

The Information Needs and Information Seeking Behaviours of SME Managers in Botswana

BOEMO NLAYIDZI JOROSI

Dept. of Library and Information Studies, Faculty of Humanities, University of Botswana, Gaborone, Botswana

This study investigates the information needs and information seeking behaviours of SME (small and medium-sized enterprises) managers in Botswana's manufacturing industry, using a self-administered questionnaire. The respondents were largely male (171 or 79%) while only (45 or 21%) were female. The key findings of the study indicate that: (1) SME managers consider customer and competition information to be the most important types of information to their firms; (2) SME managers devote a significant amount of time to active information-seeking and on average spend approximately five hours per week seeking information; (3) SME managers

spend time seeking customer and competition information; (4) they use both personal (e.g. customers, business associates) and impersonal sources (newspapers, broadcast media and government publications); (5) information source selection is largely determined by accessibility and ease of use; and (6) managers use information for making important decisions and performing their routine activities. Several recommendations are made for future research in information behaviour of managers and mainstream user studies. Replication of this study with a different sample of firms would be highly useful.

Introduction

Over the past decades or so, strong forces of change have been reshaping the global business landscape (Kanter 1991; Bettis & Hitt 1995; Frerrier 2001; Song *et al.* 2002; Hitt *et al.* 2003). As a result, today's business environment is fraught with uncertainty, diverse global players, rapid technological change, wide spread price wars and seemingly endless reorganisation, all of which exert pressure on the business environment. In short, the business environment is variable or volatile. Against this scenario, information has quickly assumed centre-stage status as an extremely valuable resource (Drucker 1993; Mintzberg 1973). In this vein, information is seen as a strategic weapon for use by managers to adapt to the turbulent environment. As the business environment becomes more complex and dynamic, it

becomes increasingly vital for top executives to monitor continuously the external environment to identify strategic threats and opportunities (El Sawy 1985; Milliken 1993).

Through the use of information, top managers of firms are able to reactively and pro-actively adapt their organisations to environmental changes in order to survive and prosper. Furthermore, some writers suggest a direct link between information and improved performance. Prusak (reported in Butcher 1998), in a survey of top Japanese firms, showed that Japanese managers spent much time collecting and processing business intelligence. He described them as having a preoccupation with the actions of their competitors and suggested that it was the use of information that helped them maintain their competitive position. Similarly, Daft *et al.* (1988) found that Chief Executive Officers (CEOs) in high performing firms made more

and better use of information. Effectively, without information, top managers of firms simply would not function smoothly and this would lead to corporate decline and failure (Starbuck *et al.* 1978).

The field of information behaviour, within mainstream user studies boasts an admirable four-decade history when it has been a fertile ground for researchers seeking a better understanding of the information behaviour of various groups of users. Since 1963, many empirical studies, including notable classics, have been conducted. However, although the impressive contributions of these studies are evident, there are two salient limitations that pervade the extant literature. First, much of the research on information behaviours of managers has focused on large firms to the extent that some critics argue that it suffers from a malady called "big business syndrome" (Specht 1987, 26). However, small firms are intrinsically different from their larger firm counterparts (Welsh and White 1981; Bergeron 2000). Welsh and White (1981, 34) aptly express this important distinction in the following way, "smaller firms are not smaller versions of big businesses." Therefore large firms cannot be transferred to smaller firms.

Second, the sparse literature on information behaviour research of SME managers is dominated exclusively by studies that were conducted in developed nations, such as the United States, the United Kingdom, Australia, New Zealand, Canada and Norway. To date, very few studies have been uncovered that focus on a developing country context. However, considerable relevant research from related disciplines reveals that the two contexts differ fundamentally from each other (Elenkov 1997; Fubara 1985; Mrema 1987). On the one hand, financial limitations, low educational levels, highly unstable political and economic environment, low technology adoption, and poor infrastructure and training facilities afflict the social context of a developing country. On the other hand, the social context of a western industrialised country is characterised by environmental munificence, that is, resource availability (Dess & Beard 1984). In brief, it is the opposite of the developing country. Consequently, the findings of a study conducted in one geographic and social context have limited applicability in another context because of the significant differences in the contexts. Likewise, the information behaviour of managers in a developing country context should

not be generalised to a developing country context or vice versa.

