

BUSINESS SUCCESS FACTORS AND THE SMALL AND MEDIUM SIZED CONSTRUCTION COMPANY IN SAUDI ARABIA

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ABSTRACT: The aim of the present paper is to explore basic factors that assist new and existing small and medium sized construction enterprises (SMEs) to be successful. This paper reports on the results of a preliminary study that examined these factors globally. Then the paper examines the findings in the context of construction contracting firms operating in Saudi Arabia (SA). The paper presents a literature review conducted to determine basic factors affecting the performance of small contracting companies. This review identifies a large number of factors that are seen as being potentially significant in delivering organisational success. The paper identifies intra and inter organisation success factors and asserts that their recognition can lead to company success. Also, the paper suggests a business success model that is based on the factors identified. The next phase of the work involves exploring the relationship between project cost control and business success in more depth via a small number of project-centered case studies so as to develop an initial conceptual model of business maturity. The paper contributes to the body of knowledge available on SMEs in construction and identifies factors thought to be some of the keys in driving forward the management and practice performance agenda in the construction industry.

Keywords : Business success, construction, management systems, SMEs

INTRODUCTION:

Small business owners continue to demonstrate their extraordinary capacity to organise resources and generate new jobs. National federation of independent businesses (NFIBs) stated in their last survey in December (2004) that ‘Small-business optimism remains high, firms are looking for new employees’. What assists them in comparison with larger companies is their greater flexibility in being able to respond to shifting markets and their ability to produce new products and services to market much faster than larger companies (Scozzi, 2005). To start a new business and to remain in business profitably a company must be able to adopt a number of factors that lead to success. In order to address these factors, sound intra and inter organisation success factors are more important than ever before.

The characteristics, definitions and explanations of small and medium construction companies are vital to provide a broad understanding of their business management approaches. There is no single definition of a small firm, mainly because of the wide diversity of businesses (DTI, 2004). In the case of the construction industry of Saudi Arabia (SA), it is difficult to obtain a definition for these firms as the industry is controlled by many governmental departments and authorities (AL-SHARIF, 2002). However, by considering the classification category of the contractors in SA and the relevant professional bodies a definition can be formed as follows:-

In SA the classification of a small construction firm is that it must satisfy at least two of the following criteria: (at the time of writing this paper, the Sterling pound = 7.1 Saudi Riyal (SR)):

- (i) A turnover of not more than 5 million SR.
- (ii) A balance sheet total of not more than 2.5 million SR;
- (iii) A workforce of not more than 30 employees

Similarly, to be classified as a medium-sized company a firm must satisfy at least two of the following criteria:

- (i) A turnover of not more than 15 million SR;
- (ii) A balance sheet total of not more than 7.5 million SR;
- (iii) A workforce of not more than 150 employees

However, in practice, companies which are nominally targeted as small firms accept a range of working definitions depending on their particular objectives. The small construction companies differ from the large construction companies in the attributes of the projects' size, financial plan, resources and management system (Turner and Payne, 1997). In the management of small to medium sized projects, which are the core business of the small construction company, the main emphasis is on the prioritisation of resources across several projects. Small projects also can not embrace the bureaucracy of procedures designed for larger, more complex projects (Turner and Payne, 1997). The aim of the present paper is to present the results obtained from a literature review on those basic factors that contribute to the success of SMEs. The factors identified were then classified as factors affecting either the intra or inter organisational performance of these companies.

The paper starts with a review of the characteristics of small contracting companies in order to understand their current management tools, systems, problems and opportunities. Then the paper presents intra and inter organisation success factors followed by discussion and conclusion sections.

CHARACTERISTICS OF SMALL CONTRACTING COMPANIES:

The characteristics of SMEs found in the literature can be divided into negative and positive. The positive characteristics are those that lead the company to success and the negative characteristics are those that restrict the company in their wish to move ahead in its business.

Starting with the positive characteristics, the bill of quantities is often cited as being the primary tool of management and control of projects (Turner and Payne, 1997). The use of a bill of quantities is a positive characteristic of a small contracting company because its use can reduce the time for planning and scheduling for the projects, even though it does not reduce the cost of the initial stage of the project. This is important in increasing the profitability of small companies, and in helping them to forecast the overall cost of their projects. Also, the SMEs very often use the technique of project organisation structure (Kuprenas, 2003). The advantage of using this approach is to increase the levels of communication and flexibility amongst the project workers.

