

## Research and concepts

# The moderating impacts of business planning and firm size on total quality management practices

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### Keywords

Total quality management, Small- to medium-sized enterprises, Developing countries, Planning, Size, Quality culture

### Abstract

Total quality management (TQM) research has concentrated on large firms. Little has been done on the TQM practices of small- and medium-sized enterprises (SMEs), particularly in developing countries. This paper investigates the relationship between TQM, planning behavior and firm size by reviewing existing literature and collecting primary data from 54 SMEs in the Republic of Botswana. The findings indicated that the majority of SMEs understand the importance of both TQM and planning activities for their survival and growth. However, their approach to both is unsystematic, non-formal and short-term oriented. Both firm size and planning behavior are found to have statistically significant relationships with TQM practices. As firm size increases from small to medium, and as SMEs move from operational to strategic planning, they attach greater degree of importance to TQM practices. However, the planning behavior of SMEs is more strongly related to TQM practices than firm size. Suggests the promotion of business planning as a prerequisite to the adoption of formalized TQM practices. Some implications for SMEs are also forwarded.

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## Introduction

As a planned approach to organizational changes, total quality management (TQM) needs systematic business planning and policy deployment. The increasing intensity of competition has made continuous planning and quality improvement a prerequisite for the survival of not only large firms but also for small- to medium-sized enterprises (SMEs). Firm size, representing organizational resource endowments, has an important relationship with planning because the formulation and implementation of strategies require commitment of scarce resources (Temtime, 2002). Since the implementation of TQM practices is influenced by the planning behavior of firms, which is in turn affected by firm size, the need for a TQM model or framework customized to the SME setting is apparent.

The purpose of this paper is to investigate the planning and TQM practices of SMEs and to draw attention to the importance of understanding the dynamic relationship between them. The paper explores how the planning behavior of SMEs, being influenced by firm size, affects TQM perceptions and practices. The paper argues that while planning behavior has a direct impact on TQM, the relationship between firm size and TQM is indirect, leading to the assertion that SMEs can actively engage in TQM practices as long as they employ systematic business planning. The limitations and implications of the study for SMEs are also presented.

## TQM and competitive advantage

Recent literature (Douglas and Judge, 2001; Reed and Mero, 2000; Chandler and McEvoy, 2000) has begun to describe and evaluate TQM as a potential source of competitive advantage. The implementation of TQM is accomplished through a set of practices within the TQM philosophy, which dictates that the practices operate as an interdependent system that can combine with other organizational assets and resources to generate competitive advantage (Douglas and Judge, 2001). TQM can be generally described as the process of making quality the concern of everyone in the organization. It is an organizational culture committed to customer satisfaction through continuous



improvement. Powell (1995) broadly stated it as an integrated management philosophy and set of practices that emphasize, among other things, continuous improvement, meeting customer's requirements, reducing rework, long-range thinking, increased employee involvement and team work, process redesign, competitive benchmarking, team-based problem solving, constant measurement of results and closer relationship with suppliers.

Although many proponents of TQM openly praise it, others (e.g. Kunst, 2000) have identified significant costs and implementation obstacles. As Powell (1995) argues, empirical studies have not shown that TQM firms consistently outperform non-TQM firms. Nevertheless, TQM has become an irrepressible, globally pervasive strategic force in today's turbulent and dynamic business world. Despite the fact that the literature on the relationship between TQM and firm performance is mixed and inconclusive, there is much consensus that implementation of TQM practices leads to better financial performance, improved communication, increased customer satisfaction and team work (Chandler and McEvoy, 2000; Boon and Ram, 1998; Wiele and Brown, 1998; Reed *et al.*, 2000). The growing interest in TQM implementation has led to the emergence of a distinct stream of quality research.

