

INFORMATION NEEDS AND PREFERENCE FOR INFORMATION DELIVERY CHANNELS OF SMALL AND MEDIUM-SCALE ENTERPRISE OPERATORS IN GHANA

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ABSTRACT

This study investigated the information needs and information seeking behaviour of SME operators in Ghana using a questionnaire (n = 189), with a response rate of 47.1%. Over 50% of the respondents across all sub-sectors indicated an urgent need for information in all the business areas specified apart from land/premises, new staff and parent company. Gender of entrepreneur, educational background, ownership type and size of enterprise influenced different aspects of information needs, with gender influencing needs such as how to create better product and the educational background influencing information on export market and international laws and regulations. The two most preferred means of obtaining information were SDI and online databases with the possibility of conducting research in a documentation centre being the least preferred. Lack of adequate training for information specialists in entrepreneurship in Ghana might have accounted for the wide information needs gap in this study and calls for specialist training for business information practitioners in Ghana.

KEYWORDS: KNOWLEDGE DISSEMINATION, INFORMATION
PROVISION, BUSINESS INFORMATION

Introduction

Information is now widely recognized as a key factor in economic growth in most advanced countries. Countries can substantially improve their growth rates by improving their access to knowledge. However, the problem associated with information in business circles is that it is rarely seen as a key issue for business development. This may be due to the difficulty in defining information need. Zweizig and Dervin (1977) define the concept of 'information need' as arising when 'internal sense runs out'. Given such an unclear definition, a consensus is emerging among researchers that information need is difficult to define, but it is linked to specific situations and a need arises when the present level of knowledge is incapable of dealing with a new situation (Wilson, 1981; Kaniki, 1991; Mchombu, 1995).

Studies that have focused on business information needs have established that such information needs exist. In a study conducted in China by Dhua (1990), it was found that business people need a broad range of information on marketing products, sources of funds, competitors, suppliers of materials, customers, technology, new product development and foreign trade practices. Dhua (1990) also noted that small businesses were lacking sufficient information and this lack leads to the failure of tens of thousands of small companies every year (Wheelen & Hunger, 2000). The underlying problem appears to be an overall lack of relevant information that could eventually lead to proper planning to meet customer needs or keep track of the company's performance.

Information relating to business opportunities, operations or sources of assistance can create differential advantages for the small and medium-scale enterprise (SME). Most entrepreneurs are however not aware of the category of information they require; are unable to identify the information source, facilities and tools to be used; or the information providers themselves are not well organized. If SMEs in Ghana are therefore to survive and be competitive in the current worldwide drive towards globalization, then managers of SMEs in the country have no option but to understand and play to the rules of modern business development - the use of information as a tool for competitive advantage.

Literature Review

An important factor in the success of small-scale business enterprises is access to information (Atherton, 1980). Writing on the information needs of enterprises, Duncombe and Heeks (1999) indicated that a wide range of market and non-market factors would determine enterprise information needs. They agreed that although all enterprises need information, these needs have different degrees and different levels of complexity. In relation to this, the authors point out three main factors on issues of information needs in enterprises:

- Information is a generic term. The information needs of an enterprise include information and data that relate to all aspects of business operation. Information is therefore a resource that should not be considered in isolation from the other business resources such as finance, technology and labour. Rather, the accessing, storage, processing and use of information form an intrinsic part of all business activities;

- All enterprises will have common information needs, relating to sources of finance, access to markets, management skills, technology, etc. However, the type of information required will vary widely, according to the type or size of the enterprise, the nature of the market within which the enterprise is operating and the capacities or abilities of the business owner or employees of the business; and

- The information needs of the enterprise will vary over time, depending on the stage of the enterprise lifecycle the enterprise finds itself. The needs of enterprises prior to start-up, or during the start-up phase, will differ from those in a growth or expansion phase. Additionally, enterprises which are in danger of imminent collapse, or that have recently failed, will also have differing and possibly more urgent, needs for information and/or assistance.

