International Journal of Mechanical Engineering and Technology (IJMET)
Volume 10, Issue 02, February 2019, pp. 636-651, Article ID: IJMET_10_02_067
Available online at http://www.iaeme.com/ijmet/issues.asp?JType=IJMET&VType=10&IType=2
ISSN Print: 0976-6340 and ISSN Online: 0976-6359

CHALLENGES FACING SMES IN EMERGING ICT ADOPTION FROM DIVERSE ACTORS' PERSPECTIVE: A DATA DRIVEN APPROACH

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ABSTRACT

This paper examines challenges facing SMEs in emerging ICT adoption from diverse actors' perspective using data driven thematic analysis approach -similar approach to grounded theory. This study deployed both unstructured and semi-structured interviews with the total of 26 interviewees drawn purposefully from Crunch online database in Luton. Data collected from the interviews were analysed to understand both the challenges faced by SMEs and actors that pose such challenges during ICT adoption. The study developed a framework that revealed certain actors that took part in emerging ICT adoption the challenges they pose that impede SMEs from adopting emerging ICT successfully. The finding revealed that Poor knowledge of ICT, and Time are challenges linked to SME managers. Limited ICT support, lack of specialised skills, limited funding, and general support are linked to the government. Dependent and untrustworthy are associated with IT consultants while global solution is linked to IT experts. Commercial interest is linked to IT vendors. The implication is that while some challenges encountered by SMEs originate from them, majority are caused by diverse entities which has constantly limit the extent SMEs embrace new technology.

Keywords: SMEs, emerging ICT, ICT adoption, actors, data driven, qualitative.

Cite this Article: Sunday Chinedu Eze, Vera Chinwendu Chinedu-Eze, Adenike Oluyemi Bello, Adekanmi Adeyinka Adegun and Monisola Esther Alao, Challenges Facing Smes in Emerging ICT Adoption from Diverse Actors' Perspective: A Data Driven Approach, *International Journal of Mechanical Engineering and Technology*, 10(2), 2019, pp. 636-651.
http://www.iaeme.com/IJMET/issues.asp?JType=IJMET&VType=10&IType=2

1. INTRODUCTION

Information Communication Technology (ICT) is an important enabler of economic growth and sustainable development [1][2]. It has transformed the global economy into an e-economy; and attracted huge studies in Information Systems (IS) research for many years [3][4]. Although research in this areas has been conducted mostly in large organizations; Small and Medium Enterprises (SMEs) are major sources of growth and economic development [6][7][1]. Studies from the UK highlight the importance of ICT to SMEs in particular and the economy as a whole [8][9][10][11]. The emergence of new ICT has constantly revolutionized business processes, changed the nature of power that exist between customers and suppliers, grant quick access to a worldwide market and the change from post-industrial era to an information based economy where, information is becoming predominant [9] as a result of the accessibility of information in the new e-economy. The new e- economy is a dynamic systems of interactions involving diverse actors (managers, individuals, government, IT experts, and vendors' and customers) that partake in information technologies adoption and implementation in SMEs to achieve socio-economic goals [12].Therefore, SMEs have no choice than to embrace emerging ICT in the new e-economy because of its advancements and the diverse entities involved in the process. Emerging ICT is defined in this study as any new ICT or enhanced ICT [13]. Although these applications have been widely acknowledged in various establishments as tools for accomplishing business strategies, they have remained the foundation for most firms to accomplish their business strategy, SMEs, government, and other stakeholders are regularly relying on [14] because of the significant amount of resources invested on them on the account that it will save time and cost and improves the firm's performance [15]. However, small businesses have witnessed constant challenges because of their attitude, behavior and the activities of numerous entities associated with ICT adoption. These challenges most times, produce ICT anxiety, reduce the SMEs managers' sense of control and provoke ICT related negative cognition [16].

This hinders them from making valuable contributions when ICT matter arises [17]. SMEs are key to social and economic development [9][18][19].They are at the centre of growth, economic development and stability[20][21].Though they are inhibited by limited resources [22], SMEs are more flexible than large organisations considering their size [23][24][1]. However, most large organisations have been at the forefront of adopting and utilizing emerging ICT [25]. Although, some studies[26][27] account that SMES have used ICT efficiently to develop communication, customer relationship and business processes, there is still dearth of studies that have considered the challenges faced by SMEs in adopting emerging ICT when diverse actors are involved in the process[28].

