

The challenges for micro, small and medium sized construction enterprises operating in the international construction markets

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Abstract: The paper is about international construction, and the nature of how companies that ventures overseas, face the challenge of operating in changing environments, because of the way that micro, small, and medium sized enterprises (MSME) are integrated into the supply chain for international projects using outdated processes. MSME play an important role in the international construction industry. They are a source of entrepreneurial skills, employment opportunities, and innovation. Large companies receive all the publicity on international projects, all the industry awards, and all the credit, but for most projects, they rely upon their supply chain comprising both local and overseas MSME's to build the project and provide the work force. Principal contractors have become organisers and managers of complex supply chains, particularly when working on overseas projects. The old world was about directly employing a workforce; the new world is about managing complex supply chains. The change presents new challenges for the design, procurement, and management of construction projects in the international construction market. The fundamentals of managing cost, time, quality, and compliance need new organisational, financial, and management models when operating internationally. Human and financial capital, and productivity are at the root of the challenge. The research considers the challenge of how MSME can improve performance on the job site when operating internationally; the hypothesis is that the contribution by the MSMEs' uses outdated and inappropriate organisation, financial, and management systems. Observation, semi-structured interviews, document reviews within selected case studies have been chosen for this research. MSMEs' characteristics, challenges and their reflection to supply chain management have been considered to set up the main outcome of the research.

Keywords: MSME; International construction; Organisation; Management

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1 Introduction

Micro, small and medium-sized enterprises (MSME) play an important and central role in the construction industry in both developed and developing countries. They are a major source of entrepreneurial skills, employment and innovation. MSME frequently have difficulties in obtaining capital or credit, especially in the early start-up phase. Their restricted resources may also reduce access to new technologies or innovation (European Commission, 2010).

MSME undertake small works and act as sub-contractors and specialist contractors to the major construction enterprises. Empirical studies show that MSME's contribute over 55% of GDP and over 65% of total employment in high-income countries. MSME together with informal enterprises, account for over 60% of GDP and over 70% of total employment in low income countries, while they contribute about 70% of GDP and 95% of total employment in middle income countries (Fida, 2008).

The term MSME covers a wide range of definitions and measures, varying from country to country and between the sources reporting MSME's statistics. Some of the commonly used criteria to define an MSME are the number of employees, annual turnover, strength of the balance sheet, total assets, and investment level. MSME's are defined as formal enterprises; they are different from informal enterprises (Ayagari *et al.*, 2005), however, some micro and small companies do operate in the informal sector where they are paid in cash and avoid value added tax and other taxes that may be payable. Their output is unreported in the construction statistics. Governments have attempted through the introduction of legislation to stop the informal sector operating beyond the taxation system, but it is difficult to implement effectively. In some countries, registration is mandatory, but often this can be avoided by operating in the informal sector.

MSME can be specialists and are frequently multi-skilled. However, they can lag behind in technical competence, levels of skills, specialisms, capital investment to support their activities, and the ability to use and take advantage of modern technology, especially in information technology and communications (OECD, 2004). This can directly affect many of their activities such as supply chain management, etc. Shortage of training and pressure of work can have a negative effect on an MSME's efficiency. They do not have huge resources to call upon in a pressured situation and have to revert to working long hours and balancing competing pressures. MSME need support from government to foster their development.

2 The characteristic of construction MSME

Micro, small and medium-sized enterprises are socially and economically important, they represent more than 95% of all enterprises. In the EU countries they provide around 65 million jobs and contribute to entrepreneurship and innovation. However, MSME face particular difficulties, which national legislation should address by granting various advantages such as financial government support.

MSME help to absorb resources at all levels of the economy and add to the formation of the flexible economic systems in which MSME are interlinked. MSME are the engine of growth, essential for a competitive and efficient market and critical for poverty reduction and employment. Education and training to develop the teaching of necessary skills at all levels for better vocational education, along with advisory services, is necessary, and needs to be undertaken in close collaboration with academia (OECD, 2004).

MSME need a formal, statistical and common definition, which can be based on the number of employees or based on behavioural criteria, for improving their consistency and effectiveness and to limit any distortions (Profundus Consulting Ltd, 2016). According to Burn (2011), the main criteria for defining MSME are the number of employees, turnover and the balance sheet total.

Numbers of employees or turnover are usually the boundaries between micro, small, medium and large companies. When comparing enterprises across sectors or countries, turnover is not a good measure as it measures income, but not the real scale of the business with outsourcing activities that may inflate the size of the company.

