



The Bottom Line

Key success factors influencing SME managers' information behaviour on emerging ICT (EICT) adoption decision-making in UK SMEs

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Key success factors influencing SME managers' information behaviour on emerging ICT (EICT) adoption decision-making in UK SMEs

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Abstract

Purpose – While a substantial number of studies have examined information behaviour, most centred on choice of information source, student information behaviour, information behaviour of women, environmental uncertainty and scanning behaviour of top-level hotel executives. However, little is known about how the small and medium enterprise (SME) managers scan, seek, gather, document and use information relevant for emerging information and communication technology (EICT) adoption decision-making. This paper aims to examine the key success factors influencing SME manager's information behaviour on EICT adoption decision-making.

Design/methodology/approach – This study deploys a qualitative approach to exploring 16 key success factors shaping SME managers' information behaviour on EICT adoption decision-making. More specifically, the study adopted both unstructured and semi-structured interviews with 20 small business managers drawn purposeful from Crunch Database.

Findings – This study develops an extended technology, organisation and environment framework by incorporating the information context which helped to unravel 16 key success factors influencing small business managers' information behaviour on EICT. From the technology context, uncertainty driven, compatibility, replacement of legacy technology, relative advantages, lack of technical know-how and perceived affordability fit for purpose influence SME managers' information behaviour. Users' acceptance information, efficiency driven, owner's support shape the organisation context of perceived information need; competitor's intelligence gathering, customer's information gathering provider credibility and government policy influence the environmental context of perceived information need; and finally, perceived information sources credibility, herding event, testimonial and openness to other people's ideas and experiences are shaped by the information context.

Research limitations/implications – Qualitative research is normally subjective, interpretive and limited on the sample used. Because of the limited number of interviews, the generalisation of the framework and the finding is difficult. Therefore, the finding and the framework need to be established across broader population. The findings are vital considering the fact that small business managers are limited in knowledge and the study may improve the way and manner they go about seeking and gathering information relevant in adopting new ICT.



Originality/value – This research provides further insight into SME managers' information behaviour by developing a framework and identifying main factors influencing SMEs information behaviours on EICT. Therefore, understanding such factors will enrich their knowledge on some of the factors that may shape their decisions during EICT adoption decision to make effective decision.

Keywords SMEs, TOE, Information behaviour, EICT, Adoption decisions-making, SME managers'

Paper type Research paper

Introduction

Small and medium enterprises (SMEs) play a significant role in socio-economic development and job creation in the UK. According to [Ritchie and Brindley \(2005\)](#), the total number of SMEs in the European Union is about 18 million, contributing over 59 per cent of the gross domestic product (GDP) and accounting about 65 per cent of job creation. A report published by the UK Parliament revealed that the UK accounts for about 4.9 million businesses and 99 per cent of these businesses are SMEs with staff employment ranging from 1 to 249. Out of the 4.9 million small businesses, 4.7 million (representing 95 per cent) are micro-businesses and accounts for 32 per cent of employment in the UK ([Jones, 2013](#)). The growth and expansion of these businesses have not only been enabled by SMEs performances and business strategies but the use of emerging information and communication technology (EICT). EICT is defined as any improved or an entirely new ICT developed ([Eze et al., 2014](#)). These technologies are constantly changing the way SMEs communicate and perform their daily business activities including payments strategies, data storage and access. SMEs have unprecedented opportunities to compete with large organisations without being constrained owing to the size of the market, technical ability and geography, as well as financial resources. Also, innovation adoption and use are crucial for the survival and growth and may define the success of small businesses ([Cosh et al., 1999](#)). However, because of the unpredictable and complex nature of EICT coupled with unsettled market environment, globalisation and irregular technology change, SMEs are always under pressure to scan their environment for adequate information during emerging information and communication technology (EICT) adoption decision-making process to avoid ICT adoption failure.

[Stockdale and Standing \(2004\)](#) noted that advances in information systems and electronic environment intimidate SMEs. The electronic market place has remained unknown for most SMEs combined with the stiff competitive environment. Other challenges include poor awareness of EICT by small business managers, financial constraints, poor training skills on the use of the technology, issues of safety, security and the inability to comprehend the importance of ICT in their business, lack of resources for the adoption of ICT and inability to understand the monetary benefit of EICT. In addition, issues of uncertainty regarding the benefits, as well as the ignorance of the present policy of the government at all levels (regional, national and European levels), aimed at helping SMEs in adopting and implementing new ICT ([Wilson, 1981](#); [Timmers and Glas, 2010](#); [Khajeh-Hosseini et al., 2012](#)). As a result, there is need for SMEs to constantly gather information from both the internal and external environments for appropriate decision-making for EICT and advance their business processes ([Citroen, 2011](#)). Although decision-making process of EICT adoption is a complex task and can affect adoption because of the unfamiliarity of the new technology ([Griffith, 1999](#)). [Daft and Lengel \(1986\)](#) argued that equivocality and uncertainty in decision-making are two complementary forces influencing information process behaviours. Many information systems implementation fail because of the helplessness of most organisations to address the issues of uncertainty and equivocality on time ([Kydd, 1989](#)). Limited human

and financial resources also hinder most SMEs in using the internal team or external persons when a multi-dimensional decisions arises (Culkin and Smith, 2000). SMEs do not have the capability to train their staff because of the limited number of qualified staff. This most of the times affect them in making adequate decision on EICTs (Consoli, 2012). Therefore, information gathering and acquisition remain vital for small business managers during decision-making process for EICT, as effective decision-making for new technology is a herculean task for these managers.

While extensive literature review has shown that a huge number of studies have investigated ICT adoption decisions-making in small businesses, most centred on ICT adoptions drivers, ICT adoptions and factors, EICTs and cloud computing adoption decision (Eze and Chinedu-Eze, 2018a; Eze and Chinedu-Eze, 2018b, Alshamaila *et al.*, 2013; Daneshgar *et al.*, 2013; Gupta *et al.*, 2013; Dwivedi *et al.*, 2009a, Martin and Matlay, 2001; Nguyen *et al.*, 2015; Eze *et al.*, 2018c; Ghobakhloo and Hong Tang, 2013; Daniel *et al.*, 2002; Simpson and Docherty, 2004; Eze *et al.*, 2014), However, little is known about the factors influencing information behaviours of small business owners during EICT adoption decision-making process. Although studies have looked at information behaviours of people and group, majority of these studies focused on one side of information behaviour such as CEO information sources and environmental scanning (Auster and Choo, 1993), choice of information source (Yunjie *et al.*, 2006), information sources (Agarwal *et al.*, 2011), student information behaviour (Ole Pors, 2008), information behaviour of women (Urquhart and Yeoman, 2010), environmental uncertainty and scanning behaviour of top level hotel executives (Jogaratanam and Wong, 2009). There is still dearth of studies that have explored factors shaping SME managers to scan, seek, gather and document vital information that would aid EICT adoption decision-making (Johnston *et al.*, 2007; Yang and Fu, 2008). This aspect is vital given that SME managers may moderate the time used to seek for information, as information literacy of SMEs in the UK shows that SMEs in the past have wasted over £3.7bn on the time spent trying to use internet as a research tool (De Saulles, 2007).