Another positive characteristic is that small projects which are the core business of the SMEs can be used as a training ground to develop future managers who will proceed to manage larger projects (OECD, 2002). That provides them with an excellent opportunity to innovate new techniques to manage their projects and to receive quick feedback in order to keep the company on the right performance track. In addition, the small business does not require a large input of capital to get started. At the same time, its works are manageable and controllable (Wamelink, *et al*, 2002).

The negative characteristics act as a barrier to the improvement and enhancement of performance. Generally, it has been recognised that small business failures seem to be characterised by a lack of management skills and experience (Flahvin, 1985). SMEs are less likely to obtain management training than larger firms due to financial constraints, information

gaps and other factors (OECD, 2002). Such characteristics are very evident in the Saudi construction industry which features unstable companies that are managed by the companies' owners (Bageis, 2004). Such owners do not have adequate experience in the construction industry, or they are not sufficiently skilled to manage the construction works. The reason why such inexperienced owners, choose to start a construction business; is that the construction works is easy to access, set up, and operate.

Most of the legal troubles of small businesses are the result of unclear agreements. Small businesses usually neglect to set up contracts that are specific and openly clear in writing, instead preferring informal and legally ambiguous agreements. Good contracts are clear, complete and appropriate for the situation. A "one-size-fits-all" approach will only get businesses into trouble (Steingold, and Bray, 2003).

Cheetham, *et al.* (1994) indicate that small to medium sized building contractors do not forecast the monthly valuations budget and they often have problems in controlling their financial commitment. Forecasting and controlling the cash flow of projects does not exist in the project initial phase and construction phases of the management process of small contractors in SA (Bageis, 2004). High failure rates of small firms are largely attributed to weaknesses in financial management and marketing (Mc Carton-Quinn and Carson, 2003). Therefore, they do not give sufficient attention to its importance and that causes poor financial performance of their projects. Alrabei; (2003) asserts that one of the main problems associated with small contracting companies is the absence of quality supervision. Therefore, if the supervision of the construction works is not adequate, it does not support the quality of the work on the site and it causes further losses in terms of the financial performance of project (Siciliano, 2003).

Small contracting companies suffer more than larger sized contracting companies owing to the weakness of their organisational aspects and their inefficiency in controlling and monitoring those projects that make up their company business (Turner and Payan, 1997). Small contractors' managers are more likely to move between projects without having to relearn the company's management processes (Mc Carton-Quinn and Carson, 2003). In fact, the majority of small contracting companies do not record their commitment, problems and success in order to obtain advantages in terms of learning from their past or previous projects. Moreover, a consistent reporting mechanism is either not in place or often small contractors' managers do not pay sufficient attention to it. This approach results in having difficulties in determining their work load and their work in progress.

FACTORS LEADING TO SMALL CONSTRUCTION COMPANY SUCCESS:

Factors that are considered to be important in producing construction company success differ in relation to the organisation size and the organisation's ability to cope with these factors (Hutchings and Christofferson, 2000). These factors seem to be similar globally in their identification but they do differ in their implementation in relation to the organisational size, the organisation's main business diversion and to the organisation's culture (Bageis, 2004). These factors have been collected from the literature review as they appeared to be the most significant factors influencing the performance of small construction companies. The factors have been classified into intra and inter organisation success factors, according to its contribution to improve the SME performance, and they are as follows:

THE INTRA-ORGANISATION FACTORS:

(I) Appropriate Organisation Structure :

One of the critical tasks of the construction company manager is to design an organisational structure for the firm as well as a project organisational structure which is suitable for a particular organisation and the project environment (Kuprenas, 2003). The organisational approach adopted by the firm will influence the management that will be applied in practice (Jan de Kok and Uhlaner, 2001). Small construction firms do not have a consistent reporting mechanism, or often, their managers do not pay sufficient attention to it (Bageis, 2004). However, the structure adopted for a project defines the reporting structures, systems and procedures for the project (Shirazi et al, 1996).

In the construction industry the organisational patterns have to take account of the needs of subcontractors or specialist contractors working together with the SME. This intra organisational arrangement can shape the nature of these firms' relations and organise the way people are involved in the construction projects. The design of an appropriate project structure should take into account cultural and environmental influences and may change as the firm evolves through its life cycle and as a result of different types of project and conditions of contract (Shirazi *et al*, 1996).