As a result, we know very little about SME managers' information needs. The net result of these limitations is a gap in the empirical literature that needs to be filled. The objective of this study therefore is to investigate the information needs and information seeking behaviours of SME's managers in Botswana. An understanding of the information needs and seeking behaviours of managers is a crucial pre-condition to the design of relevant and effective information systems for this category of users.

Review of literature

Research on the information needs and information seeking behaviours of SME managers is part of a larger and interdisciplinary stream of research on managers' information behaviour *per se*, which began with the groundbreaking study by Aguilar (1967), on environmental scanning. However, empirical studies focusing exclusively on small to medium-sized firms as opposed to large firms began with the Australian study of Maguire and Kent (1974). Since then, there have been over three-dozen studies conducted during the past three decades or so, to understand the information behaviours (information needs and information seeking behaviours) of SME managers.

Dua (1990), studying Chinese SMEs using face-to-face interviews concluded that some managers mostly used personal sources of information and rarely used formal information services. The use of internal information by SMEs was the subject of a postal questionnaire and in-depth interviews study by Olaisen (1991). A key conclusion of the study was that the phase in which the SME was in was of utmost interest in so far as external information was concerned, more so than the actual size of the company. Orminski (1991), employed face-to-face interviews in a multi-phased investigation into the business information needs of science park companies in Bradford, Warwick and the South bank London in the UK. A major finding of this probe was that a clear relationship existed between a company's approach to business and its attitude to and exploitation of information. Companies with more developed business strategies tended to have a more formalised and systematic approach to information gathering and use.

McLachlan (1993), through telephone interviews, investigated various aspects associated with the information needs of small business executives. Results suggested that: (1) business managers relied more on magazines and to a lesser degree on trade papers as sources of printed information while trade shows, suppliers, workshops/seminars and professional organisations were the most frequently cited sources of oral information; (2) market and economic conditions were the most frequently cited areas of information. In a national study of over 200 CEOs in the Canadian publishing and telecommunication industries, Auster and Choo (1993), found that the most frequently reported sources were internal and personal. Many CEOs indicated a high usage of printed materials such as newspapers, economic reports and government reports.

Kinnell *et al.* (1994), in another Chinese study employing interviews, probed the information needs of SME managers. Results suggested that most managers sought information concerning product development, manufacturing and marketing information. In a methodologically similar vein, Chalmers (1995) undertook a qualitative study on the needs for and uses of published and personal information by managers in New Zealand. Among the key finding were that: (1) most respondents did not systematically seek information from secondary published sources to assist them in decision-making and (2) environmental scanning usually involved the use of primary sources, and where published sources were used, in most cases, they were supplemental to personal sources.

Marcella *et al.* (1996) used a questionnaire to investigate the business information needs of companies in rural Grampian. Results revealed that companies were complacent about their information needs. However, product information, supplies, manufacturers and costs received high rankings as areas of information needs. Vaughn *et al.* (1996) used a mail-delivered questionnaire to study the role of the public library in providing information to small businesses. A key finding of this study was that small businesses obtained information mainly through informal sources; e.g. customers, suppliers, friends, associates and relatives. Surprisingly, the Internet was ranked as the least important source of information. Vaughn *et al.* (1998) compared the use of business informa-

tion in Western culture (Canada) and an Eastern culture (China) based on a questionnaire survey. The results suggested that informal information sources were more important and better used in both cultures.

Studies have also been made in Africa. Mchombu's (2000) small exploratory study probed the information needs of women in small business in Botswana in order to establish how these needs arose, and factors which create information seeking habits. The study employed structured interviews as the main data-gathering tool. Among the key findings, it was found that respondents' information needs centred on business management, sources of financial assistance, business diversifications and legal information. Shokane (2001) investigated the extent to which small and medium-sized enterprises in Acornhoek (South Africa) make use of business information for sustainable competitive advantage. The study utilised a pre-structured questionnaire to gather data. The study's finding revealed that: (1) many business managers lacked information managing their businesses, (2) many were not aware of their information needs and how business information devices could support and advance their business activities and (3) business managers still relied on informal sources for managing their business enterprises. Ikoja-Odongo and Ocholla (2004) studied the information seeking behaviour of informal sector enterprisers in Uganda by combining interviews with observations and historical methods. The study concluded that an appropriate model for information behaviour for the information poor community must be grounded on oral tradition and indigenous knowledge and be sensitive to poverty infrastructure and illiteracy.