The study adopted technology, organisation and environment (TOE) framework advocated by Tornatzky *et al.* (1990) to explore a broad range of factors influencing information behaviour of SMEs for ICT adoption decision-making process, extend the framework and increase the success of EICTs implementation in SMEs. This is because the challenges encountered by SMEs during the adoption decision-making process are associated not only with the internal and external environment but also with technological, organisational and information context.

Literature review

Technology organisation environment framework

The TOE framework was established to scrutinise both the characteristics of technology adoption, the factors shaping technology adoption and its diffusion (Merono-Cerdan, 2008). The framework also considers a broad range of factors that can assist in explaining information behaviours of SME managers and the adoption of EICT in organisations. TOE acknowledged three contexts that shape an organisation's ICT adoption decision. They are technology, organisation and environment. Technological context defines the EICT within and outside the organisation; organizational context looks at variables such as firm's size, its scope, how complex the structure of the management is, human resources; and the environmental context looks at the influence of these variables (e.g. competition, trading partners, business practice, and government) on the organization (Tornatzky and Fleischer, 1990). On the contrary, Rogers (1983) looked at both the internal and external business

characteristics as a group of adoption predictors and the leaders' physiognomies (Merono-Cerdan, 2008; Zhu *et al.*, 2003). The leaders' physiognomies is associated with the leader's attitude to change; core features of the firm linked to organisation design which include centralisation, as well as how the external organisation features link to the system's honesty and the significance of the technological attributes' which include the qualities of the novelty. Zhu *et al.* (2003) argued that, because the people that make decisions in the organisation are internal to the organisation, Rogers's innovation diffusion is related to TOE in terms of adoption predictors, internal features, top management features and external features. Both Roger's model and TOE place much emphasis on the features of a technology, which appear to be related to TAM- perceived usefulness and perceived ease of use. The implication of this is that the conditions associated with technology adoption are shaped by the arrangement of the organisation and thus, influenced by the environment of the organisation.

While a large number of researchers have used ICT adoption theories in the past, theories such as resource-based view (RBV), Rogers innovation models (Rogers, 1983; Rogers, 1995), several other additions (Venkatesh *et al.*, 2003), Porter's model (Porter, 1985) and others involved in the meta-analysis of these theories (Premkumar, 2003; Adams *et al.*, 1992; Pavlou and Fygenson, 2006) and intention models (Ajzen and Fishbein, 1980; Davis, 1989) have been advocated, which today, are regarded as the most frequently adopted theories by researchers to explain IT adoption decisions in SMEs (Parker and Castleman, 2009; Williams *et al.*, 2009). These theories have made vital contributions to information systems research, and to a large extent influenced technology adoption decision-making studies for decades; however, a substantial number of these models or theories developed to study ICT adoption decision-making were not meant for small business context because of their narrow views (Rantapuska and Ihanainen, 2008). Dwivedi *et al.* (2009a) critically analysed some of the regularly used adoption decision-making theories and argued that no frequently used theory adequately describes SMEs adoption decision because each neglected a vital aspect of SME idiosyncrasy thus; their analysis resulted in advocating for an integrated theoretical framework. The TOE framework provides a significant analytical tool for examining the adoption decision of wide-ranging IT innovations (Oliveira and Martins, 2011) because technology, organisation and environmental factors affect the attitude of SMEs in understanding information behaviour of SMEs (Tornatzky and Fleischer, 1990). The TOE framework has the potentials to unravel the information behaviours of SMEs and factors influencing their adoption decision-making of EICTs in details because it is an integrated and richer model linked with numerous variables that incorporate technology, organisation and environment variables.

According to Citroen (2011), business information is vital for business managers because of the issue competition, technologies markets and environmental trends that help organisations to make a rational strategy decision after investigating the relevance of information executives who follow rational approach. Their findings revealed that up-to-date and adequate information improves the effectiveness of decision-making. Therefore, information gathered eternally is not only important for decision-making but also extend to problem-solving at both organisational and individual level irrespective of the differences in the context and subjects in the literature (Guo, 2011). To examine and understand the information behaviour of small business managers would invariably lead to a better technological, organisational and environmental evaluation of key factors that shape ICT adoption decision-making process. This will not only reduce the uncertainties associated with EICTs but also improve the adoption and implementation of EICTs in small business context. Furthermore, Van de Ven and Poole (1995) argued that scholars should often draw

from different theories and concepts that will help in discovering new and better ways of studying organisational change and development processes. This study, therefore, adopts the three components of the TOE framework and extends the framework using a hybrid approach of thematic analysis.

Technology context of perceived information needs

Technological context include technologies suitable for the organisation which are not only internal to the organisation but also external to them. It also extends to technologies which the organisation is using presently which are available in the marketplace and those that have not been tried and tested and adopted by the organisation (Gupta *et al.*, 2013; Gutierrez *et al.*, 2015; Oliveira and Martins, 2011). Liao *et al.* (2003) argued that knowledge acquired by a firm internal or external will encourage innovation and businesses must assess the type of organisational changes such innovation will bring into the business (Baker, 2012). Technology context in this study implies those internal variables small business managers deliberate on before adopting EICT. A number of studies (Alshamaila *et al.*, 2013; Ramdani *et al.*, 2013; Zhu *et al.*, 2003; Markus and Tanis, 2000; Grandon and Pearson, 2004; To and Ngai, 2006) have examined these variables (e.g. compatibility, relative advantages and perceived affordability) and provided a theoretical direction for many studies which are relevant in studying a firm's ICT adoption decision-making and factors influencing such new technology.

Organisation context of perceived information needs

Organisation context examines the characteristics, resources and size of the business, as well as how the intra-firm communication processes that shape adoption decisions. According to Baker and Wurgler (2002), these variables play a great role in influencing the implementation and adoption decision of ICT in many ways. The ability of any business to acquire these resources will make adoption decision-making easier. Studies (Ramdani *et al.*, 2013; Thong, 1999; Gutierrez *et al.*, 2015) have examined the variables (e.g. perceived employee acceptance and owner support) associated with the organisation context. Although majority of these researchers centred on adoption of EICTs, a large number have not understood how organisations gather information that shape their ICT adoption challenges and the factors influencing their choice of adoption, as well as other related challenges facing organisations.

