

Full Length Research Paper

Analysis of responsibilities of electronic readiness and software for museums online in national commission for museums and monuments in Nigeria

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Received 31 May, 2017; Accepted 18 July, 2017

This study was carried to identify level of electronic readiness in museums by assessing the uses of electronic readiness provision in museum services, and also to determine the factors responsible for ineffective use of electronic readiness in museums. Descriptive survey research was used for this study. Total enumeration sampling technique was adopted for the sampling procedure. This was chosen because of the small number of number of population of professional museum staff involved which is put at 784 as at 2012. Questionnaires were distributed to museum professionals at 16 museums, located in the South-West and North –Central geo-political zones of Nigeria to collect for the study. Questionnaires administered, the data collected were analysed with the use of statistics depicting the mean and standard deviation. Findings indicated the highest availability of e-readiness resources by respondents was the use of computer (Mean =2.55) and followed by use of e-mail (Mean =2.53), museum website (Mean=2.23), internet (Mean=2.20), the least was CD-Rom (mean =1.62) respectively. The overall result indicated that computer is the most available e-readiness resources use in museums. It was recommended that the country's museums must be computerised

Key words: Electronic readiness, museums online, software for museums, national commission for museums and monuments, electronic resources, information communication technology.

INTRODUCTION

In the trend of electronic readiness world, few of the humanities have withstood the march of technology more tenaciously than museum. Museums tend to think of themselves more as custodians than communicators, now as long as electronic emerge. Museums, like other

institutions, have succumbed to the propensity of our society to amass data in all its forms. Information and Communication Technologies (ICT) are affecting the modus operandi of the entire industries (Crowston and Myers 2004).

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However, in recent years, museums have been given the opportunity to reach out to audiences beyond their physical vicinities with the help of the electronic readiness. Most museums maintain websites with varying degrees of museums services. With the inception of electronic, museums gained the ability to provide images and information about their collections online as a preview to the visit.

As it has progressively taken place in other areas, museums are increasing their use of electronic readiness, not only to support management operations through data collection and analysis but also to be directly used by visitors, in an attempt to enhance their experience of the exhibition (Sheldon, 1997).

A museum is a complex institution, one's definition would depend on either one's likes or dislikes for museums. Eboreime (2008) argued that museum was the cultural equivalent of the central bank of any nation. Museums are memory institution which organise cultural and intellectual record. Museum's collections contain the memory of peoples, communities, institutions and individuals, the scientific and cultural heritage, and the products throughout time of our imagination, craft and learning.

According to Dempsey (2000), museums have changed from the imposing sites designed to preserve relics and to exhibit collections, to places where a mix of enjoyment, learning and experience outcomes are also pursued. Moscardo (1996) opines that museums play a significant role in culture and tourism worldwide. Through museums, societies represent their relation to their own history and to that of other cultures and people. Lumley (1988) contends that in addition to preserving and studying collections, "museums exist for the purpose of serving the community."

Corroborating this fact, Ames (1986) submits that with increased levels of competition in the culture and tourism industry, it is becoming more important for museum professionals to identify the variables that will enhance the attraction and retention of museum visitors.

It is important to remember that digital databases of any kind are still a relatively new concept, and many, if not most, museums are still struggling to keep their in-house database updated (Sabin, 1997). In order for museums to make their databases available online, they first have to be sure they are up to date and useful and that they are updated regularly.

For many museums, this may be too intensive to be practical in light of limitations in financial and human resources but the advantage, when put in place, will be enormous in the long run. Research has shown that satisfaction is an important predictor of intention to revisit a place formally visited (Bowen, 2002).

However, Cosson (1991) thinks that regardless of growing pressure to become more competitive and self-reliant, museums, particularly in the public sector, have been slow in subscribing to the idea of customer

orientation. Museums, as a part of the cultural industry, give meaning to present lives by interpreting the past. Museums were expected to "provide the symbols through which a nation and a culture understand itself" (Hewison, 1987).