No study of the information needs and information seeking behaviours of SME managers in Botswana has so far been reported in the literature. It was therefore considered important to undertake this research in order to understand the information behaviour of SME managers in Botswana.

Research objectives

The purpose of this study was to investigate the information needs and information seeking behaviours of managers in Botswana's manufacturing industry. Specifically, the study focussed on the following research questions:

1. Which types of information do SME managers consider important?
2. How much seeking of information do managers do?
3. What types of information do managers seek?
4. Which information sources do managers utilise?
5. Which factors influence source selection?
6. In what ways do managers use the acquired information?

Methodology

Research setting

Botswana is centrally located in the heart of Southern African. It is a landlocked country about the size of France or the state of Texas in the US. Botswana has undergone tremendous changes since its independence in 1966. Over the past three and half decades, the country has been transformed from one of the poorest in the world to a middle income country with per capita Gross Domestic Product of P17,000 or (US\$ 3,000). The country's economic accomplishments can be attributed to the exploitation of its mineral resources. Revenue from abundant diamond resources, coupled with fiscal prudence have resulted in Botswana recording successive budget surpluses, thereby enabling the country to achieve rapid economic growth, and making it the fastest growing economy in the world (SADC Review 2004).

However, in recent years, the government has questioned its sole reliance on the mineral sector. Consequently, attention has turned to diversification in line with global trends. To this end, SMEs have been identified as important instruments to achieve economic diversification. Today, the government vigorously supports SMEs through a range of strategies, e.g. the creation of a business-friendly climate via exchange liberalisation, tax reforms and the launch of the Citizen Entrepreneurial Development Agency (CEDA), which gives subsidized loans to aspirant SME owners.

Botswana values SMEs for several reasons, such as their potential to create employment and generate foreign exchange through exports and their potential to grow into larger enterprises. Defined as firms with between 6 and 99 employees (SMME Task Force 1998), these enterprises are also im-

portant as domestic producers of cheap import substitution consumer goods especially for low income groups.

Although SMEs are seen as a new engine of economic growth in the Botswana economy, the business environment in which they operate is the scene of profound changes; e.g. shifting customer preferences, development of new technologies, growing influx of cheaper imports from China which exacerbates intense competition, and pressure from foreign market opportunities such as the African Growth and Opportunity Act (AGOA). These changes present SME managers with extraordinary opportunities but also pose significant challenges as managers must continuously look for external information to navigate their firms through a turbulent business environment. Nonetheless, the business-friendly environment painted above makes Botswana a rich setting to investigate the information needs and information seeking behaviours of SME managers.

Data collection

A nationwide mail survey of SME managers was undertaken during 2003. Our sample list was drawn from the authoritative and comprehensive *Manufacturers Directory* of 2002. We mailed 400 questionnaires to SME managers of randomly selected firms within eight sub-sectors of the Manufacturing Industry. Each firm had between 6–99 employees. Export-oriented firms identified from the above directory were excluded for fear of introducing bias in the sample.

In an internal pilot test, the preliminary version of the questionnaire was sent to ten Botswana students studying at three Glasgow universities: Caledonia, Glasgow and Strathclyde. They were asked to identify any ambiguities in the terms, concepts or issues raised. Next, the survey instrument was pilot tested with 25 SME managers in Gaborone, Botswana. The analysis revealed the need to make minor adjustments to the original questionnaire.

After three rounds of reminders and telephone calls (Dillman 2000), a total of 233 questionnaires were returned. Of the 233 returned questionnaires, 17 were discarded because of substantial missing data and failure to meet sampling criteria, leaving 216 usable questionnaires for a response rate of 54%.

Table 1: Response rates according to sub-sectors.

Sector	BSIC	Survey sent	Survey returned	Response rate
Bakery products	1541	50	26	52
Grain milling	1530	50	15	30
Textiles	1700	50	32	64
Clothing and apparel	1800	50	35	70
Tanning and leather products	1910	50	22	44
Wood and wood products	2000	50	19	38
Non-metallic products	2620	50	30	60
Fabricated metal products	2800	50	37	74
Total	8	400	216	54.0

Results

Profile of survey respondents

The table above depicts a breakdown of survey responses according to sub-sectors. As can be seen in the table above, our sample does not represent a broad cross section of the entire manufacturing industry. The manufacturing industry in Botswana is quite diverse, ranging from SIC 1510 (meat and meat products) through SIC 3700 (recycling, processing of metal and non-metal waste).

