ATTITUDES OF LIBRARY STAFF TO THE USE OF ICT: THE CASE OF KENNETH DIKE LIBRARY, UNIVERSITY OF IBADAN, NIGERIA.

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Abstract: This survey study examined the attitudes of library staff to the use of ICT in Kenneth Dike Library. The sample for this study includes 101 respondents comprising 21 professional librarians, 32 Para-professionals and 48 non-professional staff of the library. The study developed and utilized Attitudes of Library Staff to the Use of ICT Scale (ALSUICTS) to elicit information from the respondents. The Friedman test was carried out and Pearson correlation matrix where (df = 39, r.obs = 5, at P<0.05) was used in analyzing the data. The findings showed that generally library staffs in Kenneth Dike Library have a positive attitude toward the use and implementation of ICT and that knowledge of ICT and training influence positive attitudes towards ICT. Based on the findings it is recommended that staff of libraries be trained to allay the fears and anxiety about the use and application of ICT in their respective libraries.

Keywords: Use of ICT, Attitude, Library Staff, Kenneth Dike Library, University of Ibadan, Nigeria.

BACKGROUND INTRODUCTION

The explosion of information communication technology (ICT) since the beginning of the 20th century has been rendering manual-based library system in academic, research, special and public libraries less relevant. This is because using and implementing information communication technology in the library depends largely on the attitude of library staff toward this digital age. There is no doubt about the fact that significant changes have taken place in libraries in the developed world due to the application of information communication technology (ICT) in automated cataloguing, circulation systems, online information retrieval, electronic document delivery, and CD-ROM databases. According to (Ostrow, 1998) the advent of the Internet, digitization, and the ability to access library and research materials from remote locations have also created dramatic changes by the end of the twentieth century. Ramzan (2004) asserted that developments like expert systems, wireless networks, virtual collections, interactive Web interfaces, virtual reference services, and personal Web portals bring about greater changes since the start of the new millennium. The researcher added that there are significant and fast changes occurring in librarianship, where digital and electronic libraries are being established to complement, and in some cases to completely replace, the traditional libraries.

Attitude measurement in management information systems (MIS) research, for instance, has been shown to be informed by a specific understanding of the relationship between attitudes and behaviour as proposed by Fishbein and Ajzen (1975) in their theory of reasoned action (TRA). The theory posited that an individual's
behaviour is determined by his/her intention to perform that both behaviour and intention are influenced jointly by the individual's attitude and subjective norm – a measure of how people are influenced by their peer's opinions. Based on this reasoning, attitudes play important part in affecting behaviour and must, therefore, be taken into consideration in managing staff, especially during processes of change and innovation (Spacey, Guilding and Murray, 2003). According to these, the author concludes that attitudes are also open to influence. The category of a member of staff in the library system, for example, might have some bearing on an individual's opinion of the efficacy of the Internet and subsequent decision of whether to use it at work.

It should be noted that the drastic change in library practices brought about by rapid changes in information communication technology is posing challenges to the Librarians in recent time particularly in the developing countries. To cope with these challenges posed by ICT, Librarians in developed countries moved quickly to learn and adopt new information technologies (Ramzan, 2004). Computers, software, CD-ROM, email, Internet, networks, and other information management and communication technologies were introduced to perform different library functions and to provide innovative user services. At the same time, library staff raised their level of knowledge of new information technologies through continuing education programs, professional training, and through revisions in their library and information school curriculums. This helped them to leverage the benefits of new technologies. Ultimately their libraries became well equipped with sufficient hardware, appropriate software and effective technology-based materials (Ramzan, 2004). Considering what operate in developed countries as explained by Ramzan compared to the developing ones, the story is quite very different. This is due to lots of reasons ranging from inadequate availability of ICT equipments, hardware and software issues to the like. While it is true that the change and the revolution of library practices will continue as new ICT is being invented and introduced, it should be noted as well that there is need for the librarians especially those in developing countries like Nigeria to develop positive attitude towards the application of ICT to library practices.

However, Ramzan (2004) have pointed out that the situation with regard to IT usage in Pakistan and other developing countries is not encouraging. He noted that veteran educators and librarians have observed that library staff in developing countries were prone to implement information technologies, and librarians in Pakistan were also not prepared to embrace the changes forced upon them by new technologies; by explaining that most of them were uncertain about ICT applications in their libraries and the ultimate benefits to their parent organizations. This, according to Ramzan (2004), is couple with the fact that they had little knowledge of what technologies to acquire, how to implement them, and what problems to solve. Ramzan (2004) also pointed to reason like lack of knowledge of appropriate technologies, and the skill to analyze and evaluate library automation projects and their implementation as reported by Khan, 1995; Mahmood, (1999); and Ramzan, (2000). Nigeria is another developing country just like Pakistan. In the light of this therefore, this study examines the attitudes of library staff in Kenneth Dike Library, University of Ibadan, towards the application of ICT in the library.

