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# AN AUDIT OF RECORDS AND INFORMATION MANAGEMENT PRACTICES AND ICTs UTILISATION AMONG SMEs IN NORTHERN UGANDA

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# **AN AUDIT OF RECORDS AND INFORMATION MANAGEMENT PRACTICES AND ICTs UTILISATION AMONG SMEs IN NORTHERN UGANDA**

## **1.1 BACKGROUND**

In Africa, Uganda's economy is among the ones with great development potential. Endowed with significant natural resources, including ample fertile land, regular rainfall, and mineral deposits, it appears poised for rapid economic growth and development at independence (Okello-Obura 2011). However, chronic political instability and erratic economic mismanagement produced a record of persistent economic decline that left Uganda among the world's poorest and least-developed countries (United States, Bureau of African Affairs 2007). Despite that, the Government of Uganda has been implementing an ambitious and successful programme of macro-economic adjustment and structural reform since 1987 – with strong support from multilateral and bilateral creditors and donors (Okello-Obura .. et al 2007, Okello-Obura 2011).

The government's continued implementation of appropriate fiscal and monetary policies – and its programme of substantial economic liberalisation – has 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 2012). During the 2003/04 financial year, Uganda's economy registered strong growth of 6 % compared to a growth rate of 5.2 % in 2002/03 (Central Intelligence Agency 2004). Solid growth in 2003 reflected an upturn in Uganda's export markets. In 2007, Uganda's growth rate reached 8.9% (Uganda, Ministry of Finance, Planning and Economic Development 2008). In 2013, Uganda saw the consolidation of macroeconomic stability and a gradual recovery of economic activity, with estimates putting annual real gross domestic product (GDP) growth at 5.2%, up from 2.8% in 2012. This recovery in economic activity has benefited from a fiscal and monetary policy stance focused on containing inflationary pressures, while ensuring debt and exchange rate stability, thus providing an enabling macroeconomic environment for growth. Growth prospects, however, continue to be hampered by a relatively unfavorable investment climate for the private sector, as well as by capacity constraints in public sector investment and management (African Development Bank Group 2014). Remarkable growth is being witnessed to a large extent due to the vibrancy of the private sector dominated by Small and Medium Scale Enterprises (SMEs).

SMEs play a significant role in the economy in terms of balanced and sustainable growth, employment generation, development of entrepreneurial skills and contribution to export earnings (Macintosh 2003; Saeed 2002). Although Beyene (2002) ; Mutula and Brakel (2006) argue that there is no universally accepted definition for 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 and Opondo, 2003; Schiffer and Weder, 2001, p. 13; Uganda Bureau of Statistics, 2003, Okello-Obura 2011, 2012). 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 (Okello-Obura... et al 2008). A UBOS report (2011) on the Census of Business Establishments 2010/2011 illustrated that 30% of 458,106 enterprises were small and medium enterprises and the sector employed over 1 million people.

The Uganda's continued growth and the expansion of the SMEs have created a vibrant private sector and active government departments. Ultimately there are a lot of business documents being generated in both private and public sectors today than before, calling for efficient and effective information management. However, despite SMEs importance to the economy, most SMEs are not able to stand up to the challenges of globalization, mainly because of difficulties in the area of financing (Gangata and Matavire 2013) and records and information management.

## **1.2 STATEMENT OF THE PROBLEM**

According to Uganda, Ministry of Public Service (2006:8), records and information management (RIM) systems in Uganda are not fully developed. Records and information are not captured and stored in a systematic and easy to retrieve manner. Despite the recognized fact that efficient RIM is crucial for efficient decision making and that SMEs are considered the engine of economic growth of any country, little seems to be done to facilitate good records and information management among the SMEs sector (Okello-Obura 2012). Secondly, despite the recognized fact that ICTs are pillars in efficient management of functions, little seems to be done to ensure that SMEs adopt them in especially information management. This study was therefore set to

make an audit in the management of records/information and ICTs utilization in records/information management among the SMEs in northern Uganda.

### **1.1. AIM AND OBJECTIVES OF THE STUDY**

The aim of the study was to establish the records and information management practices and ICTs adoption in proper records and information management among the SMEs. The specific objectives of the study were to:

- a) make an audit of records and information management practices of SMEs with reference to standard practices/compliance
- b) establish the ICTs used in records and information management by SMEs
- c) specifically find out how e-mail records and information are managed among the SMEs

## **2. BRIEF LITERATURE SURVEY**

It should be noted that the SME, in virtually all countries, plays a key role in national economic development strategies by facilitating flows of information, capital, ideas, people and products. The contributions of SMEs to employment and the countries' gross domestic product (GDP) are by no means trivial (UNDP 2007, Okello-Obura 2012). Equally, the potential benefits of information and communication technologies (ICTs) to small- and medium-sized enterprises (SMEs) are well known. ICTs enhance SME efficiency, reduce costs, and broaden market reach, both locally and globally (Okello-Obura 2012). Since the SME plays a major role in national economies, these benefits to individual SMEs collectively translate into positive results in the form of job creation, revenue generation and overall country competitiveness (UNDP 2007).

