

Environmental Scanning in Botswana's SMEs: A Study of the Manufacturing Industry

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Environmental scanning (ES) is an indispensable activity practiced by top executives to align their organizations to turbulent environments. However, although the subject has generated a vast body of literature, it remains an underdeveloped domain in sub-Saharan Africa in general, and in Botswana in particular. Consequently, there is a paucity of literature on the subject and this has unfortunately limited a fuller understanding of how ES in transitional contexts is practiced. The research reported here thus investigated the scanning behaviour of CEOs of SMEs (Small and Medium Enterprises) in Botswana's manufacturing sector. Data were gathered via mail-delivered questionnaires sent to respondents based in

the cities of Gaborone and Francistown. The key findings of the study were: (1) the CEOs in the study display a propensity to scan the task environment with greater frequency focusing most on the customer, competitor and suppliers sectors; (2) CEOs in the sample are systematic scanners and frequently use the continuous scanning mode; (3) the sampled CEOs consider personal sources (customers, business associates, managers and suppliers) as their preferred sources of information; and (4) CEOs use a mosaic of sources but tend to rely on personal sources more than impersonal. Recommendations are made for future research on CEO scanning.

Introduction

Today's firms face environmental conditions that are fraught with turbulence, complexity and uncertainty. In order to survive and prosper in these conditions, organizations must be aware of the nature of the environment that they face or anticipate facing. One critical and indispensable way of achieving environmental awareness is through conducting environmental scanning (ES) by top executives; i.e. the gathering of accurate environmental information. Environmental scanning is defined as the acquisition and use of information about events, trends and relationships or organisational external environment, the knowledge of which would assist management in planning the organisations future course of action (Aguilar 1967; Auster and Choo 1993). ES is indispensable for firms as it enables them to gather vital information in order to: (1) maintain organisational

competitiveness; (2) identify and assess emerging developments and process events that may affect the strategic and tactical objectives of a firm. For SMEs (small and medium enterprises), ES is doubly important for two reasons. First, advances in the technology used by these firms, accelerated globalization and greater competitive intensity have increased the general level of uncertainty facing these enterprises; second, SMEs lack the infrastructure and resources necessary to collect adequate information needed to cope with dynamic and highly uncertain environments.

With few exceptions – referring to Korea (Ghoshal 1988), Canada (Auster and Choo 1993), Nigeria (Sawerr 1993; Sawerr *et al.* 2000), Bulgaria (Elenkov 1997), Portugal, (Correira and Wilson 1997, 2000), Russia (May *et al.* 2003), Greece (Kourtely 2005), Malaysia (Yunggar 2005), and Hong Kong (Jogaratnam and Law 2006), empirical studies with respect to ES have been limited to the U.S.

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However, research evidence suggests that Western theories focusing on organisations and their environments are likely to suffer from a weak fit in terms of their generalisability to a non-western context. Unsurprisingly, there are pressing calls in the literature for research to examine ES in different national settings (Ebrahimi 2000). Moreover, much of the empirical literature on ES has tended to focus on large firms at the expense of small firms which happen to be majority of firms in most economies. Taking these cues, this study aims to contribute to the empirical literature on ES by probing the scanning behaviours of CEOs in Botswana's manufacturing industry. Botswana provides a suitable setting for this stream of research, as the manufacturing sector is a significant component of the country's diversification strategy and has thus attracted a modest population of national and international decision makers operating in one environmental setting.

Prior studies

Following the pioneering work of Aguilar (1967), and similar classics such as Collings (1968), Kefalas and Shoderbek (1973), Keegan (1974), El Sawy (1985), Ghoshal (1986), Daft *et al.* (1988) and Auster and Choo (1993), to name but a few, numerous enquiries have been undertaken to probe how executives scan the environment in order to align their organisations to the turbulent and equivocal environmental conditions. Consequently, ES as a domain boasts an admirable body of empirical literature. Studies of environmental scanning have dealt with the identification of environmental sectors scanned, the scanning modes/strategies used and the identification of information sources utilised.