Enterprises qualify as micro, small and medium-sized enterprises if they are below a maximum ceiling for staff numbers and below a stated turnover level or a balance sheet ceiling, but not necessarily both. Table 1.1 and 1.2 show the classification for China, EU within the eligible recommendation.

Table 1.1. MSMEs classification EU

| Enterprise category | Headcount | Turnover € m | Balance sheet total € m |
|---------------------|-----------|-----------------|----------------------------|
| Medium-sized | < 250 | ≤ 50 | ≤ 43 |
| Small | < 50 | ≤ 10 | ≤ 10 |
| Micro | < 10 | ≤ 2 | ≤ 2 |

Source: EC (2006)

Table 1.2. MSMEs classification China

| Enterprise category | Headcount | Total Assets RMB m | Business revenue RMB m |
|---------------------|-----------|-----------------------|---------------------------|
| Medium-sized | 600-3000 | 40 | 30-300 |
| Small | < 600 | ≤ 40 | ≤ 30 |

Source: SME promotion law of China, 2003

3 Theory of the firm and its relation to MSME

Economic theory is used to explain business strategy and decision-making. The theory of the firm consists of a number of economic theories that describe the nature of the firm including its existence, behaviour, structure and its relation to the market (Levy and Powell, 2005). Change in a market can erode the advantages of an organisation. The theory of the firm involves understanding the way an organisation behaves in the market, the strategy it must pursue, and what is at the core of its business policy. Strategic choices may not be explicit, they may be characterised by infrequency, uncertainty, non- recurrence, and be multi-functional. The theory of the firm in perfect competition provides useful predictions concerning the response of cost, firms and industries. It addresses a number of issues: existence, boundaries and internal organisation.

A. Existence: The very existence of the MSME can explain the nature of the firm. The firm exists only because it can organise a systematic process to achieve better productivity and maximisation of profits. MSME are often considered as a homogeneous group by researchers and policy makers, but they are heterogeneous with different needs and aims. However, the homogeneous idea is directed to a sub-group within MSME. The in-depth nature of the data collection/observation allowed the differences between the selected MSME to be identified and understood, in terms of both operation and ownership. A life style choice is one of the main reasons for which most MSME are established.

For others, the entrepreneurs, it is an opportunity to be their own boss and grow a business into a successful and prosperous entity. Between these two groups there are a range of reasons for MSME wanting their own business, such as to provide an income, pension plan, or something that they can pass to their children (Levy and Powell, 2005).

B. Boundaries: The question of the boundaries of the firm was first raised by Coase (1937), who observed that, in deciding how to set their firms' boundaries, managers considered the benefits of relying on internal production against the cost and risks of using the market. However, it was not until almost forty years later that the work of Klein, Crawford and Alchain (1987) and Williamson (1971, 1975) led to what is known as transaction cost economics (TCE). It showed, under certain conditions, the costs of using the market would be such that the firm would decide to internalize a transaction by producing it in-house. Therefore, to understand a firm's boundary decisions it is necessary to understand the determinants of asset specificity; the huge body of empirical and theoretical research (David and Han, 2004) confirms this. Various researchers have analyzed and expanded beyond the TCE viewpoint. Integration saves on transaction cost by helping to "avoid the negative." It also helps to create value through better information flow, co-ordination and concerted problem solving. However, over the last decade, attention has shifted to examining the capabilities and characteristics that might affect firms' boundaries.

A small, young firm must face greater risks and more turbulence than a large firm. Once a firm starts to increase in size, both the degree of control and the immediacy of communication will decrease. A multiplicity of small firms has the capability of meeting specialised demand, since the attempts of big firms to capture the specialised demand are limited by the organisational nature of the company.

C. Organisation: Coase (1986) defines the firm as a system of relationships that exist when the way in which resources are used depends on an entrepreneur who subtracts from the market mechanism, the transactions that are connected to it, organizing them according to a directive principle. In a small firm, productive activity represents the heart of the organisation (Tommaso and Dubbini, 2000). This has led this study to focus on the firm's productive capacity and capability, in particular when they are acting internationally. Usually, there is no formal governance arrangement in their hierarchy.

4 Characteristic of the MSME

Despite the disparity in the comparative definitions of MSME, they have some common characteristics. Ownership and management are held, by one individual/family and decision-making is often subjective. Individual/ family experience and its culture orientation has a strong affect the firm's export activity, whereas governance/management does not have that strong influences (Merino,et all, 2014).