The application of ICTs in records and information management as well is pertinent in the efficient functioning of SMEs. In reality, Governments, therefore, should have interest in the promotion of access to, and use of ICTs by SMEs especially in management of records and information. Unfortunately, a number of factors hinder or discourage SMEs from fully realizing the benefits of ICTs, including, among others, lack of knowledge, resources and trust. Governments, using public policy as a tool, can play a critical role in addressing these concerns. Lack of ICT skills and business skills are widespread impediments to effective uptake once adoption decisions are made. There should be policy considerations that focus on issues related to a healthy business environment, network infrastructure and broadband deployment, human capital and skills development among SMEs, access to information, good e-governance, and

public-private-civil society partnerships (UNDP 2007). Generally, the ability for ICTs to easily and transparently retrieve archived data, prepare data for potential future legal matters to rapidly respond to a litigation and investigation pertaining to the firm cannot be doubted any more. SMEs need to comprehensively adopt ICTs applications in business transactions and records/information management for efficient operations. A similar study was carried out in Tororo district, Uganda to determine the utilization of ICTs by SMEs to manage records and information. It was found out that there is need for a deliberate effort to facilitate the adoption of ICT utilisation in RIM. Following that study it was found it would be prudent to expand the study to cover northern Uganda hence the justification of this study.

### **2.1 Management of the E-Mail communication as business records and information among the SMEs**

E-mail continues to be an area of weakness for many organizations. The sheer volume of incoming and outgoing e-mail is often a challenge to those entrusted with the duty to management of records and information of the enterprise. ARMA (2011) agrees to this by observing that E-mail continues to challenge organizations. “With the growth of e-mail, voice-mail, and instant messaging – as well as other electronic records – the capacity for discoverable information has increased” (ARMA 2011). This dilemma will continue to escalate as the proliferation of e-mail-enabled devices grows exponentially (Okello-Obura 2011).

E-mail is not a new communication platform, but the compliance culture (and recognition that e-mails can have legal standing as records) has put increased pressure on IT and records staffs to ensure that appropriate capture, control and disposal rules are reviewed. Even where a firm has a structured approach to the management of electronic office documents, e-mail often is ignored or left exclusively to the realm of IT control (Okello-Obura 2011). Organizations can face legal exposure, embarrassment and other forms of risk if e-mail is not managed according to context and content (Winkler 2004; TOWER Software North America 2004). Many IT departments, when left without guidance, will formulate disposition policies based purely on storage capacity or age of the message. The sheer volume of incoming and outgoing e-mail is often overwhelming for the records manager to consider. This dilemma will continue to escalate as the proliferation of e-mail-enabled devices grows exponentially.

According to research analysts IDC, in the year 2000, e-mail volume reached 9.7 billion per day worldwide, and has been increasing at a rate of approximately 19%, reaching a volume of 16.2 billion e-mail messages in 2002 (Winkler 2004; TOWER Software North America 2004). Wireless cards in laptops, Blackberry devices, smart phones and other PDAs are moving into the hands of mobile knowledge workers at an accelerating pace and are being used to keep on top of business issues 24/hours and 7days while away from the office (Okello-Obura 2011). But e-mail is only the first wave in facilitating business in a distributed environment. New communication platforms are being adopted across public and private-sector organizations at an increasing rate. Instant messaging, on-line collaboration and threaded discussions, access to corporate portals and intranets from mobile devices are the technology shifts we see today and their management it critical for business success. United Nations, Archives and Records Management Section (2012), notes that “Email has become an important business tool in the United Nations and many of the email messages that you create and receive constitute records because they provide evidence of and information about the business transactions of the United Nations. So, along with other types of information, you must manage email messages, which fall under the definition of records”. Without the management of emails, it is difficult for organizations to meet their legal reservation requirements in the event of litigation and government investigations, increasing the effort and cost in responding to e-discovery and disclosure (AIIM 2014). So how are e-mail records and information managed by SMEs in northern Uganda? This was investigated

### **3. METHODOLOGY**

The study used survey research techniques. The matrix below shows how the variables were handled.

**Table 1: Matrix showing the research paradigm and Data collection methods**

<b>Variables/Research objectives</b>	<b>Research paradigm and method</b>	<b>Data Collection Instruments</b>
Audit of Records/information management practices by SMEs?	Quantitative- Questionnaire method	Structured questionnaire
Level of ICTs utilization in records/information management by SMEs?	Quantitative – Questionnaire method	Structured questionnaire
How are E-mail records/information managed by SMEs?	Quantitative- Questionnaire method	Structured questionnaire

### **3.1 Population and Sampling method**

The population of the study will compose of SMEs managers in one district in northern Uganda with the largest numbers of registered SMEs. According to this study, the SMEs are classified by the Government of Uganda as small scale if they employ 5-50 people and medium scale if they employ 51-500 people (Kasekende and Opondo 2003; Schiffer and Wedder 2001:13; Uganda Bureau of Statistics 2003, Okello-Obura 2012). The choice of northern Uganda is based on the fact that this is the region of Uganda that is most underdeveloped. A third of the chronically poor - and the disproportionate number of households that are moving back into poverty - are in northern Uganda (Okello-Obura et. al 2009). In the rural areas of the north, 81% of the population have a real *per capita* monthly income of less than Uganda Shs 6,000 (approx. \$3.3) which translates to Uganda Shs 200 or approx. \$0.11 per day and 42% have a real *per capita* monthly expenditure of less than Uganda Shs 3000 (approx. \$ 1.6) - that is Uganda Shs 100 or approx. \$0.05 *per* day (Younger 2007; Okello-Obura ... et tal 2009). Given this situation, it is imperative that SMEs are facilitated to run their business efficiently in order to maximise profits and create job opportunities so as to boost people's incomes.

SMEs in the districts to participate were determined as follow:

According to UBOS (2007), there are 1,297 SMEs in northern Uganda. This implies that the population of SMEs for which the sample size was determined is 1,297. The sample size was

determined using:  $n = Z\alpha^2 p(1-p)N / (Z\alpha^2 p(1-p)) + (N-1)Cp^2$  (Evaluation and Data Development Strategic Policy, Human Resources Development Canada 1998; Israel 1992),

Where n is the sample size,  $Z\alpha = 1.96$  (from Z-table), p is the proportion having the characteristic being measured or the estimated proportion of an attribute that is present in the population. The most conservative way of handling this uncertainty is to set the value of p at the proportion that would result in the highest sample size and this occurs when  $p = 0.5$ , N is the population size, Cp is the desired level of precision or tolerable error and this study used 5%.