The information needs of enterprises can therefore be understood in terms of the content, sources and channels of business information. Information content describes the formal or informal nature of information relating to all aspects of business operation including business inputs, customers, markets, competitors and the business environment. Information channels and sources, both formal and informal, will arise from 'enterprise-specific' information networks: these are established through the contacts, relationships and linkages formed with customers, suppliers, collaborators and competitors.

There is a general consensus among SMEs that access to raw materials, finance, marketing and technology for product development, is very critical for their survival. It is however interesting to note that the advanced countries have been transformed drastically by what is now known as the Information Revolution and in recent times, a proposal for a **World Bank Group on Harnessing Information for Development** states that "throughout the world, information and communication technologies are generating a new industrial revolution already as significant and far-reaching as those of the past. It is a revolution based on information, itself the expression of human knowledge...this revolution adds huge new capacities to human intelligence and constitutes a resource which changes the way we work together and the way we live together" (<http://www.worldbank.org/html/fpd/harnessing/hidl.html>). Belshaw (1965), for example, noted that information should be regarded as a factor of production. This factor is, however, not yet fully recognized and information availability and use is seldom cited as one of the ingredients for the success of the small business sector (Bunjun, 1988; Hopwood, 1989). The present millennium, which Tyson (1998) views as an intelligence age, is an extremely competitive environment for the business world. In such environments companies are expected to build a knowledge base of their competitive environment and require a perpetual strategic process to ensure it is constantly updated. However information support for the small business sector has received very little attention, particularly in most countries in Africa.

Research Objectives

The aim of this study was to assess the 'generic' information needs of SMEs in Ghana with the view to sensitizing SME operators on the business development potential of information in making them more competitive on both the domestic and the international market. It is also aimed at helping policy makers in the country identify the information needs and the information seeking behaviour of SME operators so as to design appropriate services for them.

Methodology

This study which was conducted in 2003 involved the use of a combination of self-administered questionnaire by the respondents and copies of the questionnaire were left at the business premises of SME operators in the Greater Accra Region of Ghana for the respondents to provide the relevant information for this study. The design of the questionnaire was based on the one used by Duncombe (1999) in a similar study in Botswana; however, it was modified to suit the present study. The modification took into consideration an International Trade Centre (ITC) publication on the methodology for conducting Business Information Reviews (ITC/WTO/UNCTAD, 1996).

Due to the lack of reliable data on the informal sector of the SMEs we concentrated on the formal sector to generate a more structured and scientific data on their information needs and their preference for information delivery channels of SME operators in Ghana. Those in the formal sector belong to the class that are likely to have formal record keeping and have official registration. This group tends to be more established and less prone to failure. Also, entrepreneurs in this group are likely to have a high level of formal education.

To ease accessibility to respondents, we worked with registered members of two established associations that are considered to represent the formal sector SMEs in Ghana. These are Association of Ghana Industries (AGI) and the Federation of Associations of Ghanaian Exporters (FAGE).

In order to identify weaknesses, ambiguities and omissions before it is finalized for the survey itself, the questionnaire for this study was pre-tested with ten (10) randomly selected entrepreneurs to find out the suitability of the questions asked. The responses received helped us to re-shape some of the questions and delete some irrelevant ones. It came out from the pilot study that some of the initial questions were repetitive and others illogical. We also noticed that there was a particular question which all the entrepreneurs except one did not answer. This question had to do with their total turnover for the year. It seemed this was a sensitive question so we deleted it.

Data Analysis and Statistics

Copies of the questionnaire that were completed and retrieved were first screened for accuracy and completeness. The researcher then coded the information contained in them and processed it using the statistical software package, SPSS for Windows, version 11.