(II) Building Stable Teamwork :

The project team is the basic unit that performs the SMEs project works. Sadly, project environments in the construction industry are so dynamic that teams working in this environment do not seem similar to other ordinary teams found in other industrial and commercial settings (Frame, 2002). On many projects, team members can be considered to be borrowed resources. They come to the project, do their work, and then return to their functional homes. Moreover, most small contractors are frequently characterised by changing teams as personnel move from one firm to another (Frame, 2002).

The challenge for the small construction company manager is how to employ a stable team in such an environment. The difficulty in this environment is the normal conditions that promote team work do not exist (Frame, 2002). An additional complication is that project teams today increasingly involve partnering arrangements which could promote team work. However, managers must recognise that team building will not occur by accident, and its development requires conscious and careful effort. Successful managers of firms who employ a little initiative can develop ways to build team spirit in an environment that seems rather hostile to it. Kerzner (2003) indicates that this could be done in such ways as: making the team as tangible as possible; managers inspiring their hired team to go the extra mile; holding productive meetings; creating team space; creating team "signs"; publicising team efforts; rewarding good behaviour, and so on.

(III) Appropriate Management Systems:

Well-managed construction jobs often result in excellent project performance which the construction firm will use as a springboard for success. Management systems that contribute to these excellent projects differ according to the project size and characteristics. Management systems contribute to the improving performance of the constructing company. As a result of

these systems, project management approaches are been more important than ever before. The purpose of project management is to anticipate or predict dangers and problems as far as possible, by using these systems, to plan, organise and control activities so that the project can be completed as successfully as possible in spite of the risks (Haapasalo et al, 2002). The literature reviewed identify the following as being the management systems used in the construction industry: organisation management systems, supply chain management systems, human resource management systems, quality and safety management systems, time management systems, construction software systems and others.

These management systems aim to provide vital information that could be used for monitoring and controlling the performance of companies (CERL, 2004). These systems jointly provide a database of basic information on the projects, budget estimation, control tools, procurement selection tools...etc, which are useful tools to support decision management.

(IV) The Existence of a Strategic View:

The existence of a strategic view has been perceived to be one of the most significant factors that lead to a SME becoming successful (Frame, 2002). The primary objective of survival for the construction firm is to secure a sustainable advantage in the market against its competition. The firm must be able to work out its survival techniques through developing a strategy in the context of the overall competitive scene. To determine 'what drives the market and where to compete', it must also be able to respond to environmental forces that influence the choice of the appropriate strategy (Ansoff, 1965).

Small construction firms need to work on a strategic as well as a tactical level for each project. A good strategy that could be adopted is to develop a strategic plan for every project based on the common approach, but allow different projects to adopt different approaches at the detailed or tactical level (Turner and Payan, 1997).

(V) Good Business Management:

There is more to construction than managing resources, materials and time. A construction company has to deal with everything from complicated union payroll requirements to last-minute scope changes that potentially stand between it and quality construction done on time and under budget (CEO, 2004). A construction company' business is just like any other business in that it must adopt factors that lead to business success. Business success factors entail planning the company business, knowing the key things that can tell when the company has reached its goals (Mc Carton-Quinn and Carson, 2003). These are indicators or milestones that measure the company's business achievements and help determine how well the firm is progressing towards its goals and objectives.

A business plan provides a small construction firm; with a pathway to profit. In business a pathway to profit needs to consider business process, marketing strategy and productivity and benchmarking. These are the key features of good business management which aims to maintain and support the business situation of a company.

(VI) Good Financial Management:

The implementation of an accounting system and the regular review of financial statements have been perceived to be two of the most important factors that lead to construction company success (Adrian, 1976). A complete and accurate accounting system and/or the keeping of financial records are crucial to the success of the business for a number of reasons. For instance, good accounting systems provide financial data that help the company operate more efficiently, thus increasing profitability (Siciliano, 2003). Accurate and complete records enable the company, and their accountant, to identify business assets, liabilities, income and expenses. This information, when compared with appropriate industry averages, helps the company identify both the strong and weak phases of its business operations.