Profile of survey respondents

Section A of the questionnaire included questions that collected background information on the SME managers and the responding firms. These data constitute the substantive material for analysis in the ensuing sections. The multivariable Table 2 below depicts the socio-demographic characteristics of the survey respondents: age group, gender, educational level and experience as owner/manager. In the following sections, we discuss each of these aspects, in turn.

Evidence from extant entrepreneurial literature suggests that self-employment becomes an increasingly attractive option as one nears middle ages. The table below clearly illustrates this point. As can be seen in the table, respondents' ages ranged from 25 to 65 and the largest proportion (37.7%) of the respondents was in the age range of 36–45. Additionally, respondents were biased towards the age ranges of between 36 and 65, and away from the under 25 and over 65.

Table 2: Demographic profile respondents.

Age Group	Frequency	Percentage
– 25	7	3.2
26 – 35	34	15.7
36 – 45	74	34.3
46 – 55	62	28.6
56 – 65	29	13.4
< – 65	10	4.6
Total	216	100.0
Gender		
Female	171	79.2
Male	45	20.8
Education Level		
Primary	7	3.2
Junior Certificate	35	16.2
O Level	86	39.8
Diploma	40	18.5
Degree	36	16.7
Post graduate	12	5.6
Years Employed as CEO		
0 – 3	40	18.5
4 – 7	78	36.1
8 – 14	80	37.3
15 – 19	15	6.9
Above 20 years	3	1.4

In relation to gender, our sample was predominantly male (79%), a striking, although unsurprising, demographic characteristic that reflects the composition of the larger business sector in the country as a whole. Consequently, only (21%) were females.

The educational levels attained by respondents varied considerably as follows: Primary School Certificate (7 or 3%), Junior Certificate (35 or 16.2%), Ordinary Level (86 or 39.8%), Diploma (40 or 18.5%); Degree (36 or 16%), and Postgraduate work (12 or 5.6%) On the whole though, the data suggest that the educational levels of our respondents are low, the largest proportion (39.8%) possessing an Ordinary Level certificate. Not surprisingly, most of the responding executives did not have education that emphasised a business curriculum. This can be understood with respect to Botswana's educational curriculum, which largely overlooked business subjects until very recently, and Botswana's citizen empowerment schemes and government low-cost loan, both of which seek to attract investors into the business sector.

Our sample respondents had been employed at their current firms on average 14.67 years and had

Table 3: Characteristics of responding firms.

Age of Firm	Frequency	Percentage
1 – 3 years	54	25
4 – 6 years	91	42.1
7 – 10 years	46	21.3
11 – 19 years	22	10.2
Above 20 years	3	1.4
Number of Employees		
10 – 25	180	83
26 – 99	36	17
Annual Sales		
Less than P100 000	135	62.5
P101 000 – P250 000	39	18.0
P251 000 – P1.5 million	33	15.3
Above P1.5 million	9	4.2
Total	216	100.0
Ownership		
Wholly citizen	179	82.9
Joint-venture	27	12.5
Foreign-owned	10	4.6

P8.00 = 1Pound sterling

an average of 12 years experience in the manufacturing industry. Four predominant job titles used by the senior executives emerged from the questionnaire responses: Managing Director (38 %), Director (26%), Manager (20%) and Chief Executive Officer (16%).

Characteristics of responding firms

In this section, we present the descriptive statistics of our responding firms. Our description focuses on: age of the firm, employment size, firm revenues and firm ownership. Table 3 displays the statistical data.

Of the firms responding, the largest proportion (30.4%) was 4 to 6 years old. Overall, the sample reveals a skewed distribution towards the ranges between 4 and 19. Also, it is interesting to note that 91.5% of the responding firms are mature, that is beyond the start-up phase. Unsurprisingly, the vast majority of the responding businesses had fewer, than 26 employees, with the largest proportion (30.9%) in the 16–25 employee category. Only 32% of the firms were medium-size. The preponderance of small firms in the sample mirrors a more general pattern of firm distribution in the country where medium and large firms are a conspicuous small minority.