### TQM and planning

The ever-increasing intensity of market competition has made the implementation of TQM practices a prerequisite for corporate survival. At the heart of such activity is the use of scientific planning approaches and models. A number of terminologies such as strategic planning (e.g. Mintzberg, 1994; Miller and Cardinal, 1994), policy deployment (e.g. Durate, 1993), management by objectives (e.g. Jones *et al.*, 2000), management by policy (Collins and Huges, 1993), and *hoshin kanri* (Wichter and Butterworth, 1997; Wood and Munshi, 1991) are used in the literature to describe planning models. But, their application in the SME context is not supported by empirical data. A plethora of studies have been conducted on the relationship between strategic planning or policy deployment and TQM practices in large, multi-product firms (Marsden and

Kanji, 1998; Wichter and Butterworth, 1997; Wood and Munshi, 1991). However, while it is obvious that planning, policy deployment and TQM are inseparable corporate activities, it is surprising to find only very little research integrating TQM and policy deployment in SMEs not only in developing economies but also in the developed world. As a planned approach to the implementation of organizational change, TQM practices are organizational quality policies developed in the planning phase and deployed in the implementation stage. Thus, planning and TQM are inseparable, and the effectiveness of TQM is affected by the quality of business planning (Boon and Ram, 1998).

### Is TQM only for larger firms?

Although the majority of previous studies in TQM focus on large multi-national companies, quality has become the basis of global competition for all firms regardless of location and size. Today, SMEs are at the center of interest in the quality debate for several reasons. One, according to Wiele and Brown (1998), is that larger organizations will not be able to improve the quality of their products, services and processes, unless their suppliers or the second-tier suppliers also grow to higher level of quality maturity. Amongst these suppliers there are many SMEs. There is evidence (e.g. McTeer and Dale, 1994) that SMEs are no less concerned with quality than their larger company counterparts, but that they are less comfortable with the formal approaches that are often advocated as part of ISO 9000 series registration, and the introduction of TQM.

SMEs have their own unique characteristics that differentiate them from larger firms. Some studies (e.g. Lee and Oakes, 1995; Yosuf and Aspinwall, 1999; Ghobadian and Galleary, 1996) have attempted to identify the characteristics, strengths and weaknesses of SMEs when it comes to the implementation of TQM. Yosuf and Aspinwall (1999) have divided the characteristics of SMEs in to five categories (structure, systems and procedures, culture and behavior, human resources, markets and customers) and discussed the advantages and disadvantages under each category. Lee and Oakes (1995) argue that if top management is convinced of the need for TQM, then it is easier for

managers to inspire and motivate others in the organization. Because organizational systems and structures are simple in SMEs, the process of TQM implementation can be made visible more easily. The people dimension is easier to tackle on face-to-face relationships because of the lower number of employees. Ghobadian and Gallear (1996) found that visibility of leadership and improvement teams are easier in SMEs. Employees are closer to the products and services and thus feel more responsible for quality, and they will have a better understanding of service and the overall profitability of the organization. Furthermore, decision-making processes are simpler in SMEs than in large firms. According to Hartz and Kanji (1998), SMEs can be characterized as easy to survey and understand, having short lines of communication and flexibility in relation to the implementation of new management philosophies and approach.

SMEs also have several problems that affect the implementation of TQM. Investment in training and education to instill quality culture in employees, the need to free up people from their normal work without disrupting ongoing processes, lack of resources, inflexibility and rigidity of the outlook of the owner or manager are major obstacles for TQM implementation in SMEs (Lee and Oakes, 1995). Some studies (Deshpande and Golhar, 1994; Hornsby and Kuratko, 1990) indicated that effective human resources management (HRM) is one of the most crucial problems faced by SMEs. Djerdjour (2000) identified lack of proper training and education as a major obstacle in implementing quality systems and fulfilling ISO 9000 standards in Pakistan. High employee turnover restrains management from making the necessary investment in training and development in employees. Centralized decision making was also a major problem, as decision making revolves around a few top people in most SMEs (Kiggundu, 1989). Teaching and orienting employees about TQM and ISO 9000 requires open communication, decentralization and participative management style. According to Kakkar (cited in Djerdjour, 2000), the barriers faced by Indian organizations in implementing TQM includes, among other things, lack of management commitment and inadequacy, low contribution from line

managers, and lack of employee involvement in planning and goal setting.