Considering the limitations on the use of quantitative method [29] the study adopted qualitative method and more specifically data-driven approach in order to understand the respondents' views in greater details. It is believed that the findings in this study will increase researchers understanding of the nature of emerging ICT adoption challenges faced by SMEs from a diverse actors' perspective, in order to help them remain active and tactical since emerging ICT are becoming thought-provoking.

2. LITERATURE REVIEW

2.1. Why Service SMEs

SMEs across the globe are the main drivers of economic growth and development and the service oriented sector in particular plays a very significant role [30][31][32][33][19][34] in the UK. In the UK, small businesses are expanding [35] because of various supports they received by government [36]. In European for example, SMEs represent over 90 percent of all businesses and generated employment opportunities of about 70 percent, contribute to innovation development, skills and gross added value of over 65 percent [37]. Studies[38][39][40][41] asserts that since the 1971 Bolton Report in UK, SMEs have been spearheading in driving economic, regional and local development and contributed approximately 60 percent of the UK's Gross Domestic Product (GDP) . However, with the advent of globalization and the shift towards the adoption and use of emerging ICT, there has been variation between the past and the future of service-oriented businesses [42] which have increased the activities of services oriented SMEs in the UK.

The study examined UK service SMEs because this sector is expanding rapidly in recent times and represents over 18 percent of the UK's national output [43]. Because the UK economy is service oriented, the sector has remained the economic driver and extends its support to UK private and public sectors. Despite significant efforts to improve the economy falls on the service sector [17], the service sector has repeatedly functioned in a difficult and volatile business environment; and confronted with the challenges ranging from adoption to implementation and use of innovation technologies. Even when SME manages adopt these solutions, most of them adopt it as short-term solution and neglect their long-term profitability [17][44][45][46]. They are often ignorant that any little change in their ICT adoption plans can results to competitive advantage.

2.2. SMEs ICT adoption behavior

ICT applications are important because most businesses regularly rely on them and spend so much because they believe it constantly improve organisational performance and saves time and cost [15][11]. According to [47] information is regarded as a backbone of any business which helps to reshape and redesign products/services, organisational structure, as well as corporate directions of any business. Service-oriented businesses are information intensive and they communicate corporate information via the use of ICT to their clients and ICT is regarded very significant for them because it helps them to develop their indigenous economy. While some SMEs participate in the use of ICT effectively and advance their communication with their customer, a large number still consider it to be exciting in the development of networks and knowledge sharing. However, a large number of them have failed to taken into account the circumstances that aid its constant adoption [18] since majority of them are not knowledgeable on technological and human competences [8]. A large number of SMEs are not open- minded and they find it difficult share information and take advantage of emerging ICT [17]. Also, the manner SMEs exploit knowledge differs. In many service SMEs, the owner-manage is the only one that manages the ICT investment however, in most instances the decision depends on tacit knowledge which included instinct, attitude and values of the manager as well as experience, [17]. Although tacit knowledge of the employees has been recognized an important asset [48] which many have overlooked however, such will not lead to the anticipated outcome [49]. According to [17] poor collaboration reduces face-to-face interactions and informal knowledge within and outside the organisation. Contemporary organisations are of the opinion that knowledge and ideas generated from diverse actors (including internal and external to the business) are much more

innovative and satisfying when adopting emerging [17][49][50]. Although, small businesses flexible compared to their large counterparts in adapting to changes they still face greater challenges.

