

Sources of Business Information and Means of Access Used by SMEs in Uganda: The Case of Northern Uganda.

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Abstract

This article is a result of part of the doctoral study *Business Information Systems Design for Uganda's Economic Development: The Case of SMEs in Northern Uganda*. The study was conducted in 2005/06 to identify the sources of business information used by small- and medium-scale enterprises (SMEs), rate these sources according to their usefulness in meeting the information needs of SMEs, determine the means of access to business information, and propose appropriate sources and means of access to business information for consideration in the design of a business information system (BIS). It was assumed that northern Uganda is lagging behind because of a lack of appropriate strategies for empowering SMEs as an engine of economic growth, including using information as a catalyst for socio-economic transformation. Through the use of a descriptive design, the study identified and recommended the business information sources necessary for SMEs and the appropriate means that should be adopted in order for a BIS to enable SMEs in northern Uganda to access relevant business information. The article has six sections. Section one provides an introduction, an overview of SMEs in Uganda, and a situational analysis of Uganda's economic development, especially northern Uganda. Section two covers a brief general literature review while section three delineates the methodology applied. Section four presents the findings that are discussed in section five. Strategic interventions are proposed in section six. To enable access to various business information sources using various means, one of the key recommendations is the adoption of Internet-based services with the integration of an interactive business planner, an online small business workshop, the business start-up assistant, info-guides, an e-mail service, and Talk to BIS services.

KEYWORDS <Business information services><Business information sources><Business information access><Business information access means><Commercial information services><Small- and medium-scale enterprises><Northern Uganda>

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INTRODUCTION

Business and industry, including transnational corporations, play a crucial role in the social and economic development of a country. The eradication of poverty is one of the Uganda government's chief goals. The problem of poverty in Uganda is one of many, including insecurity, a high mortality rate, and poor accounting and financial record-keeping within the business community in northern Uganda. This problem could be mitigated by means of an appropriate business information system as poverty eradication is directly related to information supply (World Bank, 2001, p. 73). According to the World Bank (2001, p. 73), it is possible to reduce poverty by spreading information to needy populations worldwide. Northern Uganda, being poor, needs a local, demand-driven information system to facilitate accessibility to and utilization of business information.

Although Beyene (2002) and Mutula and Brakel (2006) argue that there is no universally accepted definition for small- and medium-scale enterprises (SMEs) in Africa, this study adopts the government of Uganda's classification of SMEs as business firms employing 5-50 people (small scale) and 51-500 people (medium scale) (Kasekende & Opondo, 2003; Schiffer & Weder, 2001, p. 13; Uganda Bureau of Statistics, 2003). This study was conducted on the assumption that if relevant business information were to be provided to northern Uganda business enterprises, business performance would improve and more jobs would be created that would result in more money in the hands of more people. This would lead to improved income, improved income equality, and improved household consumption that would, in turn, lead to the socio-economic transformation of northern Uganda. But what is the structural outlook of SMEs in Uganda?

An Overview of SMEs in Uganda

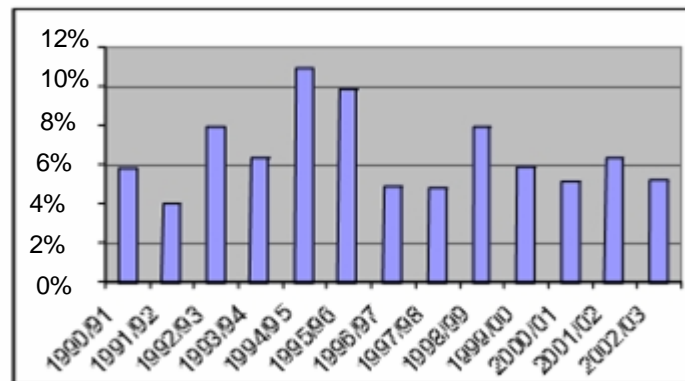
It is estimated that SMEs in Uganda constitute 90 percent of the private sector, with 80 percent being located in urban areas and, are largely involved in trade, agro-processing, and small manufacturing (Hatega, 2007), SMEs contribute approximately 75 percent of the gross domestic product (GDP) and employ approximately 2.5 million people, signifying their importance in the economic development of Uganda. At the same time, SMEs have operational and structural challenges. According to Hatega (2007), obstacles that affect SMEs' ability to compete favourably include limited information on financing products and an inadequate and expensive supply of power and telecommunications. Ugandan SMEs lack the information, experience, and networks needed to compete in a world of economic giants (Kigozi, 2006). An important part of the solution would be to provide well-researched market information, opportunities, and changes in the business sector using appropriate information systems and services.

Situational Analysis of Uganda's Economic Development with Specific Reference to Northern Uganda

According to USAID (2005), Uganda has become more stable politically and is on the path to economic recovery. This could be attributed to the re-establishment of law and order and macroeconomic stability, the rehabilitation of major infrastructure and market liberalization. The government of Uganda has been implementing an ambitious and successful program of macro-economic adjustment and structural reform since 1987 with

strong support from multilateral and bilateral creditors and donors. The government's continued implementation of appropriate fiscal and monetary policies and its program of substantial economic liberalization have maintained high growth, low inflation, a steadily improving balance of payments, and an increasingly vibrant and diversified private sector (Uganda Ministry of Finance, Planning and Economic Development, 2002). During the 2003/04 financial year, Uganda's economy registered a strong growth rate of six percent compared to a growth rate of 5.2 percent in 2002/03 (Central Intelligence Agency, 2004). Solid growth in 2003 reflected an upturn in Uganda's export markets. Growth continues to be solid, despite variability in the price of coffee, Uganda's principal export, and a consistent upturn in Uganda's export markets (Central Intelligence Agency 2008). Generally, according to Uganda Ministry of Finance, Planning and Economic Development (2004, p. 31), the average growth of the gross domestic product over the past years is as shown in Figure 1.

Figure 1: REAL GDP GROWTH AT MARKET PRICES 1990/91-2002/03



Source: Uganda, Ministry of Finance, Planning and Economic Development 2004. Also available at www.un.org/special-rep/ohrrls/ldc/MTR/Uganda.pdf.

Although the government's initiative to fight poverty through its Poverty Eradication Action Plan (PEAP) and Poverty Action Plan (PAP) is yielding results, there is still evidence of poverty despite the GDP growth indicated above. The international poverty line is \$1 per day and, according to the World Bank (2000, p. 64) and the Ugandan Ministry of Finance, Planning and Economic Development (2004, p. 12), 37.7 percent of Ugandans live below the poverty line, with the highest incidences occurring in northern Uganda (63.6 percent). A third of the chronically poor and a disproportionate number of households moving back into poverty are in northern Uganda (Mukasa & Masiga, 2003). In the rural areas of the north, 81 percent of the population have a real per capita monthly income of less than Uganda Shs 6,000 (approximately \$3.3), which translates into Uganda Shs 200 or approximately \$0.11 per day, and 42 percent have a real per capita monthly expenditure of less than Uganda Shs 3,000 (approximately \$ 1.6), that is, Uganda Shs 100 or approximately \$0.05 per day (World Bank, 1993, p. 9). A recent

survey by the Ugandan Ministry of Finance, Planning and Economic Development (2004, p. 13) indicates that northern Uganda has experienced an increase in poverty from 60 percent in 1997/98 to 63.6 percent in 2002/03. While most parts of the country shared in the benefits of growth between 1992 and 2000, northern Uganda was left behind (Uganda, Ministry of Finance and Economic Development, 2004, p. 18). Also with respect to the spread of a cash economy, the central, southern, southeastern regions of Uganda have more advantages than northern Uganda. Especially notable is that these regions of Uganda have had more direct access to national economic activities with Kenya and Tanzania rather than with the Sudan and the Democratic Republic of Congo both before and after independence (Uganda, Ministry of Finance, Planning and Economic Development, 2002). The disadvantage that northern Uganda experiences in not having easy access to many economic activities is one of the reasons why the focus of this study is on the districts in the northern region.