Milliken (1987) suggests that it is widely accepted that environmental uncertainty arises from the organization's inability to predict its environment, or in other words, to predict the factors that characterise its environment. According to Dill (1958), Duncan (1972), Daft *et al.* (1988) and others, these factors are usually and meaningfully classified into two groups – "general" and "task" business external environment sectors. The general environment is a relatively remote environment and the elements that compose it have an indirect influence on the organization. This environment is typically composed of economic conditions, tech-

nological developments, political and regulatory environments, and socio-cultural and demographic trends. On the other hand, the task environment is the closest environment to the organization and the elements that compose it have a direct influence on the organization. This environment is typically composed of sectors such as customers, suppliers and competitors.

Several scholars, (see for example, Duncan (1972), Daft *et al.* (1988), Auster and Choo (1993)), argue that the factors in the task environment usually create greater perceived uncertainty to organizations than sectors in the general environment. This is because it is believed that the task environment, which is connected with the short-run, is more volatile than the general environment, which is connected with the long-run.

A closer scrutiny of the environmental sectors scanned by top executives reveals some startling parallels with research from the subfield of information behaviour. Research from this stream of knowledge suggests the types of information sought by managers are largely dependent upon the context in which the executive works. Three distinct managerial roles are identified: operational tasks, control/tactical tasks, and strategic tasks (see Butcher (1998) for a detailed discussion). Because of the dictates and peculiarity of each role, the precise resultant information needs and the sources used are bound to mirror the different roles the CEO is predominantly executing.

With reference to scanning modes/strategies, it has been observed from extant research that perceived strategic uncertainty that arises from environmental sectors impels firms to seek information to try and diagnose the conditions prevailing in the organization (May *et al.* 2000). To this end, several typologies of scanning have been made in the empirical studies of ES. For example, the typology proposed by Aguilar (1967) consists of 4 categories: (1) undirected viewing; general scanning in which the viewer does not have a particular purpose in mind; (2) conditioned viewing; directed exposure, but not active search of an identified area or type of information; (3) information search; relatively unstructured effort to obtain a particular bit of information for a specific purpose; (4) formal search; deliberate planned search to obtain specific information for a particular purpose. Likewise El Sawy (1985) identifies four scanning modes. First, there is the null mode of passive

scanning (no scanning in which the CEO is being pushed unsolicited information, "unsolicited reception"). Next, is the "problemistic search", a reactive mode in which the CEO is actively searching for solutions to specific problems. Third, there are two proactive scanning modes which are generically called "surveillance". Surveillance is broken down into two modes: "coincidental surveillance" and "routine monitoring" while "Coincidental surveillance" involves the serendipitous surveillance of "non-habitual" information sources. "Routine monitoring" involves the systematic surveillance of "habitual information sources". A "habitual information source" is one that the manager accesses on a regular basis while a "non-habitual information source" is one in which the manager may never have accessed before or may never access again (El Sawy 1985, 78). Further, Smeltzer *et al.* (1988) provide a simple and relevant scanning strategy comprising three modes: irregular, periodic and continuous. Each of the modes refers to the frequency of scanning performed by CEOs. The irregular mode is characterised by little scanning activity. With respect to periodic scanning, the CEO has a pattern of scanning at intervals while continuous scanning is an integral part of routine work.

Notwithstanding the variety in scanning modes, several common themes seem to emerge. For example, existing empirical evidence suggests that the frequency and interest in scanning can be high or low (Hambrick 1982; Sawyerr 1993) and passive or active. Firms can use advanced or elementary scanning systems (Subramanian *et al.* 1994) and formal or informal structures. Finally, most studies are in concordance that perceived strategic uncertainty that arises from environmental sectors impels firms to scan for information with a view to diagnose the prevailing environmental conditions (May *et al.* 2000).