Also, a large number of SMEs are not only confronted with poor administration but also poor learning, dearth of awareness of the significance of ICT and poor education because of their size. Inadequate ICT adoption plans may be discouraging SMEs and hence impact on them negatively thereby limiting subsequent adoption. Substantial number of small businesses also fail in achieving emerging ICT adoption and implementation successfully because they are poorly prepared due to short-term decisions made and most importantly, leaving ICT adoption and implementation issues with fewer individuals in the organization [17]. In addition, most SME managers see themselves as being too busy, which hinder them from acquiring adequate and valuable information during ICT decision making [16]. Therefore, a more up to date research is required in this area to aid service SMEs in understanding major problems that could obstruct them and ways to handle them. This is paramount because majority of SMEs spend huge amount of money and time trying to adopt emerging ICT without tangible benefits [24][28]. In addition, most SMEs find it difficult to invest in new ICT instead they automate existing ones. Scholarly works [28][51] are of the believe that when businesses achieve some level of sophistication in the use and management of new technology, business executives become more involved in assessing and evaluating ICT to adopt. However, majority of the small businesses in most cases often consider solutions with short-term advantage and with tactical benefits. Costello et al., (2007)[24] note that small businesses do not have the required knowledge required to understand both the long and short-term demands of ICT which lead to adoption failure. Though the failure of ICT adoption is not new, a number of studies [52][53][1] have stressed that the failure of ICT to provide the desired result to the company[54] is because of ICT complexity which had made it difficult for the integration of the traditional systems.

Also small service SMEs differ in structure, formation, size, culture as well as the utilization of business information and how a substantial number of tasks is carried out. For instance, majority of SME managers are desperate in achieving their purpose; while others are guided by their rational objectives. Some may also decide to be small which creates a way for members of their families to plan and put the business into proper perspective[27].Therefore, framework that accommodate actors and the complex challenges faced by SMEs are needed to help them become well-informed about the activities of these actors and the associated challenges given the limited resources, lack of skills as well as misleading advices [54][52], and lack of understanding of the ICT benefits which make SMEs late adoptors'[30][2]. Adoption of emerging ICT in small business are multifaceted and SMEs that overcome the challenge achieve are likely to stay ahead of their rival by constantly learning and improvement. Therefore, investing in emerging ICT is not a one off occurrence but instead a continuous process [55].

3. METHOD

3.1. Overview of the Research Method

This study applied accepted technique-data driven approach (a similar approach to grounded theory) by collecting qualitative data to make the findings a representation of everyday reality [56]. The research began with reviewing appropriate literature in order to identify the research gaps, followed by a preliminary study using data gathered during the first stage of the unstructured interview because using quantitative approach may not allow the level of penetration required [57]. Next, an initial data were analysed and coded which helped the

initial set of themes to emerge. This preliminary investigation at the first stage helped in designing semi-structured interviews which was conducted followed by the data analysis, confirmation and interpretation as indicated in Figure 1 below