In a more contemporary context, a museum helps people to understand the world by using objects and ideas to interpret the past, the present as well explore the future. It helps to preserve and research collections, make access of object and information in actual and virtual environments possible. It helps, in the interest of the public, to establish permanent non-profit-making organisations that can contribute long-term value to the communities (A new definition of museums, 2002).

Visitors to museums do not buy the attractions, but rather pay for the experience generated by the visit. These categories remind us of the elements of an experience proposed by Pine and Gilmore (1999) which claimed that the realms of an experience include entertainment, education, escape, and aesthetics:

"Entertainment: Entertainment is not only one of the oldest forms of experience, but also one of the most developed and the most common place and familiar. To arouse visitor's interest, modern museums have incorporated more sensory aspects that involve "sight, sound and motion, and allow visitors to actively participate in the museum experience Kotler and Kotler (2007)

Education: Aside from entrainment functions museums also performs edutainment roles. Edutainment accords museums dual responsibilities involving entreating and educating visitors concurrently.

Escape: Escapist experiences involve greater immersion than entertaining and educational experience. "Escapist experiences immerse the visitors in activities" (Pine and Gilmore, 1999)".

Estheticism: In aesthetic experiences, individuals immerse themselves in an event or environment to absorb or appreciate beautiful things Pine and Gilmore (1999).

Entertainment, education, escapist and aesthetic experiences cannot be staged without the involvement of props, (for example facilities and people). The elements that influence visitor's experience include marketing mix products, price placed, promotion strategies and the aesthetic structure of the place (McLean, 1997).

The Museum and Library Services Act (2008) defines a museum as "a public or private non-profit agency or institution organised on a permanent basis for essentially educational or aesthetic purposes, which, utilizing professional staff, owns or utilizes tangible objects, cares for them, and exhibits them to the public on a regular basis".

Museums as cultural attractions are an important element of the tourism destination and must adjust to new consumers' needs (MacDonald and Alsford, 1997). Some authority consider that museums should maintain

strict guidelines in their exhibits, making sure that no place has been given to the misinterpretation of the past and react against a possible “over-interpretation” the present (Uzzel, 1989).

Therefore, in the trend of electronic readiness world, few of the humanities have withstood the march of technology more tenaciously than museum. Museums tend to think of themselves more as custodians than communicators, now as long as electronic emerge. Museums, like other institutions, have succumbed to the propensity of our society to amass data in all its forms. ICT are affecting the modus operandi of entire industries (Crowston and Myers, 2004).

In recent years, museums have been given the opportunity to reach out to audiences beyond their physical vicinities with the help of the electronic readiness. Most museums maintain websites with varying degrees of museums services. With the inception of electronic, museums gained the ability to provide images and information about their collections online as a preview to the visit. As it has progressively taken place in other areas, museums are increasing their use of electronic readiness, not only to support management operations through data collection and analysis but also to be directly used by visitors, in an attempt to enhance their experience of the exhibition (Sheldon, 1997).

This innovation therefore, where society will not only rely on the physical accessibility of the museums, they now have the opportunity to enjoy quite number of degree of museums activities online through electronic readiness as the focus of this research study.

Statement of the problem

Museums might have reached out to many audiences beyond their physical vicinities with the help of the electronic readiness. Many people who manage the museums, especially in developing nations of the world, do not realise that visitors have high expectation for and rely on online access for information than the rigour involved in searching for information in one museum complex to the other. Some do not realise that technological advancement has changed people`s orientation tremendously to the extent that everybody prefers to receive services at the comfort of their home.

Objectives to the study

The broad objective of this study is to examine the influence of electronic readiness on museums in Nigeria. Specifically, the study intends to:

1. Identify the level of electronic readiness in museums.
2. Assess the use of electronic readiness provision in

museum services.

3. Determine the factors responsible for ineffective use of electronic readiness in museums.
4. Assess the future and anticipated plans of electronic use in museums.
5. Identify challenges of using electronic readiness resources in museums.

Research questions

The study will focus essentially on the following research questions:

1. What is the level of availability of electronic readiness in the Museums?
2. How often do you use electronic resources in the Museum?
3. What types of information services are available in the Museum?
4. What are the benefits of using electronic readiness resources in Museum?
5. What are the challenges of using electronic readiness resources in National Commission for Museums and Monuments of Nigeria?