Good financial records, such as the income statement (profit and loss) and cash-flow projection, are essential for the preparation of current financial statements (Mason, 2003). These statements, in turn, are critical for maintaining good relations with the company's banker. They also present a complete picture of the company's total business operation (Siciliano, 2003). Only a profitable organisation can remain in business, and employ qualified people in rewarding positions. A company can empower the predictable profit margins only if it employs a project cost control system that provides employees with a framework to control expenditures effectively on all of its contracted work (Al De Wachter, 2004).

There are many techniques and systems that integrate with accounting systems to support the control of the financial commitment of an organisation. Among the most important techniques are the estimating cost models and cash flow forecasting techniques (Siciliano, 2003). In today's credit tight economy it is more important than ever for a contractor to control cash flow. A construction company must plan and monitor cash requirements (Mason, 2003). Many of the items discussed in this section today will seem obvious, but are often ignored or given a low priority (Al De Wachter, 2004). Now is the time for the construction companies to review the basics of their business, and the best place to start is the all-critical item called cash-flow (Schaeffer, 2002).

Financial failures still occur and they can often be traced back to the lack of effective cost control by the project execution team. On the other hand, even under bad estimate conditions, if a project has been successfully managed by the execution team, then the contract's financial outcome is often better than anticipated (Al De Wachter, 2004). Applying these techniques correctly will provide the small contracting company with the means to keep its business decision-making on track and their account purchasing in control. It will also act as an early warning indicator when their expenditures are running out of line or their sales targets are not being met. To be successful a construction company must balance its cash flow. It is important to review the bidding, estimating, billing, and disbursement functions so as to plan properly for appropriate controls and techniques. This will increase cash flow and allow for the consideration of alternative sources of finance on a timely basis. Returning to focus on the basics will greatly enhance a contractor's future success (Schaeffer, 2002).

(VII) Good Time Management:

Time management is a fundamental criterion for the achievement of excellent project performance (Winch, 2002), and it is perceived to be a primary success factor that leads to small-sized contractors becoming more successful. This factor is concerned with the control of project

time, along with cost and quality. Time management needs to be carefully controlled and monitored owing to the fact that it is often found to be stated in contract documents (Lock, 2003). This provides a strong reminder to the engineer and/or constructor that the time milestones that have been indicated in the project documentation have an economic significance for the owner and that the control of time is expected. Also, time control is important for the contractor since time savings can improve a contractor's profits. Conversely loss of time can have a direct cost effect on a project.

There are both proactive and reactive aspects to time management (CII, 2003). The proactive aspects, which have an emphasis on how the project stakeholders should organise their efforts to best reduce the time required to achieve the engineering and construction objectives of the project are part of planning. At this stage the importance of having good historical schedule performance data for similar work appears to be of vital importance. Its existence would allow the planner to design an appropriate schedule with the objective of reducing time without sacrificing other project objectives. These proactive efforts will yield the greatest return (CII, 2003). The reactive aspects take place during the execution stage when negative time variances threaten or begin actually to appear, and actions must be taken to overcome those variances. In both the proactive and reactive modes, the managers are seeking ways to achieve schedule and planning objectives.

A small-sized construction company also faces these time pressures. One of the struggles they face on their projects today is the need to meet customer expectations. Therefore, salespeople are promising to deliver in six months jobs that normally take ten months (Frame, 2002). Of course, this can lead to serious problems when the project team eventually fails to meet its originally promised six-month target date.

(VIII) Careful Project Selection:

The selection of which projects to undertake is a serious business. It should not be carried out in a careless manner. Very often, insufficient attention is given to whether a particular project idea has real value to the construction company. Sometimes projects may be selected to satisfy the powerful players in the industry, or they may be selected simply to keep staff busy or to spend end-of-the-year money (Frame, 2002).

Most of the medium and small-sized construction companies have difficulties in determining their work load (Mc Carton-Quinn and Carson, 2003). A big problem that results from careless project selection is the ineffective use of resources. Support of a project to satisfy short-term demand may lead to long-term work that is not profitable. This kind of decision by the company managers causes resource problems because of the company's resources being tied up with these projects. It may be said that in such circumstances companies have not taken into account the opportunity costs of their decision. If the prospect of a truly good project arises in the future, they may no longer have the resources to pursue it because their resources are tied up in less significant activities.

