Assessing managerial skills in SMEs for capacity building

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Abstract
Purpose – The paper aims to identify perceived critical managerial factors (PCMFs) affecting the performance of SMEs, show the direction and extent of relationship between PCMFs and firm characteristics, and forward some research and policy implications.

Design/methodology/approach – The paper uses a survey questionnaire to collect data on SMEs' perceptions of the degree of impact of selected managerial issues on their performance. The data were factor analyzed (principal component analysis), purified (Varimax rotation) and validated for reliability (Cronbach's α values) to identify the PCMFs. Both descriptive and inferential statistics were used to present and analyze the data.

Findings – The paper identifies and ranks four PCMFs affecting the performance of SMEs in a developing African economy. Important relationships are found between PCMFs and firm characteristics, and among the PCMFs themselves. The paper forwards some research and policy implications.

Research limitations/implications – The paper shows the need to replicate the study in other places to see whether the findings remain consistent. Although based on a mixed sample and limited to examination of perceptions rather than actual problems, the findings are highly relevant in designing business support initiatives and training programmes for SMEs.

Practical implications – Future research should develop a framework for conceptualizing and operationalizing the managerial construct in the context of SMEs. Small business support providers, policy makers and practitioners should identify, prioritize and customize the most influential managerial problems in designing entrepreneurial training and assistance programmes.

Originality/value – Research in the study of PCMFs in SMEs in developing African economies is scarce and lacking. The findings in this paper serve as an addition to the existing limited research output in the area. Moreover, the study adopted a systematic approach to identify, factor analyze, test and validate the measurement instrument for the managerial construct.

Keywords Management skills, Small to medium-sized enterprises, Critical success factors, Botswana

Paper type Research paper

Introduction
Small to medium-sized enterprises (hereafter SMEs) have long been recognized as engine of economic growth and have been put in the development agenda and strategy of many developing African countries. Recognizing the great contributions of SMEs to economic diversification, employment creation, income generation, and poverty alleviation, the government of Botswana has been putting much effort and resources to promote the development of entrepreneurship and SMEs. The promotion of SMEs in Botswana is as old as the country as an independent state. However, most business support policies and programmes focus on financial
assistance for start-up firms. The financial assistance policy, the SMMME policy, the Botswana Development Corporation, Thswelelo, the Micro-credit fund and the Credit Guarantee Scheme all put excessive emphasis on the provision of financial assistance. The 1982 Financial Assistance Policy (FAP), for example, provides citizens with non-repayable, interest-free grants. The FAP was characterized by a lack of coordination, monitoring, and strategic orientation and was replaced by the Citizen Entrepreneurial Development Agency (CEDA) in 2001 to redirect the objective towards sustainable entrepreneurial development through a mix of financing, mentoring, training and development services. The 1998 task force report on SMEs in Botswana attributed the high rate of small business failure to the lack of an entrepreneurial culture, orientation and skills, and suggested the incorporation of entrepreneurship in all educational, development and investment strategies and policies (Government of Botswana, 1999).

However, very little has been done, even by CEDA, to develop the entrepreneurial and managerial capability of citizens who start business with little or no basic business management skills. The current pace of development of SMEs in Botswana is very slow and discouraging (Tenttime, 2002). Millions of pula are being lost on business ventures because of essentially avoidable mistakes and problems. In most cases, as Viviers et al. (2001) noted, “the ideas are good and the people behind them are technically competent, but, they do not have the clue on how to run a business and have no underlying appreciation of business management fundamentals”. Over 70 percent of start-up firms fail in the first 18 months, while less than 2 percent expand their business (Government of Botswana, 1999).

It is not only access to finance or the availability of capital that leads to competitiveness: it is how SMEs manage their scarce resources (financial, human, and material), market complexities and changes, as well as opportunities and threats in the environment (Tenttime, 2002). As Argenti (1976) has argued, the most commonly cited cause of business failure is “poor management”. As every business operation or activity is directly or indirectly related to management, it is essential to identify and assess the critical managerial factors affecting the performance of SMEs.