MSMEs' characteristics are distinct from large-scale enterprises, so the policies and regulations relating to MSME need to be designed by the MSME (Khoa, 2006). There are some key differences between large enterprises and MSME. The strengths of MSME, compared to large enterprises, are their flexibility, fast decision-making structure, lower overheads, and commitment of their employees. The weaknesses relate to the lack of technical superiority, infrastructural facilities, and financial resources (Dangayach and Deshmukh, 2001; Grando and Belvedere, 2005).

For this research, the characteristics of MSME have been divided into three types organisational, economic and business. Based on the literature review and the interviews with MSME managers and owners, the following observations are made.

4.1 Organizational characteristic

Interviews with the MSME owners showed that they are the only people in a managerial position, often with no board of directors or formal governance arrangement. Some of the owners or managers have little formal business experience, or few generic business skills. However, some owners have a professional higher degree such as MBA. Management, innovation, organisational and human resource aspects of MSME determine the firm performance (Aragon and Martin, 2005).

MSME can have a tight family-like culture where the values of the owner are shared by the staff. They are flexible to change during a project, because they are not hide bound by rigid organisational structures; their work place practice and projects are flexible and suited to individual employee needs (www.med.govt.nz, 2005). The interviews with the MSME showed that they operate on a reasonable person basis that is more flexible and more informal, rather than on an informed and strict observance of regulations. This means they prefer to operate on trust, rather than on formal systems and contracts. The approach works well until an unexpected event occurs; for example, if there is an accident on the job site which results in serious injury, all the parties must have paperwork that defines responsibility and liability. MSME are more tactical than

strategic in their approach to business; which means they have a view that is bounded by the horizons, skills and experience of the owner in terms of management and the pressures of day-to-day management. Whilst they are rarely trained in the management of risk, they devise effective systems, which manage risk within their risk tolerance and risk appetite based upon intuition and experience.

The research showed that MSME establish themselves as a micro company with aspirations to grow. As their business starts to grow, their company moves to being small/medium. The research showed that growth was a critical factor in the company development. Some MSME grow too fast, take too much risk, and fail to survive as evidenced by the bankruptcy statistics for construction enterprises. They have insufficient liquid capital to grow the business, or to deal with an unexpected adverse event, even though they may have the technical skills to undertake the work. Cash flow and liquidity are as important as competencies to do the work.

In many countries a contractor is registered by the registration authorities on the basis of technical skills and competencies, size of annual turnover, and type of work, which dictates the type and the project size of work they are allowed to undertake. This means there is a test on competency and on the sustainability of the business. Some countries like UK has no such mandatory registration scheme, leading to a market open to companies who may lack the experience, knowledge, and the financial resources. The reasoning is that it is better to let the market decide the competency of the firm; poor firms will not survive, but they can do damage to some projects, which has been a contributory factor in the poor image of construction, particularly on small projects. In Japan, South Korea, China, and across South East Asia, registration is common.

Governments are introducing more legislation across all facets of business, with more red tape and bureaucracy. Bureaucracy is burdensome and expensive, but MSME must comply, adding to their costs and time taken to manage the business. Unnecessary and burdensome bureaucracy is cited as being a major inhibitor to growth. It is particularly burdensome for MSME because they do not have the opportunity to create jobs for people to handle the tasks, it means the workload of a small group of people is increased. Introducing systems into a business is the only way to cope with the changes.

The importance of cash flow management was mentioned frequently in the interviews, it is major issue for micro enterprises. Obtaining finance and credit for MSME is a challenge. Whilst around half of businesses use external finance, a smaller proportion (around 20%) is actually seeking finance at any one time. Of those who have used external finance in the last year of trading prior to the interview date, bank finance is still the primary source of finance. Some owners rarely differentiated sufficiently his/her private funds from the company's funds, which largely contribute to the inefficiency and poor performance. The company is always chasing cash flow because of a lack of capital in the business. The assets include the owner's home and car and other equipment, which is used as a bank guarantee to run the business. MSME are often labour intensive because they do not have sufficient capital, or long-term guarantee of workload, to buy the necessary plant and equipment that would make the business more productive. Despite change being constant in business, it is not easy for MSME to shift from one structure to something radically different to cope with the changes. Electronic tendering is an example of such change, with all the documentation

being transmitted electronically. Robust systems must be in place to ensure there is continuity and accuracy of the information transmitted.