Secondly, the overall information needs of enterprises were examined, focusing on information content and information channels. Data was analyzed using simple frequencies and percentages in order to make it easier to interpret. Cross tabulations were carried out to find out how the variables related to each other. The Kendall's tau (δ)-b was used as the test statistics for the strength and significance for the study.

Results

Response rate

The overall response rate in this study was 47.1%, the highest coming from the service sector with 64.8% and the lowest from the export sector with 30.0% (Fig. 1). Exporters were more elusive during the survey and therefore registered the lowest response rate (30.0%; Fig. 1).

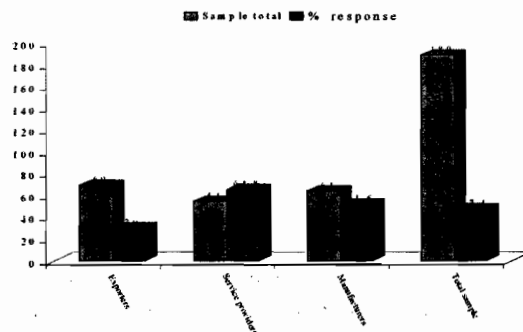


Fig.1: Response rate by economic activity.

Information Needs

Over 50% of the respondents across all sub-sectors indicated that they have urgent need for information, classified as 'essential' or 'very important' in all the business areas specified apart from land/premises, new staff and parent company (Fig. 2). A more thorough analysis of these results indicated gender differences with regard to information on how to create better products ($\delta = -0.281$; $p = 0.001$), management/staff training ($\delta = -0.191$; $p = 0.03$) and new staff ($\delta = -0.199$; $p = 0.025$). Female entrepreneurs generally regarded information on how to create better products (61.9% v. 32.4%) and management/staff training (33.3% v. 25.0%) as essential for the development of their businesses compared to their male counterparts. Though entrepreneurs generally did not regard information on new staff important for business development, more females (4.8%) compared to males (2.9%) indicated that this was essential

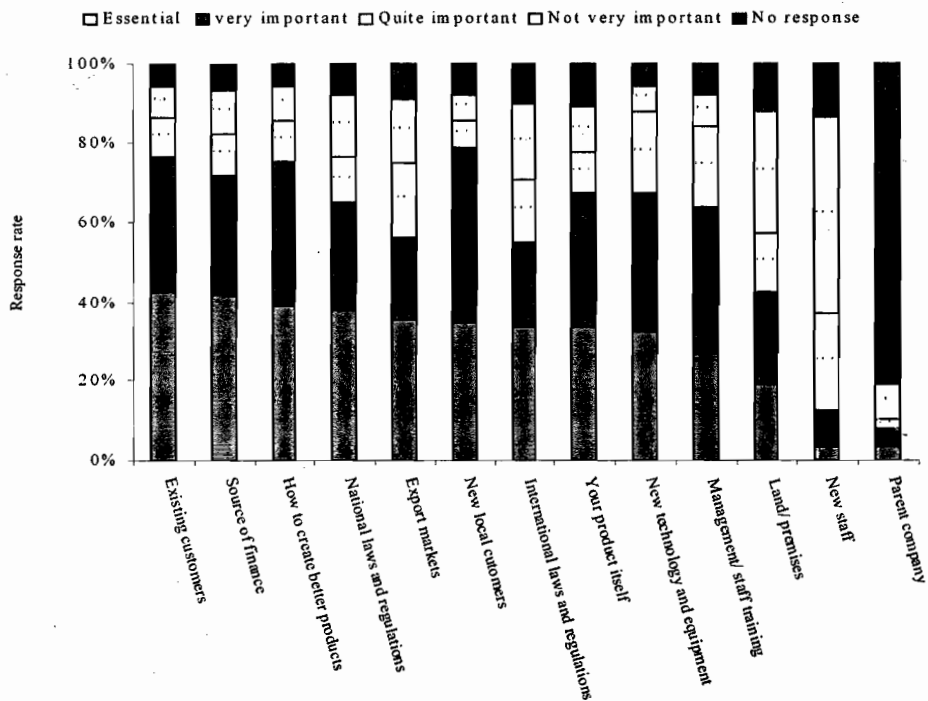


Fig. 2: Information needs of SME operators (n=89) in Ghana. Figures represent percentage response.

