

TQM IN SMES IN BOTSWANA: A PRELIMINARY INVESTIGATION

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Abstract: Stiff competition driven by more demanding customers has exerted pressure on both small and large firms to adopt total quality management (TQM) practices. Although TQM has currently grown to become a well-established field of research, much of the work to date has concentrated on large, multi-product, multi-divisional and multi-national firms. Only a little has been done on the TQM practices of Small and Medium Enterprises (SMEs). The literature on quality improvement practices of SMEs in developing countries particularly in Africa is almost non-existent. The purpose of this paper is, therefore, to examine the problems and prospects of SMEs in implementing TQM practices by reviewing existing literature and collecting primary data from 56 SMEs in the Republic of Botswana. Since the study is limited to a preliminary investigation of problems and possibilities, simple descriptive statistics such as statistical rankings, analysis of variance (ANOVA), sample means and standard deviations are used to analyze the data. The results indicate that misperceptions coupled with lack of resources and strategic orientation have hindered the introduction of TQM practices in SMEs in Botswana. Implications for future research and strategies to achieve attitudinal and behavioural changes in SMEs are suggested.

Keywords: Total Quality Management, ISO 9000, Small and Medium Enterprises, Developing Countries, Quality Improvement, Quality Control.

INTRODUCTION

TQM is a management philosophy for continuously improving the quality of goods and services delivered through the participation of all organizational members. It is 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 customers' 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. Its adherents claim that managers can implement TQM in any

organization - manufacturing, service, non-profit or government and that it generates improved products, reduced costs, more satisfied customers and employees and improved bottom line financial performance (Powell, 1995; Agus and Abdullah, 2000). 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 out-perform non-TQM firms. Several studies (e.g. Husband and Mandal, 1999; Douglas and Glen, 2000; Kaldenberg and David, 1995) have noted that TQM entails retraining costs, consumes a considerable amount of management time, increases rigidity, formality and paper work, puts greater emphasis on processes rather than on results, fails to address the needs and problems of SMEs, service and non-profits firms. The Wallace Company, the Malcolm Baldrige Quality Award winner, and the Florida Power and Light, the Deming Quality Award winner, have, for

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example, virtually eliminated their TQM programs due to bankruptcy and excessive paperwork, respectively (Powell, 1995). 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, 2000; Boon and Ram, 1998; Wiele and Brown, 1998; Reed, Lemark and Mero, 2000). Does this also apply to SMEs in developing countries? How do SMEs perceive TQM as a management tool for achieving competitive advantage? What are the major factors affecting TQM implementation in SMEs in developing countries?

MATERIALS AND METHODS

TQM and SMEs

TQM is a strategic weapon that both large and small firms need in order to survive and grow in today's turbulent markets. It could be used by SMEs with considerable success (Ghobadian and Gallear, 1996). A study by Ahire and Gohlar (1996) found that the introduction of TQM in SMEs had helped to sharpen SMEs' market focus, to become more efficient, to better harness their human resources and to improve their competitiveness. They also concluded that TQM implementation leads to better product quality and that SMEs can implement it as effectively as larger firms. Shea and Gobeli (1995) found two major benefits of TQM to SMEs - improved customer satisfaction, primarily because of improved internal processes, and a high level of employee satisfaction based on more satisfied internal and external customers. Boon and Ram (1998) also stated that quality in its various aspects is applicable to all firms regardless of size and context.

Thus, SMEs are at the centre 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 a 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. It could be argued that many SMEs are practising the principles of quality every day without placing such a label as TQM on it.

Characteristics of SMEs

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 Gallear, 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 into five categories - structure, systems and procedures, culture and behaviour, 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 in face-to-face relationships because of the fewer 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 the service and overall profitability of the organization. There is a natural tendency for cross-functional training and it is easier to attain functional integration. Furthermore, decision-making processes are simpler in SMEs than in large firms. According to Hartz and Kanki (1998), SMEs can be characterized as being easy to survey and understand, having short lines of communication and being flexible in relation to the implementation of new management philosophies and approaches.