Despite the lack of formal systems, MSME are innovative. The research focused on MSME working directly in the construction sector. Outside of construction there is a huge amount of innovation and new ideas. Many of the new innovative such as web applications for mobile phones and the iPad were developed by MSME. Innovations in design emerge from young dynamic designers who make their reputation based upon their ability to push the frontiers of knowledge.

Innovation takes many forms; its modern meaning is a new idea, creative thoughts, new imaginations in form of device or method, the application of better solutions that meet new requirements, unarticulated needs, or existing market needs. Some of the MSME in the research sample were innovative in providing design solutions for complex construction problems. They used their experience; skills, knowledge, and entrepreneurship to problem solve, but not necessarily replicate the solution again.

MSME are not systems oriented, they are more flexible and more people (client) oriented, they rarely conform to any standardization in their organisation. MSME are multi project driven; running several projects over a period of time, which is quite different from managing a single large project. However, there is a greater need for accurate detail and scheduling on the multi projects; for instance a schedule for feedback and round table discussions. This can improve the communication between owner, manager, designer, supplier and other parties. MSME face different risks. They are a special risk group because of their vulnerability, insufficient funds of their own, their dependency on a few clients, and lack of collateral or credit history. There is not a high level of health and safety for the employees on their project and often one person is responsible for many administrative issues, such as insurance, taxation, and finance. There is a shortage of specialists in an MSME.

Since management teams are small, most MSME managers work closely together on a day-to-day basis, their management structures tend to be flat and with an absence of bureaucracy (Levy and Powell, 2005). Management skills are not strong and management training is undertaken rarely by MSME. However, they can respond quickly to situations because of their flexibility.

MSMEs' owners enjoy the challenge of being their own boss, offering potential job security for themselves and their family (Analoui and Karami, 2011). Their staff are more generalists rather than specialists, because, at start-up, it is expected that everyone will contribute to ensuring company and business survival. MSME play an essential role as subcontractors in the downsizing, privatization and restructuring of large companies. However, there is a lack of a collective voice and influence on policies (Fan, 2003). They often do not belong to large trade bodies; hence their concerns and experiences do not get fed back to improve any systems.

4.2 Business characteristic

The interviews showed that securing workload is seen as the main challenge. MSME rarely have the luxury of repeat business because their clients are not long-term investors, nor do they employ sophisticated methods of procurement. Relationships, recommendations and the internet are the

main methods of marketing. They operate through networks where they deal with other MSME when resources are stretched; it was not uncommon to have many layers of sub-contracting within the MSME. They recognised the importance of price in winning work. Informal connections with builders' merchants, architects, surveyors, other contractors, provide a source of work. Informality in business is therefore one characteristic.

Interviews with the MSMEs' managers showed that they built up relationships with local building inspectors, planners, fire officers, health and safety inspectors, and environmental inspectors to ensure that the projects were not delayed by breaches of the regulations.

They had little familiarity with all the standard Joint Contract Tribunal (JCT) contract conditions and viewed the contract as a means of defining the agreed price, the method of payment and the time constraints, rather than a document on which the roles and responsibilities are clearly defined.

Each project is different and unique in terms of the challenges and running of the project, but the process is mostly the same. What dictates the size of the project for MSME is the price and complexity, which, in turn, depends on their specialisms and their budget. MSME usually have a shortage of accessibility to advanced technology and proper equipment because of lack of training, knowledge and capital for investment (Esmail, et al, 2007). Communication between different parties for MSME is essentially paper based.

4.3 Economic characteristic

During observation and interviews with the selected MSMEs' managers and owners it was found that MSME operate in the formal sector of the economy and employ mainly wage-earning workers. MSME have a short-term perspective of profit maximisation, even though it often means lower income in the long run. Profitability is crucial to the survival of the business. The challenge is that the MSME have poor costing systems that operate behind the project. It is not until the project is reported as showing a loss long after the event that they are alerted to the need for remedial action.

The observation and interview data showed that the workforce on the job site considers the MSME as their banker and MSME consider their builders' merchants as bankers by providing credit lines. The MSMEs' payment to their employees depends on the client's payment, yet they frequently pay on-stage payments to their workforce, or on a day rate, or a fixed price for a particular project. Where they have the staff on payroll, these are kept to a minimum and rarely have staff benefits offered by larger organisations. Labour is employed on a day, week or piecework basis. They do not have security of employment and are entitled to few benefits. Employment legislation sets out the rights of workers to benefits after they have been on a continuous temporary contract.