Substituting these in  $n = Z\alpha^2 p(1-p)N / (Z\alpha^2 p(1-p)) + (N-1)Cp^2$ , then,  $n = 1.96^2 \times 0.5(1-0.5) 1297 / 1.96^2 \times 0.5(1-0.5) + (1297-1) 0.0025 = 297$ .

Alternatively, the sample size for proportions is given as  $n = Z^2 pq/e^2$  (Israel 1992) where n is the sample size; Z is the abscissa of the normal curve that cuts off an area or the desired confidence interval; e is the desired level of precision; p is the estimated proportion of an attribute that is present in the population; and q is 1-p. The value for Z is found in statistical tables which contain the area under the normal curve. In this study Z is 1.96 - from the table; p is 0.5; and e is 0.05. Substituting in the formula:  $n = Z^2 pq/e^2$ , then,  $n = 1.96 \times 1.96 \times 0.5 \times 0.5 / 0.05 \times 0.05$  and gives n to be 385. However, since the population size is small - less than 100,000 – a finite population correction for proportions is required. The finite population correction for proportions is

$$n = \frac{n_0}{1 + \frac{n_0-1}{N}}$$

Where n is the sample size;  $n_0$  is the determined sample size that needs to be reduced slightly for precision to be achieved; and N is the population size. In this case  $n_0 = 385$  and  $N = 1297$  and substituting this in the formula:

$$n = \frac{385}{1 + \frac{385-1}{1297}} \quad \text{gives } n \text{ to be } 297 \text{ - the same as with the first formula.}$$

Therefore, in this study, a sample size of 297 SMEs was used.

To arrive at the required sample size of 297, the SMEs were chosen by use of snowball sampling method until the required figure realised. Northern Uganda was divided into: Lango region, Madi

Region, Acholi region, West Nile Region and Karamoja region. A district from each of the regions was identified qualitatively to participate.

To ensure clarity and reliability of the instruments, 3 independent researchers were asked to critic the questions to be asked in the instruments. After the critic, adjustments were then made before a formal request to the district authorities for permission to conduct the research was made. The Lead researcher and 2 researchers were responsible for the data collection with the assistance of the 5 district research assistants. The choice of the research assistants was to take into consideration among others competence in the local language to cater for those SMEs managers who were not good at English language.

In survey research, content analysis and descriptive statistics are used for data analysis (Edwards and Talbot 1999:115). The coded responses from the questionnaires were analysed, quantitatively, using Excel software.

## **4. Results**

### **4.1. Response rate and Background Information**

Out of the 297 targeted respondents, 256 responded giving a response rate of 86.25%. Of the 256 who responded, there were 144 male and 112 female. The 256 SMEs who participated in the study had a total of 358 male and 1173 female as employees. Out of those who responded, 189 indicated their age brackets as in Table 1.

**Table 1: Age Brackets of Respondents (N=189)**

<b>Age Brackets</b>	<b>Frequency</b>	<b>Percentage</b>
21-25	50	27%
26-30	46	24%
31-35	44	23%
36-40	29	15%
41 and above	20	11%
Total	189	100%

The ages of the SMEs managers show that the majority are in the most productive age bracket of 21-40 years.

When the respondents were asked to state their level of education, the responses were as given in Figure 1.

**Figure 1: Education Levels of the Respondents (N=225)**

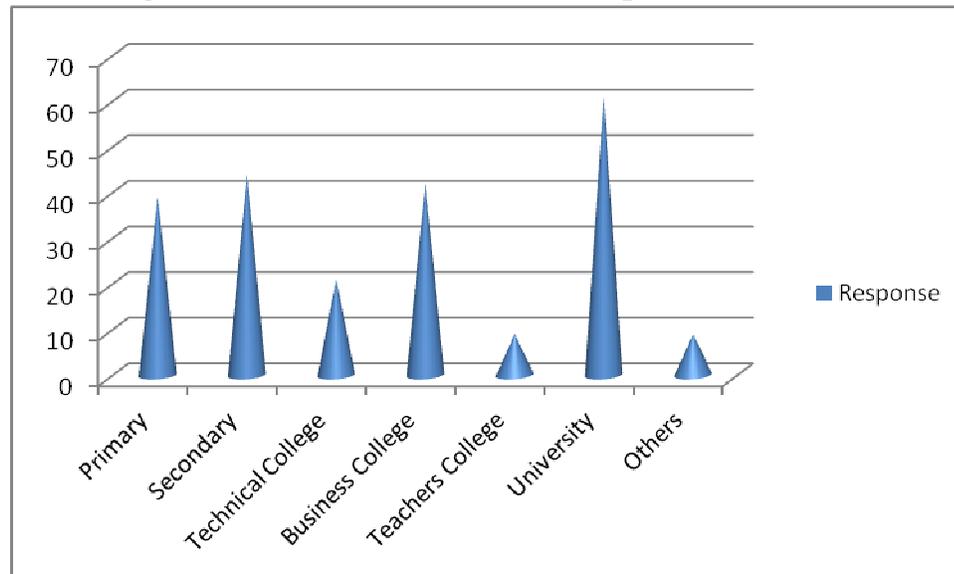
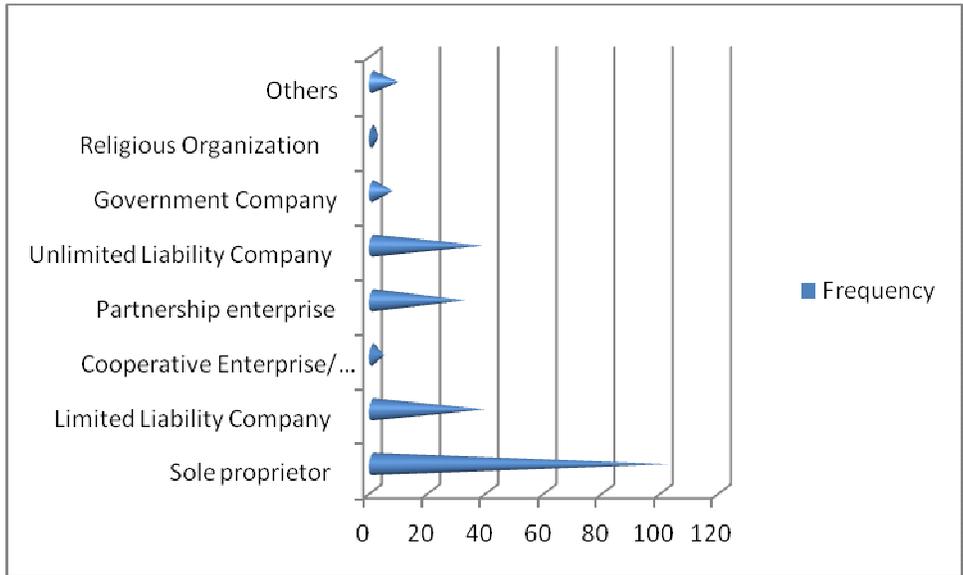