However, SMEs also have weaknesses that can negatively affect the implementation of TQM practices. It is more difficult to prove that TQM is an effective basis for small business strategy. Investment in training and education to instil quality culture in employees, the need to free up people from their normal work without disrupting on-going processes, lack of resources inflexibility and rigidity of outlook of the owner or manager are major obstacles for TQM implementation in SMEs (Lee and Oakes, 1995). Several studies (Deshpande and Gohlar, 1994, Hornsby and Kuratko, 1990) indicate that effective human resources management (HRM) is one of the most crucial problems faced by SMEs. With the exception of only a few studies (e.g. Chandler, 2000) there is an acute shortage of research identifying and validating human resource practices in SMEs and even less research focusing on the relationship between TQM, HRM and small firm performance. In fact, even among larger firms, only recently has research begun to document the relationship between human resource practices and firm performance (Denaley and Huselid, 1996; Delery and Doty, 1996; Huselid, 1995). Abacus consulting identified lack of proper training and education as a major obstacle in implementing quality systems in fulfilling ISO 9000 standards in Pakistan (Djerdjour, 2000). High employee turnover restrains management from making the necessary investment in training and development of employees. Centralized decision-making is also a major problem as decision-making revolves around a few top

people in most SMEs in developing countries (Kiggundu 1989). Teaching and orienting employees about TQM and ISO 9000 requires open communication, decentralization and participative management style. According to Kakkar (1995), 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 (Djerdjour, 2000).

Quality and SMEs in Developing Countries

The demand for quality is no longer the prerogative of the West. With the adoption of international quality standards such as ISO 9000, quality is emerging as one of the most important factors for all businesses competing in the global market place. Although a number of researchers and academics have extensively examined TQM implementation practices in industrialized countries such as USA, Japan, 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 have examined TQM practices of large firms. Thus, studies on TQM practices of SMEs in developing countries, particularly in Africa, are almost non-existent.

SMEs are long recognized as the engine of economic growth in both the developed and developing world. However, most SMEs in developing countries perceive TQM practices as costly and time-consuming tasks. With the weakening of trade-barriers, the opening of markets to multinational competitors and the spreading 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. Today developing countries are beginning to see dramatic improvements in quality. It is, therefore, very important for academics, consultants and researchers to

examine quality practices in SMEs in developing countries and to investigate the major psychological, managerial and organizational factors that affect the implementation of TQM practices. At Pakistan's first international convention on quality, Crosby (1995) stated that nothing is more important to the prosperity of a developing nation than quality. The only way a developing nation can increase its trade activities and develop a sustainable basis is to improve the quality of its products and services (Djerdjour, 2000).

Developing countries, particularly the emerging ones, are blessed with a big advantage. They do not have to repeat the mistakes and omissions that were made by industrialized countries. 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. TQM is therefore a solution for improving the quality of products in developing economies so that they are acceptable in a global market. However, most organizations in developing countries suffer from lack of employee involvement and participation in quality improvement efforts; lack of management commitment and motivation; perception of quality as an optional extra but not as a necessity for survival and growth; traditional belief that quality costs money; lack of cooperation between suppliers and dealers, management and trade unions; unorganized and indifferent customers; lack of political support; lack of established standards (Lakhe and Mahanty, 1994; Djerdjour, 2000). In developing countries quality promotion is restricted in most cases to inspection and measurement. According to Seyal and Raza (Djerdjour, 2000) the major reasons for SMEs in Pakistan registering for ISO 9000 certification include; pressure from existing buyers, to achieve greater market accessibility, to improve firm image, to fulfil some contractual requirements of potential buyers, to compete with other ISO 9000 registered firms, and to capture better bargains in foreign markets. Kakkar (2000) stated the

major reasons for Indian firms adopting ISO 9000 standards as: marketing advantages, competitors' use of TQM principles, demanding customers and system improvement.