5 MSMEs' challenges

5.1 Market

The competitive environment affects the chances of survival for MSME. The insecure market environment for most MSME means they have a smaller market share, and hence less chance to

influence the price. This was confirmed through the interviews. They showed that clients sought an excessive number of quotations for work in the hope of finding an MSME that would undercut the price. MSME tend to be price-takers while the high market share of large firms means that they can usually determine prices. In difficult market conditions the large firms are prepared to undertake smaller projects to maintain their workload, resulting in more competition for the MSME. There are a few MSME that compete in slim market niches where there is little or no competition. These represent a high risk for the MSME, as, when the market is faced with a downturn, the lower margins and benefits have a greater impact (Levy and Powell, 2008). Interviews showed that some MSME try to maintain their level of projects in their existing market; others set their path upon growth.

5.2 Independence

The behavioural attitude of the owners or managers may have a major influence over the behaviour of the firm (Burns, 2001). MSME need to have their rules and regulations but, unlike large or international firms, there is no standard regulation, which can lead to misunderstandings and losses. For example, MSME have problems in securing loans from local banks for their investment, as the banks are worried that they may not be able to repay their loans. During interviews with the selected MSME for this study it was found that they had difficulties in borrowing money and getting a bank loan to run their projects; because of the MSMEs' ability to repay any loan.

5.3 Personality

MSME owners' attitude to the business can personify the management of the firm. Since the managers or owners of MSME are involved in all aspects of managing the projects, their personality influences all aspects of the company. This can be an issue when the firm grows, when it becomes necessary to delegate and pass on the decision-making (Levy and Powell, 2008).

5.4 Survival

Survival is more difficult for MSME when many new firms start each year, the barriers to entry are low. The first three years of a business are the most critical, with up to 50% ceasing to trade during that time (Burns, 2001). Only 40% of firms survive after 10 years and 4% of those firms create 50% of new employment. MSME in such a country like UK are six times more likely to fail than their larger counterparts and 80% of US businesses fail before the third generation (Bianchi, 2002). Failure is often caused by MSME looking inward and not concentrating on client or market requirements. Poor management skills, capitalization and financing also can contribute to their demise (Analoui and Karami, 2003).

The attitude of the owner to the company or business can determine the survival and future development. There are two possibilities for the owners, either plan to sell the company once it has become profitable, or to expand the company. The lifestyle of the owners can influence the environment of the company for growth. However, owners are usually high-achievers and are looking for recognition for their success (Burns, 2001).

The difficulty for many successful owner-managers is that they do not know how to delegate when the firm grows and when much more formal management structures are needed. This can lead to the owners losing strategic direction, as there is a mind-set and implicit strategy in the owner's head (Knight, 2000). Income shortage or missing a business opportunity leads owners to work a 24/7 lifestyle. MSME may have to borrow money to stay in the business but have no influence on borrowing rates (Burns, 2001). This often leads to undercapitalisation, as MSME are worried about borrowing money from banks or other financial institutions. They struggle to manage the cash flow and increase the revenues, the only strategic planning, they do is cash flow forecasting.

Regulations impose disproportional costs on MSME because they don't have the same capacity to influence the environment in their favour as larger firms (Commerce and Industry Bureau, 2001). MSME have a poor reliance on new technology, less financial reliability with limited analysis of new business opportunity in their field. This was found with the MSME selected for this research during interviews. Management devolution is a factor for survival since the entrepreneurs manage on their own. Those firms that recruit experienced managers are likely to be more successful.

5.5 Strategy

MSME strategies tend to be informal and emergent, focusing on day-to-day issues on a medium term rather than long term basis. Usually there are few formal systems and relatively little strategic planning. As MSME grow, they tend to formalise their strategic planning. A trend confirmed in interviews with three of the MSMEs' studied. Strategy in MSME is a learning process (Bianchi, 2002). They work very hard to find their customers and deliver all the orders. The owner is often involved in the process of the project. The structure of the organisation is very simple for the staff as they have direct contact with the manager or owner.