THE INTER-ORGANISATION FACTORS:

(I) Achieving Good Project Performance:

A project also needs to be delivered within the terms of its contracted performance. Variances from agreed times will affect the small contractors' reputation either positively or negatively.

Projects usually involve attention to a variety of human, budgetary and technical variables. Although many definitions exist, most researchers agree that projects generally possess the following characteristics: defined budget; schedule; quality standards; and a series of complex and interrelated activities. The following aspects should be considered when determining project success: project efficiency, impact on the customer, direct and business success, and preparing for the future (Turner, 2004). The perception of the various interest groups (e.g. stakeholders, management, customers, and employees) is also regarded as one of the key factors since different people will view success in different ways.

Morley (1996) noted that the conventional project management performance triangle based on schedule, cost and technical performance is the most useful in determining the success or failure of a project. In addition to these standards, the project's risk profile and the capacity to resolve problems encountered by the project team, also appear to be major elements in the evaluation of the success of a project.

(II) The Use of Expert Advisors:

The use of expert advisors is perceived to be important for company success. This advice could be provided in many ways. The implementation of good supervision for the construction works is a kind of expert advice, and is perceived to be of great importance (Alrabei, 2003). Looking for outside help from professional advisors, including accountants, management consultants and architecture and/or civil engineering experts can also be a clever business approach to be followed (Belout and Gauvreau, 2004). Many of circumstances have been solved by specialist advisors such as has happened in the case of projects that have ended up in a disputes situation (Source). Obtaining advice from professionals is the first line of a protective wall that could keep the contractors away from financial risk even though they are often in complex situations which can happen in the life cycle of projects.

(III) Change Order Procedures and Change Management Skills:

Kerzner (2003) indicates that all proposed design changes need to be reviewed by the project management team prior to their approval and implementation. All proposed changes should be fully documented so that their impact on the project can be assessed before they are implemented. The construction company needs to ensure that an effective change control system is in place. The need to negotiate change is a continuing and ongoing component of service contracts. The ability to accommodate change successfully is fundamental to the success of any commercial arrangement that is to succeed over time; partnerships are increasingly seen as a way of coping with uncertainty, as one of their purposes is to better accommodate change in an effective and efficient manner (Winch, 2002).

OTHER FACTORS:

Bednarz (1997) indicates that the existence of other factors such as quality performance standards for subcontractors, estimating and scheduling procedures, implementation of strict purchase order systems, control of job-site safety, ongoing training and education and the use of checklists for quality control are important to improve the construction company's performance.

Hutchings and Christofferson; (2000) reported significant results from a study they carried out in the USA concerning factors leading to construction company success. That work created a prioritised list of factors leading to the success of small-volume residential companies. The result shows that personal attributes were perceived to be the most important by those responding to the survey. Quality of construction, customer service and warranty work were also considered important. Moreover, the study appreciated the importance of marketing, product design, pricing strategies, planning, business profile and technology in improving the SMEs performance.

DISCUSSION AND ANALYSIS:

The factors identified above have been analysed from the literature reviewed and can be considered to be the base factors influencing the performance of small construction companies. As they provide the basic foundation of the contracting company's components and mechanism to perform well in the construction industry. If one of these factors has not been put in place or has not been found to be at an appropriate standard, the likely result will be serious problems for the company. For instance, if the financial management of the company has been inefficiently managed and yet the other factors have been well managed, then that is not going to fix the problem of poor financial management, and vice versa.

These factors can be categorised into two groups based on their contribution to the improvement of the small construction companies. The first category can be seen to be the intra-organisation success factors. These factors include matters such as appropriate organisation structure, building stable teamwork, appropriate management systems, the existing strategic view, good business management, good financial management and good time management. The second category of factors can be seen to be the inter-organisation success factors. These combine to build up a good reputation for the company through careful project selection, the achievement of good project performance, the use of expert advisors, good change order procedures and change management skills.

As a result of this classification of factors, it is possible to develop a conceptual model of factors needed to facilitate a business success model. (Figure, 1).