LITERATURE REVIEW

The rise in knowledge intensity is being driven by the combined forces of the information technology revolution and the increasing pace of technological change. Globalisation is being driven by national and international deregulation, and by the Information Technology (IT) related revolution (Houghton and Sheehan, 2000) in order for a country to gain the benefits offered by IT, technology must be implemented and used effectively across society and the economy.

Moreover, countries face the threat of being left behind if they do not address the growing digital divides both between and within countries (Montazer et al., 2006). Many developing country leaders have embraced IT as an engine for growth and development to help their nations, and they are driving the necessary changes to make that happen (Montazer et al., 2006).

Decision-makers need to know where the country currently stands in terms of IT availability and use, so they can plan toward their goals to knowledge economy or knowledge society. Governments and development aid professionals often frame this discussion in terms of “e-readiness”, or how ready a country is to gain the benefits offered by IT in term of policy, infrastructure and ground-level initiatives (Montazer et al., 2006). An e-readiness process based on an objective assessment that leads to sound e-strategies can offer a path for converting good intentions into planned action that brings real changes to people`s lives (Bridge.org, 2005).

E-readiness is a relatively new concept that has been given impetus by the rapid rate of internet penetration throughout the world, and the dramatic advances in uses of IT in business and industry (Choucri, 2003). The e-readiness concept was originated by the intent to provide a unified framework to evaluate the breadth and depth of the digital divide between more and less developed or developing countries during the latter part of 1990s (Mutulaa and Van Brakel, 2006).

The first efforts in defining e-readiness were undertaken in 1998 by the Computer Systems Policy (CSPP) when it developed the first e-readiness assessment tool known as Readiness Guide for Living in the Networked World (CSPP, 2001). CSPP defined e-readiness with respect to a community that had high-speed access in a competitive market; with constant access and application of ICTs in schools, government, offices, businesses, healthcare facilities and homes; user privacy and online security; and government policies which are favourable to promoting connectedness and use of the network (Bridges.org, 2001).

"E-readiness" is shorthand for the extent to which a country's business environment is conducive to internet-based opportunities (EIU, 2002). It is a concept that spans a wide range of factors, from telephone penetration to online security to intellectual property protection. It is an idea that has outlasted the Internet "bubble" that sparked such exuberance; and delivered such disappointment in the late 1990s EIU (2002).

E-readiness can mean different things to different people, in different contexts, and for different purposes (Bridges, org, 2001). E-readiness is also defined as the aptitude of an economy to use information and communications technologies to migrate traditional businesses into the new economy. E-readiness reaches its optimal level when the economy is able to create new business opportunities that could not be done otherwise (Koulopoulos and Palmer, 2001).

E-readiness in construction organisation also is defined as ability of an organisation, department or workgroup to successfully adopt, use and benefit from ICTs such as e-commerce (Ruikar, 2005). Since the development of the first e-readiness tool several e-readiness tools have emerged through efforts of development agencies, research organisations, academia, business enterprises and individuals (Mutulaa and Van Brakel, 2006). One of the museum's central roles is to make information about the natural world accessible to a growing audience, its pioneering website provides scientific data, educational programmes and resource materials to millions of internet user across the globe (Natural History Museum Annual Report, 1999).

Digital technologies, and particularly the World Wide Web, have great potential to serve the challenges faced by museums in relation to access and audience development, which involves reaching and nurturing both existing and new audiences. Once you have thought

about the likely implications of electronic for your museum, it is time to begin writing your electronic policy. The electronic policy is basically a written statement of how you are going to use ICT and what you are going to be using it for. The exact content of the policy will vary from museum to museum, but some broad headings we may want to think about include the following; Statement of intent – what you will be using ICT for:

1. Roles and responsibilities for managing ICT in your museum
2. Provision of technical support: There are three main ways of organising technical support:
3. As part of an on-going contract with the supplier of your ICT
4. As part of the terms of the warranty under which your equipment is supplied
5. As an on-going contract with a third party ICT services provider

Specification for software including operating system and productivity software having decided what you want your computer to do, you will need to identify the software which does it. You will also need to think about whether the computer will need to run specialist software such as image editing or a collections management system. You need to think about how you would like to use the computer to communicate – for example through the Internet or by email.