Moving on to characteristics of sources of information, several scholars have classified sources broadly as "external" and "internal". External sources of information originate outside the organization whereas internal sources of information originate within the organization (Aguilar 1967; El Sawy 1985; Auster and Choo 1993). Furthermore, these two categories are sub-classified into "personal" and "impersonal" sources. On the one hand, personal sources originate from personal contacts with people inside and outside

the organization. On the other hand, impersonal sources originate from sources such as documents, databases, etc. (Aguilar 1967; El Sawy 1985; Auster and Choo 1993; Sawerr *et al.* 2000), evidence referring to the importance of personal versus impersonal sources and internal versus external sources is inconclusive (Sawerr *et al.* 2000), it is widely argued that personal sources are more important than impersonal resources (Aguilar 1967; Johnson and Kuehn 1987; Daft *et al.* 1988; Elenkov 1997) and that external resources are more important than internal resources (Aguilar 1967; Keegan 1974; Elenkov 1997). In the particular context of SMEs, many studies have observed that managers of SMEs more frequently use sources that are personal (Specht 1987), external (Johnson and Kuehn 1987), and informal (Smeltzer, Fann and Nikolaisen 1988).

Given that, to date, no study of ES by CEOs in Botswana has been reported in the literature, it was therefore considered important to undertake this research in order to understand the scanning behaviour CEOs in Botswana.

Objectives of the study

The purpose of the study was to investigate the scanning practices of SMEs executives in the manufacturing sector. Specifically, the inquiry sought to provide answers to the following research questions:

1. Which environmental sectors receive greater scanning attention by CEOs?
2. What are the prevalent scanning strategies/modes used by CEOs?
3. Which sources are rated important by CEOs?
4. Which information sources are used by CEOs?

Research methodology

Research setting

Botswana is a land-locked nation centred in Sub-Saharan Africa. Over the past 35 years, Botswana has been among the best performing economies in Africa. From one of the world's poorest countries it has evolved into a middle-income country. The discovery and prudent management of its vast diamond resources together with sound economic policies have elevated the country to the

level where it is no longer considered poor. The population of Botswana is 1.68 million with a per capita income of US\$3,000. Approximately 3.4% of Botswana in formal employment are employed in the diamond industry while unemployment remains high at 20%, with 37% of the population living below the poverty line. Botswana's record in human development is equally impressive, with one important exception – HIV/AIDS infection, which has dramatically reduced life expectancy from 67 to 47 years (UNAIDS 2006). Major emphasis has been placed on providing basic education and primary health care throughout the country.

The heavy dependence of the economy on diamonds (83% of merchandise exports) leaves it vulnerable to trade shocks, and this has prompted the Government of Botswana to promote economic diversification. To this end, manufacturing and tourism have been identified as the twin pillars of the economic diversification strategy. To achieve economic diversification, government has undertaken a wide range of proactive and vigorous measures to create an overall enabling environment. Salient among these policies have been infra-structural development, taxation, fiscal policy, exchange rate controls, low-cost finance schemes (e.g. Citizen Entrepreneurial Agency, CEDA) and the introduction of policies promoting free market enterprise. To date, Botswana prides itself as a leading and shining democracy with an investor-friendly environment and has attracted a significant number of foreign investors. Based on its impressive performance, Botswana is rated highly by international organizations on a number of indicators. Transparency International has rated Botswana for three consecutive years as the least corrupt country in Africa, and among the least corrupt in the world. Similarly, Botswana has received 68.6 per cent rating in the Heritage Foundation 2008 Index of Economic Freedom and ranks 36 in global ranking (BEDIA 2008).

The manufacturing sector is vital to the economy of Botswana. Since the late 1980s, successive national development plans have identified this sector as the central tool to achieve the country's diversification strategy, i.e. moving the economy away from its single dependency on the mineral sector. Presently, the sector is the second contributor to the Gross Domestic Product after the mining sector and absorbs a considerable number

of relatively poorly educated people from the country's high school system (approximately 10% of the workforce). At the same time, the industry thrives in a turbulent market characterized by an incessant current flood of imported cheap goods particularly textile materials from Southeast Asia, especially China.