RESEARCH DESIGN AND METHODOLOGY

The major weaknesses of this study are twofold. First, the study is a preliminary consideration of the problems of SMEs in adopting TQM practices and not a detailed research into actual implementation. Second, due to the limited number of firms available in each sector of the Botswana economy, the author was forced to take sample firms from different industries and sectors. As TQM practices vary from industry to industry, this sampling plan makes the findings difficult to generalize concerning firms in all sectors. However, as all firms regardless of their industry are expected to implement some form of quality management practices in order to meet customer requirements, the study hopes to reveal the problems of SMEs in general.

Fifty six small and medium firms located in 3 cities in the Republic of Botswana were randomly selected from a list provided by the Botswana Confederation of Commerce, Industry and Manpower (BOCCIM) to complete a two-page questionnaire. Efforts were made to include firms from all private sectors of the economy.

The questionnaire was designed with 3 sections. Section 1 deals with particulars about the company such as year of establishment, number of employees, managerial experience, form of ownership, and so on. Section 2 examines the emphasis placed by the sample firms on selected quality improvement activities identified from existing literature under 8 major headings. The last section asks respondents to examine the major obstacles to TQM implementation.

As part of a follow-up to the questionnaire, each respondent was reminded, twice on average, to complete and return the questionnaire. Moreover, the respondents were promised a copy of the summary of the problems and

prospects of SMEs in Botswana. Although 41 (68%) were filled and returned by the chief executive officers/managing directors/owners during the 76 days data collection period, only 36 were found useable for this study. Simple descriptive statistics such as statistical rankings, sample mean, analysis of variance (ANOVA) and standard deviations were used to analyze the data.

RESULTS AND DISCUSSION

Characteristics of Sample Firms

The sample firms consisted of 9 manufacturing, 11 merchandising (wholesaling and retailing firms) and 16 service (Banks, Hotels, Hospitals) firms. The main reason for taking a mixed sample is that none of these groups could justify the cost of a fully-fledged survey. Although the partnership form of business is not common in Botswana, all forms of ownership were operational. 23 companies were formed as corporations, 9 as sole proprietorship and 4 as joint ventures or partnerships. The sample firms were also divided into small and medium-sized firms based on the number of employees. In the Republic of Botswana, firms with 25 employees are regarded as small and those with 25 to 99 employees are defined as medium-sized firms. The sample firms consisted of 22 small and 14 medium-sized companies. The intention of the writer - to use annual sales and profit data to define small and medium enterprises was hampered by the unwillingness of the majority of the sample firms to reveal their financial information due to confidentiality.

The sample firms were also divided into strategic planners and operational planners based on their response to selected strategic/operational planning indicators. The firms were asked to indicate the degree of emphasis they put on selected strategic/operational planning indicators, using a Likert - type scale ranging from very high (5) to very low (1). The selected strategic/operational planning indicators are:

- Formal Mission Statement;
- Market Research;
- Industry Analysis;

- Long - Term Goals;
- Environmental Scanning;
- Planning Manuals;
- Forecasting;
- Short - term Goals;
- Operational Efficiency; and
- Functional Budgets.

Firms with a score of high (4) and very high (5) are considered strategic planning-oriented while those with a score of very low (1) and low (2) are considered operational planning-oriented firms. Although it is not easy to label firms as strategic and operational planners, the author intended to analyze the relationship between the perceptions of the sample firms about TQM practices and their planning behaviour. Only 12 firms were found to be practising some form of strategic planning whereas the remaining 24 firms put more emphasis on short-term operational planning.

Employed professional managers are managing 21 (60%) firms whereas owners and family members manage the remaining 15 (40%) firms. On average, the sample firms have been operating in Botswana for 5.7 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, 4.8 years of managerial experience and only 3 (14%) of the employed managers were female. The average level of education for all managers is 12 + 1, which is equivalent to a certificate. Employed professional managers have, on average, 12 + 2.5, which is slightly above the diploma level training. All the companies (100%) 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 initiative and implement its own TQM program.