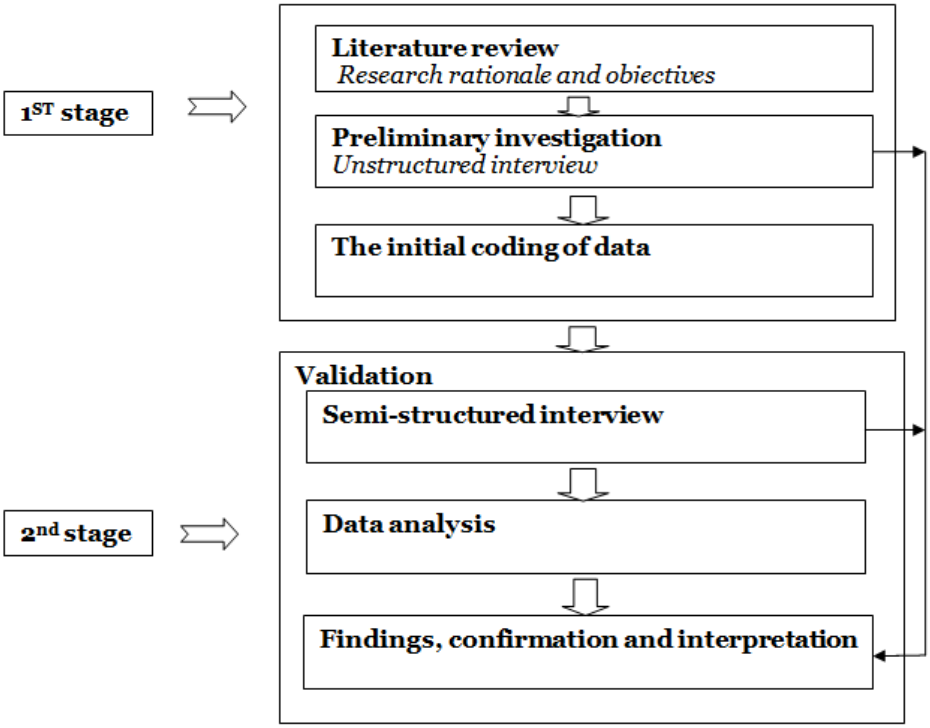

Figure 1 The overall research process

3.2. Unstructured and Semi-Structured Interviews

More specifically, the research deployed unstructured and semi-structured interviewed at first and second stage of the data collection process. Since the purpose of qualitative research is on discovery and description of participants view, purposive sampling was used to identify small service businesses that have adopted emerging ICT at the first stage of the interview. Purposeful sampling was adopted in order to select units of analysis that will help the researcher make a reasonable comparison and not for statistical generalization [18]. The first stage of the unstructured interviews was carried out to know the present state of emerging ICT adoption in SMEs in order to have a broad view; second, to apply the first set of codes (challenges) to the samples of the raw data for credibility check, unveil actors and their activities. The outcome of the preliminary investigation assisted in designing the semi-structured interview questions for validation of the outcome at the initial stage which allowed the investigators to understand the views of the interviewees' [58]. It is important to note that the data generated were participants' narratives expressed in their own words [59]. According to Oates (2006)[58] interview questions should be sent to the interviewees few days before the interview to enable them go through , get prepared and have lee-way to think through . In that way, the researcher credibility will to be established. The semi-structured interview questions had to be sent two days ahead of the interview to enable the interviewees make their decisions and feel comfortable before the interview.

A formal letter was sent few days before the interview and states the reason for the interview and confidentiality related issues. This was seen as an important part of the interview process because relying on memory may lead to error and bias. All the interviews

lasted approximately 1 hour. It is important to note that, the interviewee sample was generated from Crunch online database where 65 interviewees were selected randomly, and 26 interviewees were interviewed as indicted in Table 1 which provides a summary of participants' profile.

Table 1 Interviewee profile

Interview Participants	Position	Company size	Type of Service
M1	Managing Director	30	Security
M2 M3 M4	Manager IT support staff IT support staff	25	Internet marketing and advertising
M5	Manager	9	Social media /consultancy
M6	Manager	-	Social network provider
M7 M8	Managing Director Directors	25	IT Vendor /Consultancy
M9	Operational Manager	45	Sales and distribution
M10	Managing Director	80	Construction
M11	Manager	5	IT Vendor /Consultancy
M12	Manager	52	Business and Management /Consultancy
M13	Manager/IT support staff	99	IT
M14	Manager	8	Accounting
M15	Developer	1	IT and networking
M16	Designer	1	IT
M17	Test analyst	245	IT Quality control
M18	IT Designer/developer	2	IT
M19	IT Developer	1	IT and networking
M20	IT consultant	11	Consultancy
M21	government agencies	-	Education and training
M22	government agency	-	Education and training
M23	government agencies		Education and training
M24	government agency	22	support services
M25	government agencies	-	Support and advisory services
M26	Manager	102	IT consultant/business supports/advice

Table 1 Interviewee profile

No of Company	Participants	Manager/ Customers	Internal IT Staff	Developers	Designers	Consultants	Test Analyst	Vendors/ Suppliers	Govt. Agencies
1	M1	X							
2	M2	X							
	M3		X						
	M4		X						
3	M5	X				X			
4	M6	X							
5	M7	X						X	
	M8	X							
6	M9	X							
7	M10	X							
8	M11	X							
9	M12	X				X		X	
10	M13	X				X			
11	M14		X						
12	M15	X							
13	M16			X	X				
14	M17			X	X				
15	M18						X		
16	M19				X				
17	M20			X					
18	M21					X			
	M22							X	
19	M23	X							X
	M24		X						
20	M25	X							X
	M26			X					