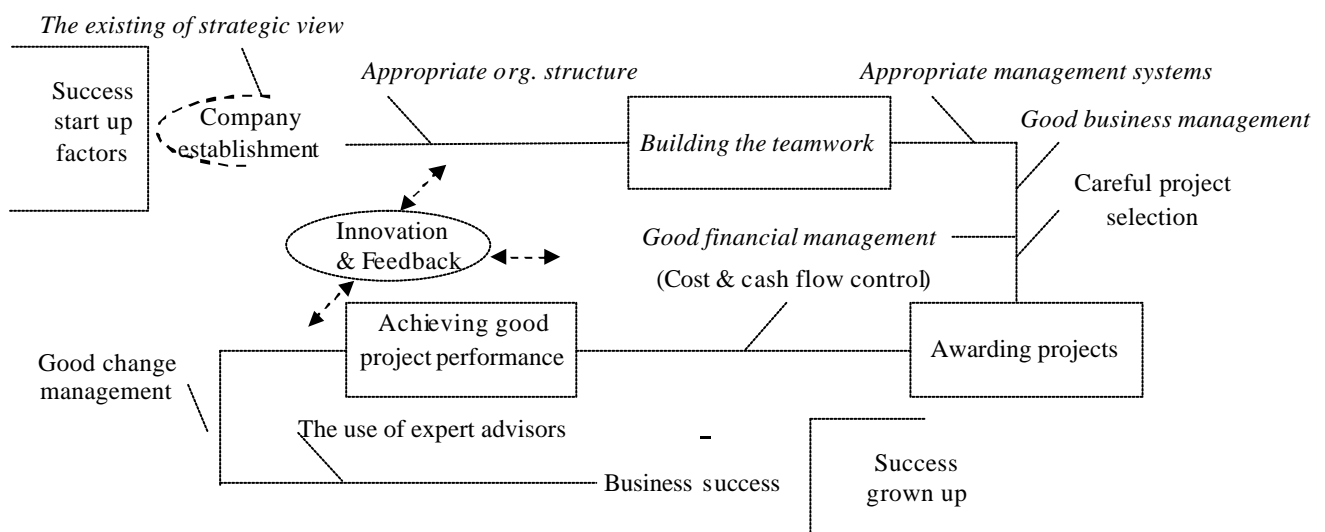


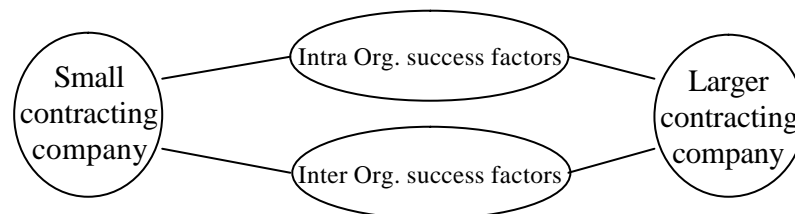
Figure 1: Business success model

Figure 1 suggests that in the case of building up either a small or medium construction company, the success start up factors; such as start up analysis, business plan, communication plan, adequate funds, etc. should already be in place. At the company establishment phase it is important to have a strategic view and appropriate organisation structure. The next task is to build up the teamwork and apply appropriate management systems, including good business management, and good financial management with careful selection of projects. After being awarded a project the company's sound financial management becomes more important than ever. In particular, the cost control and cash flow control mechanism are going to play the main role of achieving good management performance. Good change management and the use of expert advisors are the forces that push the job to even better levels of performance. New innovation and feed back are necessary to keep the business on the right track.

It is suggested that the existing small and medium contracting companies in SA can reform themselves on the lines of this suggested business success model so as to grow and become more successful firms.

CONCLUSION:

The aim of the present paper is to explore basic factors that assist new and existing small- and medium-sized construction enterprises (SMEs) to be successful. In this regard, the result of the literature review shows that there is a strong contribution from both the intra and inter organisation success factors in obtaining better performance in these companies. The factors identified are important for the company because they provide it with the foundation of a good contracting company, this in turn allows the company to remain in business profitability. Also, these factors are vital to protect the company from gaining a bad reputation and to grant continuous improvement for the company.



In the case of small constructing companies it is not reasonable to expect to implement a comprehensive management system which might include different departments, resource planning and management tools, all of which could be used for monitoring and controlling management performance. In fact, small contracting firms can cope with this issue by taking up some of the procedures of these comprehensive management systems, or perhaps partly implementing the tools of these systems which depend on the firm's ability to fulfil the requirements of these systems. The further development of this initial conceptual model of business success factors calls for more data to be gathered from SMEs in SA, and this will form the core of future activities in connection with the next phase of this research.

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