Although a number of researchers and academics have extensively examined TQM implementation practices in industrialized countries such as the USA, Japan, the UK and other European countries, it is only in recent years that a few researchers have begun to examine quality practices in developing countries. Of the few studies in developing countries, the majority has examined TQM practices of large firms. Thus, studies on TQM practices of SMEs in developing countries, particularly in Africa, are almost non-existent. With the weakening of trade-barriers, the opening of markets to multinational competitors and the spread of international quality standards such as ISO 9000 to developing countries, SMEs are expected to achieve competitive advantage through the provision of quality products and services. The opening of markets to global competition, the adoption of a free market policy, the provision of training in quality improvement techniques, the establishment and widespread of bureau of standards and regional trade agreements are indicating that developing countries are beginning to see improvements in quality. At Pakistan's first international convention in quality, Crosby (cited in Djerdjour, 2000) stated that nothing is more important to the prosperity of a developing nation than quality. The only way a developing nation can increase their trade activities and develop a sustainable basis is to improve the quality of their product and services. Developing countries, particularly the emerging ones, are blessed with a big advantage. They do not have to make the mistakes and omissions that were made by industrialized countries, because they can move into the proper position if they take time to study the trends (Agus, 2000). In an increasingly competitive world, quality is no longer an optional extra; it is an essential strategy for all firms' regardless of size and location.

## Design and methodology

### Sampling scheme

The sampling frame in this paper comprises private registered companies in three industries – manufacturing, merchandising and service – in the Republic of Botswana.



The main reason to take a mixed sample was that any one of these groups could not justify the cost of a full-fledged survey. The sample firms include all registered private firms with the number of paid full-time employees ranging from 6 to 99. The study, therefore, does not include: informal firms that are not formally registered; micro firms that are formally registered but have fewer than six paid employees; and large companies with more than 99 paid employees. Non-probability, judgmental sampling was used in selecting these firms. A total of 87 companies were involved in the strategic planning study, whereas the TQM study was based on only 56 sample firms. Finally, 54 SMEs were found having complete data on both the planning and TQM constructs.

### Measurement instruments

Demographic variables such as managerial experience, level of education, type of industry, age of firm, number of employees, the gender and age of owner/manager, etc., were included in both questionnaires.

#### *Measurement indicators for planning behavior*

The most difficult part of the strategic planning study was designing a measurement instrument for the planning construct. Based on literature review, a planning model was established with four dimensions. These were (1) the business-planning environment; (2) the planning process and formality; (3) the planning content and horizon; and (4) planning resources and support.

Different questions were developed under each dimension, and the sample owner/managers were asked to indicate the level of importance they attach to each item using a five-point Likert-type scale with anchors ranging from 5 (very high) to 1 (very low). But, only two dimensions of the planning construct (planning process/formality and planning content/horizon) were presented in this paper because the other two are only indirectly related to the implementation of TQM practices. Based on their response, the 54 SMEs were divided into operational planning and strategic planning-oriented firms.

#### *Measuring firm size*

The 54 sample firms were also divided into small and medium size based on their number of employees. The definition of firm size

varies, not only from one economy to another, but also from industry to industry within the same economy. The government of Botswana defined small firms as those formally registered companies with up to 25 paid employees and medium enterprises as those with 25 to 99 paid employees.

#### *Measurement indicators for TQM practice*

A TQM construct was developed with the following eight dimensions:

- (1) Customer satisfaction ST.
- (2) Managerial leadership.
- (3) Employee empowerment.
- (4) Continuous improvement.
- (5) Supplier partnership.
- (6) Quality philosophy/culture.
- (7) Working environment.
- (8) Measurement and feedback.

Based on the literature review, five question items were identified and developed to measure each dimension. Then, the respondents were asked to evaluate the level of emphasis they put on a total of 40-question items using a five-point similar scale.

### Data analysis

Mean and standard deviations were calculated for both the planning and TQM constructs, and the variance between means and standard deviation scores of small and medium size, as well as strategic and operational planning-oriented SMEs, was used to describe the sample firms and the relationship between planning, firm size and TQM practices.

## Results and discussion

### Characteristics of sample firms

The sample firms consist of 13 manufacturing, 19 merchandising (wholesaling and retailing firms), and 22 service (banks, hotels, hospitals) firms. Although the partnership form of business is not common in Botswana, all legal forms of ownership (sole proprietorship, partnership and corporations) were operational, 27 companies were formed as corporation, 17 as sole proprietorship and ten as joint ventures or partnerships. The sample firms consisted of 34 small and 20 medium-sized companies.