Leading manufacturers in Uganda, such as Coca-Cola, Pepsi, Mukwano, Uganda Breweries, Nile Breweries, Britannia, Rafiki, Bata Uganda Ltd., British American Tobacco (BAT), Royal Foam and Vita Foam, Mobile Telephone Network (MTN) Uganda Ltd., National Water and Sewerage Corporation, Uganda Revenue Authority, Pride Africa and Private Sector Foundation, have opened regional outlets in northern Uganda to give the region an opportunity to increase and improve its business activities. Much more, however, is required in terms of information access. One of the weaknesses of Uganda's economic development is poor information systems (Uganda, Ministry of Planning and Economic Development, 1999, p. 49). The information infrastructure, including premises and communication networks, is poor. As shown in Table 1 (World Bank, 2005, p. 318), the penetration of the information economy puts Uganda well below certain developed countries.

Table 1 * MEASURE OF PENETRATION OF THE INFORMATION ECONOMY

Country	Daily newspapers		Radio Television	Mobile phones	Fax	Personal computers	Internet hosts (secure servers)	Internet users
	2000	2000	2003	2000	1996	2003	2004	2003
South Africa	26	336	117	22	3.6	72.6	909	68
Sudan	26	461	386	0	0.9	6.1	....	9
Tanzania	4	406	45	0	.....	5.7	1	7
Sweden	410	281	965	282	...	621.3	2354	573
Uganda	3	122	18	... ..	0.1	4	2	5
UK	326	1445	950	122	...	405.7	21034	423
Togo	2	263	123	.....	4.1	32	1	42
United States	196	2109	938	165	78.4	658.9	198098	551

Source: World Bank (2001, p. 308; 2002, p. 318; 2005, p. 312)

Key to Table 1:

According to the World Bank (2005, p. 313) and World Development Indicators available at <http://www.lib.umich.edu/govdocs/wdi/wdivar/wdivar13.html>,

- **Daily newspapers** refers to those published at least four times a week and calculated as average circulation or copies printed (per 1,000 people).
- **Radio** refers to radio receivers in use for broadcasts to the general public (per 1,000 people).
- **Television** refers to television sets in use (per 1,000 people).
- **Mobile phones** refers to users of portable telephones subscribing to an automatic public mobile telephone service using cellular technology that provides access to the public switched telephone network (per 1,000 people).
- **Fax** refers to facsimile machines connected to the public switched telephone network (per 1,000 people).
- **Personal computers** refers to self-contained computers designed for use by a single individual (per 1,000 people).
- **Internet hosts (secure servers)** refers to servers using encryption technology in Internet transactions (per 10,000 people).
- **Internet users** refers to the number of users within a country who access the Internet (per 1,000 people).

* Data for the given countries in Table 1.1 were selectively extracted from the three publications indicated in order to highlight the situation in Uganda in comparison to other countries.

Unavailable data- The cited documents (World Bank, 2001, 2002, & 2005) had no data.

In order for businesses in northern Uganda to prosper, they must have access to useful information at the right time and in the right format. Businesses require news of exchange rates and the price of credit, while lenders need to request credit histories and the authority to draw available funds. Vendors need to advertise their products and need to learn about market trends in order to make productive decisions. All these needs require relevant sources of business information and efficient means of accessing that information.

Problem Statement

SMEs need to have access to adequate information to enhance productivity and to facilitate market access. The establishment of an active SMEs sector and the effective utilization of quality business information have been identified as crucial in attaining long-term and sustainable economic growth for developed and developing countries alike (Corps, 2005). In most developing countries, however, the SMEs sector suffers from inadequacies in the provision of business information that is available only from stand-alone institutions, is often slow and cumbersome to access, is limited in scope, and is not provided in an integrated manner (UNIDO, 2005). This is the situation in northern Uganda where access to information is insufficient and businesses often fail to receive timely business information (Cochrane, 1996, p. 6). A recent study by the Uganda Bureau of Statistics (2005, p. 30) established that the majority of business enterprises depended on “word of mouth.” They did not have any meaningful mechanisms for accessing relevant information on business resources, a considerable amount of which is available in Uganda. The problem of access to quality business information is generally attributed to poor information systems, lack of awareness of business information sources, and use of inappropriate means of access to information (Uganda, Ministry of Planning and Economic Development, 1999, p. 49). This limited access to relevant business information is one of the obstacles to the competitiveness of Uganda’s SMEs (Hatega, 2007). This situation has necessitated a study to investigate and to propose appropriate

business information sources and means of access to these sources in the design of any BIS for business enterprises in northern Uganda.

Aim of the Study

The aim of the study was to identify the sources of business information used by SMEs in northern Uganda, rate these sources according to their usefulness in meeting information needs, determine the means of access to business information, and propose appropriate sources and means of access to business information for consideration in the design of a business information system (BIS) for SMEs in northern Uganda.

REVIEW OF GENERAL LITERATURE

A review of literature can be of assistance in setting the direction an investigation will take. This section reviews the available literature on sources of business information and the means generally used to access business information. The aim of the section is to provide a general picture and to determine how the Ugandan situation relates to this overall picture.

Business information sources refer to the containers of information that are useful for different business transactions (Kaye, 1995). Although they may be formal or informal, these sources play a pivotal role in determining the input for an information system. Access to the right business information, from the right place, at the right time, from the right source, and at the right price—and knowing how to use it—is a major factor influencing trading efficiency and competitiveness (Siriginidi, 1996, p. 22). In his study, Jorosi (2006) argues that the main sources of business information for SMEs include competitors, customers, business associates, government officials, broadcast media, libraries, newspapers/periodicals/magazines, government publications, trade and industry associations, and electronic sources. Kaye (1995, p. 16) notes that there are informal and formal sources that contain business information in different forms.

Kaye (1995, p. 16) argues that informal sources, just like formal sources, are those that help in the provision of information to individual business managers. Informal sources include business colleagues, superiors and subordinates, external professionals, and other contacts. Some are informal-external and others informal-internal. The informal-external sources include trade contacts, personal advisers, professional associates, social and family contacts. Informal-internal sources include superiors and subordinates, including staff from other departments.

Formal sources may be defined as those that are constituted in some regularized or legal manner in relation to the user (Kaye, 1995, p. 16). Formal internal sources include the following: trade and development associations, professional and learned societies, universities and colleges, chambers of commerce and trade, radio and television stations, market research organizations, advertising agencies, stock exchanges, banks and insurance companies, law firms, government departments and agencies, international sources, business statistics offices, company registration offices, local authorities, suppliers, customers, competitors, shareholders, and public and other libraries. Formal-

internal sources also include reports, memoranda, work instructions, budget statements, delivery notes, invoices, codes and regulations, and analyses and test results.

All these sources are important for businesses to flourish. Riaga (1994, p. 1), however, argues that good information comes from a source in which the user has confidence, which raises the question of users' trust in sources of business information. In 1977, Atherton (p. 7) controversially argued that the kind of information sources sought and used tend to be those that are easy to access and that are known, personally, to the user, regardless of the quality of the information. For the purposes of this study, it was, therefore, important to determine answers to the following questions:

- which information sources are used by business enterprises in northern Uganda?
- How do these businesses rate the information sources used in terms of trust in the quality of information provided?