Data collection

A survey research method was adopted to investigate the scanning behaviour of CEOs of 113 SMEs randomly selected from the cities of Francistown and Gaborone between late 2005 and early 2006. The sample frame consisted of all the CEOs listed in the authoritative and comprehensive *Manufacturers Directory 2005*. Small firms were defined as companies having 6 to 25 paid employees while medium firms were defined as having paid employees ranging from 26 to 99 (SMME Task Force 1997). Following the above definitions, micro-entrepreneurs and large firms were excluded from the sample. Contact details and names of CEOs were obtained for the sample. The cover letter explaining the purpose of the research along with the questionnaire was mailed to the sample of 300 thus identified. To boost the response rate, follow-up mails and phone calls were made to those who had not responded within 3 weeks of the initial mailing (Dillman 2000). After reminders and further telephone calls, a total of 113 questionnaires were returned. Of the 113, three were discarded because of missing data, leaving 110 usable questionnaires for a response rate of 37%.

Following several notable prior studies (e.g. El Sawy 1985; Ghoshal 1988), data were analyzed using simple descriptive statistics, frequencies and percentages.

Characteristics of responding firms:

The manufacturing industry comprises quite diverse sectors ranging from Standard Industrial Code (SIC) 1510 (meat and meat products) through SIC 3700 (regarding processing of metal waste). Of the 110 SMEs responding to the questionnaire, 39 (35%) were textile firms, 40 (36%) were tanning and leather businesses and 31 (28%) were grain-milling operations. These SMEs consisted of 67 (61%) small firms and 43 (39%) medium-sized companies. Most of the sample firms (65%) had

Table 1: Respondent Profile

Title	Frequency	Percentage
CEO	33	30
Managing Director	49	45
Manager	28	25
Years in present position		
<3 years	34	31
4–10 years	50	45
>11 years	26	24
Years in industry		
< 4 years	19	17
5–9 years	26	24
10–15 years	45	41
>16 years	20	18
Educational background		
Primary	10	9
Secondary	53	48
Tertiary	22	20
Undergraduate	17	15
Post graduate	8	7
Age		
30– 35 years	20	18
36–40 years	25	23
41–50 years	46	42
51– 67 Years	19	17
Gender		
Male	91	83
Female	19	17

Table 2: Environmental sectors scanned by CEOs

Task Environment	Frequency	Percentage
Customers	104	95
Competitors	101	92
Suppliers	98	89
General Environment		
Economic	95	86
Regulatory	79	72
Technological	70	64
Social	65	59
Demographic	59	54
Political	30	27

been operating in Botswana for a period between 5–15 years and only (18%) had been in the industry for over 15 years. The majority of the firms, 60 (55%), were owned by Botswana citizens, while 27 (25%) were owned by foreign citizens and 23 (21%) were joint ownership.

Profile of survey respondents

The ages of the respondents ranged from 30 to 67 and the vast majority of the CEOs (65%) were between 36 and 50 years old and only (17%) of the respondents were between 51–67. With respect

Table 3: Usage of scanning modes

Scanning Mode	Frequency	Percentage
Continuous	73	66
Periodic	23	21
Irregular	14	13
Total	110	100

to gender, the sample was preponderantly male (83%). Furthermore, the qualifications possessed by the CEOs varied considerably from primary to postgraduate education. However, the majority of the CEOs (68%) possessed secondary and tertiary qualifications. The multivariable Table 1 presents a profile of the respondents.

In an attempt to provide answers to the questions about the external sectors which received the greatest scanning attention, respondents were asked to rate on a 4-point scale (1 = not frequent, 4 = most frequently) the sector on which they scanned for information. Table 2 presents the survey responses to the question. Clearly, three of the most scanned sectors were components of the task environment: customers (95%), competitors (92%) and suppliers (89%). In the general environment, the economic sector (86%) received the greatest scanning attention, while the political sector received the least scanning attention with only 27%.

Usage of different scanning modes by CEOs

Following Smeltzer, Fann and Nikolaisen (1988), CEOs were asked to indicate their modes of scanning by selecting from the following search modes: *Irregular* (less than 2 hours per month); *Periodic* (1–2 hours per fortnight); and *Continuous* (30–60 minutes per week). Table 3 depicts the results of responses.