Figure 1 shows that the majority of the SMEs managers are graduates of Universities. This implies that they are educationally exposed to comprehend business needs and value of relevant information indecision making for business. They should also be in a position to appreciate the need for proper management of records to guard against litigations.

When respondents were asked to state the years they have been in business, 89 respondents said less than 5 years; 84 said 6-10years; 12 said 11- 15 years; 6 said 16-20 years and 5 said more than 20 years.

Regarding business ownership, respondents indicated their classification as shown in Figure 2.

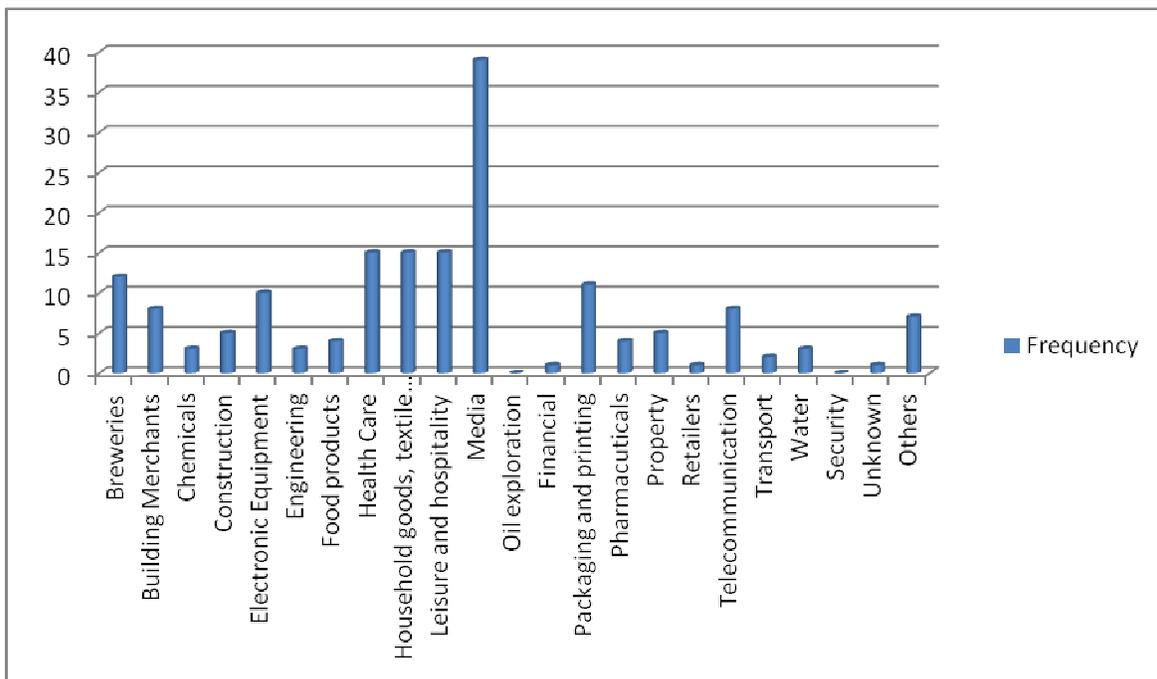
**Figure 2: Classification of business ownership of the Respondents**



The result shows that the majority are sole proprietors. This seems to be the case for SMEs in Uganda since it concurs with the study carried out by Okello-Obura... et al 2009, Okello-Obura 2011 and Okello-Obura (2012) where most of the SMEs who participated were classified as Sole proprietors.

For industrial Sector Classification/categorization, the responses were as follow in Figure 3:

**Figure 3: Responses on Industrial Sector Classification/ categorization**



This contradicts sharply with the findings the studies conducted in Tororo by Okello-Obura (2012) and Okello-Obura ... et al (2009) where the majority of the SMEs were found to be under Household good and textile traders.

#### **4.2. RECORDS AND INFORMATION MANAGEMENT PRACTICES AMONG SMEs**

When the respondents were asked as to whether they had qualified records and information managers who are in charge of their records, of the 180 respondents who responded, 62% said No and 38% had qualified staff.