The sample firms were also divided into strategic planners and operational planners based on their response to selected planning

indicators. Firms with a score of high (4) and very high (5) on strategic planning issues (e.g. mission statement, deductive approach, environmental scanning, formalization, long-term goals, quantitative targets, etc.) are considered strategic planning-oriented while those with a score of very low (1) and low (2) on the same issues and very high (5) and high (4) on operational planning issues (e.g. short term goals, functional budgets, incremental approach, operational efficiency, etc.) are considered operational planning-oriented firms. Only 18 firms were found to be practising some form of strategic planning, whereas the remaining 36 firms put more emphasis on short-term operational planning activities.

The management of 32 (60 percent) of the sample firms was handled by employed professional managers, whereas the remaining 22 (40 percent) were managed or administered by the owners themselves and family members. On average, the sample firms have been operating in Botswana for over four years. This is generally assumed to be adequate time for firms to get used to the various trends in the market and the economy. The managers have, on average, over four years of managerial experience and only six (11 percent) of the employed managers were female. The majority of the respondents have a high school and above high school educational qualification. Most of the employed professional managers have college certificate and diploma. However, about 92 percent of the respondents indicated that they have never received professional training in the past three years. All the sample firms (100 percent) were single independent business units. This means that they are not branches of other firms, where managerial decisions are made centrally. This was done to maintain the assumption that each company can take the initiative and implement its own TQM program and independent planning.

#### **Degree of emphasis on planning processes and contents by firm size**

The respondents were asked if it is possible for SMEs to effectively operate without business plans. It is interesting that 96 percent of the respondents responded negatively, confirming their good understanding of the need for business planning as a necessary condition for their survival and growth.

Almost all of the sample firms (98 percent) responded positively for the question on whether they have a written business plan or not. However, 89 percent of them indicated that these plans were prepared by external consultants mainly for the purpose of external validation by government agencies, banks, and other SME support agencies and financial lenders. The interesting finding of the study is that SMEs are using two types of business planning. A formal and structured business plan for external validation, and unsystematic, and non-formal planning to guide organizational activities. Based on their response to the items in Table I, the sample firms were divided into two. A total of 36 (67 percent) SMEs were found to put greater emphasis on operational planning issues and hence labeled as operational planning-oriented (OPO) firms and only 18 firms were found to be practicing some form of strategic planning activities and hence labeled strategic planning-oriented (STO) firms.

Table I shows the degree of emphasis SMEs put on the planning process and planning contents dimensions of the planning construct. Smaller firms put greater emphasis on intuitional or informal planning activities (mean = 4.69) compared to formalized planning activities (mean = 2.41) with a significant variance of 2.2. But, a relatively lower emphasis was given to informality (mean = 4.02) and a relatively higher emphasis to formality (mean = 3.11) of the planning process by medium-sized firms resulting in a lower variance of only 0.91. The measurement on incremental-deductive approaches to planning also shows that small firms attach more emphasis on incremental approach than deductive approach. Although medium-sized firms also put greater emphasis on incremental approach (mean = 3.93) than deductive approach, the size of the variance (0.52) is relatively small.

Table I also shows the level of emphasis placed on planning contents. Small firms put more emphasis on short-term goals (mean = 4.62), as opposed to long-term goals (mean = 2.45) with the difference being significant. Medium-sized companies also put higher emphasis on short-term goals (4.36) than on long-term goals (mean = 3.88). But, the emphasis they put on long-term goals is greater than by small firms. Small firms also put relatively little emphasis on environmental scanning (mean = 2.19),