Environment context of perceived information needs

Environmental context examines the internal and external factors that may affect SMEs positively or negatively. This extends to the geographical areas or environments where the business carries out its activities due to government policy, globalisation and advancements in technology (Chau and Tam, 1997; Nguyen *et al.*, 2015; Mehrrens *et al.*, 2001). The environmental context plays a role in understanding the internal and external information that are exceptional during ICT adoption decision-making process in SMEs (Andries and Debackere, 2006). Therefore, constant gathering of information with respect to the environment is vital considering the fact that sometimes changes may take place within the environment that may greatly influence the decision of a firm. The capacity of an organisation to have a competitive advantage over its rivals via the examination of the internal environment variables influences the decision for new ICT. According to Thong *et al.* (1996) top management support greatly shapes the information systems efficiency, however external information systems expertise that is of high quality is much more critical for SMEs carrying out their business activates in a highly sophisticated environment. The variables associated with environmental context that may influence SME managers'

information behaviours have been discussed extensively in the literature and extend to competitor intelligence gathering (Oliveira and Martins, 2011), provider credibility (Nguyen, 2009), perceived technology market growth (Ramdani *et al.*, 2013), information gathering on customers (Mehrtens *et al.*, 2001; Premkumar and Roberts, 1999) and government policy (Kuan and Chau, 2001). The TOE elements discussed above is to help understand the all-inclusive information behaviour of SME managers and reduce the uncertainty that is linked to EICTs adoption.

Method

Sampling

As non-quantitative research centred on discovery and the explanation of the respondents real-life issues and experiences, this research adopted purposive random sampling to help unravel SMEs that are using EICT adoption at the initial stage of gathering data. The study adopted purposeful *sampling* in a bid to select units of analysis at the individual level that will assist the researcher in making realistic assessments in line with the objectives of the research and not for statistical generalisation (Mason, 1996). *Snowball* sampling accompanied purposeful sampling because after the first few interviews, the interviewees were able to introduce the researchers to other people (respondents) who were also interviewed. The unit of analysis was the SME managers. The reason was that most decisions on EICTs in SMEs are usually made by the managers considering their structure and size. This was the reason why the study selected small business managers from service-oriented industries in the UK that have used new ICT in the past six years, and have engaged staff ranging from 1 to 249. A total of 70 participants were selected randomly and communicated to from the crunch database, of which a total of 20 participants agreed to be interviewed including the ones the interviewees introduced the researchers to.

Unstructured interviews

The study was carried out in two stages. The aim of the first stage of the interview was to help understand and redefine the research topic, develop a plan for selecting participants and understand the present state of information behaviour of SMEs with respect to EICT adoption in small service SMEs in a bid to have abroad and unrestrained view; second, to test the application of the codes generated inductively to the samples of the raw data and actors and their activities in EICT adoption. Some of the key questions asked at this stage include:

- Q1. What service does your company presently render?
- Q2. Can you tell us the last time your organisation adopted any EICT such as cloud computing?
- Q3. Can you tell us the key factors that influence your organisation to seek and gather information for EICT adoption decision-making and why?

The findings the researchers gathered at the initial stage helped in shaping the development of the semi-structured interview questions at the second stage of the data collection.

Semi-structured interviews

The purpose of conducting a semi-structured interview is to give room for the researchers to take grip of a complete richness of the interviewees' opinions communicated using their words and their experiences (Oates, 2006). Hence, the data collected were based on the

participants' stories (Schultze and Avital, 2010). The researchers sent out a formal letter ahead explaining the purpose for conducting the research, as well as confidentiality issues, as Oates (2006) commended that in qualitative research, interview questions should be sent to the respondents few days before the interview so that the respondents can go through them, have their judgement and feel more comfortable, as well as help assess the researchers' credibility before the interview. According to Oates (2006), this is an important part of interview procedure because relying on one's memory is not advisable and may lead to bias and error. The interviews lasted for about 50 min to 1 h. In the initial stage of the unstructured interview (preliminary study), as shown in Table I, four participants were interviewed, whereas in the second round, as shown in Table II, 16 semi-structured interviews were conducted.

Table I provides a summary of participants' profile.

Data analysis

Figure 1 depicts the stages through which the interview data were analysed and interpreted in this study. It was important to note that data were analysed and interpreted based on the deductive coding of the TOE framework using *hybrid approach of thematic analysis* (Bryman, 2008; Braun and Clarke, 2006) and extended to inductive coding (Table IV), which helped the researcher to unveil the information context which extends the TOE framework. During the coding process, the researcher identified the fundamental ideas, norms and conceptualization (Braun and Clarke, 2006) rather than depending on the semantic level,

Table I.
Participant profile for
the preliminary
study

UI no.	Role	Company size	Sector	Business location
SM1	Owner	100	Security services	Coventry
SM2	Owner	25	IT software development	Northampton
SM3	Owner	50	Telecommunication	Birmingham
SM4	Head of operations	2	Telecommunication	Birmingham

Table II.
Main study
participants' profile

UI no.	Role	Company size	Sector	Business location
SM5	Managing Director	50	IT software development	London
SM6	Director	10	Training and development	Luton
SM7	Director	100	Security	Forest Gate
SM8	PA to CEO	35	Financial firm	London
SM9	Site Manager	50	Engineering/Telecommunication	Luton
SM10	Branch Manager	30	Retails	Luton
SM11	Owner	20	Telecommunication	Luton
SM12	IT manager	65	Security	London
SM13	Managing Director	10	Property	Bedford
SM14	Manager	15	Property	Bedford
SM15	IT Director	25	Consultancy	London
SM16	Owner	5	Money management	Cambridge
SM17	Owner	1	Internet marketing	London
SM18	Business analyst manager	20	Financial firm	London
SM19	Operational Manager	5	Security training	Cambridge
SM20	IT manager	70	IT consultant	London

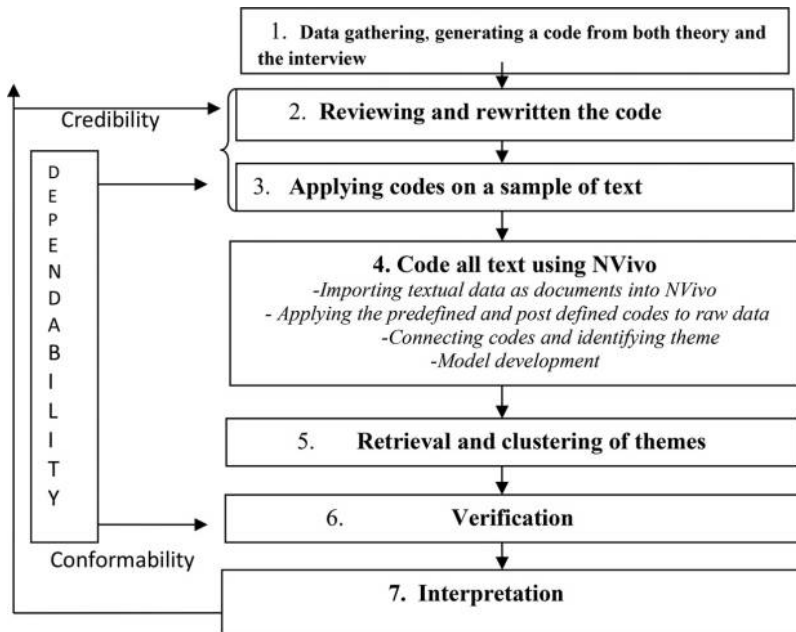


Figure 1. Procedure for data analysis

which only considers the surface meaning of the data. The study adopted this approach because it helps in applying the theoretical codes to the interview data and it helps themes to emerge inductively. In addition, this approach helps in checking how credible and dependable these themes are before further application (Miles and Huberman, 1994).