METHODOLOGY

The research design employed for this was descriptive survey research of correlation type. According to Landman (1988), descriptive research is primarily concerned with describing the nature or conditions and degree in detail of the present situation, and the emphasis was to describe rather than judge or interpret. Inferences about relations among the variables were made without any direct intervention from concomitant variation of independent and dependent variables.

The study carried out the influence of the independent variable on electronic for the dependent variable which was museum. The target population for the study was seven hundred and eighty-four (784) museum professional employees used were between grades level 08 to 15 with minimum of bachelor degree or its equivalent. Out of the six-geopolitical zones which made up of Nigeria, two geopolitical zones were selected on random sampling which was southwest and north central geopolitical zones of national museum.

The study was limited to conservators, ethnographers, museum educators, curators, archaeologist, museum visitors and tourists because they belonged to the category of museum staff who, by the virtue of their professional calling, education and experience.

Total enumeration sampling technique was adopted for the purpose of the study and sampling procedure respectively. It is chosen because of the small number of population of professional museum staff involved which is put as at 784 as at 2012 (National Commission for Museums and Monuments of Nigeria, Staff nominal roll, 2012). At least, 16 National Museum were involved in the geopolitical zones examined. This appears to be well informed to be able to respond well to the research instrument. The research

Table 1. Population of the study: Museum stations in south-west and north-central.

Town	Number
Lagos	112
Abeokuta	14
Ibadan	77
Ile – Ife	60
Osogbo	54
Oyo	13
Esie	26
Ilorin	59
Lokoja	33
Markudi	10
Minna	50
Lafia	13
Jos	150
FCT, Abuja	49
Akure	41
Owo	23
Total	784

Source: National commission for museums and monuments of Nigeria, staff nominal roll as at April 2012.

Table 2. Research question one: What is the level of availability of e-readiness in the museums?

E-readiness resources	NA (%)	MA (%)	A (%)	ADA (%)	Mean	S.D
Computer	24 (12.0)	83 (41.5)	51 (25.5)	42 (21.0)	2.55	0.95
Email	27 (13.5)	80 (40.0)	52 (26.0)	41 (20.5)	2.53	0.97
Museum website	47 (23.5)	82 (41.0)	49 (24.5)	22 (11.0)	2.23	0.93
Internet	47 (23.5)	90 (45.0)	39 (19.5)	24 (12.0)	2.20	0.94
Website	60 (30.0)	87 (43.5)	33 (16.5)	20 (10.0)	2.07	0.93
Software	105 (52.5)	39 (19.5)	39 (19.5)	17 (8.5)	1.84	1.02
Online databases	126 (63.0)	31 (15.5)	29 (14.5)	14 (7.0)	1.66	0.97
CD-ROM	131 (65.5)	26 (13.0)	32 (16.0)	11 (5.5)	1.62	0.94

instrument used consist of 200 questionnaires distributed to the museum staff and tourist who were adult of 18 years and above that pay visit to museums (Table 1).

DATA ANALYSIS AND FINDINGS

Findings of this study were based on users and their perception of availability of electronic readiness and use of electronic readiness by professional museum staff of National Commission for Museums and Monuments performance. Questionnaires were designed and administered to museum users respectively. Answers to the research questions were as follows as administered to the respondents.

Answers to research questions

Table 2 indicated the ranking of the level of availability of e-readiness resources in the Museums as perceived by the respondents as follows; computer (Mean=2.55) was ranked highest by their mean score rating and was followed by e-mail (Mean=2.53), museum website (Mean=2.23), internet (Mean=2.20), website (Mean=2.07), software (Mean=1.84), Online databases (Mean=1.66) and lastly by CD-ROM (Mean=1.62) respectively. The result indicated that computer was the most available e-readiness resources used in museums.