The educational background of entrepreneurs was the most important factor influencing the information requirement of entrepreneurs in areas such as information on new local customers ($\delta = -0.331$; $p < 0.001$), export market ($\delta = 0.221$; $p < 0.01$), international laws and regulations ($\delta = 0.175$; $p < 0.05$), source of finance ($\delta = 0.185$; $p = 0.03$), management/staff training ($\delta = 0.193$; $p < 0.05$) and new staff ($\delta = -0.184$; $p = 0.03$). Entrepreneurs with higher education, i.e. graduates and postgraduates, regarded information on international laws and regulations, management/staff training, new staff, source of finance and export market as of less importance for business

development. They however were more concerned with information on new local customers (Fig. 3). More respondents with secondary school (60.0%) and vocational/technical (50.0%) education regarded information on source of finance as essential for business development compared to graduates (40.5%) and postgraduates (30.8%; Fig 3). Generally, only few people regarded information on new staff as of any importance. This notwithstanding, 10.0% of the respondents with vocational/technical education regarded it as essential for business development compared to 2.7% graduates and 3.8% postgraduates (Fig. 3).

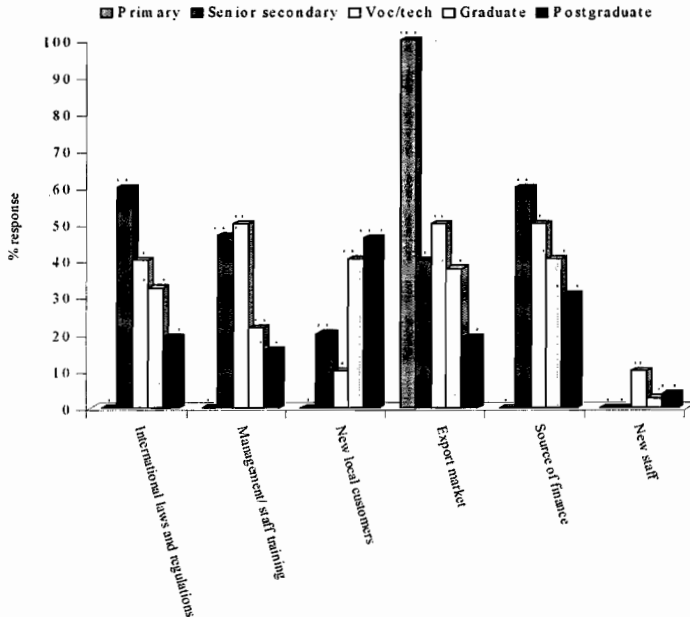


Fig. 3: Influence of educational level on type of business information regarded as essential to the development of SMEs (n=89). Figures represent percentage response.

The need for information on parent company ($\delta = -0.367$; $p < 0.001$), international laws and regulations ($\delta = -0.169$; $p < 0.05$) and management/staff training ($\delta = 0.183$; $p < 0.05$) were all significantly influenced by the type of ownership. Information on international laws and regulations was regarded by joint venture operators (46.2% v. 31.6%; $\delta = -0.169$; $p < 0.05$) as being essential whilst Ghanaian-owned enterprise operators regarded information on management/staff training (30.3% v. 7.7%; $\delta = 0.183$; $p < 0.05$) as being essential for business development (Fig. 4). The size of the enterprise only significantly affected information on parent company ($\delta = -0.214$; $p = 0.05$) with 3.9% of small-scale enterprise operators as against 0% of medium-scale enterprise operators alluding to its importance to their business development (Fig 4).