It is also important to note that because of the huge data involved, Nvivo software was further used in coding of data into suitable classes. Reliabilities were conducted in line with the categories recognized and the quotes from the interview transcript by applying the inter-coder reliability analysis (Bryman, 2008), which made use of four judges. These judges assessed the extracted quotes with the themes that emerged and further validated via cross-case analysis of supporting evidence (Macredie and Mijinyawa, 2011). The outcome of the inter-coder reliability analysis reveals 80 per cent agreement associated with the scope of the study. This exceeded the 70 per cent benchmark suggested (Miles and Huberman, 1994). The process unveiled step-by-step process on how data were analysed and reported (dependability check) followed by the conformability checks to examine how the data are firmly linked to the interpretation (Boyatzis, 1998). During the analysis, it is important to note that a guide was developed with respect to the description of the codes, which assisted in coding the data (Table III).

Areas	No. of judges	Reliability	
		First two judges	Second two judges
Factors influencing information behaviour of SMEs in EICT adoption decision-making	4	0.78 (78%)	0.87 (87%)

Table III. Reliability analysis

The process involved in the analysis of the data was a part of the design method which showed how data were analysed and reported (dependability check) followed by a conformability check to ascertain how tightly the raw data are linked to the interpretation (Boyatzis, 1998). Table IV describes the pre-defined and post-defined codes.

Research findings

The findings depicted in Tables V and VI show the themes associated with SME manager’s information behaviour during the adoption decision-making process and their supporting cases and evidences. According to Boyatzis (1998), there are three methods of thematic analysis – data-driven method, theory-driven method and hybrid method. This study adopts

Table IV.
Descriptions from predefined and post defined codes

Predefine code	Post defined code
Technology	Technology context refers to both internal and external forces that shape SME managers EICT adoption decision-making
Organisation	Organization context refer to resources that influence adoption decision-making and trigger information behaviours of SME owners
Environment	Environment context refers to both the internal and external forces that impact on organizations decision-making process which have some level of uncertainty during adoption decision-making process
Information	Information context refers to forces that trigger information users in meeting their information need and requirement for EICT adoption decision-making

Table V.
Themes and associated supporting cases

Themes (Factors)	Supporting cases	Total supporting cases
<i>Technology context of perceived information need</i>		
Uncertainty driven	SM1, SM3, SM4, SM6, SM9, SM11, SM12	7/20
Compatibility	SM3, SM6, SM8, SM10, SM11, SM12, SM16	7/20
Replacement of legacy technology	SM1, SM 7, SM8, SM10, SM14, SM15	6/20
Relative advantages	SM1, SM3, SM4, SM5, SM6, SM7, SM9, SM12, SM14	8/20
Lack of technical know-how	SM1, SM3, SM12, SM13, SM15, SM17	6/20
Perceived affordability	SM1, SM2, SM 7, SM9, SM10	5/20
Fit for purpose	SM2, SM3, SM5, SM8, SM13, SM17	5/20
<i>Organization context of perceived information need</i>		
Users’ acceptance information	SM2, SM4, SM6, SM7, SM9, SM12, SM14, SM20	8/20
Efficiency driven	SM5, SM 6, SM10, SM11, SM13	7/20
Owner’s support	SM2, SM5, SM9, SM12, SM 22	
<i>Environment context of perceived information need</i>		
Competitor’s intelligence gathering	SM1, SM8, SM9, SM10, SM12, SM13, SM15, SM18, SM20	9/24
Customer’s information gathering	SM3, SM5, SM6, SM10, SM14, SM15	6/20
Provider credibility	SM1, SM2, SM3, SM5, SM9, SM12, SM15, SM18. SM 22	8/20
<i>Information context of perceived information need</i>		
Perceived information sources credibility/reliability	SM1, SM2, SM3, SM5, SM9, SM12, SM15, SM18	8/20
Herding event	SM1, SM4, SM6, SM9, SM11, SM12	6/20
Testimonial	SM1, SM2, SM3, SM5, SM9, SM12, SM16 , SM18 SM 22	9/20

Themes	Supporting evidences
<i>Technology context of perceived information needs</i>	
Uncertainty driven	"Do have to implement some technological applications that will enhance the expectation of the user? When you look at this factor and others, uncertainty becomes an inevitable factor . . ." (SM4)
Compatibility	"It is important will do both the cost evaluation analysis and the compatibility test as well" (SM8)
Replacement of legacy technology	". . . As years go by, we keep developing applications that are much better and better systems. There was a time we only had typewriters" (SM7)
Relative advantages	"Efficiency is one of the reasons we seek for information that will help us perform better. As a business there is a need for us to deliver things swiftly to our customers . . . I must say that new technology is fantastic because our services are much better" (SM5)
Lack of technical know-how	". . . for us to seek for information on new technology we must assess if it will meet the skill set we have in the business or if we need an expert assistance to provide such to our consumers or not (SM1)
Perceived affordability	"As a business, we will first consider the benefit in relation to the cost. If after our assessment the cost is relatively low and the benefit is considered high then, we will try the new technology" (SM1)
Fit for purpose	Does the new technology suit the purpose for which an information was gather about it? As a business, we are at risk adopting a new technology which is not considered appropriate for the organization" (SM8)
<i>Organization context of perceived information needs</i>	
Users 'acceptance information	"Yes we educate them well so that they can understand ICT and appreciate it can do for them. We make our point in such a way it is understandable and appreciated" (SM4)
Efficiency driven	"can the technology improve our daily routine operations? How can the technology make accomplish my task with minimal stress and carry out my work better?" (SM5)
Owner's support	"We are open and positive in getting information on new technologies, discovering new ways such technologies can be automation to decrease human input" (SM4)
<i>Environment context of perceived information needs</i>	
Competitor's intelligence gathering	It is important to know that one has competitors that influence the way you carry out your operation and shape the business. Because I want to outperform my competitors in terms of the product or services I offer, most times I have to consider looking for existing technology adopted by my competitors and see how we can use them more efficiently" (SM18)
Customer's information gathering	"yes, most times consideration is given to new technology because of the requirements of our customers' requirements. Since we are dealing with a large clients, it will depend on their needs and wants" (SM3)
Provider credibility	"If you fail to access business environment thoroughly in the industry to understand and identify who the true provides and guarantee you the quality of such technology. . . , as a business man, I will be making the greatest mistake of my life" (SM12)
<i>Information context of perceived information need</i>	
Perceived information sources credibility	"Most times we engage in some sort of search on the internet to ascertain what and how other people have rated the new technology and the extent it has got a bad review" (SM2)
Herding event	"What is trending around us also greatly shape the technology we adopt?" (SM1)
Testimonial	"Also we can put calls through to our customers asking them to tell us or we can engage people we don't know for testimonial who have already started using the technology for about a year. We always ask our clients for feedback" (SM16)

Table VI.
Themes and
associated
supporting evidences

theory-driven thematic analysis method because themes adopted here emerged deductively. Themes that emerged during the analysis were clustered, which revealed what triggers SME managers' information behaviour during the adoption decision-making process challenges facing SMEs. The findings presented in this study are based on participants' narratives, themes that emerged and the literature, and are captured in the framework in Figure 2.