Managerial capacity building
Following Argenti's (1976) argument, the authors claim that most problems affecting SMEs are related to lack of managerial capability in owner-managers of SMEs. Though it is difficult to determine what constitutes poor management, all problems of SMEs, be it marketing, operations, finance, personnel or distribution, are all essentially managerial problems. No matter what happened to these functions, managerial effectiveness could by definition have avoided or at least minimized their impact on firm survival. Managers require basic skills to establish organizational goals and determine appropriate strategies to achieve these goals. The success of SMEs in today’s turbulent markets depends largely on their ability to engage in environmental scanning activities in order to understand the behaviour of and trends in the environment (Tenttime, 2001). The processing, gathering and analysis of interoperating environmental data requires managerial competence and expertise. A previous study (Tenttime, 2002) showed that most SMEs do not engage in actual strategic planning as they put too much emphasis on operational bits and pieces. Some
prepare business plans just for external validation by banks and creditors rather than for coordinating organizational activities. It is not uncommon that owner-managers often spend too much time fire-fighting rather than leading the firm. As the environment of SMEs is dynamic rather than static, turbulent rather than stable, and requires managerial agility and capability, SMEs should be assisted to think and act strategically.

Hitt et al. (1996) found that management decision-making and organizational structure in SMEs revolves around the preferences and interests of owner-managers, who take all the major decisions and monitor all activities. While such approaches and structures enable strong control over the firm, organizational success or failure in SMEs is seriously affected by the managerial competencies of owner-managers. Al-Madhoum and Alalouf (2003) studied 106 managers in Palestine and found an important relationship between managerial skills and small business development.

SMEs are characterized by a lack of proper organizational structure and systematic human resources management (HRM), which is the process of attracting, recruiting, developing and maintaining the workforce. As Drucker (1984) noted, SMEs require “a few highly competent people, dedicated to the task, driven by it, working full time and very hard”. For many firms, the attraction, development and maintenance of successful individuals is critical for success. Recruiting new employees is one of the biggest challenges facing small firms, who usually rely on social networks to attract workers, particularly at the start-up stage (Aldrich and Langton, 1997). However, as SMEs grow in size, they exhaust the supply of suitable family and friends, forcing them to recruit strangers to fill work positions. Since the performance of SMEs is closely related with their ability to recruit and maintain strangers, a basic managerial skill in human resources management is critical for their survival and growth. Owner-managers in SMEs are usually close to the operating personnel and activities being undertaken. This provides owner-managers with an extraordinary opportunity to influence employees directly. However, the employee-employer relationship in SMEs is often informal, with no precise definition of duties and responsibilities. Appointments and promotions are not always on the basis of objective criteria. It is common that small firms do not usually have many individuals in each specialty. This leaves them vulnerable. Since owner/managers do not often take the time to develop their subordinates and assistants, the business suffers when a key employee leaves or dies. A study by Abdellem and Kindling (1978) suggested that every effort should be made to develop subordinates where needed. Skilled managers force key employees to take vacations, evaluate the effect of their absence and identify areas where more development of substitutes is needed. Although the development of employees is costly for SMEs, the cost is often outweighed by the benefits. Jennings and Beaver (1997) also found a significant difference between the financial performance of owner-managers who delegated responsibility and those owner/managers who repeatedly performed tasks themselves, particularly routine activities. SMEs are often seen as a good training ground for entrepreneurship. But the failure to delegate successfully continues to be an obstacle for the preparation of employees for increased responsibility. If properly done, delegation will prevent the manager from being drowned in a sea of routine activities, instead allowing them to
focus on the most critical issues. The manager’s conceptual and creative contributions will not be lost if routine tasks are delegated to other organizational members. Skilled managers can tap employee strengths by proper delegation of tasks. Jennings and Beaver (1997) found that financial success is significantly related to the owner’s delegation of lower-level tasks to subordinates.