Although the answers to these questions are discussed later in this study, it is important to establish here what is entailed in users' trust of information sources.

Whatever the source of business information, its characteristics are important to the user. Bowes (1995, p. 120) argues that the characteristics of the information source, including credibility and performance, are important for community acceptance and credence. The variables of such sources include credibility and the dimensions underlying it, such as competence and trustworthiness; homophily with audience; opinion leadership; and centrality to formal and informal communication networks. A business information source that is trusted by its users creates confidence in decision-making in all aspects of commercial activity and will be visited or used repeatedly. As Moore (2002, p. 301) observes, an important determinant of the impact that is made by information providers and processors is the trust that users place in the information provided. Authority is an important determinant of trust. Information users take a number of things into account when assessing authority of the information they receive. These include the "standing of the information provider; the extent to which it can be seen to be objective; its motive in providing the information; and the likelihood that it will get things right" (Moore, 2002, p. 301).

Means of access to business information refers to the ways, means, or methods used to access or acquire the right business information from available sources. These include the telephone, e-mails, faxes, visiting the library personally, reading public notice boards, listening to radio broadcasts, etc. The means of access to information is a powerful procedural measure that needs to be instituted for quality control in an information system. For instance, if the information system institutes personal visits to the resource center as the only means to access information, this can have a detrimental effect on the quality of information accessed. A business manager may decide to use a third party to access the information because of distance, which may affect the quality of access because of misinterpretation by the third party. If only the telephone is used, what measures are there to minimize noise? The type and the quality of the means used to access information have a direct bearing on the quality of information. For a business

characteristics of an event, community, or region, providing data about the population or item being studied by describing only the *who*, *what*, *how*, *when*, and *where* of a situation at a given time. They do not go into what currently causes or has caused it. Biscoe (2004) argues that a descriptive research design is used when the objective is to provide a systematic description and analysis that is as factual and accurate as possible. Descriptive research provides the number of times something occurs (frequency) and lends itself to statistical calculations such as determining the average number of occurrences. Since making a viable decision on the popularity of the means and sources used in accessing business information by business enterprises was important, a descriptive design was appropriate for this study. In order to effectively obtain data on the characteristics of respondents and their present behaviour and expectations, the research survey technique was deemed the most appropriate. This is because a survey asks many people about their beliefs, opinions, characteristics, past or present behaviour, expectations and knowledge (Neuman, 1997, p. 228).

The study used three types of respondents, namely SMEs, information providers, and business information policy-makers in northern Uganda, to enable the researcher to elicit views from the consumers of business information, the providers of business information, and the government. The study's total sample size was 251 SMEs, 75 business information providers, and 25 business policy-makers.

Data were collected using structured questionnaires for the SMEs and information providers and a semi-structured interview guide for the business policy-makers. The use of an interview guide to elicit the required data was found to be appropriate for business policy-makers because of the need to fully understand what could be done to improve business information access in northern Uganda. This is because interviews are known to elicit significantly more complete answers to questions (Sarantakos, 1998. p. 246; Busha & Harter, 1980, p. 77). Before the questionnaires were distributed with the help of research assistants, the research assistant for each district was properly trained in research ethics. The use of research assistants was necessary because of the language barrier. Furthermore, these research assistants were quite familiar with the area of the study.

After the questionnaires were returned, they were edited district by district to ensure legibility and subsequently handed over to the statistician from the Institute of Statistics, Makerere University, who created a data entry screen using Epi Info. A data-entry clerk was employed to enter the data. To ensure that the data entered were free of errors, the database was cleaned before the data were transferred to SPSS for analysis into frequencies, percentages, pie charts, line graphs, and bar graphs.

Data from interviews (unstructured questions) were analyzed, using the content analysis method. Content analysis is the systematic, quantitative analysis of communication content, including verbal, visual, print, and electronic communication. In content analysis, "a researcher uses objective and systematic counting and recording procedures to produce a quantitative description of the symbolic content in a text" (Neuman, 2003, p. 311). In applying content analysis, themes were identified based on the objectives of the study, and the responses of each respondent were classified accordingly so as to come up

with a quantitative value that would facilitate decision-making. Edwards and Talbot (1999) argue that, regardless of the research design and the methods utilized, a stage of coding and classification of information must be undertaken. Classification simplified the task of obtaining a quantitative value from what policy-makers said about business information needs required for a viable business information system design.

FINDINGS

This section presents the findings of the study conducted on SMEs in northern Uganda. The results of the findings from SMEs and information providers are jointly presented in text, table, and graphic formats. As the objectives of the study require, the focus is on SMEs. Where the Likert scale ranking was used, responses are ranked and presented accordingly. The findings from the interviews conducted with policy-makers are presented mainly in the form of quotations in order to draw comparisons and contrasts in the findings. This section includes the following:

- profiles of the respondents,
- sources of business information used and trusted by the SMEs in northern Uganda, and
- access to business information by SMEs in northern Uganda.

Profile of the Respondents

Of the targeted sample of 251 SMEs, 219 respondents participated in the study, giving a response rate of 87.3 percent; of the targeted 75 information providers, 54 participated, giving a response rate of 72 percent; and of the targeted 20 business policy-makers, 17 participated, giving a response rate of 85 percent. Generally, the rates indicate a very high rate of response from the respondents.

Age and gender of the respondents

The SMEs' managers who participated were 73.4 percent male and 26.6 percent female. Of the 219 participants, 218 indicated their age brackets, i.e., they answered the specific question. The age distribution of those 218 respondents is presented in Table 2.

Table 2 AGE DISTRIBUTION OF THE RESPONDENTS [SMEs' MANAGERS] (N=218*)

Age Bracket	Frequency	Percentage
15-20	13	6.0
21-30	101	46.3
31-40	59	27.1
41-50	34	15.6
51 and above	11	5.0
Total	218	100

Note: * The "N" given in all the tables indicates the number of the respondents who answered that particular question.

The information providers who participated were 81.1 percent male and 18.9 percent female. Their age distribution is given in Table 3.

Table 3 AGE DISTRIBUTION OF THE RESPONDENTS [INFORMATION PROVIDERS] (N=54)

Age Bracket	Frequency	Percentage
15-20	5	9.3
21-30	29	53.7
31-40	11	20.3
41-50	5	9.3
51 and above	4	7.4
Total	54	100

The data reveal that there are still very few females in managerial positions in business enterprises and information provision. A notable finding relates to ages: the majority of both the SMEs' managers and the information providers fall in the active and most productive age bracket of 21-30 years. This goes up to 40 years before the trend declines.

Business policy-makers who participated were 94.1 percent male and only 5.9 percent female. Their age distribution was as follows: 15-20 years (0 percent), 21-30 years (23.5 percent), 31-40 years (47.1 percent), 41-50 years (29.4 percent), and 51 and above (0 percent). This shows that the majority of business policy-makers fall in the age bracket of 31-40 years.

Educational levels of the respondents

The educational levels of the SMEs' managers and information provider managers were established and are indicated in Tables 4 and 5 respectively.