Table 4: Types of information and their perceived importance by owner/manager.

Information Type	Mean	Standard deviation
Competition information	3.48	.627
Customer information	3.42	.548
Technical information	2.64	.868
Economic information	2.88	.823
Regulatory information	2.35	.898
Socio-cultural information	2.33	.949

The largest proportion of responding firms, 35 or 62.5% achieved a turnover below P100,000.00. Only a scant 33 or 15.3% posted annual revenue in excess of P1.5 million. Regarding ownership, an overwhelming majority or 82.9% of firms were wholly citizen-owned, while the remaining 12.5% and 4.6% were joint venture with citizen stake and foreign-owned respectively.

The information needs of SME managers

Respondents were asked to rate on a 4-point scale (1 = not important, 4 = very important) how important types of information were to them. Table 4 summarises survey responses to this question by presenting the means and standard deviations.

As the Table 4 depicts, a large proportion of the sample respondents considered customer information to be the most important type of information to them. Next in importance was competition information, with a close 58 percent rating and surprisingly, economic information occupies a third position of importance with a 50% of the sample. Regulatory, socio-cultural and technological information were the lowest rated respectively.

How much time do SME managers devote to active information searching?

Question 12 in the survey instrument asked respondents to indicate the amount of time in minutes and hours that they actively spent on information acquisition. The answers to this question are presented in Table 5.

Table 5 reveals an interesting but important finding. Because the theoretical literature presents SMEs as resource poor (Welsh and White 1984; Barrier 1994; Kinni 1995) and their chief executives as having extreme time limitations, one would have logically expected devoting time to informa-

Table 5: Time spent on active information seeking.

	Frequencies	Percent
Between 1–3 hours	75	34.7
Between 4–7 hours	109	50.5
Between 8–11 hours	26	12.0
Between 12–19 hours	6	2.8
Total	216	100.0

tion searching to be a luxury that can be dispensed with. Conversely, the results demonstrate that 85 percent of the respondents spent approximately 1 to 7 hours weekly on active information acquisition. Additionally, overall time spent on information seeking totalled 1080 hours; thus giving an approximate mean of 5 hours weekly, and a range of 1–14 hours.

Taken together, these findings suggest that SME managers in this study spend a significant amount of time seeking information. While this finding is unanticipated, it is nonetheless consistent with some prior related studies. Johnson and Kuehn (1987) found that small business owner/managers spent more time searching for information than their larger firm counterpart. Other studies have documented that SME managers do engage in systematic searches of external information (El Sawy 1985; Specht 1987; Smeltzer *et al.* 1988).

Which types of information do SME managers spend time seeking for?

The next research question was a follow-up to the previous one and sought to uncover which types of information managers in the sample spent time searching. Respondents were asked to indicate their extent of seeking specific types of information on a four-point scale (1 = never, 2 = rarely, 3 = moderately, 4 = frequently). Table 6 presents a summary of the replies that were received.

As Table 6 clearly indicates, we see a very striking feature. Data reveal that customer and competition information are the types of information that most managers in this study spend time gathering with means of 3.37 and 3.19 respectively. We see a correspondence between the data here and the data about the types of information that SME managers rate to be important. Similarly,

Table 6: Types of information SME managers spent time seeking.

Type of information	Mean	Standard Deviation
Competition information	3.19	.615
Customer information	3.37	.611
Economic information	2.43	.843
Technical information	2.32	.824
Socio-cultural information	2.14	.843
Regulatory information	2.12	.844

Table 7: Sources utilised by SME managers.

Information source	Mean	Standard deviation
Competitors	2.69	.906
Customers	3.38	.573
Business associates	2.93	.698
Government officials	2.27	.838
Broadcast media	3.12	.780
Libraries	1.42	.634
Newspapers/periodicals/magazines	3.29	.717
Government publications	2.27	.838
Trade and industry associations	2.10	.798
Electronic sources	1.45	.805

economic and technical information are the runner-up types of information that SME managers spent time seeking for.

Which sources are utilised by managers to obtain information?