The study found it imperative to establish the management of records and information in SMEs by using the records management cycle activities. The responses for different aspects were as given in the different Tables below (i-ix).

##### **i. Records and information creation**

<b>Situation/ issues in the Company/ Organization</b>	<b>Yes</b>	<b>No</b>	<b>Not sure</b>
There is guidance to what constitutes a record in the organization	173	67	12
There is specific provision within the organization's guidance for capture, management and secure storage of electronic information e.g Emails	142	93	13
The record keeping or record management system record the physical location of each record set	142	73	22

##### **ii. Records and information Inventory**

<b>Situation/ issues in the Company/ Organization</b>	<b>Yes</b>	<b>No</b>	<b>Not sure</b>
The records inventory exists	164	70	11
The records inventory differentiates between paper and electronic records	137	81	23
The inventory differentiates between record types e.g Corporate, Human Resource, financial etc.	145	82	16
The records inventory is revised annually and updated	152	80	13
Each location on the location is uniquely identified	139	75	25

##### **iii. Records and information Storage**

<b>Situation/ issues in the Company/ Organization</b>	<b>Yes</b>	<b>No</b>	<b>Not sure</b>
Storage areas allocated to hold physical records have adequate space to accommodate anticipated growth	126	86	24
Access to records storage areas is restricted to prevent un authorized access , damage, theft or catastrophic loss of records	157	71	16
Storage areas for electronic records ensure records are safe from	122	87	27

environmental or biological hazards e.g damp, fire, flood, etc			
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#### iv. Disposal of records and information

Situation/ issues in the Company/ Organization	Yes	No	Not sure
There are procedures outlining methods for archiving, disposal and destruction of different records types	126	100	23
The organization has disposal schedule that addresses all records created and held by the organization.	128	92	22
A registry is maintained of all destroyed records and records pending for destructions	90	114	40
Archiving/ disposal and destruction of records is undertaken regularly e.g. at least annually.	135	78	22

#### v. Electronic records and information

Situation/ issues in the Company/ Organization	Yes	No	Not sure
Documented procedures or instruction are available on the operation and use of electronic records	108	104	25
Staff are aware of the documented procedures and trained appropriately	108	101	21
Individuals who input data are different from those individuals who check and edit data entered.	108	91	30
Procedures are in place to prevent modification being made to store information without detection.	114	72	11
Levels of access available to the electronic system has been documented and approved and only permit staff with the relevant access right to create new records and edit existing ones.	109	88	20
There are facilities within the electronic system to ensure the integrity of data is preserved throughout e.g. antivirus tool kits	118	73	29

#### vi. Security and confidentiality of records and information

Situation/ issues in the Company/ Organization	Yes	No	Not sure	
Breaches of records confidentiality, loss of records etc are recorded as security accidents and managed appropriately	133	73	22	
The organization has approved policies for	Confidentiality code of practice	115	76	31
	Freedom of information	122	74	26
	Data protection	122	71	31
The organization has developed with other agencies information sharing protocol to control the transfer and use of confidential information	104	82	39	

All staff are aware of their responsibilities regarding confidential records	145	66	15
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### **vii. Reliability of records**

<b>Situation/ issues in the Company/ Organization</b>	<b>Yes</b>	<b>No</b>	<b>Not sure</b>
Spot check are undertaken to confirm that records have adequate reflection of what has been created and received	124	71	13
Where evidence on non compliance is detected, guidance and training and training is offered	116	84	32

### **viii. Records management**

<b>Situation/ issues in the Company/ Organization</b>	<b>Yes</b>	<b>No</b>	<b>Not sure</b>
The organization has a records management policy approved by the Board	145	70	15
The organisation has an approved records management strategy to deliver the policy	130	79	23
Records and information management policies and procedures cover both electronic and physical records	116	84	28
Records management policies and procedures are regularly reviewed	130	75	20
Internal records management audit is carried out in the organization	132	79	20

### **ix. Records management training**

<b>Situation/ issues in the Company/ Organization</b>	<b>Yes</b>	<b>No</b>	<b>Not sure</b>
Records management training is included in the Organizations Education, training and Development plan	96	118	25
Staff are trained to identify and correct errors In records	118	88	22
There is provision of the regular review of training needs in records and information management	103	99	28

### 4.3 ICTs UTILISATION BY SMEs IN RECORDS AND INFORMATION MANAGEMENT

In order to determine the ICTs used in records management, respondents were asked first to indicate the areas of ICTs that they have skills in and the responses were as in Table 2

**Table 2: Responses on the ICTs that respondents have skills in (N= 256)**

ICTs	Yes- Have skills
Internet	172
E-mail	155
Scanner	130
Digital Camera	123
Databases	106
Spreadsheets-Excel	95
Social networking Technologies such as twitter, face book	95
Fax machine	96
Computer troubleshooting	152
Photocopier	133
MP3 and MP4 players	103
Desktop applications	101
DVD recorders	105
Website design	58
Computer repair and maintenance	54
CD-ROM use	58
DVD/VCD burning	73
Others	7

Internet, E-mail and Computer troubleshooting were found to be the ICTs where of the SMEs managers have skills.