This data suggests that although CEOs in the sample make use of the three scanning modes, they frequently use the continuous mode, and the irregular mode enjoys the least usage.

Sources rated important by CEOs

To gather data about the perceived importance associated with the various sources of information, a Likert-type scale of 1–4 (*not important* to *very important*) was used. Table 4 below presents the results of the information sources preferred by CEOs. The sampled CEOs rated customers (96%) as their most preferred source.

Table 4: Sources rated important by CEOs

Environmental source	F	%
External sources		
Customers	106	96
Business associates	98	89
Suppliers	95	86
Newspaper/radical	89	81
Broadcast media	87	79
www/Internet	46	42
Trade shows conventions	45	41
External reports studies	40	36
Trade publications	39	35
Consultants	13	12
Internal Sources		
Managers/supervisors	95	86
Internal reports	84	76
Peers/colleagues	80	73
Subordinates	43	39

The next most highly rated sources were business associates (89%), managers and supervisors (86%), suppliers (86%), and newspapers/periodicals (81%). Consultants were considered to be the least in importance with a 12% rating. A striking feature of the data is the low rating (42%) accorded to the WWW despite the fact that we are now in the information age in which electronic sources are seen as key information sources.

Sources used in scanning

The sources used in scanning practices were assessed on an ascending Likert-type scale of 1–4 (*seldom used to very frequently*). Table 5 provides a listing of the various sources of information used by the executives in the study sample.

Data reveals that while CEOs in the study used a variety of sources, the most frequently used sources were personal sources: customers (99%), business associates (91%), managers and supervisors (90%) and suppliers (88%). Among the impersonal sources, newspapers/periodicals (87%) and broadcast media (82%) stand out as the most frequently utilized sources of environmental information. Subordinates (39%), trade publications (36%) and consultants (8%) were rated the least used. What is also surprising is the infrequent use of the World Wide Web with only 43% usage. Although the overall array of sources used by CEOs

Table 5: Sources used scanning by CEOs

Environmental Source	Frequency	%
External sources		
Customers	109	99
Business associates	100	91
Suppliers	97	88
Newspapers/periodicals	96	87
Broadcast media (TV, radio)	90	82
World Wide Web	47	43
Trade shows	50	45
Conventions	46	42
External reports/studies	45	41
Trade publications	40	36
Consultants	9	8
Internal		
Managers/supervisors	99	90
Internal reports/studies	70	64
Peers/colleagues	65	59
Subordinates	43	39

in the sample is skewed towards external sources, it is apparent that respondents tend to rely more on external sources. For example, two of the most frequently used sources are external sources and so are the subsequent sources after managers/supervisors.

Discussion

The purpose of this study was to investigate the environmental scanning practices of SME executives in the manufacturing industry of Botswana. What picture emerges from this study? An analysis of the data collected in the research reveals that (customers, competitors, suppliers) are the most frequently scanned sectors of the environment. This finding is in concordance with the findings of studies conducted in other places around the world (see for example, Jogarathnam and Law 2006; Poopola 2000; Daft *et al.* 1988). However, a closer examination of some extant prior studies reveals a somewhat discordant picture. Whilst four studies, (Daft *et al.* 1988; Sawerr 1993; May *et al.* 2000; Jogarathnam and Law 2006) all ranked customers (task environment) as the most frequently scanned sector, in contrast, two studies (Elenkov 1997; Kourtely 2005) reported the political and legal and economic sectors respectively, as the most frequently scanned sectors and both are components of the general environment.

Our findings, together with those of other empirical studies (e.g. Jogarathnam and Law 2006; May *et al.* 2000; Sawerr 1993; and Daft *et al.* 1988) lend support to the notion that whilst environmental scanning is concerned with all the relevant external factors that influence the health and survival of a firm, it tends to concentrate on customers, competition and suppliers. That CEOs prize information pertaining to the task environment (customers, competition and suppliers) is unsurprising. In these times of increasing global competition, heightened customer awareness and evolving customer needs, CEOs more than ever before must gather information pertaining to the task environment in order to help their firms to survive and prosper. After all, these are the sectors that directly impact upon the success of the firm, and failure to scan for information pertaining to these sectors could mean a one-way ticket to extinction.