Respondents were asked to rate their utilisation of ten sources on a four-point scale, 1 = never, 2 = sometimes, 3 = frequently, 4 = very frequently. The list of sources given in the survey was based on relevant prior research, but was adapted and shortened so as to avoid making the questionnaire long, in recognition of the respondents' generally busy schedules. Nonetheless, we included libraries and electronic sources as well as the more traditional sources of information. Table 7 presents a summary of the responses.

Not surprisingly, the data reveal a preference for customers as the most frequently utilised source of information. We can also discern three noteworthy features of this data: (1) newspapers / periodicals/magazines and broadcast media feature prominently among the sources preferred by SME managers in the sample, (2) SME managers make use of both personal and impersonal sources, and (3) libraries and electronic sources are scarcely

Table 8: Determinants of source selection.

Factor	Frequency	Percentage
Accessibility	199	92.1
Reliability	134	62.0
Ease of use	195	90.3
Relevance	136	62.9

Table 9: Uses made of information acquired from sources.

Reason	Frequency	Percentage
Learn about the business environment	135	62.5
To make important decisions	205	94.9
For day-to-day operations	170	78.7

used by managers in this sample. This is particularly surprising for electronic sources given the information technology (IT) era that we are in. However, for libraries this finding is not unexpected, as previous studies have obtained a similar result (Marcella *et al.* 1996; Vaughn *et al.* 1996).

Which factors largely influence source selection?

Respondents were asked to indicate the factors that they deem to be important determinants of their source selection by circling the relevant factor(s): ease of use, accessibility, relevance and reliability. Table 8 presents frequencies of the replies.

As can be seen from Table 8, a large proportion of respondents based their source selection on access (92.1%) and ease of use 90.3%). Conversely, relevance and reliability do not feature prominently in the source selection equation although admittedly they play an important part too, given their respective high scores of 62.0% and 62.9%.

To what uses is the information put?

Respondents were asked to indicate the uses to which they put the information they acquire from sources by circling the relevant use(s): to know about the business environment, to make important decisions and for day-to day decisions. Table 9 depicts the uses to which managers in the sample put information.

As is evident from Table 9, a very high proportion of the sample used the information acquired for decision-making. However, the other two reasons, learning about the business environment and making day-to-day decisions, received significant percentages of 62.5% and 78.7% respectively. This points to the complexity of information use as a managerial activity and suggests that the other reasons also benefit immensely from the information acquired by managers.

Discussion

The purpose of this research was to identify the information needs and information seeking behaviours of SME managers in Botswana's high profile manufacturing industry. What patterns emerge from the data presented in this study? SME managers in this study perceive customers, competition and economic information to be the most important types of information needed in their managerial jobs. Taken together, respondents indicated that they perceived customer information as the most important type of information.

Botswana's SME managers in the manufacturing industry devote some time to information searching. The results suggest that 85% of the respondents spent approximately 1–7 hours weekly on active information searching and in the main, SME managers in the study seek a broad range of information types but most frequently search for customer, market and economic information.

SME managers in this study utilise impersonal sources more frequently than personal sources. The data reveal that impersonal sources, taken together and with a combined mean score of 13.65 compared to combined mean score of 11.27 for personal sources, enjoy a slight edge in usage over personal sources (see Table 7 above) and the two most utilised impersonal sources were newspapers (mean score = 3.29) and broadcast media (mean score = 3.12). This finding is inconsistent with prior research, e.g. Johnson and Kuehn 1987; Specht 1987; Smeltzer *et al.* 1988; El Sawy 1985). Nonetheless, personal sources are also widely utilised by SME managers. In this study, customers (mean score = 3.38) and competitors (mean score = 2.69) enjoyed a fairly high degree of usage but libraries did not attract heavy usage at all with only 35% usage.

The selection of sources by SME managers is greatly influenced by accessibility and ease of use. Table 8, reveals that, a large proportion of respondents indicated that accessibility was the dominant factor influencing their source selection, while ease of use featured prominently as the second most influential factor.

Finally, most SME managers in the study use information frequently when making strategic decisions, i.e., important decisions in terms of actions taken and resources committed (see Table 9). This finding is consistent with extant empirical literature, e.g., Johnson and Kuehn 1987; Auster and Choo 1993; Choo 1994. It is also unexpected because SME managers operate in a fast changing environment and are confronted by an array of forces that are constantly reshaping it.