Perceptions of SMEs About TQM Practices

Respondents were asked to indicate the degree of emphasis placed on 8 TQM implementation

practices which contain 40 elements, using a 5-point Likert - type scale, ranging from very high (5) to very low (1). Although the respondents evaluated all 40 TQM elements, only the grand mean for 8 categories are presented and analyzed in 2 tables.

Managerial Leadership and Expertise

As shown in Table 1, there are significant differences between small [mean = 2.91] and medium - [mean = 4.62] sized firms in their evaluation of managerial leadership and expertise elements. Managers of small firms put less emphasis on the need to actively champion quality programs and the need for managerial training in quality issues than do managers of medium firms. Medium-sized firms have relatively clearer quality objectives and are more actively communicating them to important personnel in the organization than do smaller firms. This reveals that managerial leadership and expertise vary with firm size. As a firm grows from small to medium, the need to assign more qualified, trained and experienced people becomes apparent. As shown by the size of the standard deviation, there is also significant perceptual difference [at $p < 0.01$] between small [S.D. = 1.2] and medium - sized [S.D. = 0.9] firms on their view of the role of managerial leadership and expertise in implementing TQM practices. The higher the standard deviation, the greater the perceptual difference among firms in the sub-sample.

TQM is closely related to the planning behaviour of firms. The more the firm is practising strategic (long-term) planning the more will be its understanding of the need to implement TQM practices to achieve competitive advantages. The findings of the study support this argument. There is a significant difference between strategic planning oriented firms [mean = 4.64] and those focusing largely on short-term issues [mean = 3.21]. Strategic planning - oriented firms put greater emphasis in such quality issues as the need for training on quality management, problem solving and team work, development of clear quality

objectives and goals and open communication than do operational (short-term) planning oriented firms. The small size of the standard deviations for strategic planning-oriented firms [S.D. = 0.5] shows the existence of a relatively good understanding among strategic planning-oriented firms of the role of managerial leadership and expertise in TQM implementation.

Customer Satisfaction

If the respondents were asked to indicate the level of emphasis they put on customer satisfaction, the result would be obvious. No firm is expected to undermine customer satisfaction as means achieving profitability. The efforts made by the sample firms to achieve customer satisfaction are measured indirectly. There is a significant difference between small [mean = 4.02] and medium-sized [mean = 4.91] firms, as well as between strategic planning [mean = 4.12] and operation planning [mean = 3.25] oriented firms. Medium and strategic planning oriented firms put greater emphasis on all customer satisfaction elements - the need to increase direct contact with customers, using customer complaints for quality improvement, the need to collect data to monitor changes in customers, involving customers in service and product designing, the need to look for causes when losing a major customer, encouraging customers to give suggestions and using customer requirements as a measure of quality - than do smaller and short-term planning oriented firms. The findings also showed that small and operational planning - oriented firms do not have a clear common understanding on how to achieve customer satisfaction as indicated by the standard deviations. Strategic planning-oriented [S.D. 0.6] and medium-sized firms [S.D. = 0.4] have significantly lower standard deviations in their view of customer satisfaction than do short-term survival-oriented [S.D. = 1.2] and small firms [S.D. = 0.9]. This means that firms in the latter group have varying levels of understanding of customer satisfaction elements.

Table 1: *Summary of Degree of Emphasis Placed on TQM Practice/Elements By Firm Size*

Factors	Small		Medium		Total	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Managerial Leadership	2.91*	1.2	4.62*	0.9	3.57	1.1
Customer Satisfaction	4.02^	0.6	4.91^	0.4	4.37	0.5
Employee Empowerment	3.45**	0.9	4.21**	0.5	3.75	0.7
Quality Corporate Culture	3.66	1.9	3.72	0.8	3.68	1.5
Supplier Partnership	2.85	0.6	2.93	0.5	2.88	0.6
Process/Product Quality Improvement	3.21++	0.5	3.98++	0.4	3.51	0.5
Resources and Working Environment	3.11	0.7	3.78	0.5	3.37	0.6
Measurement and Feedback	3.01	0.9	3.19	0.5	3.08	0.7
Sample Size	22		14		36	

Key: *, **, ^ and ++ indicate statistically significant difference between small and medium firms at 1% significant level.