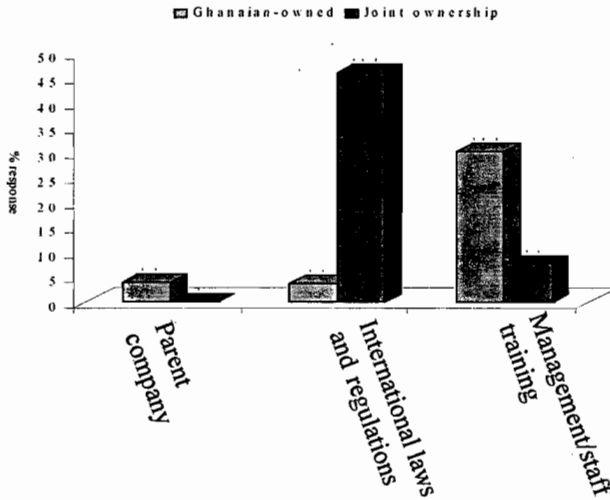


Fig. 4: Influence of type of ownership on type of business information regarded as essential to the development of SMEs (n=89). Figures represent percentage response.

Information Delivery Channel Preference of Entrepreneurs

Information selected according to company profile/Selective Dissemination of Information (SDI) and online database were the two most preferred means of obtaining information; and were indicated by 64.1% each of respondents as ‘most’ or ‘more preferred’. Participation in information meetings with other enterprises was the next preferred means of obtaining information (60.6%). The least preferred means of obtaining information was the possibility of conducting research in a documentation centre (31.5%; Fig. 5).

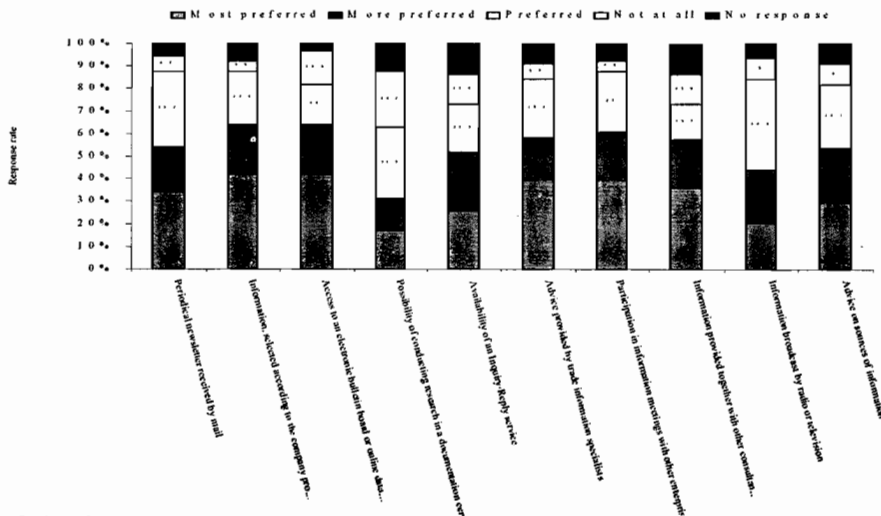


Fig. 5: Preferred means of obtaining business information by SME operators (n=89) in Ghana.

On a priority rating, SDI was rated as the first preference by 36.8% of the various groupings (e.g. 21-30 year group, medium-scale enterprise operators and entrepreneurs with secondary school level of education) with 31.6% (e.g. graduates and postgraduates, 41-50 year group and small-scale enterprise operators) indicating preference for online databases as first priority (Tables 1 – 5).

Service-providing exporters and service-providing manufacturers, as well as entrepreneurs in all three categories of economic activity indicated preference for the availability of an Inquiry/Reply Service either as of first or second priority (Table 3).