Table 4 EDUCATIONAL LEVELS ATTAINED BY SMEs' MANAGERS (N=218)

Education Levels	Frequency	Percentage response
Never went to school	14	6.4
Primary	16	7.3
Secondary	73	33.5
Technical college	28	12.8
Business college	47	21.6
Teachers college	12	5.6
University	28	12.8
TOTAL	218	100

Table 5 EDUCATIONAL LEVELS ATTAINED BY INFORMATION PROVIDERS (N=54)

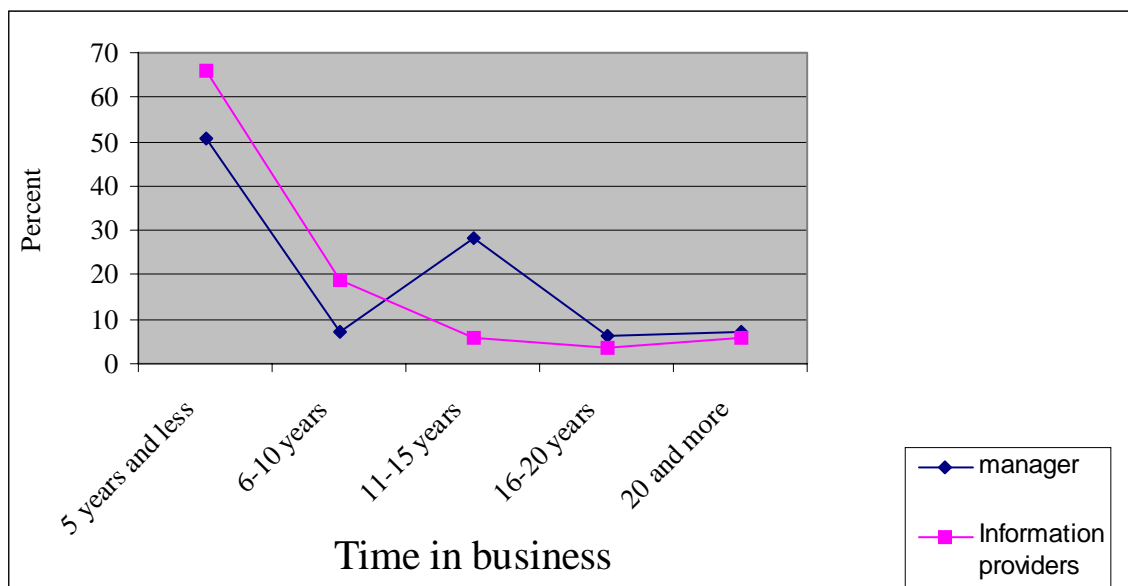
Educational Levels	Frequency	Percentage Response
Never went to school	0	0
Primary	1	1.9
Secondary	14	25.9
Technical college	0	0
Business college	15	27.8
Teachers college	4	7.4
University	20	37
TOTAL	54	100

Of the policy-makers who participated, 52.9 percent had a bachelor’s degree (none in the field of library and information sciences), 41.2 percent had diplomas, and 5.9 percent had a secondary-level certificate. It is evident from the data that the majority of the respondents are literate. This shows that the respondents are in a better position to comprehend business issues and concerns with ease. This is a positive finding in relation to effective business information and utilization.

Years of business experience

There is a common saying that “experience is the best teacher.” The SMEs’ managers are able to learn from their business experience to access or scan the environment for relevant information. Business information providers can also learn from their experience, acquired in the provision of information, to determine not only the information needs of their users but also the problems users face in accessing quality information. This study, therefore, established the extent of business experience of the SMEs’ managers and the information provision experience of information providers. The results are presented in Figure 3.

Figure 3 SME MANAGERS’ BUSINESS EXPERIENCE AND INFORMATION PROVIDERS’ EXPERIENCE IN INFORMATION PROVISION



The results indicate that the majority of both SMEs and information providers have five years' or less experience in business operations and information provision respectively. For the business policy-makers, the least experienced respondent had one year's experience, and the most experienced had 22 years' experience in business policy-making in different capacities. The findings indicate that since the majority are less experienced in business management and in information provision, appropriate training may be necessary as part of the business information systems design. However, only 5.9 percent of the business policy-makers had less than five years of work experience.

Location of the SMEs and information providers

Of the SMEs who participated, 87.7 percent are located in urban areas while 12.3 percent are located in rural areas; and of the information providers who participated, 83.3 percent are located in urban areas and 16.7 percent in rural areas. Out of the SMEs who participated, 77.8 percent use electricity, a positive indicator for online information provision.

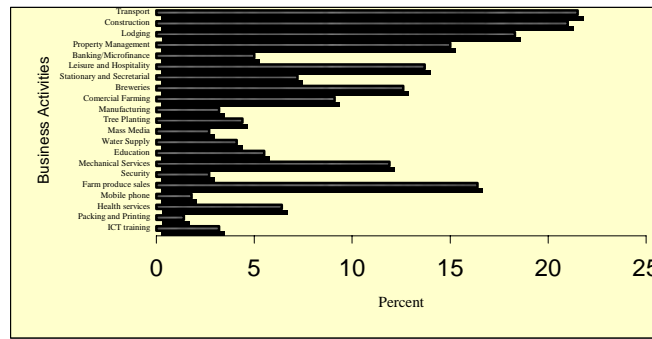
Which language do SMEs' managers read quite well?

In an attempt to establish the language proficiency of the SMEs' managers, the respondents were asked to indicate which languages they read quite well. They were given the choice of one official language used in Uganda, one national language, and three local languages widely spoken in northern Uganda. The findings indicate that 87.7 percent of the respondents can read English, Uganda's official language, quite well, while 32.9 percent can read Kiswahili, Uganda's national language, quite well. Of the local languages given, 56.2 percent of the respondents can read Luo quite well, 6.4 percent Lugbara, 5.0 percent Ngakarimojong, and 16.9 percent can read another language.

In what business activities are SMEs involved in northern Uganda?

Respondents were asked to choose the types of business they operate from an exhaustive list of 22 business activities carried out mainly among SMEs. Data reveal that the SMEs are engaged in a variety of business activities, the majority in transport services, 21.5 percent; construction, 21 percent; lodging services, 18.3 percent; and property management, 15 percent. Details are shown in Figure 4.

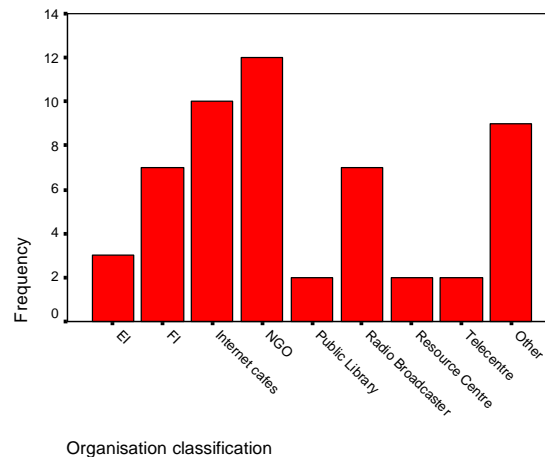
Figure 4 SMEs' BUSINESS ENTERPRISES IN NORTHERN UGANDA



The findings show that the business activities carried out in northern Uganda are diverse with the majority being in the service sector.

For the information providers who participated, the majority, as illustrated in Figure 5, were non-governmental organizations (NGOs), followed by Internet cafes.

Figure 5 CLASSIFICATION OF INFORMATION PROVIDERS



Key:

EI Educational Institutions

FI Financial Institutions

The dominance of NGOs as information providers could be attributed to the availability of NGOs in northern Uganda as a result of the war that took place there in 1986 when the current government of Uganda took power. The establishment of Internet cafes may be due to business motives on the part of some who wished to take advantage of the presence of NGO workers and employees of international organizations working in Uganda. Many of these organizations are involved in the rehabilitation of northern Uganda.