3.3. Data Analysis

At the stage 2 of the research process the analysis and interpreted of data were carried out in line with the initial themes generated using the thematic analysis [60]. During the analysis and coding of the data, the researchers examined the fundamental ideas, expectations and conceptualization [60] rather than focusing at the semantic level which places emphasis on the surface meaning of the data. This approach was useful in the research because it aided the application of codes to the raw data and allows themes to also emerge inductively and secondly, it aided in the credibility and dependability checks [61].Figure 1 shows the data analysis process. Codes generated in the first stage of the interviews were applied on the sample of raw data to check the credibility of the coded in stage one to three and all the transcribed data were imported into NVivo (software for qualitative data analysis) in stage four of the data analysis model.

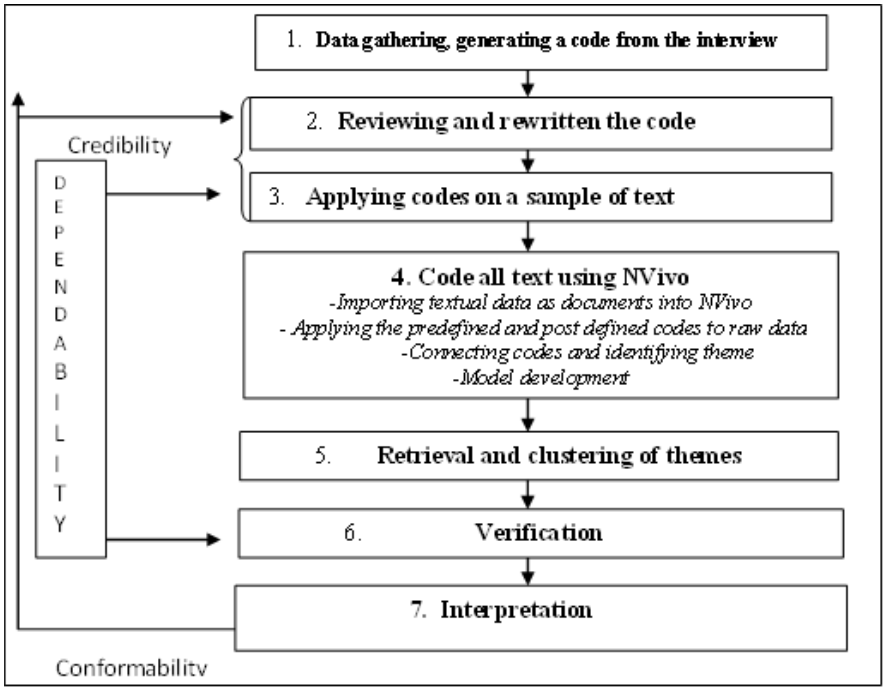

Figure 2 Data analysis process

A software for qualitative data analysis called Nvivo aided in coding the data into appropriate categories. Consistencies were considered between identified groups and the quotes extracted from the interview transcript using inter-coder reliability analysis [62] of which four judges were employed. These judges helped to crosscheck the quotes with the associated themes which was further validated through cross-case analysis of supporting evidence [63].The results of the inter-coder analysis results showed t 78% which is higher than the 70% benchmark [61] recommended. The process was a design method shows how data was analyzed and reported (dependability check) and conformability checks to ascertain how tightly the raw data is linked to the interpretation[64].During the analysis, a guide was developed to help code the data based on the meaning attached to each challenge (see reliability analysis Table 3).

Table 3 Reliability analysis

Areas	Number of judges	Reliability	
		First two judges	Second two judges
Challenges facing SMEs	4	0.78(78%)	0.87(87%)

3.4. FINDINGS

The findings depicted in table 4 and 5, shows the themes relating to the challenges faced by SMEs in relation to various actors involved in emerging ICT adoption and their supporting cases and evidences. According to [64], there are three methods of thematic analysis –data driven method, theory driven method and hybrid method. This study adopts data driven method because themes adopted here emerged inductively. Themes that emerged during the analysis were clustered which revealed the challenges facing SMEs. The findings presented in this study are based on participants' narratives, themes that emerged, and the literature.