Method
The study identified PCMFs affecting the performance and development of SMEs, the relationship between PCMFs and firm-specific demographic variables, and the associations among the PCMFs themselves. Data were collected from three cities through questionnaire from 250 SMEs and analyzed using both descriptive and inferential statistics.

First, the demographic characteristics of the respondents were tabulated and presented to show the distribution of the sample firms. Second, data reduction (principal component analysis), purification (Varimax rotation) and validation were conducted to identify the PCMFs to measure the reliability and validity of the measurement instrument. Third, the PCMFs were compared and ranked according to their perceived mean values. Fourth, the relationship between PCMFs and demographic variables was measured using inferential statistics (F-tests). Fifth, the association among the PCMFs was measured by conducting partial correlation analysis. Finally, conclusions were drawn from the findings, and implications for policy and research deduced.

Results and discussions
The first part of the questionnaire was designed to gather information about firm characteristics. Although 221 questionnaires (of 250) were completed and returned, only 203 (92 percent) were found to be usable for the study. Eighteen questionnaires were discarded due to incompleteness and large number of missing values.

The majority (70 percent) of the sample firms were small with six to 25 full-time paid employees, 14 percent were micro with up to five employees, while the remaining 15 percent were medium-sized companies with number of employees ranging from 26 to 99. The majority of the respondents were males (68 percent), indicating low participation of women (28 percent) in top managerial positions in the private sector. Most of the sample firms (65 percent) were taken from Gaborone, the Capital of Botswana. Sixty-five percent were from the merchandising (retail and wholesale) industry, while 25 percent were operating in service industries. Only 10 percent were from manufacturing industry. Not all the respondents had similar status in their companies. Some were owner-managers (11 percent); others were part owner-managers (33 percent). However, the majority (55 percent) of the respondents were salaried full-time managers. Only 21 percent of managers of the sample firms have less than five years’ experience, while the remaining 73 percent have over five years’ general managerial experience. However, most (55 percent) have been managing their current company for less than five years. Only 9 percent of have over ten years’ management experience, while 36 percent have between six and ten years’ managerial experience with their current company. Only 17 percent of the companies had been established in the past five years.
In summary, the sample firms are small in size, operating in the merchandising and service sectors, located in Gaborone, managed by full-time salaried people and owner-managers who have over five years' management experience in the economy of Botswana. Although mixed in terms of size, industry, and experience, the sample is expected to reflect the perceptions of SMEs in Botswana about the impact of lack of managerial skills on the performance of SMEs.

**Perceived critical managerial factors (PCMFs)**

Although the major research project deals with an extensive list of possible problems (76 items) affecting the performance of SMEs, only the data collected on management-related problems are discussed and analyzed in this paper. The data collection instrument contained 34 managerial items, and the respondents were asked to evaluate the perceived impact of these items on the performance of SMEs on a five-point scale ranging from 5 (very high) to 1 (very low). The respondents assigned scores to each of the 34 items. Since it is difficult to analyze and compare all items, they were factor analyzed using principal component analysis with Varimax rotation. Twenty-seven out of 34 managerial items were loaded onto five factors, which are labeled as ORD, MAB, HRD, MAC and PRF, as shown in Table I. The remaining seven items were excluded from the study: either they did not load onto any of the factors or they had a factor loading below the cut-off point of 0.50.

A reliability analysis was conducted on the five PCMFs to measure the internal consistency of the 27 items loaded onto the five PCMFs. The Cronbach's $\alpha$ values show an acceptable level of reliability for all factors except for the personal factor, which is less than the cut-off point ($\alpha = 0.50$). According to Nunnally (1978), a value of $\alpha$ greater than 0.50 ($\alpha \geq 0.50$) meets the requirements for basic survey research. Hence, the data is reduced to four PCMFs that are considered valid and reliable measurement tools for the management construct. The findings showed that these factors are perceived by the respondents to have a varying degree of impact on the performance of SMEs. As shown in Table I, although all four factors are considered critical, they do not have equal degrees of importance, as shown by their mean values. The four PCMFs are presented below.