The responses on the ICTs used for records/information management in the enterprises are given in Table 3

**Table 3: Responses on the availability of ICTs used in Records Management (N=256)**

Types of ICTs	Application in records management	Response (Yes)
Mobile phone	Communication purposes; Records delivery	256
Internet	For purposes of communication; Accessing/enabling Email communications; For electronic/digital records delivery	129
WWW/Websites, Search engines	For marketing , public relations, reaching records users	59
Electronic records management	Managing paper, electronic and digital	53

software e.g. HP TRIM, SharePoint, Open EMR, Medical Indexing system	records	
Spreadsheets eg excel	For capturing numeric records ie. Financial records	92
Information security software/ anti-viruses such as Norton, MacAfee, Kaspasky, Avira etc.	For protecting ICT systems and cleaning viruses	113
E-mail	Create and exchange messages, attach records; send/deliver records Storage and backup e.g. Google documents	124
Teleconferencing	e-governance, conducting online meetings	22
Video conferencing	e-governance, conducting online meetings	29
Digital television	Displaying digital video electronic records	42
MP3 and MP4 players	Playing audio records	68
Social networking technologies such as twitter, face book	Connecting and networking with colleagues and users	64
Fax	Send and receive records	76
Scanner	Scanning paper based records, documents, images/pictures into digital/electronic form	105
Desktop applications	For producing news letter and application	113
Databases	Capture, store, manipulate, retrieve, search records	74
Surveillance systems eg close circuit television (CCTV)	For security purposes; CCTV cameras are used to monitor records storage facilities and users	24
Recorders	Capturing audio records	67
Barcode readers	For security purposes, tracking purposes; enable check in check out of files	33
Accounting software	Producing accounting records/information	50
Webcams	Capturing pictures, recording records, videos, digitizing purposes Record/ capture videos, text, audio, pictures	22
Digital Video Cameras	Capturing pictures, recording records, videos, digitizing purposes Record/ capture videos, text, audio, pictures	71
DVD recorders	Recording information/ records	66
Storage devices such as floppy discs, CD-ROMS, DVDs, VCDs, Hard disks, C	Storage and backup of data	106
Servers	For centralized storage of records/information	39
Biometrics e.g. fingerprint scanner	For capturing of records	21
Photocopying	Making multiple copies of records	99

Radio	Communicating information, advertising services	139
Personal computers	Data capture, processing, output, information dissemination, communication, storage i.e. Electronic records management	120
Laptops	Data capture, processing, output, information dissemination, communication, storage i.e. Electronic records management	134
Notebook computers	Data capture, processing, output, information dissemination, communication, storage i.e. Electronic records management	46
Personal Digital Assistant (PDA), Also known as palmtop computers	Data capture, processing, output, information dissemination, communication, storage i.e. Electronic records management	40
Printers	Print records, forms, documents etc	101
Others		8

Mobile phone, Internet and E-mail continue to be the most popular among the SMEs for RIM. A study conducted on ICTs utilization by SMEs in Tororo (Okello-Obura 2011) also reported the same findings.

Respondents were asked to rate the usefulness of ICTs in managing records and information in their enterprises and the responses are reported in Table 4

**Table 4: Usefulness of ICTs in managing records and information (N=254)**

Types of ICTs	Most useful	Useful	Least Useful	Not useful at all
Mobile phone	142	40	33	7
Internet	72	32	19	39
WWW/Website, search engines	45	44	18	38
Electronic records management software eg. HP TRIM, Share point open EMR, Medical Indexing Systems	69	26	16	46
Spreadsheets e.g. Excel	66	21	22	39
Information Security Software/ anti-viruses such as Norton, MacAfee, kaspasky, Avira	91	18	9	37
E.mail	74	32	15	39
Teleconferencing	33	48	23	44
Video conferencing	28	46	27	47
Digital television	32	43	27	43

MP3 or MP4 players	39	36	36	39
Social networking technologies such as twitter, face book, MySpace e.t.c	43	37	23	45
Fax	73	26	14	36
Scanner	68	30	25	40
Desktop applications	78	24	11	43
Databases	80	16	15	39
43Surveillance systems eg close circuit television [CCTV]	55	29	15	45
Recorders	35	45	30	40
Bar code readers	62	23	20	45
Accounting software	69	17	14	47
Webcams	55	30	17	43
Digital Video Cameras	59	32	17	37
DVD Recorders	47	40	25	35
Storage devices such as Floppy discs , CD-ROMS , DVDs, VCDs, Hard disks etc	89	13	14	37
Servers	65	23	15	36
Biometrics e.g. Finger print scanners	50	29	20	39
Photocopying	48	42	23	37
Radio	58	43	24	44
Personal computers	89	16	14	35
Laptop computers	97	20	7	47
Notebook computers	68	18	20	38
Personal Digital Assistants [PDA], Also known as palmtop computers	68	21	13	40
Printers	46	49	25	33

#### 4.4. E-Mail Records and Information management among the SMEs

Of those who responded to questions regarding E-mail records and information management, 39% (91/234) had e-mail services while 61% (143/243) did not have. Of those that have E-mail services, 75% said that they have E-mail policy and 25% do not have. Of these, 40% said that their enterprise consider E-mail communication as records while 34% said no and 26% did not know. Eighty seven percent said that they archive their e-mail communication while 13% said that they do not archive.

When respondents were asked to respond to different pre-determined statements regarding e-mail records and information management in their enterprises, the responses were as given in Table 5.