Table 4 Sample supporting cases on the challenges of emerging ICT adoption

Actors	Challenges (Themes)	Supporting cases	
SME mangers	**Poor Knowledge of ICT**	**A3, A5, A11, A13,A15, A18, A22, A23 A26,**	**9/26**
	Time	A1, A3, A5, A,6, A10, A12, A18.A19, A23, A24	10/26
Government	Poor ICT support	A3,A4, A7, A15, A20, A21, A23, A26	8/26
	Lack of specialised skills	A1, A5, A8, A9, A11, A17, A19, A20, A21, A22, A23. A25	12/26
	Limited funding	A11,A4, 17, A22, A24, A26	6/26
	General Support	A1,A5, A7,A11,,A15, A17 A21, A22, A23, A25,	10/26
Consultants	Dependent and untrustworthy	A3, A7, A9,A10, A11, 14,A17,A19, A22, A25, A26	11/26
IT Experts	Global solution	A5,A9,A1, A11, A25, A26,	6/26
IT Vendor	Commercial interest	A2,A7, A13, A 23, A26	5/26

Table 5 Themes and sample supporting evidence on challenges associated with actors on emerging ICT adoption

Themes	**Supporting evidence**
	SME Managers
Poor Knowledge of ICT	"Say from the beginning, some people don't know what they need. Some will have idea but they find it difficult to progress with such idea" (A22). I use buyers that are knowledgeable because a buyer that does not know what he wants will be difficult for such buyer to make good buying decisions" (A26)
Time constraint	"SMEs are regularly short on time, most times decisions about the business will be left in the hands of one or two executive, (mostly the owners), which tend to manage the business that lack adequate resources and limited cash. This normally leads to a very difficult decision making environment" (A12) "...normally businesses don't have the time…they are so busy running their business on daily bases" (A23) "Time was one of the biggest challenge... "(A5)
	Government
Poor ICT support	"We don't normally sit and work with these small businesses in moving their business to the next level or regarding the areas they should be considering to enable them move forward. They are responsible to take that on board and put it into context" (A21) "...we render our support via the IT centre and we deliver to UK online for business programme and we determine what kind of programme to deliver" (A26)
Lack of specialised skills	"I can say I have enough know-how to the extent businesses are taking on or not taking on IT which could be of benefit to them (A25) "—I was involved in the ICT project to able to learn about new ICTs things. As far as I am concern, they are new to me" (A23)
Limited funding	", one of my problems is whether if funding is there and will be enough . funding is always going to be an issue from local authority's point of view (A24) "to be sincere people that are looking forward to starting a new businesses find it difficult getting financial support to help them start up and presently where budget are very tight"(A26)

General support	"Over the years, the manner various support will provide appears to be general start-ups and extend to business support. Within department we do not have the specific knowledge"(A23) "It is important to note that we do not promote any single serviceor particular philosophy" (A21).
	IT consultants
Dependent and untrustworthy	"Well, in a business world out there where there is a consultant, they are normally recommendations and where this happens it could be that there a relationship with the provider. This happen in every sector" (A, 23). "... it will depend on the trust and the quality of the advice you received from the consultants" (A23)
	IT experts
Global solution	We just realised that what IT experts do are global solution" (A26) "It is difficult getting specific work done to support SMEs with IT" (A25).
	IT vendors
Commercial interests	"One of the difficulties I have is the supplier, the person that provide the solutions seems not to be independent. What they appear to do is to sale a solution" (A26) "You see, SMEs are wary of the advice [IT vendors] give because they are interested to sell their product and they do not have the interest of SMEs in mind" (A25)

3.5. Identifying actors associated with emerging ICT adoption challenges

According to Strom et al (2014)[65], consumers and other actors play vital roles in co-creating values, and the same time may hinder ICT adoption success. The findings revealed that challenges SMEs face in adopting emerging ICT can be caused by numerous actors. SME managers are the emerging ICT adopters as well as the decision makers that compete with other actors to ensure that their claims of what solution to be adopted is supported[66]. The identification of SMEs managers as the main participants made it possible for other stakeholders to be identified during the cause of the study which may be internal and external to the business. The interview conducted with managers of small businesses helped to identify external person such as the IT experts, IT vendors' consultants, government agencies and customers who are part of the development, and adoption process and may also impede SMEs from adopting emerging ICT successfully. Because the focus of the study was on small businesses, to understand how small business managers encounter challenges that may hinder them from adopting ICT successfully, the researchers made an effort to identify circumstances that lead to such challenges from diverse actors perspectives otherwise the holistic views of the various actors and deep insight about the challenges may not be revealed. Figure 3, shows the actors associated with emerging ICT adoption and the challenges they pose.