Discussion

Response rate

The overall response rate of 47.1%, in this study reflects the trend among businessmen. Vaughan (1998) noted that questionnaire surveys aimed at the business community often have low response rates. For example, a recent business survey jointly conducted by The Institute for Small Business, Bank of Montreal and The Centre for Creative Leadership, San Diego, resulted in a 3.3% response rate (The Institute for Small Business and The Centre for Creative Leadership, 1995). Diamantopoulos *et al.* (1999) in a five-nation study on export information use also reported response rates ranging between 9% from the USA and 46% from New Zealand, even after several follow-up procedures were employed to enhance the response rates. The response rate of 30.0% among Exporters could also be regarded as very good compared to the 9% reported by Diamantopoulos *et al.* (1999) in the USA. This could be due to the elusive nature of most exporters.

Table 1: Effect of age on entrepreneur preference for source of business information in the SME sector. Figures represent percentage response.

Age group (yrs):	Information and advice from ...	Priority rating (n=89)			Total	Information and advice from ...	Priority rating (n=89)			Total
		First	Second	Third			First	Second	Third	
		Very often	Quite often	Total		Very often	Quite often	Total		
31-40	Information selected according to the company profile	51.5	21.2	72.7	Participation in meetings with other enterprises	45.5	24.2	69.7	Advice on sources of information	
41-50	Access to an electronic bulletin or online database	43.3	30.0	73.3	Advice provided by trade information specialists	43.3	26.7	70.0	Participation in information meetings with other enterprises	
51+	Advice on sources of information	21.4	42.9	64.3	Advice provided by trade information specialists	28.6	28.6	57.2	Participation in information meetings with other enterprises	

Table 2: The educational background of the entrepreneur and preference for source of business information in the SME sector. Figures represent percentage response.

Level of education:	First		Second		Third	
	Very often	Quite often	Very often	Quite often	Very often	Quite often
Senior secondary	73.3	6.7	60.0	20.0	46.7	26.7
Vocational/technical	60.0	20.0	50.0	30.0	50.0	20.0
Graduate	40.5	24.3	37.8	21.6	32.4	21.6
Postgraduate	30.0	25.1	34.0	30.8	32.4	21.6

Priority rating	(n=89)	Information and advice from ...
Very often	80.0	Information, selected according to the company profile
Quite often	80.0	Access to an electronic bulletin or online database
Very often	80.0	Advice provided by trade information specialists
Quite often	80.0	Information provided by other consultants/peers
Very often	80.0	Information and advice from ...
Quite often	80.0	Access to an electronic bulletin or online database
Very often	80.0	Information, selected according to the company profile
Quite often	80.0	Advice provided by trade information specialists
Very often	80.0	Information provided by other consultants/peers
Quite often	80.0	Information and advice from ...

Table 3: Economic activity and preference for source of business information in the SME sector. Figures represent percentage response

	Priority rating			Total	Information and advice from ...	Priority rating			Total	Information and advice from ...
	First	Second	Third			Very often	Quite often	Very often		
(Category of entrepreneurs:										
Non-exporting Manufacturers	44.4	27.8	72.2	50.0	16.7	66.7	44.4	22.2	66.6	44.4
Exporters	64.7	11.8	76.5	47.1	23.3	70.6	41.2	22.2	64.7	44.4
Service providers	37.5	29.2	66.7	29.2	25.0	54.2	16.7	37.5	54.2	44.4
Exporting Manufacturers	53.6	33.3	86.9	44.4	22.2	66.6	44.4	22.2	66.6	44.4
Service - providing Manufacturers	53.8	15.4	69.2	23.1	30.8	53.9	38.5	15.4	53.9	44.4
Service - providing Manufacturers	60.0	40.0	100	60.0	33.3	100	66.7	33.3	100	44.4
All economic activity	100.0	100	100	66.7	33.3	100	66.7	33.3	100	44.4
Service - providing exporters	60.0	40.0	100	66.7	33.3	100	66.7	33.3	100	44.4
All economic activity	100.0	100	100	66.7	33.3	100	66.7	33.3	100	44.4

Table 4: Preference for source of business information as affected by type of ownership in the SME sector. Figures represent percentage response.