Table 3 indicated the use of electronic resources in the Museum as follows: - CD-ROM (Mean= 4.09) was ranked highest among other electronic resource in museum such

Table 3. Research question two: How often do you use electronic resources in the museums?

Utilization of electronic resources	Never (%)	Occasionally (%)	Once a month (%)	Twice a month (%)	Once a week (%)	Daily a week (%)	Mean	S.D
CD-ROM	91 (45.5)	31 (15.5)	4 (2.0)	4 (2.0)	19 (9.5)	51 (25.5)	4.09	2.16
Website	17 (8.5)	115 (57.5)	4 (2.0)	7 (3.5)	2 (1.0)	55 (27.5)	3.87	1.86
Internet	10 (5.0)	106 (53.0)	5 (2.5)	2 (1.0)	14 (7.0)	63 (31.5)	3.54	1.91
Email	11 (5.5)	91 (45.5)	4 (2.0)	8 (4.0)	14 (7.0)	72 (36.0)	3.31	1.94
Computer	3 (1.5)	90 (45.0)	2 (1.0)	4 (2.0)	4 (2.0)	97 (48.5)	2.97	1.98

Table 4. Research question three: What types of information services are available in the museums?

Services delivery	D (%)	SD (%)	A (%)	SA (%)	Mean	S.D
Guided tour services	10 (5.0)	3 (1.5)	50 (25.0)	137 (68.5)	3.57	0.76
Outreach services	17 (8.5)	3 (1.5)	55 (27.5)	125 (62.5)	3.44	0.89
Users education	21 (10.5)	2 (1.0)	59 (29.5)	118 (59.0)	3.37	0.94
Cultural awareness services (CAS)	10 (5.0)	-	108 (54.0)	82 (41.0)	3.31	0.72
Selective Dissemination of information	29 (14.5)	8 (4.0)	108 (54.0)	55 (27.5)	2.94	0.95
Internet services	38 (19.0)	77 (38.5)	57 (28.5)	28 (14.0)	2.38	0.95
Photocopy services	111 (55.5)	5 (2.5)	51 (25.5)	33 (16.5)	2.03	1.22

as website (Mean=3.87), internet (Mean=3.54), e-mail (Mean=3.31) and computer (Mean=2.97) respectively. The result showed that CD-ROM was the mostly used electronic resources in the museums.

Table 4 showed that the ranking of types of information services available in the museum is as follows; guided tour services (Mean=3.57) was ranked highest by their mean score rating and was followed by outreach services (Mean=3.44), users education (Mean=3.37), cultural awareness services (CAS) (Mean=3.31), selective dissemination of information (Mean=2.94), internet services (Mean=2.38) and lastly by photocopy services (Mean=2.03). This implies that guided tour services were mostly information services used in the museums.

Table 5 ranked the benefits of using electronic resources is as follows; faster delivery of information (Mean=3.53) was ranked highest by their mean score rating and was followed by effective service delivery by museum staff (Mean=3.40), bringing visitors into interactive with museum objects (Mean=3.40), easy access to electronic resources (Mean=3.39), better user satisfaction (Mean=3.34), save visitors' time on searching (Mean=3.34), access to museum services off location (Mean=3.30) and lastly by access to more web based resources (Mean=3.27) respectively. The mean of ranking indicated that electronic resources makes information delivery faster in museums. This implies that electronic resources will be of the benefits of e-readiness of using electronic resources.

Table 6 ranked challenges of using electronic resources in the museums as follows; erratic power supply (Mean = 3.28) was ranked highest by their

mean score rating and was followed by poor internet connectivity (Mean=3.19), lack of software resources in museum (Mean=3.17), computer malfunctioning and access to database (Mean=3.11), lack of ICT skills (Mean=3.08), costly to access and use (Mean=3.07), technological constrains (Mean=3.05), difficulty to access (Mean=3.02), lack of training and support of staff and visitors (Mean=3.02), lack of technical know-how (Mean=2.97) and lastly by social factors (Mean=2.94) respectively. It indicated that erratic power supply was the most challenging problem faced while using electronic resources readiness in the museums. The implication is that e-readiness will continue to suffer until the electricity is stabilized.