Employee Empowerment

Given their low investment and other resource problems, it is not surprising that small and short-term planning-oriented firms do not put much emphasis on employee training, motivation and participation in planning. The implementation of TQM practices without having motivated, well trained and empowered work teams is impractical, for it is the people who turn the plans and objectives into reality. Although there are important differences between medium [mean = 4.21] and strategic planning - [mean = 4.32] oriented firms on the one hand and small [mean = 3.45] and operational planning - [mean = 3.41] oriented firms on the other in their emphasis on employee empowerment issues, both groups put very little emphasis on the need to measure employee satisfaction and designing appropriate incentive systems. This difference is also seen in the size of the standard deviations. The standard deviations for medium [S.D. = 0.51] and strategic planning-oriented firms [S.D. = 0.4] are far lower than the standard deviations for small firms [S.D. = 0.91] and operational planning - oriented firms [S.D. = 0.8]. The less standard deviation is the more common understanding of firms in their evaluation of the need for

employee training, motivation and empowerment. From this it can be inferred that firm size and planning behaviour affect the adoption and implementation of TQM practices.

Organizational Culture and Quality

There is no significant difference [at $p < 0.0$] between small [mean = 3.66] and medium [mean = 3.72] firms in their emphasis on the need to incorporate quality in their organizational culture. However, a significant difference [at $p < 0.05$] is observed in the perceptions of strategic planning oriented [mean = 4.23] and operational-planning oriented [mean = 3.41] firms. This indicates that strategic orientation rather than firm size plays an important role in the development of an organizational culture that facilitates quality improvement efforts. Many small enterprises indicated that they do not have explicitly stated mission statements. These firms perceive quality as an optional extra and not as an essential strategy to achieve long-term competitive advantages.

The study showed that small and medium firms with some form of strategic orientation have various programs that are designed to develop a quality-sensitive corporate culture.

Some of these include in-house quality award winners programs at the end of the planning period, greater work autonomy, involving employees in important decisions and open communication. There is an important difference among sample firms in their evaluation of organizational culture elements.

The highest standard deviation [S.D. = 1.9] is observed in small firms' evaluation of corporate culture. This shows that there are conceptual and perceptual problems among smaller firms regarding the incorporation of quality issues in their organizational culture. Similarly, significant perceptual differences are observed between strategic [S.D. = 0.7] and operational planning-oriented [S.D. = 1.2] firms.

Suppliers Partnership

It is very surprising that both small and medium enterprises put below-average emphasis [small firm mean = 2.85; medium firm mean = 2.93] on the need to develop supplier partnership. This could be attributed to the very small supply market in the country and the region. Most sample firms rated the willingness and reliability of suppliers very low. They indicated that there are usually long lead times, high costs of

switching from one supplier to another, inadequacy of the number of suppliers in the country and the high bargaining power of suppliers due to their low number and concentration in limited areas. TQM practices cannot be effectively implemented without collaboration with suppliers. The traditional adversarial relationship between buyer and supplier is a major obstacle for TQM implementation. However, strategic planning-oriented firms [mean = 4.20] have put more emphasis on the need to develop strong working relations with suppliers than do operational planning-oriented [mean = 3.21] firms. But all firms have a similar understanding of the problems in establishing close working relationships with suppliers as indicated by the standard deviations in Tables 1 and 2. Thus, although firms in Botswana seem to understand the importance of partnership with suppliers, they are unable to establish long-term working relationships and collaboration with suppliers.