Sources of Business Information Used and Preferred by SMEs in Northern Uganda

In order to determine input into the proposed business information system, it was necessary to find out which sources of business information are used and preferred by SMEs in northern Uganda. The respondents were asked to rate their utilization of 12 sources on a four-point scale: 4 = most important, 3 = sometimes important, 2 = least important, 1 = not important. The list of sources given in the survey was based on a literature review and a pilot study (Okello-Obura, Minishi-Majanja, & Cloete, 2006). Table 6 shows the findings.

Table 6 SOURCES OF BUSINESS INFORMATION SMEs USE (N=219)

Sources of Business Information	Most Important %	Sometimes Important %	Least Important %	Not Important %
Radio stations	57.2	20.7	13.8	8.3
Newspapers	44.4	17.6	19.9	18.1
Personal contact—e.g., entrepreneurs and friends	44.0	23.4	17.9	14.7
Extension workers	26.7	24.0	32.2	17.1
Printed sources such as trade literature, journals, and reports—individually bought or donated	17.5	22.6	39.6	20.3
Private sector consultants	16.6	23.0	26.3	34.1
Ugandan government departments	15.7	17.2	32.4	34.7
Banks/other financial institutions	14.8	21.8	24.5	38.9
Television stations	12.0	11.2	28.7	48.1
Industrial/trade associations	11.0	23.4	33.9	31.7
Internet sources	9.7	14.7	24.9	50.7
Libraries, telecenters, and resource centers	8.3	14.3	32.3	45.1

An analysis of the data in Table 6 indicates that the most important sources of business information are radio stations at 57.2 percent, personal contact at 44.0 percent, and newspapers at 44.4 percent. The majority of SMEs also indicated that the sources of business information that are not important include private sector consultants (34.1 percent); Uganda government departments (34.7 percent); libraries, telecenters, and resource centers (45.1 percent); Internet sources (50.7 percent); banks/other financial institutions (38.9 percent); and television stations (48.1 percent).

Table 7 depicts the important sources of business information used by business enterprises as perceived by information providers.

Table 7 SOURCES OF BUSINESS INFORMATION SMEs USE ACCORDING TO INFORMATION PROVIDERS (N=54)

Sources of Business Information	Most Important %	Sometimes Important %	Least Important %	Not Important %
Radio stations	69.2	13.5	7.7	9.6
Personal contact—e.g., established entrepreneurs and friends	38.9	33.3	24.1	3.7
Newspapers	37.0	33.3	24.1	5.6
Extension workers	31.5	29.6	27.8	11.1
Banks/other financial institutions	24.1	25.9	27.8	22.2
Printed sources such as trade literature, journals, and reports—individually bought or donated	24.1	35.2	29.6	11.1
Private sector consultants	24.1	31.5	24.1	20.3
Ugandan government departments	20.4	14.8	50.0	14.8
Information centers such as telecenters and resource centers	13.2	11.3	43.4	32.1
Television stations	13.0	13.0	33.3	40.7
Industrial/trade associations	7.4	18.5	46.3	27.8
Sources available on the Internet	3.7	20.4	35.2	40.7
Libraries	3.7	13.0	44.4	38.9

An analysis of the contents of Table 7 indicates that the important business information sources include radio stations at 82.7 percent, personal contact at 72.2 percent, newspapers at 70.3 percent, extension workers at 61.1 percent, printed sources at 59.3 percent, private sector consultants at 55.6 percent, and financial institutions at 50 percent. Surprisingly, a high percentage of these respondents did not value such information sources as libraries (83.3 percent), the Internet (75.9 percent), industrial associations (74.1 percent), television stations (74 percent), information centers such as telecenters and resource centers (75.6 percent), and Ugandan government departments (64.8 percent).

Access to Business Information by SMEs in Northern Uganda

SMEs were asked whether they accessed business information from some specific organizations considered relevant to business information supply. The results are shown in Table 8.

Table 8 ACCESS BY SMEs OF BUSINESS INFORMATION FROM DIFFERENT ORGANIZATIONS (N=217)

Organizations That Can Supply Business Information	Yes	No
Uganda Revenue Authority	64.2%	35.8%
Uganda Chamber of Commerce and Industry	39.6%	60.4%
Private Sector Foundation	36.4%	63.6%
Ministry of Finance, Planning and Economic Development	26.5%	73.5%
Uganda Manufacturers' Association	25.8%	74.2%
Uganda Investment Authority	25.8%	74.2%
Northern Uganda Manufacturers' Association	25.3%	74.7%
Ministry of Tourism, Trade and Industry	23%	77%
National Agricultural Organization (NARO)	20.8%	79.2%
Business Information Solutions Network Uganda—BISnet-Uganda	11.1%	88.9%
Other	14.4%	85.6%

An analysis of the data in Table 8 shows that the Uganda Revenue Authority is the most well-known organization among SMEs for the supply of business information. The findings also indicate that the Northern Uganda Manufacturers' Association, which should be a popular organization among SMEs in northern Uganda is not. Only 25.3 percent of the SMEs who responded obtain information from that association.

To further understand how SMEs access business information, the respondents were asked to identify and rank the means they use for accessing business information on a four-point scale (4=most used, 3= sometimes used, 2 = least used, and 1 = not used at all). Table 9 gives the results of the findings.

Table 9 SMEs' RESPONSES TO THE MEANS OF ACCESS TO BUSINESS INFORMATION (N=218)

Means of Access to Business Information	Most Used %	Sometimes Used %	Least Used %	Not Used at All %
By using the telephone	72.0	12.8	6.9	8.3
Discussions with business colleagues or customers	44.0	33.0	15.2	7.8
Listening to radio broadcasts	32.9	30.6	17.8	18.7
Through the public notice boards	18.3	24.2	21.9	35.6
Through e-mail	12.3	12.8	30.6	44.3
Listening to, and watching, television broadcasts	11.5	11.9	31.2	45.4
Communication at conferences	9.1	15.5	30.2	45.2
Using the Internet	7.8	12.3	22.8	57.1
Visiting a library and reading information sources	7.3	10.5	25.1	57.1
Visiting a telecenter and reading information resources	6.4	9.2	27.1	57.3
Listening to politicians	4.6	8.3	24.3	62.8

As is evident from the data in Table 9, a very high proportion of SMEs in northern Uganda use telephones, business colleagues or customers, and radio broadcasts as their means of access to business information. Listening to politicians, visiting telecenters and

libraries, using the Internet, communicating at conferences, and using e-mail were considered unpopular by the majority of the respondents.

According to information providers, through which means does the business community in northern Uganda access/acquire business information for their business enterprises?

In framing the above question, eleven means of access were provided for information providers to choose from and to rank according to a four-point scale to show the level of usage (4 = most used, 3 = sometimes used, 2= least used, and 1= not used at all). Table 10 presents the findings.