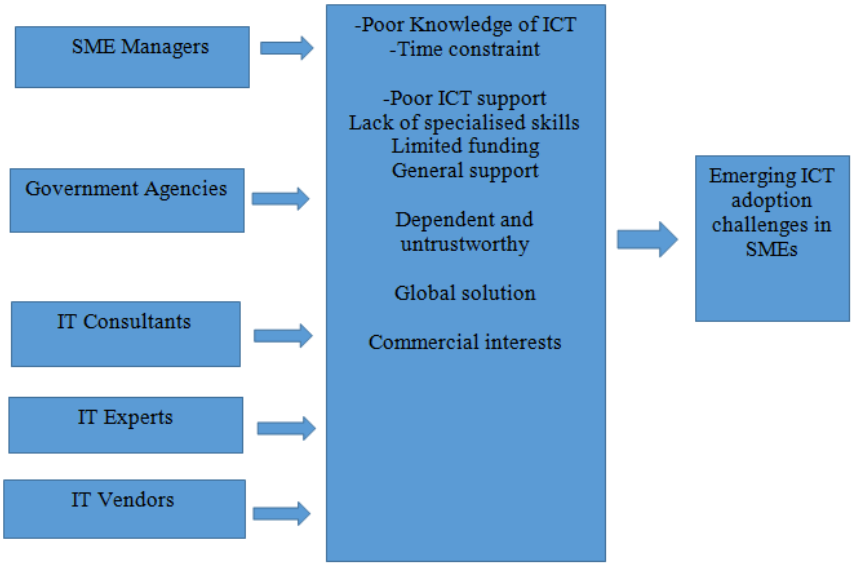

Figure 3 Framework for emerging ICT adoption challenges in SMEs

The framework reveals that in most innovative SMEs for example, the attitudes and belief of the manager may not only be responsible for the challenges encountered by SMEs but such challenges may come within the organisations and from the external actors. These external entities include IT consultants whose main responsibility is to plan for the implementation of the new technology and provide ongoing support and problem solving. The IT vendor's responsibilities are to identify, customize, create an interface, and functional enhancement of the new ICT [67].Others included designers and developers, government and its agencies as well as the internal actors including such as the SME manager and staff with other external actors may determine the impact or value of the emerging ICT and develop a procedure to assess and evaluate it. However, why SMEs believe that these actors play substantial roles in co-creating values with them, the study reveals that most challenges SMEs encounter during emerging ICT adoption come from the external entities as shown in the framework. Therefore, SME managers should be tactical, and proactive in dealing with actors to avoid emerging ICT adoption failure.

4. DISCUSSION

4.1. Challenges facing SMEs in Emerging ICT adoption

4.1.1 SME managers

4.1.1.1. Poor knowledge of ICT and Time constraint

Evidence suggests that the major challenge facing small business managers is that they lack the necessary skills and knowledge needed to build, invest and make informed decisions on how to implement and use new ICT applications. According to some participants, one of the challenges facing SMEs is the limited understanding of ICT and lack of skills and knowledge to make informed decision on emerging ICT to adopt. This point echoed across cases:

"Say from the beginning, some people don't know what they need. Some will have idea but they find it difficult to progress with such idea" (A22).