CEOs in the study tend to use all three scanning modes to gather information. However, the continuous mode (66%) preponderates while the irregular mode (13%) is the least used. This finding is in agreement with similar studies conducted elsewhere (Aguilar 1967; Ghoshal 1988; Sawyerr 1993; Nikolaisen 1988). Several scholars (Milliken 1997; Daft *et al.* 1988; Auster and Choo 1993; Boyd and Fulk 1996) suggest that perceived strategic uncertainty will lead organizations to follow different scanning strategies. In the context of Botswana, increased perceived strategic uncertainty may be attributed to the influx of foreign companies lured by the business-friendly environment that has been created by government in order to achieve economic diversification. Government has been making vigorous efforts to woo investors both local and foreign through a variety of incentives and strategies (e.g. 15% corporate tax and low-cost finance schemes such CEDA). Nonetheless, the scanning patterns uncovered in the study provide a clear rebuttal to the pervasive notion in the ES literature that because SMEs are resource-poor, their CEOs cannot afford to scan the environment.

Turning to the sources rated important by CEOs, the results of the study reported here suggest that CEOs considered customers (95%) as their most preferred source. The next most highly rated sources were: business associates (89%), managers and supervisors (86%), suppliers (86%),

and newspapers/periodicals (81%). Clearly, this study suggests that CEOs in this sample place a great deal of importance on personal sources as opposed to impersonal sources. This finding is consistent with relevant prior studies on source preference (Johnson and Kuehn 1987; Smeltzer *et al.* 1988; Vaughn 1996). However the results of this study seem to contradict Trott and Martin (1996), Roberts *et al.* (1987) and Marcella *et al.* (1996) who found that CEOs rated technology and market information as the most important type of information to them.

Finally, most CEOs in the study display a propensity to use a mosaic of sources both personal and impersonal, but it is personal sources that CEOs use most. Among the personal sources, customers (99%) were the most frequently used source followed by business associates (91%), managers and supervisors (90%) and suppliers (88%). This finding is in concordance with previous studies on the sources utilised by managers (Aguilar 1967; Keegan 1974; Preble *et al.* 1998) who found a greater reliance on personal or human sources. In a similar vein, Johnson and Kuehn (1987) reported that small business CEOs used more verbal media than printed sources. At the same time this result is somewhat in dissonance with findings reported in previous research (Auster and Choo 1993; Choo *et al.* 2000). All, however, reported preferences for external sources (e.g. radio, TV, newspapers and World Wide Web) over both internal people sources (e.g. managers, colleagues) and external people sources (e.g. customers, competitors).

Implications for library and information services

The study reported here has several important implications for library and information services. First an important finding of this study was that CEOs frequently scanned the customer, competition and supplier sectors. In other words, they tended to seek information pertaining to customers, competitors and suppliers. This finding is in consonance with results of studies conducted in other places around the world (Jogarathnam and Law 2006; Poopola 2000; Daft *et al.* 1988). Since it is evident that CEOs prize information about customers, competitors and suppliers, an important implication arising thereof is the challenge to library and information providers to be aware

of the paramount nature of these types of information to CEOs and prioritize their information provision accordingly. Thus library and information services personnel per se need to re-engineer themselves to acquire appropriate skills to gather, organize, process, and efficiently disseminate information mostly sought by CEOs. A complementary strategy would be for library and information practitioners to take the initiative proactively to develop seminars targeting business executives to discuss the range of information types they provide. In so doing, they would also be marketing themselves to a hitherto under-served user group of their services.