Discussion

Technology context of perceived information needs

Uncertainty driven. A substantial number of participants mentioned that uncertainty is driven by the decision to seek and gather information for new technology adoption. Uncertainty is linked to lack of information to carry out a decision. It is an issue that is

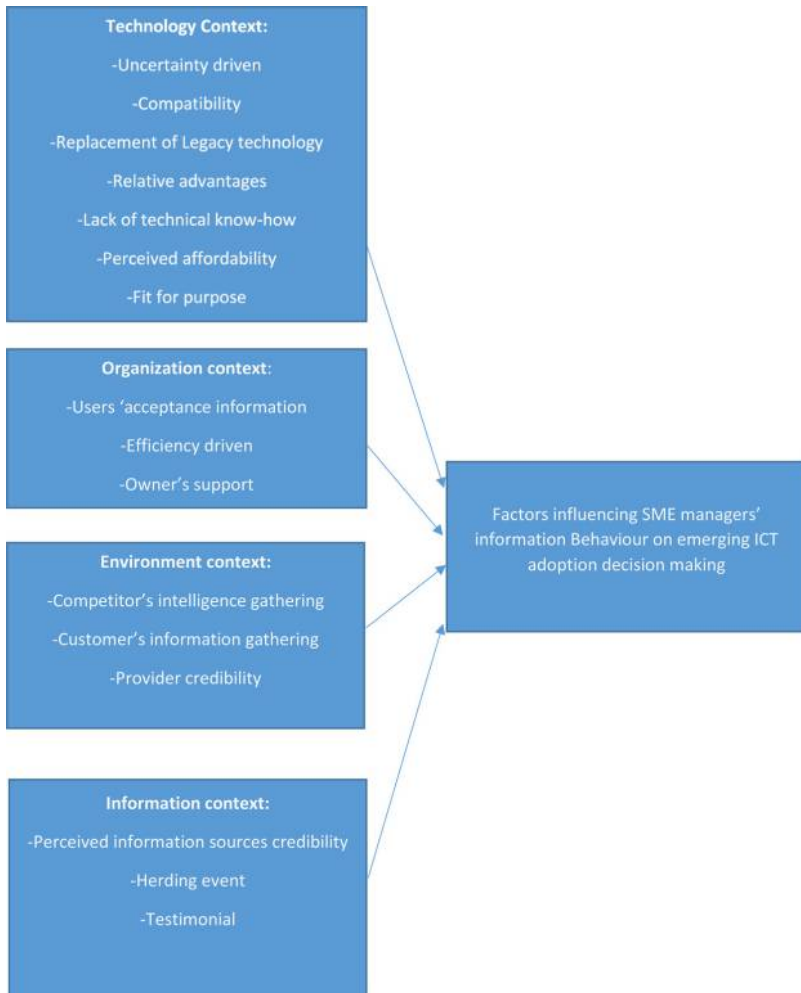


Figure 2.
An extended TOE framework on factors influencing SME managers' information behaviour on EICT adoption decisions-making

virtuously linked to information need, as well as the problems of collecting information during EICT adoption decision-making. As echoed by some participants:

“Most often, we engage in a conversation about the technology uncertainty as well as the employee behaviour” (SM12).

“We do have to implement some technology applications that will enhance the expectation of the user? When you look at this factor and others, uncertainty becomes an inevitable factor [...]” (SM4).

Similar views were expressed by participants: (SM1), (SM3), (SM6), (SM9) and (SM11). The findings revealed that there are a number of issues during adoption decision-making process that caused SMEs to seek for information. These include the uncertainty about the behaviour of employee towards the use of EICT, improvement on productivity and SME managers' doubt on employees' attitude towards the adaptation and use of the new technology. The implication of these findings is that it is important that employees, customers and other internal actors be consulted before seeking and acquiring new ICT. Therefore, in assessing previous technology need, involving other stakeholders was emphasised by most of the interviewees. In line with the findings, Walden and Browne (2009) noted that decisions on ICT are difficult and doubts make it problematic for business owners to come to terms with the new technology. Kauffman *et al.* (2015) also outlined some uncertainties that are associated with IT decision-making, which include employees, market consumer, technology standards and competition and regulatory responses, IT-driven changes in operational and transactional performance, as well as future market conditions. Therefore, SME owners must gather information to minimize these uncertainties (e.g. employees, technology investment decisions involve large-scale infrastructure development, customers' acceptance requirement and personnel and training costs).

Compatibility. Rogers (1983, p. 240) defined compatibility as “the degree to which an innovation is perceived as consistent with the existing values, past experiences, and needs of potential adopters”. Observations revealed that participants seek compatibility information when the need for ICT adoption decision-making process arises. The finding revealed that the reason why SMEs require compatibility information is to know the possibility of the EICT adapting with the existing processes within the organisation without having to spend huge amount of money training their staff and/or changing the prevailing technology. The knowledge about the compatibility of the EICTs on time and how well it fits into the present organisation arrangement would complement the existing technology, and facilitate not only the decision process but also its implementation (Eze *et al.*, 2018d). According to participants:

“It is important we examine the performance and how compatible the server is without having to change existing structure and pattern of the application in use. This is deciding factor” (SM3).

“It is important will do both the cost evaluation analysis and the compatibility test as well” (SM8).

“What we do is to examine the capability of the IT department with the previous infrastructure in use [...]” (SM16).

One of the challenges facing SMEs in investing in new technology is the inability to predict the constant advancement in technology with respect to the value of existing technologies. Inability to address this issue may lead to considerable financial waste for a firm (Adomavicius *et al.*, 2008; Eze *et al.*, 2018e). Hence, there is a need for small business managers to examine EICT compatibility with that of the present ICT and use the information gathered to develop a business case and obtain the cognitive information needed during this process. It was revealed that the ability of SME managers to acquire and understand the capability information of a new technology will help evade recruiting

manpower that have related skills during implementation. Therefore, a compatibility test is an important activity SME managers carry out and this offers an opportunity to evaluate the capacity of the employees using the EICT and that of the existing ones.

Replacement of legacy technology. SME managers seek information on the benefits of the EICT over the current ones used and those their customers admire. SME managers render services to their customers with the use of legacy technology, but evidence suggests that most of the times these technologies have failed to meet clients' needs, workers' performance and the growth of the business. Legacy technologies in this context are existing technology adopted and used overtime by SMEs. Most small businesses compare information gathered about EICT and that of the existing technology in the organization to make rational decision because advances in technology and the growth of the business put substantial pressure on SMEs to look for information on new technology aimed at replacing the old technology. The findings revealed that this can only be achieved if SMEs regularly scan the environment during this process to enable them ascertain the cost and benefits, how well the technology fits into the existing skill set available or whether it requires external assistance as noted by participants:

"With new technology we have to consider if it falls within our skills or If we need a expertise advice" (SM1).