I use buyers that are knowledgeable because a buyer that does not know what he wants will be difficult for such buyer to make good buying decisions" (A26)

"SMEs have limited skill set" (A13)

"...businesses don't have the ... knowledge; they are so busy running their business on day to day bases" (A23)

Participants (A3), (A5), (A11), (A15), and (A18) also supported the above statements. The finding reveals that SMEs are much more interested in running their daily business and hardly had time to improve their skills that would assist them in adopting the right kind of technology. The implication of this is that; for SMEs to make informed evaluation exercises on any new ICT, they must require some direction on how the new ICT would meet their needs. According to [9] although some small service businesses can handle most of the broad problems triggered by their environment through paper leaflets, most of them lack the time to read reports instead they prefer immediate responses to their problems. This was also echoed by some participants:

"SMEs are regularly short on time, most times decisions about the business will be left in the hands of one or two executive, (mostly the owners), which tend to manage the business that lack adequate resources and limited cash. This normally leads to a very difficult decision making environment" (A12)

"...normally businesses don't have the time…they are so busy running their business on daily bases" (A23)

"Time was one of the biggest challenges... " (A5)

The findings reveals majority of small businesses do not spend time in learning and equipping themselves before taking a decision for emerging ICT owning to the fact that most times they are at lost as to what they exactly wanted. This alone increases tension and hinders successful ICT adoption. One of the major implications of this finding is that, most times SMEs tend to rely heavily on external sources of advice, especially the consultants, who are seen as the first point of contact. In line with the findings above, a number of research [17][54][52] also found that lack of time, resources, skills and misleading advice from external experts, lack of understanding of its benefits[68] are some of the challenges facing SMEs in ICT adoption and these make small businesses to adopt ICT as late majority in the adopters' category .

Government

4.1.2. Poor ICT support

The findings revealed that the government's poor IT support was one of the issues encountered by SMEs which hindered them from adopting emerging ICT successfully. This statement was echoed across cases:

"We don't normally sit and work with these small businesses in moving their business to the next level or regarding the areas they should be considering to enable them move forward. They are responsible to take that on board and put it into context" (A21)

"...we render our support via the IT centre and we deliver to UK online for business programme and also, determine what kind of programme to deliver" (A26)

"... we normally signpost and if specific requirements for businesses are required in the field, our delivery associates will take that on board" (A23).

Other participants that raised similar points include :(A3), (A4), (A7), (A15), and (A20). The finding is an indication that government is not doing enough to support SMEs. In support of this observation reveals that due to poor support by the government, the governments normally sign-post SMEs to various independent businesses where further support can be pursued. Furthermore, the findings suggest even when SMEs are sign-posted to these organisations (consultants, Vendors, IT experts) they channel their attentions and interests on

the commercial gains. Hence, services the government and its agencies offer are limited and such services are not even free. According to Simpson and Docherty (2004)[9] such poor ICT support has strong negative influence on SMEs because most SMEs always believe such services provided by the government are free; however, SMEs end up charging fees . In addition to the finding, SMEs are now disassociating themselves from these agencies because of their perception about the government [9].

5. CONCLUSION

The paper examined the challenges encountered by SMEs when diverse actors are involved in emerging ICT adoption. The findings reveal that certain challenges SMEs encounter during this process are linked to them and other actors. These challenges ranges from poor knowledge of ICT, and Time which are linked to SME managers, poor ICT support, lack of specialised skills, limited funding, and general support are linked to the government; dependent and untrustworthy are associated with IT consultants while global solution is linked to IT experts. Commercial interest is linked to IT vendors. The implication of these findings is that the challenges faced by SMEs are not only caused by themselves, rather other entities involved in the process in one way or the other hinders SMEs from successful ICT adoption. In addition, the findings show that the manner SMEs use knowledge differs. In most service SMEs, the owner-manager is the main person that manages and controls the ICT venture. In most cases choices made are dependent tacit knowledge which include experience, attitude, values, and predisposition of the SME manager [17]. Although McCall et al., (2008)[48] argued that the tacit knowledge of the employees are the major assets which many businesses have overlooked, using instinct by small business not lead to sound decision[49]. According to Rantapuska and Ihanainen (2008)[17] lack of poor collaboration reduces face-to-face interactions both inside and outside of the organisation. Therefore, the findings are useful to SMEs and other practitioners in gaining insight on how they can collaborate to co-create solutions for long term benefits

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