**Table 5: Responses on Different issues regarding E-mail management as records and Information (N=91)**

<b>Which of the following regarding e-mail /records and information management applies to your company or enterprise?</b>	<b>Response</b>
Not managing e-mail properly by enterprise has ever led the enterprise to massive fines	22
Our enterprise leaves the management of e-mail communication for business purpose in the hands of employees	33
All business e-mail communication in the enterprise are backed-up in tapes	32
All business e-mail communication in the enterprise are printed and filed	50
Our company treats e-mail communication differently with other records	45
All in coming e-mail and outgoing e-mail communication are captured by our enterprise	47
We regularly train staff in e-mail communication and records management	36
The enterprise transfers e-mail into the records management system and provides various levels of security	29
The enterprise manages the retention period of all e-mail records in the company	29
The enterprise catalogs e-mail and provide easy and flexible search methods to retrieve e-mail records	29
The enterprise does not have retention policy for e-mail records	31
Our enterprise treats e-mail communication as a source of Business – Critical information	36
In our enterprise, we accept e-mail as written confirmation of transactions	40

When respondents were asked to state the technologies/systems they would wish to have in their enterprises for records and information management, the responses were as in Table 6:

**Table 6: Responses on Different Technologies/Systems the Respondents wished to have in their enterprises**

<b>Which of the following technologies/ systems would you wish to have in your enterprise to help in records/ information management?</b>	<b>Responses (f)</b>
Specialized filing equipment to improve the storage and retrieval of records	144
Document conversion technology such as optical imaging and microform to reduce the volume of paper on site and allow more efficient workflow	128
Document indexing software to allow for retrieval of documents in multiple ways	120
Document tracking and control systems to enable you to track documents or folders from creation to final destination	135
Special purpose programs that allow to automate specific aspects of records management	125
special purpose programs that allow to automate specific aspects of records management	114
Electronic forms programs to improve workflow and increase the usability of information contained on the forms	112
Use CD-ROMS for distribution of records/ information to officers	104
A records management application [RMA]. This is software which can manage records throughout their lifecycle. It can be used to categorize and locate records as well as dispose of the electronic records maintained in its systems	59

## **5. Discussions**

Good records and information management enables good business practices, and prepares the organisation for the future. It helps organisations to have meaningful, reliable and usable information available when their businesses need it and provides mechanisms for ensuring accountability and managing risk (The State Records Authority of New South Wales 2014).

A compliant records and information management system in any enterprise is necessary for the enterprise to manage all its records and information related activities proactively and progressively (Iron Mountain, 2005). Without such a system, there is disorder and inefficiency. Business paperwork, files, receipts, contracts, correspondence – all of these without a proper management strategy create chaos in business operations irrespective of size (Okello-Obura

2012). The audit of the records and information management shows that SMEs managers are aware of the value of records. For instance, this is noted in records creation in which the majority of SMEs agreed that they have guidance to what constitutes a record in an organization (See Section 4.2). The fact that the majority also have specific provision within the organization's guideline for capture, management and secure storage of electronic information is a clear testimony of value attached to records and information among SMEs. Generally the result of the study shows that SMEs value records and information management. This is also evidenced in the creation of records inventory and having good records storage practices. In a similar study by Okello-Obura (2012) in Tororo district in Uganda, it was established that SMEs understand the importance of RIM. However, it was established in the same study that many companies lacked in-house records management expertise and conducted their records management activities in a rather haphazard manner (Okello-Obura 2012). This seems to be the same issue in northern Uganda since a total of 62% of those who manage the records and information are not qualified.

Despite the understanding of the best practices of records and information management, it was established that SMEs managers are poor at records and information disposal. For instance, most of the respondents did not have procedures outlining methods for archiving, disposal and destruction of different records types. Most of the SMEs do not also have a registry for all destroyed records/information and records/information pending for destruction. Another loophole established in RIM among most of the SMEs was the lack of records and information management training programme included in their development plan. A dovetailed RIM training programme in the development plan is an indication of value attached to RIM in an organisation. Gillean (2011) when advising the British Columbia on managing its records and information noted that training is a critical aspect that should be considered in an organisation's development plan. Taking an active role in resolving fundamental training issues would allow RIM staff to dedicate more energy to developing long term strategy and forward thinking to address future challenges (Gillean 2011). This implies that fundamentally, there is need for a well packaged RIM training needs documented in SMEs organisational plans.

Regarding the ICTs used in records and information management by SMEs, it was found out that most SMEs managers have skills in ICTs with the highest number of respondents having skills in Internet, E-mail and computer troubleshooting. This could be attributed to the fact that the majority of respondents are graduates (see Figure 1). For the ICTs used in records and information management, the majority indicated mobile phone, Internet, radio, desktop applications, scanner and laptops. The dominance of mobile phone in business transaction is not new. In a similar study carried out in Tororo by Okello-Obura (2012), it was also established that mobile phone was the most commonly used ICT for the purpose of communication and records delivery by use of short text message and telephone call.

Kaynak *et al.*, (2005); Pavic *et al.*, (2007); Hamilton (2002) note that the advancement in information communications technology (ICT) has had major influences on globalisation, rapid

revolutions in information and knowledge, business structural change and the way small to medium-sized enterprises (SMEs) conduct their business activities (including their marketing strategies, service provision, working practices and management). A typical example is the internet, fibre optics, satellite which have launched an enormous technical revolution (Sprano and Zakak 2000). Another important ICT platform used for business today is the E-mail. Email is the de facto standard for business communication across organizations at this time. Just as any other type of business information and record, email must be included as part of, and adhered to the organizational standards addressing information and records (AIIM 2014). When respondents were asked on different issues regarding e-mail management as records, a number of issues were noted (See Table 5). Notable in the findings are that the majority of SMEs print and file all business e-mail communication in the enterprise, treat e-mail communication differently with records and all in coming e-mail and outgoing e-mail communication are captured by enterprise. The fundamental question remains as to whether e-mail records and information should first be printed to be stored in paper form. This in our view shows lack of knowledge and skills in electronic records and information management. Whatever the case, the management of e-mail communication remains critical in today's business. SMEs managers need to be sensitized on the nature and management challenges of e-records/information as given in Figure 4.