**PCMF-1: managerial competency**

The respondents clearly recognize the importance of managerial competency as a critical success factor. The managerial competency factor is ranked first on its impact on firm performance and is measured by five items, as shown in Table I. The main contributors to this factor include:

<table>
<thead>
<tr>
<th>No.</th>
<th>Critical factors</th>
<th>Code</th>
<th>Items</th>
<th>Cases</th>
<th>$\alpha$</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
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<tr>
<td>1</td>
<td>Organizational design</td>
<td>ORD</td>
<td>7</td>
<td>181</td>
<td>0.849</td>
<td>2.82</td>
<td>0.98</td>
</tr>
<tr>
<td>2</td>
<td>Managerial background</td>
<td>MAB</td>
<td>5</td>
<td>198</td>
<td>0.821</td>
<td>2.76</td>
<td>1.04</td>
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<tr>
<td>3</td>
<td>HRM development</td>
<td>HRD</td>
<td>8</td>
<td>183</td>
<td>0.818</td>
<td>3.05</td>
<td>0.90</td>
</tr>
<tr>
<td>4</td>
<td>Managerial competency</td>
<td>MAC</td>
<td>5</td>
<td>190</td>
<td>0.695</td>
<td>3.28</td>
<td>0.71</td>
</tr>
<tr>
<td>5</td>
<td>Personal factors</td>
<td>PRF</td>
<td>2</td>
<td>195</td>
<td>0.210</td>
<td>2.11</td>
<td>1.72</td>
</tr>
</tbody>
</table>

**Table I.** Critical factors, reliability coefficients, mean, and standard deviation.
lower emphasis on strategy formulation and implementation than focusing on operational bits and pieces (mean = 3.42); 

- less emphasis on long-term competitive advantages than short-term profits (mean = 3.26); and

- lack of developing strong interest for non-financial benefits such as need for achievement and recognition (mean = 3.23).

Although most SMEs recognize the role of strategic orientation and long-term vision, they put greater emphasis on short-term profits rather than building long-term competitive potential. This calls for concerted efforts to develop the strategic management skills of owner-managers in SMEs, because it is visionary and agile management that takes SMEs in developing economies to the next century (Argenti, 1976).

**PCMFs-2: human resources development**

The respondents indicated that human resources development is a critical management factor affecting the performance of SMEs. However, its perceived impact on SMEs is relatively moderate (mean = 3.05). Out of the eight human resources development related items, lack of experienced employees in the market (mean = 3.52), lack of skilled manpower in the market (mean = 3.45), lack of low-cost training facilities (mean = 3.22) and inaccessibility and unavailability of training facilities in the community (mean = 3.06) are considered to be more important than other HR development issues such as employee turnover (mean = 2.50) and dependence on family labor (mean = 2.55). SMEs perceived that lack of skilled and experienced personnel in the labor market and accessibility to or lack of low-cost training facilities in the community have significant impact on their HRD practices. Unlike most previous studies, the sample SMEs considered HRD policies to have little impact on firm performance (mean = 2.88). This could be attributed to many factors, including misconceptions or the lack of a clear understanding of the benefits of HRD policies in the long run. Skilled and competent managers know innovative methods of finding, attracting, and recruiting competent personnel. They can also find ways of accessing low-cost, locally available training facilities. It is largely due to managerial excellence that some firms prosper in a hostile and unsupportive business environment while others fail.