Type of ownership:	Priority rating			Total	Priority rating			Total
	First	Second	Third		First	Second	Third	
Chatham owned	Information and advice from ...	Very often	Quite often	68.8	Information and advice from ...	Very often	Quite often	61.6
Joint venture	Information selected according to the company profile	46.2	30.8	77.0	Participation in information meetings with other enterprises	46.2	23.1	69.3
	Periodical newsletter received by mail	30.8	30.8	61.6				

Table 5: Preference for source of business information as affected by enterprise size in the SME sector. Figures represent percentage response.

Size of the enterprise:	Priority rating						Total
	First		Second		Third		
	Very often	Quite often	Very often	Quite often	Very often	Quite often	Total
Small	25.0	58.3	25.0	41.7	66.7	33.3	34.3
Medium scale	25.0	58.3	25.0	41.7	66.7	33.3	66.6
Information and advice from ...	Access to an electronic bulletin or online database	Information from the company website	Participation in meetings with other enterprises	Information provided together with other consultancy services (e.g. on export market)	Information and advice from ...	Information and advice from ...	

Information needs

The large unmet demand for information across all the sub-sectors as revealed in this study (Fig 2) is corroborated by Duncombe and Heeks (1999) in Botswana. However, whilst information pertaining to land/premises, new staff and parent company was neither 'essential' nor 'very important' in Ghana, Duncombe and Heeks (1999) reported that information pertaining to these is rather essential in Botswana. The fact that information on land/premises was no problem in Ghana may mean a better atmosphere for foreign companies to do business in Ghana compared to Botswana. Estímé (2002) reported that more SMEs are entering into international joint ventures, strategic alliances, franchising and licensing operations; a phenomenon which has been catalyzed by liberalized trade, electronic networks and more mobile capital. The result has been the development of global partnership among smaller firms and between smaller firms and larger multinationals. Ghana, however, appears not to be taking advantage of this global phenomenon with only 14.6% of the enterprises having joint ownership. A lot more effort should therefore be made in this regard by policy makers in the country, taking advantage of the relative ease with which land is acquired in Ghana by potential entrepreneurs.

Generally, female entrepreneurs had more need for information as exemplified by their need for information with regards to how to create better products (61.9% v. 32.4%), management/staff training (33.3% v. 25.0%) and new staff (4.8% v. 2.9%) compared to their male counterparts. The female entrepreneurs' concern for information on management/staff training as 'essential' for business development in this study is corroborated by Mchombu (2000) who found that majority of businesswomen in Botswana indicated that information on business management was the most important business information need. Management training may therefore be a critical factor if female entrepreneurs are to realize their potential and make the needed contributions to the growth of the national economies, not only in Ghana but in Africa as a whole.

Education also had a significant influence on the type of information required. Graduates and postgraduates were generally involved in the service industry and less into export. It was therefore not surprising that they regarded information on international laws and regulations and information on export market as of less importance to their business operations. They also regarded information on management/staff training and new staff as of less importance compared to information on sources of finance. This must not, however, be taken to mean that graduates and postgraduates downplay the importance of such factors in business development. It might rather mean that they have solved their problems in that regard. This assertion is corroborated by the fact that service providers, who were generally of the top educational class, were the best at obtaining information on management/staff training (data not shown).

Being able to determine whether the information exists appears to be a major difficulty of SMEs in Ghana. This is buttressed in a study by Monrozier *et al* (2000). They found that entrepreneurs experienced a high degree of difficulty in being able to determine whether a piece of information existed at all. Training in the information seeking behaviour, such as the use of the Internet, a very powerful tool with regard to information search and developing skill in this regard may go a long way to addressing some of the difficulties. This must however, be coupled with more aggressive marketing strategies by information providers in Ghana.