Conclusions and recommendations

As the business environment becomes intensely competitive, firms are confronted with the challenge to adapt, survive and prosper. Numerous decisions on the source and allocation of resources are necessary and executives need an abundance of information. In fact, CEOs want a continuous overview of their environment, a familiarity with the supply of resources and market conditions, an awareness of these problems and potentials and a store of up-to-date facts, opinions and insights which will facilitate their negotiation and decision-making activities.

The information behaviour of SMEs has received little attention from researchers in Botswana despite the fact that an understanding of this phenomenon is considered crucial to the growth and long-term survival of these firms. This study is the first systematic probe into the information needs and information-seeking behaviours of SME managers in Botswana, a developing country context as distinct from a developed country context because of environmental munificence. As such, the study fills an apparent gap in the empirical literature and broadens and enriches our understanding of the information behaviour research by presenting evidence from an environment that prior research has tended to neglect.

Our study makes the following conclusions, which are consistent with extant empirical research:

1. SME managers rate customer, competition and economic information as very important.
2. SME managers spend a significant time seeking information.
3. SME managers spend time seeking for customer, competition and economic information.
4. SME managers use a variety of sources, both personal and impersonal.
5. Source selection among SME managers is largely influenced by accessibility and ease of use.
6. SME managers use information for making strategic decisions.

Aside from the contributions described above, our research generates a number of potentially meaningful directions for future research. First, we suggest that further research be conducted to explore different settings in order to unravel what drives human information seeking in different environmental contexts. Second, it is recommended that information behaviour research should draw on the rich traditions from comparative (inter-disciplinary triangulation or the importation of theoretical insights) disciplines, such as organisational behaviour, management, marketing, business administration, social psychology and communication studies. Such a step would greatly enrich our understanding of information behaviour because these disciplines have streams tackling research issues similar to library and information science and would thus confer on us some vital insights.

Finally, we suggest that further studies should examine the information-seeking behaviour of managers *per se*. Although the impressive contributions of prior research are self-evident, most of the empirical work that underlies these findings was conducted in environments that were characterised by predictable technological and market foundations in contrast to the contemporary turbulent global environment. In short, our thesis here is that, information-seeking behaviour is time-sensitive and the present business environment could generate a set of information behaviour different from that of prior studies. Finally, a replication of this study with a different sample of firms would be a useful follow-on.

Acknowledgements

This article is based on a portion of the author's PhD thesis research. Thanks and acknowledge-

ments are extended to the author's PhD committee: Ian Ruthven, Rita Marcella and Paul Burton.