Table 10 INFORMATION PROVIDERS' RESPONSES TO THE MEANS OF ACCESS TO BUSINESS INFORMATION BY SMEs (N=54)

Means of Access	Most Used %	Sometimes Used %	Least Used %	Not Used at All %
Listening to radio broadcasts	57.4	25.9	5.6	11.1
By using the telephone	53.7	18.5	13.0	14.8
Discussions with business colleagues or customers	40.7	31.5	22.2	5.6
Through the public notice boards	29.6	24.1	29.6	16.7
Through e-mail	9.3	9.3	37.0	44.4
Listening to politicians	13.0	9.2	35.2	42.6
Communication at conferences	1.9	20.3	35.2	42.6
Visiting a library and reading information sources	1.9	9.2	46.3	42.6
Using the Internet	7.4	11.1	38.9	42.6
Visiting a telecenter and reading information resources	3.7	9.2	31.5	55.6
Listening and watching television broadcasts	3.7	9.3	33.3	53.7

Similar to SMEs, the majority of information providers in northern Uganda highly rated the use of the telephone (53.7 percent), discussions with business colleagues or customers (40.7 percent), and radio broadcasts (57.4 percent). The information providers were divided equally on the utilization of public notice boards with 29.6 percent saying that they were used most and 29.6 percent saying they were used least. E-mail, television broadcasts, the library, the Internet, telecenters, and politicians were considered least used or not used at all by SMEs to access business information. The business policy-makers attributed the low rate of Internet usage, e-mail, and television to the lack of facilities and to information and communication technology (ICT) illiteracy within the business community in northern Uganda. One of the district's commercial officers (K.R. Olobo, Nebbi District, commercial officer, personal communication, November 25, 2005) said,

Most of the business managers are ignorant of the vast opportunities the Internet can provide. The Internet can provide enormous business opportunities and a well-coordinated approach in sensitizing the business community in ICTs could go a long way in improving business prospects.

In a bid to establish the reliability of the means used for accessing business information the survey asked this question of the SMEs' managers: How would you rate the reliability (trust put in) of these means channels for accessing relevant business information for your business activities? Rank them according to the level of reliability (4 = most reliable, 3 = sometimes reliable, 2= least reliable, and 1= not reliable at all). The results of the responses to this question are recorded in Table 11.

Table 11 RELIABILITY OF MEANS OF ACCESS TO BUSINESS INFORMATION BY SMEs (N=219)

Means of Access	Most Reliable %	Sometimes Reliable %	Least Reliable %	Not Reliable %
By using telephone	63.1	17.5	7.4	12.0
Discussions with business colleagues or customers	38.5	34.4	19.3	7.8
Listening to radio broadcasts	27.6	27.6	28.1	16.1
Through the public notice boards	18.4	20.6	23.0	37.8
Through e-mail	14.4	13.4	31.9	40.3
Using the Internet	11.0	8.8	25.8	54.4
Listening to, and watching, television broadcasts	11.9	15.1	32.2	40.8
Visiting a library and reading information sources	9.8	11.7	29.0	49.5
Communication at conferences	7.4	17.5	30.9	44.2
Visiting a telecenter and reading information resources	5.5	12.4	25.8	56.1
Listening to politicians	5.1	6.5	23.3	65.1

The findings given in Table 11 indicate that managers of SMEs believe the most reliable means of accessing business information is by telephone, discussion with business colleagues, and listening to radio broadcasts. E-mail, television, conferences, libraries, telecenters, notice boards, and politicians are not considered reliable means by the majority of respondents.

The data in Table 12 indicate the responses of information providers regarding the reliability of the means of access used by SMEs.

Table 12 RELIABILITY OF MEANS OF ACCESS TO BUSINESS INFORMATION BY SMEs ACCORDING TO INFORMATION PROVIDERS (N=54)

Means of Access	Most Reliable %	Sometimes Reliable %	Least Reliable %	Not Reliable %
By using the telephone	48.1	22.2	20.4	9.3
Discussions with business colleagues or customers	42.6	35.2	11.1	11.1
Listening to radio broadcasts	40.7	29.5	24.1	5.6
Through the public notice boards	22.2	29.5	33.3	14.8
Using the Internet	20.4	9.3	27.7	42.6
Visiting a library and reading information sources	16.7	11.1	33.3	38.9
Through e-mail	13.0	7.4	35.2	44.4
Listening to, and watching, television broadcasts	11.1	18.5	35.2	35.2
Visiting a telecenter and reading information resources	11.1	13.0	29.6	46.3
Communication at conferences	9.3	18.5	33.3	38.9
Listening to politicians	7.4	13.0	35.2	44.4

An examination of the information providers' responses shows that the majority of information providers (70.3 percent) think that SMEs consider the telephone to be the most reliable means of accessing business information. Others rated highly include discussions with business colleagues or customers (77.8 percent) and radio broadcasts (70.2 percent). They also think that the majority of SMEs would not, or would to a lesser extent, rely on television broadcasts, the Internet, conferences, e-mail, libraries, telecenters, and politicians.

DISCUSSION

The aim of this section is to highlight the requirements, based on research findings resulting from this study and from its objectives, for consideration in the design of a BIS for northern Uganda.

Sources of Business Information Used and Preferred by SMEs in Northern Uganda

Entrepreneurs rely on diverse sources of information. The sources vary depending on the nature of the problem, the incentives accruing, and the constraints involved in the running and managing of business operations (Moyi, 2000). The use of information on business and trade regulations is greatly dependent on the perceived reliability of the source. Different problems require different information sources. It is evident from this study that most of the SMEs in northern Uganda depend on a number of business information sources. Although information sources such as a printed trade literature, industrial/trade associations, Ugandan government departments, public libraries, and the Internet exist, SMEs consider radio broadcasts, personal contact with established entrepreneurs and friends, and newspapers as the most important sources of business information. These

findings have shown that these are probably the most frequently used sources in most African countries. A study conducted by Jorosi (2006) reveals the same preferences in Botswana.

Radio broadcasts

Although the cost of dry cells for radios remains a problem for most rural communities, radio has for many decades distinguished itself as a mass medium that attempts to reach out to all—rich and poor, literate and illiterate. Radio is by far the most widely used electronic mass medium in the rural areas of developing countries, primarily because of its versatility, which allows for its use in various types of communication efforts (Mowlana & Wilson, 1990, p. 151; Koert, 2000). Mbaine (2001) argues that while radio lacks some of the flamboyance of television—a combined force of the senses of sight, sound, and motion—it is still a very powerful influence on audiences in terms of its accessibility. It propels the imagination of its audiences and is famed for cajoling listeners into visualizing what they hear (Mbaine, 2001). The consideration of the radio broadcast as the most important source of business information could be attributed to the benefit associated with radio broadcasts as highlighted above. The availability of FM radio stations in Uganda, a situation that has created competition and quality production of services, could be another contributing factor for the popularity of radio broadcasts among SMEs' managers. In addition, business information programs on FM radio stations (e.g., government officials as invited guests) that include talk-radio services are probably having an impact on the business activities of SMEs although this was not established by this study.

Personal discourse

Personal discourse refers to any serious discussion or conversation among people. It is a primary source of business information for business managers, probably because of the opportunity it provides in allowing for a verification of facts through interaction. Moore (2002, p. 301) observes that an important determinant of the impact made by information providers and processors is the value that users place on the information provided. This suggests that users will always continue to consult the sources they value. Personal discourse with established entrepreneurs, friends, and relatives is considered a reliable source because of the ability to verify facts there and then. There are also low costs involved apart from instances in which transport to reach the person to consult becomes a necessity.

Newspapers

The trust in and frequent use of newspapers as a source of business information could be because the information provided is current, because of their low cost, because of their easy accessibility (they can even be borrowed from a friend), and because of their presentation of a wide view of the business environment. Auster and Choo (1993, p. 285) suggest that newspapers not only address specific problems but also provide readers opportunities to get a broad view of the business environment and to search for information that might trigger a business opportunity. The newspapers in Uganda, especially the leading national papers, including the government-owned *The New Vision* and the privately-owned *The Monitor*, provide business sections within their publications

that give the latest information on market rates, private sector investment opportunities, inflation trends, etc. These sections provide current and researched business information that is useful to the business community. The only disadvantage to the use of newspapers as a major source of business information is the poor road networks in some parts of northern Uganda that make it difficult for the newspapers to be delivered in a timely manner. In Kotido district, for example, it takes a day to receive the current newspaper. But with the introduction of free online versions of *The Monitor* and *The New Vision* newspapers, this problem could be minimized once online information services are adopted by the BIS.