Sharing equity, recognizing a particular market niches, technological sophistication and devolution of decision-making are key factors for growth and the strategy of the company (Feindt *et al.*, 2002; Storey, 1994). Extending ownership of the firm to others in exchange for equity is a good strategy for fast company growth. In some countries, scarcity of capital resources inhibits growth, so access to finance makes the growth easier (Berry *et al.*, 2012). Innovation, and the use of high technology can allow a firm to grow, however, because of lack of capitalisation it is difficult for MSME to afford the technology.

MSMEs' attitude for managing all the uncertainty and risk is usually to make short-term decisions, ignoring the strategic objectives. Day to day survival is usually behind many of their decision. However, successful MSME owners try to keep options open because of the uncertainty in the future market (Levy and Powell, 2008).

The interviews showed that there was recognition of the importance of information and communication technology. There was enthusiasm for using the latest technology, yet little evidence of the technology was being used. The workforce was enthusiastic to learn about and to use technology to provide up to date information in a timely fashion for the job site and as a means of providing feedback. Decision-making would be quicker as long as the systems were introduced across the business. Technology has the potential and it will not stop, yet the MSME are struggling

to keep abreast of new developments. They have the desire but are not clear how to start and the cost implications.

5.6 Firm growth

Legal form, size and location are important factors for growing MSME. They tend to grow fast as they establish themselves and develop their markets.

Some MSME decide not to grow and stay at their current stage because the owner does not want to relinquish the control, a necessity for growth. MSME are managed by the owner and they start to grow when professional managers take over the running of the business. In this instance, the owner is key to planning and strategy, yet their management style remains informal.

The interviewees described the difficulty of increasing their workforce when they have to invest in their customer base. However, better control of the firm is necessary when the firm is growing. This stage is very hard for the owners, they need great skills in terms of planning and leadership and also financial resources. They require a professional and reliable management team to ensure the success of the projects. However, it is not easy for MSME to bear the cost of their specialist and office staff and it is usually dependent on their market situation. MSME depend on external information for developing employment and projects; much of this information comes from personal relationships and involvement in professional associations. This is a reflection of the informal nature of MSMEs' management.

6 Conclusion

The research showed that MSME are not a homogenous group; they are heterogeneous with different needs and aims. The cause of the heterogeneity is the changing nature of the construction sector with greater specialisation and more multi-layering of specialist contractors; becoming more exacerbated when they venture overseas.

MSME face challenges of achieving continuity of workload in a highly competitive market. Their focus is short-term with many people multi-skilling and working under severe time pressures. The short-term focus results in a lack of investment in systems and in technology (Pullen, et al, 2009). The research found that none of the MSMEs' projects exploited information technology to help improve performance, this was caused by a lack of investment in equipment and training, with a lack of understanding interoperability issues.

MSME are not systems oriented there was a lack of standardised systems, the research showed there is an absence of systems and planning in their organisation; they are more flexible and people (client) oriented, and do not conform to any standardization in their organisation. MSME face a shortage of technical superiority and financial resource and capital.

MSME work on a project-to-project short-term basis. Their focus is on securing new work, and ensuring projects are completed to the client's satisfaction. They focus on the project and company

requirements and take insufficient account of the availability of the materials or the lead-time required to arrange the transportation. Materials arrive on site on a Just-In-Time basis, often procured from the lowest cost provider. Little attention is given to breaking the project into systems or improving any existing approaches. This is partly because the projects are mainly low value and do not offer long-term continuity of work. Furthermore, the MSME lacked sufficient resources to focus on developing internal management systems and procedures.

MSME lack the organisational structures to fully understand how to leverage competitive advantage from effective supply chain management of their supply chain. MSME may be prepared to be risk takers in respect of the projects they will undertake; yet they are risk averse in the application of new ways of management such as using technology to solve their organisational and managerial issues. The research has made some recommendations on the following issues:

MSME need to recognise the advantages and benefits of a systematic materials purchasing process. MSME should consider a longer-term perspective and consider a strategic approach instead of short-term tactics. They should consider new ways and elements such as using technology as a secure, reliable and beneficial feature of their business. Management training should be part of their strategic planning, particularly in terms of materials management. Communication is highly important in MSMEs' experiencing fast growth. Communication should not be on a need-to-know basis but as a method that involves all stakeholders, employees, suppliers and whole parties, and thus work towards better understanding of their roles within the potential prosperity of the enterprise. The bid should be based on full design and specification information but, in reality, it contains many assumptions. Inadequate bid information influences the whole project with materials being wrongly ordered and suppliers having to make assumptions that were often incorrect.

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