Second, another important finding of the study was that regardless of their resource limitations SME executives do indeed scan the environment and frequently use the continuous mode of scanning. This finding is in line with what has been reported in several prior studies (Aguilar 1967; Ghoshal 1988; Sawerr 1993; Analoui and Karami 2000). Our study therefore underscores the fundamental need for library and information services practitioners to change the mindset of viewing SMEs as resource-poor and thereby ill-prepared to scan the environment. Several scholars have portrayed environmental scanning as the preserve of big businesses as they are perceived to be well-endowed with the resources (e.g. personnel, finance and infrastructure) to undertake environmental scanning. It is this pervasive view in the literature that has nurtured the notion (misconception) that SME managers do not perform environmental scanning because of resource limitations. The lesson for library and information providers is to recognize CEOs of SMEs as an integral component of their customers with respect to information provision.

Finally, the results of this study also show that CEOs of SMEs use both personal and impersonal sources but tended to prefer personal sources (e.g. customers, business associates, managers and supervisors). Our study offers a caution to library and information providers to minimize the unquestionable superfluous supply of printed sources and subscription to expensive journals that tends to epitomize most business information centres and libraries. Also, it is a challenge to corporate information providers to develop new strategies of personalized information provision; that is, to go beyond the traditional serv-

ice-oriented approach to delivering filtered and valued-added customized information. To this end, practitioners in business organizations could proactively forge links with business schools, marketers and business administrators with a view to develop courses that could deepen and sharpen their understanding of CEOs as information consumers. The logic behind this proposal is that a thorough understanding of the CEO as an information customer (seeker and user of information) is a precondition for effective delivery of information and the disciplines cited above have long traditions of studying behavioural aspects of the manager. In so doing, librarians would be marketing themselves and proving beyond any doubt their relevance today, far from being in danger of extinction.

Conclusions and recommendations

Environmental scanning is a critical function of top executives. SMEs depend on their managers to monitor external issues and trends, forecast their organizational impacts and prepare strategic plans. Extant research demonstrates that top executives who invest more in this information-seeking activity generally enhance the firms' financial performance. Yet little is really known about CEOs of SMEs in Least Developed Countries. The purpose of this study was to investigate the environmental scanning practices of CEOs of SMEs in Botswana's manufacturing industry. When compared to extant research, the results of the study suggest both similarities and differences. The results of this study show that scanning focus was higher for the task environmental sectors than the general environmental sectors. With respect to scanning modes, results of this study suggest that CEOs frequently used the continuous mode of scanning while the irregular mode was rated the least used mode.

Furthermore, the results of this study suggest that customers, together with business associates, managers and supervisors and suppliers are considered to be the most important sources of information. This lends support to the finding that personal sources are preferred over impersonal sources. Because of the importance attached to the oral culture in Botswana, it is logical that CEOs would tend to rely on personal sources as by so doing they would be exploiting and perpetuating

a time-honoured cultural tradition. Finally, the results also suggest that though CEOs in the sample utilise a broad range of sources, personal sources are used more frequently than impersonal sources. This may be due to the perceived information richness of the verbal media.

In summary, the conclusion of the study can be presented as follows: the manufacturer CEOs in Botswana scan the task environment with greater frequency and use a variety of scanning modes; they prefer personal sources to impersonal sources and utilize personal external sources more frequently than impersonal sources. Although exploratory in nature, the overriding contribution of this study is that it fills an important empirical lacuna and provides fresh evidence on the scanning practices of CEOs from a developing country context. The findings corroborate existing scanning theory generated from the developed world, especially the United States.

While this study makes an important empirical contribution in ES research, it is not without limitations and this calls for caution in assessing the findings. First, the study examined ES practices by singularly focusing on the manufacturing industry. Consequently, the results probably suffer from industry bias. A replication of this study with a larger sample and concentrating on multiple industries would yield a richer understanding of ES in developing country contexts. Second, the study has weaknesses associated with the method utilized for data collection: the mail-delivered questionnaire. While questionnaires are indeed very efficient in gathering data from respondents who are geographically dispersed, they nonetheless do not allow the researcher to probe in order to obtain clarity to answers given. Since our research solely relied on the questionnaire, a tool with inherent weaknesses, our research also suffers from this shortcoming. However, future research could minimize the effects of this weakness by incorporating data from natural interviews, i.e. conversations with key informants.

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