Skilled workers, organizations, marketing and networks provide the main competitive advantage in markets where there is intense competition (UNIDO, 2002). Though significantly more Ghanaian-owned SMEs regarded information on management/staff training as essential to business development compared to joint venture operators (30.3% v. 7.7%), it might not necessarily be translated to mean that Ghanaian-owned SMEs have competitive advantage over their joint venture counterparts. As indicated earlier, most of the Ghanaian-owned SMEs are operating in the domestic market where competition is less intense. On the other hand, it can be argued that Ghanaian enterprises were beginning to develop the right business attitude towards competition.

Some earlier studies (e.g. Antila-Olkku & Koskiala, 1995) assumed that the size of a business does not influence its use of information while others such as Roberts and Clifford (1986), found that size does make a difference. Vaughan (1998) noted that the size of a business is a factor in the use of different information sources. The current study however, shows that the size of the enterprise is of consequence only to information on parent company. This study, to a very large extent, therefore corroborates Antila-Olkku and Koskiala (1995) and seems to suggest that in the Ghanaian business environment, the size of the business does not influence its use of information.

With more Ghanaian-owned firms concentrating on the domestic market as against joint venture operations that were foreign-market oriented, it was not surprising that ownership significantly influenced information requirement on international laws and regulations ($p < 0.05$). Information on source of finance was basic to entrepreneurs of all shades, a situation much like that in Botswana (Duncombe & Heeks, 1999, Mchombu, 2000). In an economy like what currently prevails in most African countries, now business financing will continue to be a problem for a long time to come. However, if the Export Development and Investment Fund (EDIF) initiative works as envisaged, Ghanaian exporters, at least, would solve their financial problems. Government may also have to consider setting up a similar fund for ICT service providers who have been projected to create the largest job opportunities in the current global market (Estimé, 2002).

Channels of Information Delivery used by Entrepreneurs

Although business people make more use of informal information, their self-perception of overall information use does not always reflect this preference. In a Canadian medium-sized business survey, self-perception of information use correlates with their use of formal information sources, not informal ones (Vaughan, 1998). However, Vaughan (1998), in two contrasting surveys found that Chinese business people's self-perception of information use correlates with both informal and formal information use. The response analysis in this study shows that SDI and online databases are the two most preferred channels of receiving business information. Service providers rather indicated preference for the availability of Inquiry/Reply service. All these are formal rather than informal sources of information. In Ghana therefore, preference is for formal rather than informal sources of information. It would be expedient to investigate why business people have preference to one source of business information and yet use another. It is hoped that such a study would help information providers address the weaknesses in formal information usage by the business community and/or formal information delivery to the business community.

Vaughan (1998) indicated in his study of Canadian and Chinese SMEs that the electronic format of information, which include categories of databases, computer networks and the Internet, is the

least useful business communication channels and advocated that digitization of business information could currently impede, rather than promote its use and should thus be undertaken with great caution, otherwise it would result in a negative impact. Rather interestingly, Ghanaian SMEs are showing preference to digitized information as indicated in the current study. In the UK, Blessing *et al* (2000) also found that many of the information needs related to product development could be satisfied through the use of the Internet. The trend in Ghana is therefore a healthy development and must be given the needed support by policy makers in the business sector.

Conclusion

The wide information needs gap realised in this study is the result of lack of adequate training for information specialists in Ghana. Business information is a specialized field involving aspects of law, management, marketing, information and informatics. With the increasing complexity of information sources and rapid technological development, it is important to rely on qualified 'Information Managers' or on trade information services in order to adequately meet the information requirements of SMEs. Effective management of business information therefore requires that, serious efforts be made at specializing in the training of business information specialists in Ghana. A lot of training has gone into making good university, school and children's librarians but we can hardly say that for the business sector. Training business information specialists would go a long way to reduce the 'information need gap' among SMEs, which is a crucial factor in their competitiveness at both the domestic and the international markets.

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