**PCMFs-3: organizational development**

The way SMEs are organized or structured has important implications for the flow of information and the effectiveness of communication in the organization. Organizational structure clarifies issues like who reports to whom and the job description and content of each organizational member. The respondents considered organizational development as a critical management factor (mean = 2.82) with a lower perceived impact on SMEs than do other factors. Centralized decision-making (mean = 3.09), lack of clear division of activities (mean = 2.89), low level of formalization (mean = 2.87) and high span of control (mean = 2.86) are considered to be more influential than other activities like level of standardization (mean = 2.63), organizational design (mean = 2.75) and communication problems (mean = 2.79). This is not surprising, as most SMEs in developing African
economies do not have a formal and clear organizational structure and lines of communication. This is in line with previous studies which have found that organizational structure affects the managerial decision-making process and effectiveness (Wally and Baum, 1994; Zhang et al., 2004). Although the current trend is towards flexible and fluid structures, owner-managers in developing economies should be assisted to understand the strategic and operational importance of aligning structures to the nature of internal processes and business operations.

**PCMFs-4: managerial background**
Managerial background includes the basic requirements to be a competent manager. These requirements include general education, training in basic business management skills, and practical industry experience. SMEs perceived general education, managerial training and experience as having only a moderate impact on their performance. However, previous studies found managerial background to have a significant impact on firm performance. This could be attributed to the concentration of the sample firms in the merchandising and service sectors, where managerial background has a more moderate impact on performance than it does on manufacturing firms. The other possible reason for such perceptions may lie in the fact that many companies in Botswana are extensions or branches of South African companies, in which managerial leadership flows from the headquarters.

**PCMFs and characteristics of SMEs**
Analysis of variance (ANOVA) was undertaken to test the hypothesis of no significant relationships between PCMFs and selected demographic variables. As shown in Table II, there is no adequate evidence to reject the claim of no significant relationships between PCMFs and firm size at the $p < 0.05$ level of confidence. Although firm size is slightly related to the managerial competency (MAC) factor ($F = 2.996$), the relationship is not statistically significant at $p < 0.05$. However, the status of the respondent is significantly related to the managerial background (at $p < 0.01$) and managerial competency (at $p < 0.05$) factors. Ownership status defines whether the

<table>
<thead>
<tr>
<th>Variables</th>
<th>df</th>
<th>ORD F</th>
<th>p</th>
<th>HRD F</th>
<th>p</th>
<th>MAB F</th>
<th>p</th>
<th>MAC F</th>
<th>p</th>
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<tr>
<td>Analysis of variance (ANOVA)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Size</td>
<td>2</td>
<td>2.049</td>
<td>0.132</td>
<td>2.088</td>
<td>1.127</td>
<td>2.32</td>
<td>0.101</td>
<td>2.9696</td>
<td>0.052</td>
</tr>
<tr>
<td>Status</td>
<td>3</td>
<td>2.017</td>
<td>0.113</td>
<td>1.358</td>
<td>0.257</td>
<td>6.155*</td>
<td>0.001*</td>
<td>4.587*</td>
<td>0.004*</td>
</tr>
<tr>
<td>Experience</td>
<td>3</td>
<td>0.105</td>
<td>0.957</td>
<td>5.937**</td>
<td>0.001**</td>
<td>1.968</td>
<td>0.12</td>
<td>0.134</td>
<td>0.94</td>
</tr>
<tr>
<td>DF/N</td>
<td></td>
<td>170/181</td>
<td>170/183</td>
<td>186/198</td>
<td>172/198</td>
<td></td>
<td></td>
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</table>

**Correlation coefficients**

<table>
<thead>
<tr>
<th>ORD</th>
<th>HRD</th>
<th>MAB</th>
<th>MAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0000</td>
<td>0.5299**</td>
<td>0.4141**</td>
<td>0.1743</td>
</tr>
<tr>
<td></td>
<td>1.0000</td>
<td>0.3216**</td>
<td>0.1806</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.0000</td>
<td>0.2333*</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>1.0000</td>
</tr>
</tbody>
</table>

**Notes:** Level of significance at *$p < 0.05$ and **$p < 0.01$
respondents are the sole owner of the firm, part-owner or employed/salaried manager only. From this, one can infer that the perceptions of SMEs about the impact of PCMFs on business performance vary with the status of the respondents. Owner managers may perceive some factors differently to part owner-managers or employed professional managers.