"Once new technology is identified, it can now be matched with existing technology and to ascertain the cost and benefit and present it to the business" (SM3).

These statements were also supported by Participants SM12, SM13, SM15 and SM17. Observation also revealed that SMEs consider it important to implement a new technology instead of using the old system. As a result, they attend exhibitions and seminars to acquire knowledge on how best it can be used.

"As years go by, we keep developing applications that are much better and better systems. There was a time we only had typewriters" (SM7).

The implication of these findings is that existing technology hinders SME managers from meeting customers' need and requirement, therefore, having the right type of information and knowledge on EICT triggers adoption decision-making. Therefore, satisfying customers via EICT triggers SME managers' information behaviour and leads to active behaviour when the need for ICT adoption decision-making process arises. In line with the finding, [Van Riel et al. \(2004\)](#) noted that customer information has a significant role to play in introducing a successful new technology.

Relative advantages. Relative advantage is linked to how well the new technology supports SMEs with respect to ensuring that the best product and/or service are rendered to the customers after EICT adoption compared to rivals. Evidence suggests that SME managers will seek and gather information on new ICT if the new ICT has the tendency to outperform other players in that sector, and is easy to use by customers who are not familiar with the technology. As echoed by participants:

"Efficiency is one of the reasons we seek for information that will help us perform better. As a business there is a need for us to deliver things swiftly to our customers [...] I must say that new technology is fantastic because our services are much better" (SM5).

"Some of the factors that trigger information search is if we noticed that something is omitted from the training, or services that are of benefit to our customers" (SM6).

Similar points were raised by Participants SM1, SM3, SM4, SM7, SM9, SM12 and SM14. The findings suggest that SME manager considers EICT as instrument that aids in satisfying

customers' needs and improves efficiency. Therefore, SME managers who have the ability to try the new ICT are likely to engage with the technology. In support of this, [Ramdani et al. \(2013\)](#) found that small businesses with greater perceived relative advantage, have greater tendency to adopt new ICT solutions. Also when a technology is considered to have relative advantage over a company's prevailing practice, it has high chances of being implemented ([Lee, 2004](#)).

Lack of technical know-how. The finding revealed that SME managers lack the required skills and information to introduce the new ICT, and thus they seek for relevant information that will enhance the adoption decision-making process. It was widely perceived by participants that this was the most difficult challenge managers face during adoption decision-making process. SMEs have limited knowledge and resources and inadequate IT personnel when the need for ICT implementation arises:

"For us to seek for information on new technology we must assess if it will meet the skill set we have in the business or if we need an expert assistance to provide such to our consumers or not (SM1).

"We do not have the necessary skills and knowledge about the so called emerging ICT. – therefore this has to be taken into consideration when the need arises [. . .]" (SM5).

The above statement was also echoed by Participants SM3, SM12, SM13, SM15 and SM17, and supported by previous research. Small business managers and employees most of the times lack the required skill on how new ICTs should be implemented, whereas others do not have the requisite knowledge ([Bruque and Moyano, 2007](#); [Kannabiran and Dharmalingam, 2012](#)). Hence small business managers must seek for information to understand the best approach to implement and maintain the ICT.

Perceived affordability. The term affordability is defined as benefits accrued from adopting EICT over the cost of acquiring it. SME managers normally seek and gather information with respect to the cost of the EICT by conducting cost–benefit analysis and comparing such with that of business growth and the satisfaction customers derive from it, as well as employee efficiency and productivity. These factors shape the decision to either adopt or not during decision-making process. Observations revealed that SMEs managers' often seek for information with respect to cost saving, and to determine how well does it fit in the organisation structure, implementation and maintenance cost. As noted by participants, SM7, SM9 and SM10 and further supported across cases:

"As a business, we will first consider the benefit in relation to the cost. If after our assessment the cost is relatively low and the benefit is considered high then, we will try the new technology" (SM1).

"One other factor we look at is price. You will agree with me that not all expensive items or solutions is worthwhile. As a relatively small business, if we can get any solution that will meet our needs at affordable price will be consider it because we must work within our budget" (SM2).

The finding demonstrated that inadequate financial resources most time hinder most small businesses in making adequate decision on new ICT adoption. However, being aware of the cost of EICT aids SMEs to carry out the cost–benefit analysis to make effective decisions for EICT. Similarly, [Seyal and Rahim \(2006\)](#) found that cost is considered by most SME managers as a major inhibitor for EICT adoption decision in SMEs. According to [Nguyen et al. \(2015\)](#), cost puts SMEs in a position that aid them to constantly search and gather information on the benefit of the new technology before making adoption decision.

Fit for purpose. Fit for purpose is defined in this study as the ability of the new technology to perform the functions for which it is acquired. Evidence suggest that most

SMEs would be eager to know how the new ICT will fit into the intended purpose for which it is evaluated and how it will continuously assist them in their day to day business activities. The analysis revealed that SMEs will normally seek for information with respect to the IT providers, the necessary prerequisite to ensuring that the technology is fit for the exact purpose as claimed by the provider, as it is not practicable to rely on the information accessed and generated from online forums without first contacting the IT vendor:

“Does the new technology suit the purpose for which information was gather about it? As a business, we are at risk adopting a new technology which is not considered appropriate for the organisation” (SM8).

It was also revealed that SMEs constantly request for further clarification from IT providers during decision-making before they take a stand:

“It is important that we continue to ask questions that are not clear to us otherwise if we end up implementing such technology we may end up losing our clients” (SM8).

This finding was also supported by Participants SM2, SM5, SM13 and SM17. The implication of this finding is that acquiring fit-for-purpose EICT is significant if SMEs want to remain in business and it is not advisable to completely rely on information acquired on the internet during EICT decision-making.

Organization context of perceived information need

Users' acceptance information

Observation revealed that users' behaviour shapes adoption decision-making process of small business managers. Staff or employees opinion during this process is vital. The finding suggests that the IT department and other staff play important roles in the process because of the difficulty and uncertainty associated with EICT. As a result, any EICT intended to be adopted must be aware by the employees and the need for such must be clarified. The findings suggest that this creates an opportunity that aid managers to listen to the opinions of the employees during this process. Similar assertion was echoed by SM2, SM7, SM9, SM12, SM14 and SM20 and supported:

“Yes we educate them well so that they can understand ICT and appreciate what it can do for them. We make our point in such a way it is understandable and appreciated” (SM4).

“We normally discuss internally with our IT department because they are more exposed and knowledgeable about the latest trend in the field and help clear the doubts we have” (SM6).

In support of the finding, [Nguyen et al. \(2015\)](#) found that communication between SMEs owners and their employees is vital when the need for change arises. Failure to recognise this, employees will continue to have doubt about the need of the new technology, and most times, resist the change as a result of fear of losing their job. Furthermore, [Andries and Debackere \(2006\)](#) argued in his work that communicating with the employees at the early stages of planning and implementation makes employees have sense of ownership and positive feelings about the systems, and reduces the risk of new ICT failure.