Means of Access to Business Information

Easy accessibility to reliable information is crucial in any information system and service. As indicated earlier, the telephone is the dominant means of accessing information among SMEs in northern Uganda, followed by discussions with business colleagues and radio broadcasts. The dominance of the telephone and radio as means of accessing business information could be attributed to the widespread availability of both the mobile telephone network and FM radio stations in the country. Today most business managers own mobile telephones and have access to radios, thereby facilitating easy access to business information. The availability of short message services (sms) is another factor promoting the dominance of telephone usage in accessing business information. For example, when a businessman who is interested in market prices types “beans price” and sends it to 197 on the Mobile Telephone Network (MTN), Uganda Ltd., he receives an instant message on his mobile telephone giving him the prices of beans in most of the districts in Uganda, courtesy of FOODnet Uganda. This indicates that if the BIS included sms as a means of access to business information, the business community would benefit.

CONCLUSION AND RECOMMENDATIONS

As the business environment becomes increasingly competitive, business firms are confronted with the challenge to adapt in order to survive and be productive. To favorably compete, business managers must make decisions based on accurate information. This in essence requires access to relevant business information sources using the most appropriate means of access.

For any BIS, there should be adequate and up-to-date sources of business information. Examples of such sources are radio stations, newspapers, banks/financial institutions, Internet-based resources, printed literature, private sector consultants, and macro information services.

In this study, SMEs showed a marked preference for radio stations as they have high trust in them for providing business information. It should be noted that some of the information from radio stations needs repackaging for SMEs. This is because radio stations sometimes provide general information that may not address the needs of specialized groups. That is why it is very important that data or information from these sources should go through the information system as input. Consequently, the system should have a good collaborative network with all radio stations in northern Uganda in order to access relevant business information that could go into the system. In addition, newspapers should be considered a key source of business information. The main

national, regional, and international newspapers that are of value to businesses should be considered as useful sources. Although SMEs in this study did not show much enthusiasm for Internet-based resources (Okello-Obura, Munishi-Majanja, & Cloete, 2006), the BIS should nevertheless include Internet-based business resources. It is especially important that the BIS have links to government online applications that cover the information needs of SMEs, for instance, sources of business financing, business start-up assistance, district information portals, etc. The BIS should also have links to Internet-based applications provided through partnerships between the government of Uganda and other countries. It should also enable business clients to subscribe to a service that notifies them via e-mail of new or changing programs that are relevant to their self-defined business interest profile.

It is worth noting that in developing countries there is often a lack of awareness of the value of business information (UNIDO, 2003). Such information is often considered something that should be made available free of charge by the government. SMEs are sometimes not aware of the existence of national business information or they are discouraged from using it because of a cumbersome access procedure (UNIDO, 2003). There is often a great deal of information and knowledge in national institutions, but it does not reach the private sector. Business information is frequently available only from isolated institutions, not as integrated solutions but only as *ad hoc* answers that are based on the particular competency of the information source. For quality business information to be accessed, strategic measures need to be put in place to minimize the problems relating to business information access as experienced by SMEs in northern Uganda. An important issue in the design of a BIS is the need for a mechanism for the promotion of information literacy among SMEs in order for them to be able to gain more effective access to business information.

Effective access is imperative to the success of the dissemination of processed business information. Means of access to business information should include the following:

- Radio messages—These should be filtered by the radio stations or the BIS to address the business interests of SMEs.
- Public notice boards—With the decentralization of the central government's powers to the districts, many people in Uganda have gotten accustomed to information access through public notice boards. Important information that relates to foreign and local markets, for example, could be provided through district local council notice boards.
- Online delivery and faxes.
- The use of newsletters—The BIS can use newsletters tailored to the needs of SMEs to enable them to access the required business information.
- Newspapers—Both local and international newspapers should be acquired.
- Telephone text messaging services—The government of Uganda should register all SMEs in northern Uganda with their cellular phone contacts with a view to providing short text messages on topical business opportunities existing in the country. An arrangement could be made with MTN-Uganda or Celtel-Uganda and UTL-Uganda through their telephone networks to provide useful information.

This will make SMEs in northern Uganda compete favourably with other SMEs in other parts of the country.

To facilitate easy access, the study proposes that the following core services be initiated or developed in the BIS:

- **Telephone services**—In each district in northern Uganda, a toll-free telephone inquiry service should be established by the government as a one-stop service center for business information. In addition, the BIS should offer a single, national toll-free number for business inquiries. This national/regional toll-free number should automatically direct the call to the business information system center (BISC) in Gulu district. Given the deplorable circumstances in which SMEs operate in northern Uganda, the essence of a toll-free service is that it acts as a subsidy to the SMEs operating in northern Uganda. It should be noted that a toll-free service is proposed as a short-term measure. A long-term measure and the issue of sustainability could be further explored.
- **Clients' services**—Knowledgeable business information officers, using a variety of databases accessible on their computers, should serve clients. Information officers should promote Web-based information sources, verbally provide contact information and explanations, and offer to deliver information via the most appropriate format for the user. Questions can frequently be complex and require investigation and research using BIS resource collections. To manage this assembled knowledge efficiently, each question and answer should be retained in a database for future reference by the BIS network and its regional access centers.
- **Fax services**—A toll-free, fax-on-demand service could be instituted to allow callers to order business information catalogs and other available documents. This can be considered an alternative in serving areas where Internet access is not adequate and for SMEs who have access only to fax machines.
- **In-person service**—The business information system center (BISC) should offer a business information resource walk-in service where clients may access information on their own, i.e., self-service, or obtain the assistance of business information officers. The business resource collections should focus on the information needs of SMEs. Many business sources of information, such as directories and statistical databases, should be available. For identifying and appraising potential trade contacts at the international level, business registers listing directories and databases of business associations, importers, exporters, manufacturers, service providers are recommended. The BISC should also have extensive information collections available on video, in print, and online on a range of business topics.
- **Internet-based services**—The BIS should provide easy access to a comprehensive inventory of district, regional, national, and international government programs; regulatory requirements; services; and other sources of business information. This Web site should be organized from the business

clients' perspectives with topics and search options to suit various needs. It is hoped that the BIS's Web-based information resources would contribute substantially as a gateway for Ugandan businesses to the international information portals.

- **Talk to BIS!**—This study proposes a unique service, Talk to BIS!, which could be described as part of telephone services in which both the Web and the telephone are used simultaneously to help business clients find information on the Internet. Although the Internet is aimed at self-service, the amount of information available can often lead to failed searches and frustrated SMEs' managers. Talking to BIS will allow BIS officers to use the Internet to deliver Web-based information to clients while refining search parameters with them on the telephone. The potential of this enhanced user support is tremendous as it would extend the benefits of personal assistance to the Internet delivery channel and would help people who are not comfortable in searching the Internet.

