continually pursues new opportunities the unemployment rates of 34.9% and 34.2% for the Free State and Mpumalanga reported for the first quarter of 2019 by Statistic South Africa can be mitigated and reduced significantly (StatsSA, 2019).

Proposition 5 establishes a high degree of commitment to labour intensity, which is mainly reflected in the high emphasis

on continuous improvement of product/service delivery/business processes. If it is determined that the contribution of entrepreneurial orientation dimensions to entrepreneur performance is mixed in this particular case, then this finding is consistent with the findings of Callaghan and Venter (2011), and its impact is along the entrepreneurial performance measured by entrepreneurs' inner dimension of the process. Satisfaction is not an external dimension of entrepreneurial performance measured by income. This finding is one factor contributing to the objective of describing the challenges faced by SMEs and labour-intensive methods in the construction business.

Proposition 6 reveals that it is widely believed that innovation is a direct requirement of an enterprise in the future, which is closely related to the efficiency of the enterprise (doing things right). In the past few years, the efficiency of the enterprise has improved.

Proposition 7 found that people generally believe that innovation is necessary for the future of the company, which is highly correlated with the company's image (status), because the company has grown in the past few years relative to its competitors. These findings are consistent with the views of Rhee et al. (2010). Innovation plays an important role in improving company performance, and the innovative thinking style of managers has a significant impact on the performance of small and medium-sized enterprises.

Proposition 8 found that business leaders seek to get the most value from opportunities without limiting existing models, structures or resources. This is closely related to business employees and labour and is regarded as the most valuable asset in a company or project.

Proposition 9 found that, due to the process of companies monitoring and measuring labour productivity, companies are usually the first to introduce new products/services/

processes due to their process of monitoring and measuring labour productivity. According to Chaston and Mangles (1997), the adoption of information systems may allow adequate information flows and learning for decision-making, productivity and customer service support purposes.

Proposition 10 states that business actions that competitors respond to are highly influenced by the business' monitoring and measurement of labour productivity.

Proposition 11 states that companies usually adopt a very competitive attitude to deal with competitors, to research the problems affecting labour productivity. These problems affecting productivity are related to initiative, which is related to the advantages of first-mover businessmen and is reflected in seeking opportunities, a forward-looking perspective before competition, and anticipating future needs to create change and shape the environment (Lumpkin & Dess, 2001).

Innovative industry markets where competition is most concentrated look at SMEs' internal capabilities that are correlated with growth, especially when linked to an entrepreneurial orientation.

The challenges faced by SMEs and labour-intensive construction methods are evident in the results. The evidence is highlighted by Proposition 9 and 11, whereby some businesses are usually the first to introduce new products/services/processes due to their process of monitoring and measuring labour productivity. Also, some businesses adopt a very competitive attitude to deal with competitors. These sentiments were strongly agreed upon by participants' responses from the questionnaire.

The objective of determining possible opportunities that the government proposes to uplift SMEs and LI in the construction industry is highlighted through some reports. According to the PricewaterhouseCoopers (PwC) in their SA Construction, 4th edition



report indicated that the South African government which initiated the National Development Plan (NDP) indicates that there will be the inception of public infrastructure investment of R 810 billion over the next few years to boost the construction industry's growth (SA construction, 2015).

According to the Construction in South Africa—Key Trends and Opportunities to 2024, the South African government rolled out an ambitious R858.78 billion Economic Reconstruction and Recovery Plan to reindustrialise the economy by focusing on small businesses and strengthening medium and large ones and accelerate economic reforms to unlock investments.

11. RECOMMENDATIONS

The results of this research can help formulate unique strategies to help South Africa's small and medium-sized enterprises transform early, thereby ensuring job creation in Mpumalanga and the Free State Provinces and obtaining long-term returns for the shift to sustainable construction industrial path. However, the provincial governments of the two provinces will have to invest in policy implementation that will contribute to and strengthen the economy as a whole, through the construction industries.

According to Smyth (2008), stakeholder management theory or policy must shift from a power-based analysis method to a moral care responsibility identification method that adopts active management, which is crucial.

For industrial construction stakeholders:

- the research recommends that the South African provincial government should implement policies and programmes to strengthen the construction industry in these two provinces. Therefore, the effect of reducing poverty and unemployment in their communities will be obvious;
- data analytics in provincial offices should contain necessary technical

skills for implementation and evaluation of entrepreneurial orientation;

- train engineers on employment creation and train them in specific planning skills, monitoring, implementation and evaluation of large labour-intensive programmes;
- public support for SMEs, support programme, community participation;
- construction technology that is pragmatic and innovative in nature to create more work for unskilled workers;
- access to finance so SMEs shouldn't rely on internally generated funds which are not sufficient to support expansion and growth;
- government and training institutions and the private sector need to work together for skill revolution;
- encourage more people to start their own businesses, to be entrepreneurs and self-employed;
- fight nepotism, crimes and corruption.

12. LIMITATIONS OF THE RESEARCH

The focus of this research was on the impact of business-oriented and labour-intensive methods on small and medium-sized enterprises operating in Mpumalanga and the Free State Province. Therefore, the research was limited to certain specific areas around South Africa. The analysis unit was also limited to managers, owners and employees of small and medium-sized construction enterprises engaged in the construction industry, consulting engineer companies, and municipalities (such as engineers, architects and project managers). A cross-sectional research design was used and the results cannot be generalised.

13. IMPLICATIONS

Commitment and understanding of top management is seen as an important factor for adopting new management practices and implementing LI methods to stimulate job creation. Most of the time in SMEs ownership is combined with management,

with subjectivity in decision making thus making very important that top management need to be trained or have the adequate qualification to run the enterprise or else employ necessary personals, well trained and educated with adequate knowledge of the construction industry to implement proper strategies. Labour intensive process is aimed at achieving higher level of productivity while creating the most possible employment with the involvement of the workforce and application of manual tasks. The workforce are exposed to different influences and play a significant role in the enterprise orientation of the organization and ensure successful implementation of change.

14. CONCLUDING REMARKS

In terms of income and job creation, SMEs are important pillars of South Africa's economy and society and will continue to do so. However, the continuous increase in the unemployment rate in South Africa is still a constraint on the growth and transformation of SMEs. However, the operation, growth and sustainability of these SMEs are hindered by many constraints, including cheap foreign labour. In this regard, the research focuses on creating employment opportunities through SME-oriented and labour-intensive methods (LIM) to address concerns about the impact of the construction sector. Investment in labour methods to infrastructures can generate much needed employment for the poor and can as well be technically and economically efficient, such method have the advantage to focus on local resources.

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