Efficiency driven

Observation reveals that when it comes to adopting EICT by SMEs, their major focus is how the new ICT could improve their business strategy, help in the automation of existing business operations and enhance workers efficiency, as well as how such technology would aid in the satisfaction of client's needs. These points were raised by participants:

“Can the technology improve our daily routine operations? How can the technology accomplish my task with minimal stress and help carry out my work better?” (SM5).

“As you can see, technology is evolving so fast. Our employees and customers need to have best experiences which help us in making decision to acquire such technology” (SM6).

While this finding was further supported by Participants SM10, SM11 and SM13, observation shows that an assessment by SME managers with respect to new technology influenced their adoption behaviour. Small business managers tend to evaluate the opportunities with respect to such technology and how efficient such technology would be and the potential investment it has to offer the firm before its implementation. It was discovered that managers tend to respond actively during the process considering the fact that technological innovation reduces cost and enhances efficiency (Higón, 2012).

Owner's support

Finding reveals that managers play crucial role in inspiring and motivating their employees to participate in activities that would ensure that new innovation is brought to the business by encouraging them to attend conferences and events in a bid to get acquainted with the latest information about new technologies aimed at improving the operations of the business and their relations with customers and staff. This was echoed across cases:

“When new technology is developed, it is important you send your employees to conferences and events so they can help bring on board technology that can support our operations” (SM5).

“We are open and positive in getting information on new technologies, discovering new ways such technologies can be automation to decrease human input” (SM4).

Similar statements were also echoed by Participants SM2, SM9, SM12, SM and SM22. The implication of the finding is that when adequate information is allowed to flow within the organisation, it becomes less easy for decisions to be taken by managers (Ramdani *et al.*, 2009), which encourages technology adoption. The findings also revealed that ICT adoption is much more successful if supported through top-down approach to improve organisational performance, prevent perceived performance gap and exploit business opportunities (Gangwar *et al.*, 2015). In support of this, Lian *et al.* found that top management support mostly motivates the adoption and implementation of EICT in SMEs.

Environment context of perceived information needs

Competitor's intelligence gathering

Oliveira *et al.* (2014) noted that the attainment of competitive edge has become one of the main drivers of ICT adoption that small business managers should be conscious of when the need for ICT adoption arises. The finding suggests that environmental scanning for new ICT helps managers to be aware of the role played by innovation through rivals, and clients. It was evident in the study that small business managers seek for relevant information with regard to the kind of new ICT their rivals implement and how such technological applications are incorporated into their business operation that led to competitive edge as echoed by participants:

“It is important to know that one has competitors that influence the way you carry out your operation and shape the business. Because I want to outperform my competitors in terms of the product or services I offer, most times I have to consider looking for existing technology adopted by my competitors and see how we can use them more efficiently” (SM18).

“The emphasis here is to consider doing a research on our competitors to ascertain what technology they use” (SM8).

This was further supported by SM1, SM9, SM10, SM12, SM13, SM15 and SM20. In line with this finding, [Alshamaila et al. \(2013\)](#) and [Lam et al. \(2014\)](#) in their study argued that acquiring information on what the competitors are doing and the kind of technology application they use will help a firm design a strategy they may help them compete effectively during ICT adoption process. The implication of this finding is that SME managers must continually take part in intelligence gathering by scanning the environment to ascertain what EICTs will aid competitive edge over rivals. This triggers the search for information on EICT. As competitors play an important role in the business environment, [Raymond and Ramangalahy \(2001\)](#) argues that small business managers must be at the forefront of innovation to help them continually differentiate their products and services from their competitors.

Customer's information gathering

SMEs adopt and implement new ICT to satisfy their customers' requirement. Therefore, customer information and requirement on EICT as the finding suggests are vital for SMEs. Small business managers gather information on their clients' needs and requirement and look for new ICT that would help satisfy these needs. Observations revealed that satisfying customers' needs on the one hand is a challenge, whereas the usage of the new ICTs to satisfy clients is another. As noted by participants, adequate information must be collected on clients' needs, as well as how such technology will meet their specific needs:

"Yes, most times consideration is given to new technology because of the requirements of our customers' requirements. Since we are dealing with large clients, it will depend on their needs and wants" (SM3).

"It is important you meet the needs and wants of you clients quickly" (SM5).

These statements were further supported by SM3, SM5, SM6, SM10, SM14 and SM15. The implication of this finding is that small business managers must put into consideration the role ICT plays in certifying customer requirements before its adoption is being considered. In line with this, [Zhu et al. \(2003\)](#) found that organisations are far better when they use systems that satisfy customer's needs. In addition, a numbers of previous studies have also found that pressure from clients is a principal driver of ICT adoption small business context and that should be considered before making adoption decision ([Beckinsale et al., 2006](#); [Ghobakhloo et al., 2011](#); [Mehrtens et al., 2001](#)).

Provider credibility

The credibility of the providers is vital during EICT adoption decision-making process. SME managers need information to ascertain how trustworthy the supplier is when the need for the adoption of EICT arises. The information SMEs acquire with respect to the suppliers will inform their adoption decision. Observations revealed that most SMEs were careful in selecting ICT provider in a bid to avoid the risk of choosing an ICT provider that is untrustworthy and can result into serious loss in the future. This was echoed across cases:

"If you fail to access business environment thoroughly in the industry to understand and identify who the true provides and guarantee you the quality of such technology [. . .], as a business man, I will be making the greatest mistake of my life" (SM12).

"If organisations that are bigger are using the potential new technology that will increase the trust of such providers" (SM1).

"If the reviews got from the Google search are positive, that would encourage us to make take decision even faster" (SM18).

The implication of the finding is that SMEs would prefer to examine the background of the provider and its credibility, as well as the functionality of the ICT systems and compare these from one provider to another. According to Chibelushi and Costello (2009), one of the greatest challenges facing SME managers is lack of skilled consultants and how unreliable they are in providing advice. Thus managers must be cautious when the need for consultants and vendors assistance arises, as the environment pressures such as supplier pressures influence the adoption of technology in SMEs (Kurnia *et al.*, 2015). Trust and performance of the technology provider were rated very high as an influential factor.

Information context of perceived information need

Perceived information sources credibility

Source credibility in this context refers to the extent to which an information source is consistent and reliable with respect to the intended EICT to be adopted. The analysis from the data reveals that the more the sources of information is credible, the more it influences SME managers to seek and gather information for EICT adoption decision-making. Hence, information source credibility influences SME manager's decisions-making on EICT adoption. This point was raised by a number of participants:

"Most times we engage in some sort of search on the internet to ascertain what and how other people have rated the new technology and the extent it has got a bad review" (SM2).

"If I have confidence on some providers, I will always rely on the information provided by them when the need for such information arises" (SM1).