Continuous Product/Process Improvement

The sample firms were also asked the level of emphasis they placed on five continuous improvement elements. A significant difference

Table 2: Degree of Importance Attached to TQM Practice By Planning Behaviour

Factors	Small		Medium		Total	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Managerial Leadership	4.64+	0.5	3.21+	0.9	3.73	0.8
Customer Satisfaction	4.12^	0.9	3.25^	1.2	3.57	0.8
Employee Empowerment	4.32^	0.4	3.41^	0.8	3.74	0.7
Quality Corporate Culture	4.23^	0.7	3.41^	1.2	3.71	1.0
Supplier Partnership	4.20+	0.6	3.21+	0.6	3.57	0.6
Process/Product Quality Improvement	4.25+	0.4	3.29^	0.7	3.61	0.6
Resources and Working Environment	3.36	0.5	3.28	0.5	3.31	0.5
Measurement and Feedback	2.91	0.6	2.65	0.8	2.74	0.7
Sample Size	12		21		33*	

Key: STR = strategic planning-oriented firms, OPR = Operational planning-oriented firms and + indicate a statistically significant difference at 5% significance level, * = Total sample size is only 33 because two firms did not respond to the planning construct.

is observed between small [mean = 3.21] and medium [mean = 3.98] firms [at $p < 0.01$] and between strategic [mean = 4.25] and operational planning - oriented [3.29] firms [at $p < 0.05$]. Many small and operational planning - oriented firms put below - average emphasis on periodic review of quality of products and process. The need to gather information on service delivery to improve processes was also rated low. However, medium and strategic planning - oriented firms put greater emphasis on the need to have clear division of activities and responsibilities in the organization, to encourage employees to give suggestions about product/process improvement, to maintain written documents on past results and to have guidelines and procedures for dealing with customer complaints. This reveals that quality improvement activities take place only when there are external pressures, not as a continuous process to achieve competitive advantages.

Resources and Work Environment

Although smaller firms are characterized by lack of resources, there is no significant difference between small firms [mean = 3.56] and medium [mean = 3.481 [at $p < 0.0$] and between strategic [mean = 3.86] and operational planning [mean = 3.84] oriented firms [at $p < 0.05$]. The implementation of TQM practices requires investment in employee training, information gathering and processing and technology. Both small and medium enterprises lack the necessary resources to implement TQM practices. Even firms with some strategic orientation have indicated that employee training; quality consultants and redesigning jobs are very expensive to both small and medium firms. Detailed analysis of the responses indicated that lack of experience in documentation of results, lack of integrated management information systems, lack of skills and knowledge of quality management have discouraged SMEs from adopting TQM practices. The organizational structure and authority and responsibility channels in SMEs are not conducive TQM

implementation. Employees need to have some form of task autonomy and open communication throughout the firm. The goals and objectives of the firm must be clear to important personnel in the firm.

Measurement and Feedback

The adoption and implementation of TQM practices require the development of sound measurement and feedback systems. Significant differences are observed between small [mean = 2.39] and medium [mean = 4.35] firms in the level of emphasis they put on the need for systematic and formalized performance measurement systems. Most medium enterprises regard performance evaluation as an educational process. But employees in small firms tend to consider it as a threat. The need to provide employees with timely feedback received very low emphasis in both small and medium enterprises. Employees are not openly invited to discuss performance evaluation results. Traditional techniques of measuring organizational performance [e.g. sales volume] are still prevalent in the sample firms. Strategic planning - oriented firms put greater emphasis [mean = 4.39] on the need to develop formal performance evaluation systems, the need to provide employees with timely feedback, the need to relate incentives to performance, the need to build long - term competitiveness than do operational planning - [mean = 3.21] oriented firms. Smaller and operational planning oriented firms tend to focus more on short-term financial performance than long-term competitive advantages.

The interview conducted with some of the sample firms revealed many important issues regarding the problems of SMEs in adopting TQM practices. Most of the interviewees indicated that they have a quality improvement program, such as process improvement, providing quality - related orientation to employees, providing them with different incentives. Six manufacturing companies indicated that they have a formal quality inspection unit; 3 restaurant owners indicated

that they themselves personally talk to customers and gather suggestions for improvement; a dental practitioner also stated that he usually calls his patients a week after providing services to make sure that they are happy with the service provided; wholesaling firms noted that section heads are allowed to organize their section in a manner they consider effective; three banks mentioned that suggestion boxes are effectively used to improve service quality and employees are given quality service-oriented training periodically. Generally, all sample firms have made some effort to improve quality and satisfy customers. With the exception of 4 companies, the efforts of all firms are not integrated toward TQM. They are fragmented quality practices. From the interview, it is inferred that SMEs in Botswana also understand the need to put some effort into improving the quality of goods and services. However, the efforts are fragmented, not well integrated with their business strategy.