**Figure 4: Nature and challenges of E-records/information Management**



*Source: Adopted from United Nations, Archives and Records Management Section (2012).*

## 6. Conclusion and Recommendations

Based on the findings the study can conclude that Majority of the SMEs managers are men and are graduates. SMEs employ more women than men. SMEs managers appreciate and value good records and information management for business. The Uganda Revenue Authority (2005, p. 44) that specify that records required to be maintained by any business enterprise or person liable for tax should be retained for at least six years after the end of the period to which they relate is making significant impact among the SMEs to the extent that records and information management is appreciated. There are opportunities for employment of records/archives managers among SMEs since the majority of those managing records and information are unqualified. A low percentage of SMEs have adopted ICTs in RIM. The use of mobile phones and e-mail is dominant in records creation and transmission of information.

Despite the understanding of the best practices of records and information management, it was established that SMEs managers are poor at records disposal. Notable in the findings are that the

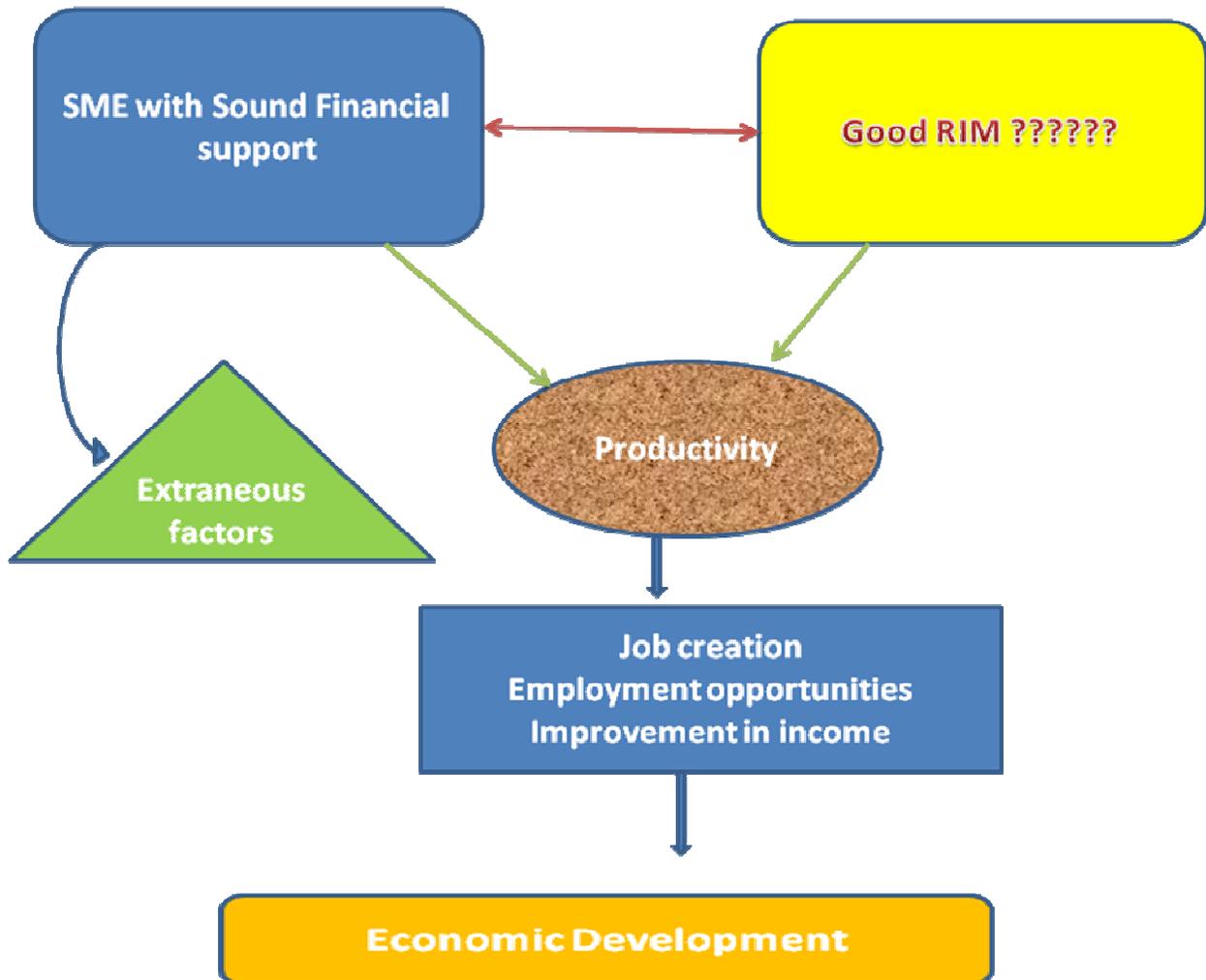
majority of SMEs print and file all business e-mail communication in the enterprise, treat e-mail communication differently with records.

The study thus recommends as follow:

- In relation to the security of records, SMEs should be encouraged to establish disaster management plans.
- Government records managers/archivists should work with private sector in RIM as a platform for public programming for Records and Archives
- The Government of Uganda should design strategies to provide ICTs support to SMEs for both business transactions and RIM.
- SMEs management should enforce periodic training of all users regarding the importance of the e- mail record management and basic records management within the organizational policy framework.
- SMEs should create and enforce a corporate-wide e-mail/records and information management policy that stipulates the management of e-mail RIM right from creation upto disposal or archiving.

In a nutshell, as shown in the Figure 5 below, good RIM among SMEs plays a significant contribution to economic development of a country. Even if SMEs are supported financially and other extraneous variables like security, inflation, and infrastructure are addressed, without good RIM, it would be difficult for the SMEs to have booming business transactions to accelerate economic development through job creations, employment opportunities and improvement in income earnings.

**Figure 5: Relationship of RIM in Productivity for Economic Development**



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MAP OF UGANDA SHOWING THE AREA OF THE STUDY (SHADED AREA IN YELLOW)