Table I Degree of emphasis on selected planning process indicators

No.	Items	Small		Medium		All firms	
		Mean	S.D.	Mean	S.D.	Mean	S.D.
<b>Planning process</b>							
1	Intuition/informality	4.69 <sup>b</sup>	0.86	4.02 <sup>b</sup>	0.84	4.43	0.85
2	Incremental	4.51 <sup>a</sup>	0.59	3.93 <sup>a</sup>	0.92	4.30	0.71
3	Documentation	3.21	0.62	3.74	0.74	3.41	0.66
4	Participative	3.16	0.76	3.78	0.91	3.39	0.86
5	Communicative	3.14	0.95	3.22	0.97	3.17	0.96
6	Deductive	2.86 <sup>a</sup>	1.05	3.41 <sup>a</sup>	0.91	3.07	1.00
7	SWOT analysis	2.59	1.11	3.18	0.81	2.81	1.00
8	Formalization	2.41 <sup>b</sup>	0.99	3.11 <sup>b</sup>	0.82	2.67	0.93
<b>Planning content</b>							
1	Short term goals	4.62 <sup>b</sup>	0.68	4.36 <sup>b</sup>	0.55	4.52	0.63
2	Personnel plan	4.25	0.59	3.34	0.49	3.91	0.55
3	Inventory plan	4.22	0.69	3.62	0.49	4.00	0.62
4	Financial plans	3.99	0.89	3.83	0.59	3.93	0.79
5	Sales plans	3.86	0.57	3.99	0.87	3.91	0.68
6	Production plans	3.79	0.94	4.21	0.86	3.95	0.91
7	Marketing plan	2.86 <sup>a</sup>	0.69	4.41 <sup>a</sup>	0.47	3.43	0.61
8	Quantitative targets	2.79	0.99	2.87	0.95	2.82	0.98
9	Mission statement	2.68 <sup>a</sup>	1.03	3.14 <sup>a</sup>	1.05	2.85	1.03
10	Long term goals	2.45 <sup>b</sup>	1.11	3.88 <sup>b</sup>	0.96	2.98	1.05
11	Scanning data	2.19 <sup>a</sup>	1.01	2.98 <sup>a</sup>	0.97	2.48	1.00
	Sample size		34		20		54

Notes: <sup>a</sup> and <sup>b</sup> indicate statistically significant difference between small and medium firms as well as between planning dimensions at 1% significant level

mission statement development (mean = 2.68), the use of quantitative targets such as market share, return on asset, return on investment (mean = 2.79), and the preparation of marketing plan (mean = 2.86).

The findings generally show the existence of a significant relationship between firm size and planning behavior. As size increases from small to medium, companies put greater emphasis on strategic planning-related issues and activities. One possible justification for this could be the fact that an increase in size means an increase in resources, investment and expertise, which will directly affect the planning behavior of firms.

#### Degree of emphasis on TQM practices by firm size

Respondents were asked to indicate the degree of emphasis placed on eight TQM dimensions or practices, which contain 40 elements. Although the respondents have evaluated all the 40 TQM elements, the grand mean for the eight dimensions are used to show the overall perception of SMEs about TQM practices.

There is only insignificant difference between small (mean = 4.69) and medium-sized (mean = 4.71) firms in the level of emphasis they put on the five items developed to measure managerial leadership. As this is the highest mean value in Table II, it indicates that both small- and medium-sized companies attach relatively high emphasis on managerial expertise and leadership issues. This implies the existence of reasonable understanding in SMEs about managerial leadership elements as an integral part of TQM.

Although medium-sized companies attach more importance than small companies to customer satisfaction, the relatively high mean value shows the existence of reasonable understanding of customer satisfaction as an important component of TQM. Employee empowerment, an important component of TQM practices, received lower attention from smaller firms (mean = 3.26) than from medium-sized firms (mean = 3.99). The same is true for all the other dimensions of TQM. This reveals the existence of an important relationship between firm size and quality improvement activities of SMEs. As firms

Table II Degree of emphasis placed on TQM practice by firm size

TQM dimensions	Small		Medium		Total	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Managerial leadership	4.69 <sup>a</sup>	0.41	4.71 <sup>c</sup>	0.35	4.70	0.39
Customer satisfaction	3.54 <sup>b</sup>	0.84	4.12 <sup>d</sup>	1.02	3.75	0.91
Employee empowerment	3.26	0.78	3.99	0.66	3.53	0.74
Quality philosophy/culture	2.98	0.99	4.23	0.71	3.61	0.89
Supplier partnership	2.56	1.08	3.18	0.81	2.79	0.98
Continuous improvement	2.47	1.14	2.86 <sup>c</sup>	0.97	2.61	1.08
Resources and environment	2.41 <sup>b</sup>	0.85	2.97 <sup>d</sup>	0.85	2.62	0.85
Measurement and feedback	2.16 <sup>a</sup>	1.19	3.21	0.95	2.55	1.10
Sample size		34		20		54