Obstacles to TQM in SMEs in Developing Countries

The respondents were also asked to indicate the degree of difficulty exerted by selected factors, using a Likert - type scale, ranging from very high (5) to very low (1), on the adoption and implementation of TQM practices.

The major problem of SMEs in adopting TQM practices is low investment. Both small [mean 4.92] and medium [mean = 4.521] enterprises rated the difficulties exerted by low investment as almost very high. Strategic [mean = 4.81] and operational [mean = 4.84] planning - oriented firms also rated investment as a very decisive factor in implementing TQM practices. From this one can easily infer that low investment in SMEs acts as an obstacle to the implementation of TQM practices. Employee training, process improvement and integrated management information systems all require an additional investment, which is unaffordable for

most SMEs particularly in developing African countries. Lack of proper managerial skills, experience and knowledge as also rated very important for the implementation of TQM practices regardless of firm size and planning behaviours. Managers spend much of their time in "fire fighting", dealing with the day-to-day operational problems of the firms, and have very little time to think strategically about the future and initiate a TQM program.

As the benefits of TQM are normally realized in the long run, the planning behaviour of firms has some relationship to the adoption of TQM practices. Most small firms focus more on short-term survival issues than long-term competitive in advantages and hence their major problem to implementing TQM practices comes from lack of strategic thinking and orientation. As shown in Table 3, greater difficulties exerted by a excessive emphasis on short-term goals is observed in small [mean = 4.86] and operational [mean = 4.92] planning - oriented firms than in medium [mean = 4.24] and strategic [mean = 3.81] planning - oriented firms. Strong belief in traditional management techniques and methods is more prevalent in small and operational planning - oriented firms than in medium and strategic planning - oriented firms.

However, unlike other studies, the findings show that small [mean = 3.92] and operational planning - oriented firms [mean = 3.81] rated the degree of difficulties exerted by this factor lower than that of medium [mean = 4.21] and strategic planning - oriented [mean = 4.81] firms. Employee training and motivation is rated very high by all sample firms. However, the size of the domestic market is exerting more difficulties on medium [mean = 4.75] and strategic planning oriented - firms' [mean = 4.76] initiatives to implement TQM practices than it does on small [mean = 3.61] and operational planning - oriented [mean = 3.66] firms. Resistance to change by both managerial and non-managerial personnel is a common problem

Table 3: Degree of Difficulties Exerted by Selected Factors in the Adoption of TQM Practices by Firm Size and Planning Behaviour

Factors	Small		Medium		STR		OPR	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Investment	4.92	0.2	4.52	0.3	4.81	0.3	4.84	0.4
Managerial Expertise	4.81	0.4	4.75	0.3	4.62	0.3	4.87	0.3
Emphasis on Short-term goals	4.86*	0.3	4.04*	0.4	3.81^	0.2	4.92^	0.2
Strong belief in traditional methods	3.92	0.6	4.21	0.5	4.46	0.3	3.81	0.3
Employee training and motivation	4.85	0.5	4.88	0.4	4.89	0.2	4.92	0.3
Small size domestic market	3.61*	0.7	4.75*	0.6	4.76^	0.3	3.66^	0.4
Resistance to change	4.72	0.6	4.82	0.5	4.66	0.4	4.96	0.3
Formalization & documentation	4.68*	0.7	3.61*	0.4	3.44^	0.3	4.88^	0.4
TQM Frameworks & examples	3.88	0.6	4.21	0.3	4.89	0.3	3.48	0.8
Organizational structure	3.12	0.8	3.21	0.4	3.34	0.5	3.316	0.2
Sample Size	20		12		11		21	

of all sample firms in implementing TQM practices. Formalization and documentation of important information and past results have exerted greater difficulties on small [mean = 4.86] and operational planning-oriented [mean = 4.88] firms. The other major problem, particularly for small and operational planning-oriented firms, is lack of an appropriate TQM implementation framework. Many firms indicated that lack of TQM implementation examples other firms and relevant implementation frameworks that have incorporated the problems of SMEs have also contributed to the problem. Several studies found that organizational structure greatly affects TQM practices. However, the sample firms rated the degree of difficulties exerted by this factor relatively low.