References

- Aguilar, FJ. 1967. *Scanning the business environment*. New York: Macmillan.
- Auster, E and Choo, CW. 1993. Environmental scanning by CEOs in two Canadian industries. *Journal of the American Society for Information Science* 44(4): 194–203.
- Barrier, M. 1994. Re-engineering your company. *Nations Business* 82(2): 16–28.
- Bergeron, P. 2000. Regional business intelligence: the view from Canada. *Journal of Information Science* 26(3): 153–160.
- Bettis, RA and Hitt, MA. 1995. The new competitive landscape. *Strategic Management Journal* 16: 7–19.
- Butcher, H. 1998. *Meeting managers' information needs: managing information report*. London: Aslib.
- Chalmers, A. 1995. Finding out: the use of business information by managers in New Zealand. *Business Information Review* 12(1): 43–56.
- Choo, CW 1994. Perception and use of information sources in environmental scanning. *Library and Information Science Research* 16(1): 23–40.
- Daft, RL, Sormunen, J and Parks, D. 1988. Chief executives scanning, environmental characteristics and company performance: an empirical study. *Strategic Management Journal* 9: 123–139.
- Dess, GG and Beard, DW 1984. Dimensions of organizational tasks and environments. *Administrative Science Quarterly* 29: 52–73.
- Dillman, DA 2000. *Mail and Internet surveys: the tailored design method*. New York: John Wiley.
- Drucker, P. 1993. *Post-capitalist society*. New York: Harper-Collins.
- Dua, Z. 1990. The study and practice of information demand by small and medium-sized enterprises in China. *International Forum on Information and Documentation* 15(4): 37–42.
- El Sawy, OA. 1985. Personal information systems for strategic scanning in turbulent environments: can the CEO go on-line? *MIS Quarterly* (March): 53–59.
- Elenkov, DS. 1997. Strategic uncertainty and environmental scanning: the case of institutional influences on scanning behaviour. *Strategic Management Journal* 18(4): 287–302.
- Frerrier, WJ. 2001. Navigating the competitive landscape, the drivers and consequences of competitive aggressiveness. *Academy of Management Journal* 44: 858–877.
- Fubara, BA. 1985. Corporate planning in Nigeria. *Long Range Planning* 19(2): 125–132.
- Hitt, MA, DR Ireland, and RE Hoskisson. 2003. *Strategic management: competitiveness and globalization*. 5th edition. London: Thomson South-western.
- Ikoja-Odongo, R and Ocholla, DN. 2004. Information seeking behaviour of the informal sector entrepreneurs: the Uganda experience. *Libri* 54(1): 54–66.
- Johnson JL and Kuehn, R. 1987. The small business/owner manager's search for external information. *Journal of Small Business Management* 25(July): 53–60.
- Kanter, RM. 1991. Transcending business boundaries: 12000 world managers view change. *Harvard Business Review* 69(3): 151–164.
- Kinnell, M, Feather, J and Matthews, G. 1994. Business information provision for SMEs in China: the application of a marketing model. *Library Management* 15(8): 16–23.
- Kinni, T. 1995. Process movement, part 2. *Industry Week* 244(4): 45–50.
- Maguire, C. and Kent, R. 1974. *Information and the small manufacturer: report of a survey of information needs of small manufacturers in New South Wales*. University of New South Wales: School of Librarianship.
- Marcella, R, McConnell, M, Moore, G, and Seton, M. 1996. Rural information needs in the north east of Scotland. *Library Management* 17(7): 3–16.
- Mchombu, CM. 2000. Information needs of women in small businesses in Botswana. *International Information and Library Review* 32: 39–67.
- McLachlan, J. 1993. *The small business's information needs and information sources*. Graduate School of Library and Information Studies. London: University of Western.
- Milliken, FJ. 1993. Perceiving and interpreting environmental change: an examination of college administrators' interpretation of changing demographics. *Academy of Management Journal* 33(1): 42–63.
- Mintzberg, HE. 1973. *The nature of managerial work*. New York: Harper-Collins.
- Mrema, EL. 1987. Strategic planning in Tanzania. *Long Range Planning* 20(3): 105–110.
- Olaisen, J. 1991. The use of information and information technology as a critical success factor in small and medium-sized companies. *Journal of Business Venturing* 3: 223–232.
- Orminski, E. 1991. *Business information of Science Park Companies*. London: British Library.
- SADC Review. 2004. *Botswana: country profile*. Gaborone: Southern African Marketing Company.
- Shokane, JK. 2001. *The use of business information by small and medium-sized enterprises in Acornhoek*. MLIS Thesis. Rand Afrikaans University.
- Smeltzer, LR, Fann, GL, and Nikolaisen, V.N. 1988. Environmental scanning practices in small businesses. *Journal of Small Business Management* (July): 55–62.
- SMME Task Force Report. 1998. *Small, medium and micro-enterprises task force report*. Government Printer. Ministry of Commerce and Industry.

- Song, M, Calantone, RJ and Di Benedetto, CA. 2002. Competitive forces and strategic choice decisions: an experimental investigation in the USA and Japan. *Strategic Management Journal* 23: 969–978.
- Specht, PH. 1987. Information sources used for strategic planning decisions in small firms. *American Journal of Small Business* 11(4): 21–33.
- Starbuck, W, Greven, A and Hedberg, BL. 1978. Responding to crises. *Journal of Business Administration* 9: 111–137.
- Vaughn, L.. 1998. A cross-cultural comparison of business information uses. *International Information and Library Review* 33: 157–168.
- Vaughn, LO., Tague-Sutcliff, J. and Tripp, P. 1996. The value of the public library to small businesses. *RQ: Reference Quarterly* 36(2): 262–269.
- Welsh, JA and White JF. 1981. A small business is not little business. *Harvard Business Review* (July–August): 18–23.

Editorial history:

paper received 25 February 2006;

final version received 10 May 2006;

accepted 22 May 2006.