Notes: <sup>a</sup>, <sup>b</sup>, <sup>c</sup> and <sup>d</sup> indicate statistically significant difference between levels of emphasis put on different TQM dimensions at 1% significant level

grow from small to medium in terms of number of employees or annual turnover, they tend to put more emphasis to TQM practices.

From this, one can infer that small-sized firms put greater emphasis on managerial leadership, employee empowerment and customer satisfaction than the development of quality culture, the use of measurement and feedback, working condition, collaboration with suppliers and commitment to continuous improvement. This could be attributed to lack of resources and expertise in SMEs, since an attempt to implement all TQM practices may result in dilution of scarce resources and a loss of focus.

#### The relationship between TQM and planning behavior

Table III shows the degree of emphasis put on the eight TQM dimensions by operational and strategic planning-oriented firms. There is statistically significant difference between operational and strategic planning-oriented

firms in the degree of importance they attach to TQM dimensions. Strategic planning-oriented firms put greater emphasis on most of the TQM dimensions than do operational planning-oriented firms. For instance, there is significance variance (variance = 1.62) between the degree of emphasis on customer satisfaction by STO (mean = 4.83) and OPO (mean = 3.21) oriented firms. Significant differences are also observed in employee empowerment, quality philosophy and culture and supplier partnership.

This trend is also supported by the standard deviation values. As shown in Table III, all the standard deviation values for the STO-oriented firms are below one while half of the standard deviation values for OPO-oriented firms are above one. Thus, increased variability in the evaluation of the TQM dimensions is found within the operational planning-oriented firm subgroup. Large standard deviation values indicate a lack of common understanding or perception about the dimensions under consideration.

Table III Degree of emphasis on TQM practice by strategic and operational oriented firms

Factors	SPO firms		OPO firms		All firms	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Managerial leadership	4.71	0.58	4.69	1.08	4.70	0.39
Customer satisfaction	4.83 <sup>c</sup>	0.91	3.21 <sup>c</sup>	0.91	3.75	0.91
Employee empowerment	4.43 <sup>a</sup>	0.49	3.08 <sup>a</sup>	0.87	3.53	0.74
Quality philosophy/culture	4.32 <sup>e</sup>	0.73	3.26 <sup>e</sup>	0.97	3.61	0.89
Supplier partnership	4.11 <sup>d</sup>	0.66	2.13 <sup>d</sup>	1.14	2.79	0.98
Continuous improvement	4.25 <sup>b</sup>	0.45	1.79 <sup>b</sup>	1.40	2.61	1.08
Resources and environment	3.33	0.59	2.27	0.98	2.62	0.85
Measurement and feedback	2.88	0.62	2.39	1.34	2.55	1.10
Sample size		18		36		54

Notes: SPO = strategic planning oriented firms, OPO = Operational planning oriented firms  
<sup>a</sup>, <sup>b</sup>, <sup>c</sup>, <sup>d</sup> and <sup>e</sup> indicate a statistically significant difference between STR and OPO at 1% significance level



These higher mean values and lower standard deviation values show not only the existence of statistically significance relationship between the planning behavior of SMEs and TQM practices, but also the strength of the relationship as compared to the relation between firm size and TQM practices. Based on the magnitude of the variance between means, one can, therefore, conclude that planning behavior is more strongly related to TQM practice than firm size. This can be confirmed by further analyzing the mean values given to the continuous improvement dimension of TQM by the small- and medium-sized firms and by SPO and OPO-oriented firms. Given mean emphasis of 2.47 and 2.86 to the continuous improvement dimension, respectively, with the variance being (variance = 0.39) very small. However, the variance between the means for continuous improvement dimension by SPO and OPO planning oriented firms is very significant. SPO firms put a mean emphasis of 4.25 while the OPO firm put a mean emphasis of only 1.79, with the variance (variance = 2.46) being relatively very high. Thus, it is concluded that planning behavior and firm size have important impact on TQM. But, planning behavior exerts much more influence on TQM than firm size.