REFERENCES

- Amin, M.E. (2005). *Social science research: Conception, methodology and analysis*. Kampala: Makerere University Printery.
- Atherton, P. (1977). *Handbook for information systems and services*. Paris: Unesco.
- Auster, E., & Choo, C.W. (1993). Environmental scanning: Acquisition and use of information by managers. *Annual Review of Information and Technology*, 28, 279-314.
- Beyene, A. (2002). Enhancing the competitiveness and productivity of small and medium scale enterprises (SMEs) in Africa: An analysis of different roles of national governments through improved services. *Africa Development*, xxvii (3), 130-156. Retrieved June 23, 2004, from www.codesria.org/Links/Publications/ad3_04/Beyene.pdf
- Biscoe, B. (2004). *Types of research designs*. Retrieved January 2, 2005, from http://www.helpforschools.com/sikb/reference/research_design.shtml
- Bowes, R. (1995). How best to find and fulfil business information needs. *Aslib Proceedings*, 47, 119-126.
- Busha, C.H., & Harter, S.P. (1980). *Research methods in librarianship: Techniques and interpretation*. San Diego: Academic Press.
- Central Intelligence Agency. (2004). *World Fact Book : Uganda*. Retrieved July 22, 2005, from <https://odci.gov/cia/publications/factbook/print/ug.html>
- Central Intelligence Agency. (2008). *World Fact Book : Uganda*. Retrieved February 2, 2008, from <https://www.cia.gov/library/publications/the-world-factbook/geos/ug.html>
- Cochrane, J.A. (1996). *AfricaLink: Trip report, Uganda Sep.21 to 27,1996*. Retrieved August 4, 2000, from <http://www.info.usaid.gov/alnk>

- Corps, M. (2005). *Information and communications technologies in small and medium enterprise development*. Retrieved December 15, 2005, from www.globalenvision.org/library/7/698
- Edwards, A., & Talbot, R. (1999). *The hard-pressed researcher: A research handbook for the caring professions* (2nd ed.). London: Longman.
- Hatega, G. (2007). *SME development in Uganda*. Available at www.uiri.org/sites/uiri.org/myzms/content/e773/e813/SMEDevelopment.pdf
- Jorosi, B.N. (2006). The information needs and information seeking behaviours of SME managers in Botswana. *Libri*, 56, 97-107. Available at <http://www.librijournal.org/pdf/2006-2pp97-107.pdf>
- Kasekende, L., & Opondo, H. (2003). Financing small and medium-scale enterprises (SMEs): Uganda's experience. *BOU working paper*. Retrieved December 15, 2004, from www.bou.or.ug/FINANCESMEs.pdf
- Kaye, D. (1995). Sources of information, formal and informal. *Library Management*, 16(5), 16-19. Retrieved February 3, 2006, from <http://www.emeraldinsight.com/Insight/ViewContentServlet?Filename=Published/EmeraldFullTextArticle/Articles/0010330502.html>
- Kigozi, D. (2006). *Business Linkage News*. A publication of the UIA-Enterprise Uganda Business Limited. Retrieved September 3, 2007, from http://www.ugandainvest.com/Business_linkagenews.pdf
- Koert, R. (2000). Providing content and facilitating social change: Electronic media in rural development based on case material from Peru. *First Monday, peer-reviewed journal of the Internet*, 5(2). Retrieved June 28, 2006, from http://firstmonday.org/issues/issue5_2/vankoert/index.html
- Mbaine, A.E. (2001). *Why radio continues to matter in Uganda*. Retrieved June 14, 2006, from www.highwayafrica.ru.ac.za/presentations/Adolf%20Mbaine%20-%20Why%20radio%20Continues%20to%20matter.doc
- Moore, N. (2002). A model of social information need. *Journal of Information Science*, 28(4), 297-303.
- Mowlana, H. & Wilson, L. (1990). *The passing of modernity: Communication and the transformation of society*. White Plains, N.Y.: Longman.
- Moyi, E. (2000). *An analysis of the information-search process in micro and small manufacturing enterprises*. Retrieved July 5, 2005, from <http://www.ipar.or.ke/dp15.pdf>

- Mukasa, E., & Masiga, S. (2003). *Regional workshop on aging and poverty: Uganda country position paper*. Retrieved August 15, 2004, from www.un.org/esa/socdev/ageing/workshops/tz/uganda.pdf
- Mutula, S.M., & Brakel, P. (2006). E-readiness of SMEs in the ICT sector in Botswana with respect to information access. *The Electronic Library*, 24(3), 402-417. Retrieved January 23, 2007, from <http://www.emeraldinsight.com/Insight/ViewContentServlet?Filename=Published/EmeraldFullTextArticle/Articles/2630240310.html>
- Neuman, W.L. (1997). *Social research methods: Qualitative and quantitative approaches*. Boston: Allyn and Bacon.
- Neuman, W.L. (2003). *Social research methods: Qualitative and quantitative approaches* (5th ed.). Boston: Allyn and Bacon.
- Okello-Obura, C., Minishi-Majanja, M.K., & Cloete, L.M. (2006). Business information systems design for Uganda's economic development. The case of northern Uganda. *Mousaion*, 24(1), 119-144.
- Riaga, A. (1994). *Systems theory, analysis and design*. Nairobi: 2000 Publications.
- Sarantakos, S. (1998). *Social research* (2nd ed.). Hampshire: Palgrave.
- Schiffer, M., & Weder, B. (2001). *Firm size and the business environment: Worldwide survey results: Discussion paper 43*. Washington: World Bank.
- Siriginidi, S.R. (1996). Business information: Its sources and role in globalisation. *New Library World*, 97(1), 22-28. SI: MCB University Press.
- Uganda Bureau of Statistics (UBOS). (2003). *A report on the Uganda Business Register, 2001/2002*. Entebbe: Uganda Bureau of Statistics.
- Uganda Bureau of Statistics (UBOS). (2005). *2002 Uganda population and housing census: Main report*. Entebbe: Uganda Bureau of Statistics.
- Uganda Bureau of Statistics (UBOS). (2005). *2004 national survey delivery survey report*. Entebbe: Uganda Bureau of Statistics.
- Uganda, Ministry of Finance, Planning and Economic Development. (nd). *Uganda National Report*. Retrieved January 27, 2008, from www.un.org/special-rep/ohrrls/ldc/MTR/Uganda.pdf
- Uganda, Ministry of Finance, Planning and Economic development. (1999). *Uganda Vision 2025: Prosperous people, harmonious nation, beautiful country*. Kampala: Monitor Publications.

- Uganda, Ministry of Finance, Planning and Economic Development. (2002). *Challenges and prospects for poverty reduction in northern Uganda*. Kampala: Ministry of Finance, Planning and Economic Development.
- Uganda, Ministry of Finance, Planning and Economic development. (2004). *Poverty eradication action plan 2004/5-2007/8*. Kampala: Ministry of Finance, Planning and Economic Development.
- UNIDO. (2003). *The UNIDO support programme prepared by Small and Medium Enterprises Branch: Capacity-building for business information networking*. Retrieved June 28, 2006, from http://www.unido.org/file-storage/download?file_id=18759
- UNIDO. (2005). Retrieved January 4, 2006, from www.sme.gcn.gov.hk/smeop/english/service.cfm.
- USAID (2005). *Budget: Uganda*. Retrieved February 2, 2008 from: <http://www.usaid.gov/policy/budget/cbj2006/afr/ug.html>
- World Bank. (1993). *Uganda: Growing out of poverty*. Washington: World Bank.
- World Bank. (2000). *World development indicators*. Washington: World Bank.
- World Bank. (2001). *World development report 2000: attacking poverty*. Oxford: Oxford University Press.
- World Bank. (2001). *World development indicators*. Washington: World Bank.
- World Bank. (2002). *World development indicators*. Washington: World Bank.
- World Bank. (2005). *World development indicators*. Washington: World Bank.