Table 7 ranked the level of electronic readiness in the museums was as follows; e-mail (Mean=2.31) was ranked highest by their mean score rating and was followed by Museum website (Mean=2.28), internet (Mean=2.19), Purchase of ICT equipment (Mean=2.16), e-readiness policy (Mean=1.94), software (Mean=1.92), online database such as WEB, FLICKR, TWITTER, FACEBOOK (Mean=1.78) and lastly by CD-ROM (Mean=1.77). This implied that e-mail was the only e-readiness resource which was mostly used by museums professionals.

DISCUSSION

Findings of this study were based on users and their perception of availability of electronic readiness and use of electronic readiness by professional museum staff of

Table 5. Research question four: What are the benefits of using electronic resources in museums?

Benefits of using electronic resources	D (%)	SD (%)	A (%)	SA (%)	Mean	S.D
Faster delivery of information	18 (9.0)	4 (2.0)	33 (16.5)	145 (72.5)	3.53	0.91
Effective service delivery by museum staff	22 (11.0)	2 (1.0)	51 (25.5)	125 (62.5)	3.40	0.96
Bringing visitors into interactive with museum objects	20 (10.0)	2 (1.0)	55 (27.5)	123 (61.5)	3.40	0.93
Easy access to electronic resources	25 (12.5)	1 (0.5)	44 (22.0)	130 (65.0)	3.39	1.00
Better user satisfaction	26 (13.0)	7 (3.5)	41 (20.5)	126 (63.0)	3.34	1.04
Save visitor's time on searching	27 (13.5)	3 (1.5)	45 (22.5)	125 (62.5)	3.34	1.03
Access to museum services off location	24 (12.0)	4 (2.0)	60 (30.0)	112 (56.0)	3.30	0.99
Access to more web based resources	30 (15.0)	6 (3.0)	44 (22.0)	120 (60.0)	3.27	1.08

Table 6. Research question five: What are the challenges of using electronic resources in the museum?

Challenges of using electronic resources	D (%)	SD (%)	A (%)	SA (%)	Mean	S.D
Erratic power supply	27 (13.5)	14 (7.0)	35 (17.5)	124 (62.0)	3.28	1.08
Poor internet connectivity	36 (18.0)	11 (5.5)	32 (16.0)	121(60.5)	3.19	1.16
Lack of software resources in museum	37 (18.5)	8 (4.0)	38 (19.0)	117 (58.5)	3.17	1.16
Computer malfunctioning and access to database	28 (14.0)	26 (13.0)	43 (21.5)	103 (51.5)	3.11	1.10
Lack of ICT skills	37 (18.5)	15 (7.5)	44 (22.0)	104 (52.0)	3.08	1.16
Costly to access and use	34 (17.0)	22 (11.0)	41 (20.5)	103 (51.5)	3.07	1.14
Technological constrains	38 (19.0)	16 (8.0)	44 (22.0)	102 (51.0)	3.05	1.16
Difficulty to access	45 (22.5)	13 (6.5)	36 (18.0)	106 (53.0)	3.02	1.23
Lack of training and support of staff and visitors	38 (19.0)	24 (12.0)	34 (17.0)	104 (52.0)	3.02	1.19
Lack of technical know-how	41 (20.5)	19 (9.5)	46 (23.0)	94 (47.0)	2.97	1.18
Social factors	38 (19.0)	29 (14.5)	41 (20.5)	92 (46.0)	2.94	1.17

Table 7. Research question six: What is the level of electronic readiness in your museum?