### Concluding remarks and implications for SMEs

#### Concluding remarks

Before drawing any conclusions from the findings, the limitations of the paper must be mentioned. Since a small number of sample (54 SMEs) firms has been used for this study, both the planning and the TQM constructs have not been tested and validated. The need for TQM and planning may vary from one industry to another. But, this study used mixed samples from three industries, which will make it difficult to generalize the findings to all SMEs. Thus; any conclusion drawn from the findings should be seen as tentative.

The main objective of this paper was to investigate the relationship between planning behavior, firm size and TQM practices in SMEs. The findings supported the argument that statistically significant relationships exist between planning, firm size and TQM practices. Further analysis of the data showed that the planning behavior of SMEs is more

strongly related to TQM practices than does firm size. This implies that any attempt to introduce the adoption of TQM practices in SMEs must be preceded by the promotion of business planning practices, particularly strategic business planning, as a precondition. Quality does not happen by accident, it must be planned (Crosby, 1979). The paper showed that it is easier for strategic planning-oriented firms to adopt the TQM practices than for non-planning or operational planning firms. Quality improvement in all the eight dimensions requires systematic thinking and an organized approach. TQM could serve as a source of competitive advantage if only it is planned. Thus, it is recommended that concerted efforts must be made to promote the development of the culture of business planning in SMEs as a precondition for the implementation of formal TQM practices.

The implication of the relationship between firm size and TQM is obvious. An increase in size is an increase in resources and capabilities, which directly affect the implementation of TQM practices.

#### Implications for SMEs

The literature on TQM offers many lessons that can be learned from failures as well as successes for the purpose of successful implementation of TQM. First, SMEs must know themselves what TQM really means for them before they start the journey. They must create a culture that is conducive to and supportive of business planning. They must align TQM with their planned goals and objectives. TQM should be considered as an essential strategy, not an optional extra, to achieve planned goals.

TQM implementation should be unique to each company, it should be noted that there is no "one-size-fits-all" approach in TQM. Certain quality activities may be more appropriate for some organizations than for others. SMEs must take a "holistic" approach, since TQM is neither a canned program nor a simple sum of quality tools, techniques and practices. Since TQM implies total commitment and total responsibility by all organizational members at all levels and in all areas of business, it must be part of the company's strategic plan. Quality activities can be integrated if they are planned.

Moreover, SMEs should know that both planning and TQM are not a "magic bullet" or panacea for all problems of SMEs. Many



SMEs simply jump on the bandwagon without fully understanding what TQM means for them or its possible consequences. SMEs should avoid wishful thinking that business planning and TQM will fix short-term problems and quickly improve business performance. TQM is not a destination but a journey, requiring a long-term strategic planning and unwavering commitment to the improvement of products, services and processes. It is a means to an end rather than an end in itself (Shin *et al.*, 1998).