IMPLICATIONS FOR RESEARCH

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 what TQM really means for them before they start the TQM journey. They must create a culture that is conducive to and supportive of TQM implementation. They must align TQM implementation with their goals and competitive environment. They should understand the need time and efforted. TQM implementation should be unique to each company, noting 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; TQM is neither a canned program nor a simple sum of quality tools, techniques and practices. Broadly understand the phrase 'TQM', which conveys the comprehensive nature of quality improvement activities, implies total commitment and total responsibility by all organization members at all organization levels and in all areas of the business. Quality activities

should be integrated not fragmented. Firms should know that TQM is not a "magic pill" or panacea for quality. Many SMEs simply jump on the bandwagon without fully understanding what TQM means for them or its possible consequences. Firms should avoid wishful thinking that TQM will fix short-term problems and quickly improve business performance. TQM is not a destination but a journey requiring a long term, unwavering commitment to the improvement of product, services and process, a means to an end rather than an end in itself (Shin *et al.*, 1998).

The findings of the study indicated that SMEs in Botswana have perceptual, organizational and managerial problems regarding the adoption and implementation of TQM practice. SMEs perceive that TQM is a costly and time-consuming task and hence appropriate only for large firms with relatively adequate resources such as finance, managerial expertise and experience. This does not mean that SMEs do not engage in quality activities. But their efforts are not integrated and systematic to achieve long-term competitive advantages. Their quality efforts are fragmented and short-term objective - oriented. Customer focus gets a high emphasis in SMEs when there is only market pressure but is not a continuous process. Business process improvement efforts are often carried out with the sole reason that others in the industry are doing so. Employee training and involvement is not seriously considered by SMEs as having a great contribution to quality effort. Working relationships and partnership with suppliers are primarily aimed at avoiding supply interruption or shortage rather than addressing quality problems. The unaffordability of the use of sophisticated quality control tools and techniques, coupled with lack of well-established management information systems, have made measurement and feedback a simple end-of-period activity rather than a continuous learning process. Although current research in TQM implementation in SMEs in developing

countries is in its infant stage, two major problems are frequently reported. The perception that TQM is unaffordable and hence appropriate only for large, multinational firms must be changed. Future research must find ways of changing the attitude of SMEs towards TQM. The other problem is related to lack of a TQM implementation framework appropriate to SMEs in developing countries, which apparently lack resources to lay the foundation for the implementation of TQM practices. Frameworks designed for large firms or SMES in the industrialized countries may not be appropriate for SMES in developing countries. Future research must, therefore, focus on the development and introduction of TQM implementation frameworks for SMEs in developing countries. As TQM initiatives are strongly linked with company strategic orientation, another major problem of SMEs is their excessive emphasis on short-term survival - oriented issues. Thus the planning behaviour of SMEs which focuses on operational efficiency at the expense of long-term competitive advantage must be addressed by future research as it will have a direct bearing on the adoption and implementation of TQM. Firms without formal strategic planning cannot adopt TQM practices. The existing literature on quality management treats ISO 9000 certification and the adoption of TQM practices in a somewhat similar manner. Due to the pressure from major customers, large firms and government encouragement, SMEs are forced to register for ISO 9000 certification without being ready for, and without understanding what TQM really means for them. ISO 9000 certification is not an end in itself; it should lead to TQM implementation. Researchers and academics should therefore aim at investigating effective ways of educating SMEs on how the necessary quality infrastructure can be built up, phase by phase, before indulging in a fragmented, unorganized, uncomprehensive, short-term target of quality improvement practices.

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