Managerial experience was evaluated on the basis of the number of years managers had been in a managerial position. Significant relationships were observed between experience and the human resource development factor \( F = 5.937, p = 0.001, \text{ df} = 3/170 \) at the \( p < 0.01 \) level of confidence, implying a perceptual difference between new and experienced managers. The more experienced the manager is in owning/running a business, the more he/she understands the role of human resource development. It is interesting to note that managerial experience is not significantly related to the other perceived critical managerial factors.

A partial correlation analysis was conducted and revealed a statistically significant relationship among PCMFs at the \( p < 0.05 \) level of confidence. Human resource development (HRD) was, for example, positively associated with organizational development (ORD) \( r = 0.5299 \). Managerial background (MAB) is positively associated with organizational development (ORD) \( r = 0.4141 \) and human resource development (HRD) \( r = 0.3216 \) factors at the \( p < 0.01 \) confidence level, while managerial competency (MAC) \( r = 0.2353 \) is positively associated with managerial background (MAB) at the \( p < 0.05 \) confidence level. Except for the managerial competency factor, (MAC) which is associated with only one factor (MAB), all other factors are positively associated with at least two factors at the \( p < 0.05 \) confidence level. This implies that the HRM development problems that companies experience could be related to organizational development problems (lack of clear division of activities and duties, lack of open communication, lack of proper organizational structure, centralized one-man decision-making, low level of formalization of working procedures and low level of standardization of products and services), which in turn is related to the managerial background of the owner/manager. This means that the PCMFs are not independent of each other. They are inter-related factors. Problems in one managerial factor may have some impact on other factors. For example, the highest correlation coefficient \( r \) is found for human resource development (HRD) and organizational development (ORD) at \( r = 0.5299 \) and \( p < 0.01 \), implying that lack of experience, skills and training may worsen the problems related ORD and HRD factors.

Conclusions and recommendations
The measurement scale used in the study does not indicate the actual impact of the selected PCMFs; the paper shows only the direction of the perception of the sample firms. It is therefore important to note that any conclusion drawn from these findings should be tentative. The study has empirically identified four PCMFs affecting the performance of SMEs. These PCMFs could be summed up or labelled as “lack of managerial skills”. Hitt et al. (1996) and Lynch (2000) have underscored the importance of skill (both operational and strategic) in achieving strategic competitiveness. These managerial problems should not be allowed to continue indefinitely. If entrepreneurial programmes and policies are to yield better results, there is a need to develop low-cost training facilities that would enhance or facilitate
the development of basic management skills (both operational and strategic) for this sector. Vocational training programmes should be tailor-made to meet the needs of the SME sector. It is obvious from the research that consultants are under-utilized by SMEs. While reasons for this effect have not been explored, it could be because of a lack of awareness about the role of consultants, or it could be that consultants are inaccessible to or too expensive for this sector (Temtime and Pansiri, 2004). Whatever the reason may be, there is need to involve consultants in the development of managerial capabilities in order to enhance SMEs’ competitiveness.

The findings have two important implications for future research and policy. Future research should test and validate the proposed research design by replicating it in another place to see whether the findings are consistent. There is a strong need to develop a robust measurement instrument to identify the actual rather than perceived problems of SMEs operating under different and dissimilar environments. Studies propose that all managers require basic and strategic management skills, and that such skills are crucial for the success of firms (Al-Madhoum and Analoui, 2003; Temtime and Pansiri, 2005). Future research on this area would benefit from cross-country studies aimed at making comparisons of the impact of these critical managerial issues in SMEs. The policy implication of the finding lies in the fact that business development support agencies, policy makers and practitioners should know the most critical problems that must be given priority before they launch any assistance and training programmes. Understanding the PCMFs will help policy-makers to design and develop meaningful business support programmes and policies.

References


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