## References

- Agus, A. (2000), "TQM practices in manufacturing companies in Malaysia: an exploratory analysis", *Total Quality Management*, Vol. 11 No. 8, pp. 1041-51.
- Ahire S.L and Golhar, D.Y. (1996), "Quality management in large vs small firms", *Journal of Small Business Management*, January, pp. 1-3.
- Boon, S. and Ram, M. (1998), "Implementing quality in a small firm: an action research approach", *Personal Review*, Vol. 27 No. 1/2, pp. 20-40.
- Chandler G.N. and McEvoy, G.M. (2000), "Human resource management, TQM and firm performance in small and medium size enterprises", *Entrepreneurship: Theory and Practice*, Vol. 25 No. 1, pp. 43-57.
- Collins B. and Hage, E. (1993), *Management By Policy*, ASQC Quality Press, Milwaukee, WI.
- Crosby, P. (1979), *Quality is Free, The Art of Making Quality Certain*, McGraw-Hill, New York, NY.
- Deshpande, S.P and Golhar, D.Y. (1994), "HRM practices in large and small manufacturing firms: a comparative study", *Journal of Small Business Management*, Vol. 32 No. 2, pp. 49-56.
- Djerdjour, M. (2000), "Implementation of quality programs in developing countries: a Fiji island case study", *Total Quality Management*, Vol. 11 No. 1, pp. 25-44.
- Douglas, T.J. and Judge, W. Jr, (2001), "TQM implementation and competitive advantage: the role of structural control and exploration", *Academy of Management Journal*, Vol. 44 No. 1, pp. 158-70.
- Durate, J.E. (1993), "Policy deployment: planning methods that get results", *CMA Magazine*, Vol. 67 No. 4, pp. 62-84.
- Ghobadian, A. and Gallear, D. (1996), "Total quality management in SMEs", *Omega, International Journal of Science*, Vol. 24 No. 1, pp. 83-106.
- Hartz, O. and Kanji, G.K. (1998), "Development of strategies for total quality management in large industrial companies and small and medium enterprises", *Journal of Total Quality Management*, Vol. 9 No. 4/5, pp. 112-15.
- Hornsby, J. and Kuratko, D. (1990), "Human resource management in small business: critical issues for the 1990s", *Journal of Small Business Management*, Vol. 28 No. 3, pp. 9-18.
- Jones, G.R., George, J.M. and Hill, C.W.L (2000), *Contemporary Management*, 2nd ed., Irwin McGraw-Hill, Boston, MA.
- Kiggundu, N.M. (1989), *Managing Organization In Developing Countries*, Kumarian Press, Bloomfield, CT.
- Kunst, P. (2000), "Quality management and business performance in hospitals: a search for success parameters", *Total Quality Management*, Vol. 11 No. 8, pp. 1123-33.
- Lee, G.L. and Oakes, I. (1995), "The 'pros' and 'cons' of TQM for smaller firms in manufacturing: some experiences down the supply chain", *Total Quality Management*, Vol. 6 No. 4, pp. 413-26.
- Marsden, N. and Kanji, G. (1998), "The use of Hoshin Kanri planning and deployment systems in the service sector: an exploration", *Total Quality Management*, Vol. 9 No. 4/5, pp. 44-9.
- McTeer, M.M. and Dale, B.G. (1994), "Are the ISO 9000 series of quality management systems standards of value to small companies?", *European Journal of Purchasing and Supply Management*, Vol. 1 No. 4, pp. 227-35.
- Miller, C.C. and Cardinal, L.B. (1994), "Strategic planning and firm performance: a synthesis of more than two decades of research", *Academy of Management Journal*, Vol. 37, pp. 1649-65.
- Mintzberg, H. (1994), *The Rise and fall of Strategic Planning*, Prentice-Hall International (UK), London.
- Powell, T.C. (1995), "TQM as competitive advantage: a review and empirical study", *Strategic Management Journal*, Vol. 16, pp. 15-37.
- Reed, R., Lamark, D.J. and Mero, N.P. (200), "Total quality management and sustainable competitive advantage", *Journal of Total Quality Management*, Vol. 5 No. 1, pp. 5-26.
- Shin, D., Kalinowski, J.G. and Gaber, A.E. (1998), "Critical implementation issues in TQM", *SAM Advanced Management Journal*, Vol. 63 No. 1, pp. 10-15.
- Temtime, Z.T. (2002), "The planning behavior of small and medium enterprises in a developing economy: evidence from Botswana", *African Journal of Finance and Management*, Vol. 10 No. 1.
- Wiele, T. and Brown, A. (1998), "Venturing down with the TQM path for SMEs", *International Small Business Journal*, Vol. 16 No. 2, pp. 50-68.
- Witcher, B.J. and Butterworth, R. (1997), "Hoshin Kanri: a preliminary overview", *Total Quality Management*, Vol. 8 No. 2/3, pp. 123-32.
- Wood, G.R. and Munshi, K.F. (1991), "Hoshin Kanri: a systematic approach to breakthrough improvement", *Total Quality Management*, Vol. 2 No. 3, pp. 121-5.
- Yosuf, S.M. and Aspinwall, E. (1999), "Critical success factors for TQM implementation in small and medium enterprises", *Total Quality Management*, Vol. 10 No. 4/5, pp. 803-9.