These statements were further supported by Participants SM3, SM5, SM9, SM12, SM15 and SM18. The analysis revealed that SME managers are constantly sceptical about the source of information which is one of the dilemmas faced during adoption decision. Although the finding unveiled that some SMEs are confident on the sources of information provided managers gather post information through exhibitions and conferences; however, such information causes information overloaded and makes decision-making difficult. Therefore, personal conviction on sources of information plays a role on EICT adoption decision-making. The finding is consistent with Gerstberger and Allen (1968) which argued that the more the quality and/or reliable the sources of information is, it would be the first to be considered during information search. Also, Marton and Choo (2002) found a link between source quality and usage during information sources selection while Woudstra *et al.* (2012) argue that quality greatly shape human information sources.

Herding event

The internet constitutes huge number of business owners who are eager to meet with other business owners to gather and share business ideas, information and experiences with respect to new technology. When people are associated or influenced by other business partners, they tend to shape each other's behaviour and decisions. Observation revealed that SME managers are often influenced by information obtained by key business partners around them and the trends in technology. SMEs often rely on comments and suggestions from their networks (e.g. online communities or forums) adoption decision-making. This was echoed across cases:

"What is trending around us also greatly shape the technology we adopt?" (SM1).

[. . .] what determine if we should look for information on how to adopt new technology is that fact that as competitors engage in which help them to enhance their operations, we are push to doing the same thing. "This allows one to introduce something new, smart and competitive in a market" (SM4).

This was further supported by SM6, SM9, SM11 and SM12.

Similarly, a number of researchers have also found that herding measures shape ICT adoption decision (Walden and Browne, 2009; Hirshleifer and Hong Teoh, 2003; Luo and Lin, 2013; Walden and Browne, 2009; Woudstra *et al.*, 2012; Li *et al.*, 2014). The implication of this finding is that SME managers are greatly influenced by the decisions of others who use sources of information that are prevalent during adoption decision process.

Testimonial

The finding also revealed that information from earlier adopters influenced SME managers' decision-making when the need to adopt new ICT arises. Participants note that testimonies from earlier users reduced the risk of wrong adoption decision-making. These testimonials are linked to reviews and commendations of other managers who may have engaged with the ICT in the past. This was considered vital because it exposes them on the functionalities of the new ICT that appear to be unclear to them: This was echoed across cases:

“Also we can put calls through to our customers asking them to tell us or we can engage people we don't know for testimonials that have already started using the technology for about a year. We always ask our clients for feedback” (SM16).

“We have had some ugly experience therefore, if we can learn from other people's mistake, it will go a long way in saving us from making bad decisions when the need to adopt new technology emerges” (SM12).

The finding was further supported by Participants SM1, SM2, SM3, SM5, SM9, SM18 and SM22. This implies that the recommendation of information sources by those that have engaged in a new ICT previously greatly shapes the selection and use of information sources for new ICT adoption decision. SME managers tend to seek information sources from the internet and forums on the belief that managers who expose such information are early adopters and have first-class information on the technology tend to gather information about.

Conclusion and implication

The information behaviour of SME managers during adoption decision-making process of new technology is complex in nature due to the unpredictable nature of the changes in technology. To understand a range of factors influencing SME managers during the process, the study was informed by the TOE framework, which helped to identify 16 factors that shaped SME managers' information gathering and use behaviour during emerging adoption decisions-making of new technology. From the *technology context*, *uncertainty driven*, *compatibility*, *replacement of legacy technology*, *relative advantages*, *lack of technical know-how* and *perceived affordability fit for purpose* influence SME managers' information behaviour. *Users' acceptance information*, *efficiency driven* and *owner's support* shape the *organisation context* of perceived information need, whereas *competitor's intelligence gathering*, *customer's information gathering provider credibility* and *government policy* influence the *environmental context* of perceived information need; and finally, *perceived information sources credibility*, *herding event*, *testimonial* and *openness to other people's ideas and experiences* are shaped by the *information context*.

This research has some implications. From the theoretically perspective, the study developed an extended TOE framework that offered another lens to exploring factors influencing SME managers' information behaviour for EICT adoption decision-making from a hybrid thematic analysis perspective which is rarely used in ICT adoption research. The study extended the TOE framework by incorporating the information context shaped by

four factors. The implication is that the information behaviour of SMEs is not only influenced by the technology, organisation and environmental context but also the information contexts greatly influence the information behaviour of SME managers. The framework developed in this research demonstrates that it is an important analytical tool for researchers to explore such factor from a theory and data-driven thematic analysis perspective and offers a way of articulating these broad factors at each stage of the framework.

Studies (Orlikowski and Baroudi, 1991; Galliers and Land, 1987; Choudrie and Dwivedi, 2005; Silva, 2007) have found that large number of research works deployed either case study, experimentation or survey method in IS research. For example, a study conducted by Choudrie and Dwivedi (2005) found that most studies in IT/ICT adoption studies use either adopt survey approach or case study, which accounts for 74 and 26 per cent, respectively. In support of this, Williams *et al.* (2009) examined 345 papers in 19 journals between from 1985 and 2007 on IS research and analysed based on methods and theories. The result revealed that most studies used survey approach (57.5 per cent) case study (15.3 per cent) and multiple methods (3.7 per cent). Interview accounts for 2.3 per cent (Williams *et al.*, 2009). These findings shows that qualitative methods are not commonly used on ICT adoption studies. In addition, majority of the theories used in ICT adoption research is intentional and behaviour-based model (Ajzen and Fishbein, 1980; Davis, 1989; Premkumar, 2003; Adams *et al.*, 1992; Pavlou and Fygenson, 2006; Venkatesh *et al.*, 2003). While these models and theories have contributed immensely to ICT adoption research in the past, they are unable to unravel a broad range of factors that may influence diverse SME managers' information behaviours, as small businesses differ in structure, formation, size and culture, as well as the utilization of business information. Hence, this study creates awareness of diversifying research in terms of theories and methods. Large number of researchers in this area have used quantitative approach, which mainly involves testing hypothesis and confirming their findings. Though most studies use quantitative approach, these demonstrate that there are methods that can be used to study information behaviour of SME managers for EICT adoption. Therefore, using interviews and most especially deploying theory-driven thematic data analysis provides some guidelines for eliciting meanings from the data that confirm to the TOE framework.

The study also provides strong justification for courses of action (Macredir and Mijinyawa, 2011), that is, the need to examine factors shaping SME managers information behaviour. Small business managers could use the arguments and the empirical insight, as a justification to raise employee's awareness about the broad range of factors that may influence SMEs managers' information behaviour on EICT adoption. Small business managers that wish to make decisions on new technology adoption should bear in mind that such decisions will shape not only the factors associated with technology, organisation and the environment context but also the information context. This would encourage the assessment of situation-specific factors that might play a part in adopting EICT successfully.

Furthermore, qualitative research is normally subjective and interpretive in nature and sample used in this study are limited. Considering the small number of interviews carried out in this study, the generalisation of the findings is required to be established across a larger population. Therefore, the list of factors presented in this work may be small given that SMEs differs in terms of size and formation. Therefore, there might be other factors that may cut across other sectors that may assist researchers in providing broader and more generalised findings.

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