Appraisal of e-readiness	NA (%)	NRA (%)	RA (%)	VRA (%)	Mean	S.D
Email	39 (19.5)	80 (40.0)	61 (30.5)	20 (10.0)	2.31	0.90
Museum website	39 (19.5)	84 (42.0)	59 (29.5)	18 (9.0)	2.28	0.88
Internet	43 (21.5)	97 (48.5)	40 (20.0)	20 (10.0)	2.19	0.89
Purchase of ICT equipment	44 (22.0)	96 (48.0)	45 (22.5)	15 (7.5)	2.16	0.85
e-readiness policy	73 (36.5)	78 (39.0)	36 (18.0)	13 (6.5)	1.94	0.90
Software	95 (47.5)	37 (18.5)	56 (28.0)	12 (6.0)	1.92	1.00
Online database such as WEB, FLICKR, TWITTER, FACEBOOK	111 (55.5)	36 (18.0)	40 (20.0)	13 (6.5)	1.78	0.98
CD-ROM	105 (52.5)	45 (22.5)	41 (20.5)	9 (4.5)	1.77	0.93

National Commission for Museums and Monuments performance. Questionnaires were designed and administered to museum users respectively. The study examines the demographic variables of museum professionals; individual human behaviour tends to vary with demographic factors. It is therefore pertinent to understand their demographic variables.

However, findings identified aforementioned from the various tables showed that analyses of responsibilities of e-readiness resources are prerequisite to the e-readiness study. The use of e-readiness resources such as software is important to museum because its level of

availability has strong predictor on how well a museum can perform in the service delivery. One the results indicated that computer was the most available e-readiness resources used in museums. This implied that museum professionals need to adequately and effectively use electronic resources. This was supported by several studies which have linked e-readiness appraisal with use of e-readiness resources, (Donovan, 1997). In the course of establishing the significance effect of e-readiness on the utilization of service delivery or otherwise, it is discovered that there is significant relationship between appraisal of e-readiness and Information services

delivery.

This brings into the focus that the increased prevalence of electronic will allow museums to consider and use of ICT as a channel, to disseminate objects, exhibitions and museums services to current or potential visitors and researchers; however little is known of the user attitude toward this practice before now. Also, available services in the museums had shown that, guided tours has the highest mean of scoring, this implies that guided tour services were mostly information services used in the museums.

The findings also substantiate the complement roles of analysis of e-readiness recourses and the benefits of using the available e-resources. This means that an e-readiness would provide policy makers with a detailed scorecard of their economy's competitiveness relative to its international counterparts. This fact corroborates Bui (2003) findings in which he asserts that countries are striving to become inclusive global information societies where all persons without distinction are empowered to create, receive, share and utilize information for their economic, social, cultural and political development. Therefore any country that is not electronically advanced is lagging behind in world trend.

Computer is the most available e-readiness resources used in museums by museum professionals despite all other electronic readiness resources to preserve objects as evidence of the past. As a representation of a museum collection, the records database itself has become a new entity. In a digital environment like CD-ROM or the internet a museum object is subject to new physical characteristics. The users now interact with not a collection of objects but an electronically coordinated collection and records. Taking into account the importance of autonomy and single visitors in a museum context, electronic is not only proposed to be able to personalize the experience and allow the consumer to move beyond the constraint of museum managers and interact with museum professionals but also enhances multiple-users access concurrently.

Interactive concepts of edutainment and entertainment will enhance service provision as noted by Pierroux (1998). Electronic can provide a mix of standardized services, and personalized services. Electronic readiness fast-tracks information delivery in the museums as confirmed by Ross (2001) in the review of related literature to this study in more than 70% of UK population has access to web technologies, from their homes, schools or offices.

Conclusion

Traditional museums are expected to engage in electronic readiness to enhance learning experience and entertainment, the sector still needs more innovative ideas and further research. Museums certainly not have

sufficient in-house expertise to launch an electronic readiness project services without some external help. However, it can be argued that an electronic readiness services in museums does not necessarily involve great costs.

RECOMMENDATION

1. The country's museums must be electronically technology talking into account the importance of autonomy and single visitors in a museum context.
2. Electronic is proposed to be able to personalize the experience and allow the consumer to move beyond the constraint of museum managers.
3. Interactive concepts of edutainment and entertainment will enhance service provision.
4. There is need for adequate infrastructural commensurate to electronic capacity must be provided to the museums.
5. There must be improved funding of the museums. Museums managers should source fund rather than relying on government for grants all of the time.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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