Adekunle, Omoba and Tella (2007) reported the research work of Klausmeir and Godwin which states that attitude is a learned emotionally toned disposition to react in a consistent way favourable or unfavourable towards a person, object or idea. Generally, attitude may be defined as the total of a man’s inclination and feelings, prejudices or bias, preconceived notions, ideas, fears and convictions about any specific topic. Attitudes have been used to represent perceptions of library staff on the value attached to IT in libraries' technical processing, collection organization and user services. It represents the conceptual value of these technologies in the minds of the library staff, not the values of these technologies. The study of attitude in general begins with a decision between two competing theories about the nature of attitude as a state of readiness, intervening variable between a stimulus affecting a person and that person’s response. In other words, a person attitude prepares him to react to a given stimulus in one way rather than in another.
ATTITUDES TO TECHNOLOGY

According to Spacey et al., (2003), attitudes – chiefly positive attitudes – are assumed to be fundamental in the acceptance, implementation and success of new technologies. Literature relating to people’s views of technology is expressed in terms of attitudes to technology or attitudes to change (Spacey et al., 2003). For ICT systems to be successful, it is suggested that staff need positive attitudes to ICT (Fine, 1986; Evald, 1996). Attitudes have been suggested to influence behaviour but the research in this area is varied in its conclusions. Social psychologists, Fishbein and Ajzen (1975) submitted in the Theory of Reasoned Action (TRA) that an individual’s behaviour is determined by one’s intention to perform the behaviour, and that this intention is influenced jointly by an individual’s attitude and subjective norm (the latter is a measure of how people are influenced by their peer’s opinions). Applying this understanding to an individual’s acceptance of management information systems, the Technology Acceptance Model (TAM) (Davis, 1989) suggested attitude influences behavioural intention to use, and subsequent actual use. TAM also includes the constructs of perceived usefulness and perceived ease of use. Perceived usefulness is the extent to which a person believes that using a system (or computer programme, for example) will enhance their performance, whilst perceived ease of use is the extent to which a person believes that use of the system will be free from effort. These two constructs have an important impact on a person’s attitude toward using the system but, unlike the TRA, Davis found that attitude did not completely mediate between beliefs and intentions (Mathieson, 1991). This suggests that an individual could hold negative attitudes to a system, but would still use it because it has high-perceived usefulness (Dillon and Morris, 1996).

ATTITUDES OF LIBRARY STAFF TO TECHNOLOGICAL CHANGE

Research, which explored the influence of the attitudes of library staff, found that attitudes toward computers were positively associated with computer use and were also predictive of the number of hours of work performed on a computer (Winter, Chudoba and Gutek, 1998). These authors suggest attitudes towards computers are an appropriate focus for organisations attempting to increase the number of hours that their employees use their computers. There has been little research on the attitudes of UK public library staff to ICT. A study carried out in 1989 by (Craghill, Neale and Wilson, 1989) investigated the impact of information technology (IT) on staff deployment in UK public libraries and found that the introduction of IT had been a positive experience in general, although some staff had found it to be an initial barrier. The authors suggested that all library staff would need to have a positive attitude towards IT in future” It should be noted at this point that there are many variables which seem to have relations with or influences on the attitude of the librarians towards the use of ICT at the information age. In the light of this therefore, this study endeavour to embark on the review of some of these variables. Those focused are age, gender, prior knowledge and training, anxiety, and educational qualification.

Implementing information communication technology (ICT) in the library depends largely on the attitudes of library staff to its usage. The application of ICT has caused significant changes in libraries: automated cataloguing, circulation, information retrieval, electronic document delivery, and CD-ROM databases, for example. According to Ostrow (1998), the advent of the Internet, digitization, and the ability to access library and research materials from remote locations created dramatic changes by the end of the twentieth century. Ramzan (2004) observes that expert systems, wireless networks, virtual collections, interactive Web interfaces, virtual reference services, and personal Web portals have brought changes since the start of the new millennium. There have been fast and significant changes in librarianship, where digital and electronic libraries complement, and in some cases replace, traditional libraries.

Fishbein and Ajzen (1975) explore the role of attitude in their Theory of Reasoned Action (TRA), which looks at the relationship between attitudes and norms and their influence on behaviour. Others have considered how people are influenced by peer opinions (Dillon and Morris, 1996). Attitudes affect behaviour and must be considered in managing staff, especially during change and innovation (Spacey, Guilding, and Murray, 2004)
This study will examine the attitudes of library staff in University of Ibadan Library system towards the use and application of ICT. This becomes necessary as most researches on similar subject focuses on the librarians' attitudes whereas the generality of library staff make up a library system. It is hoped that the outcome of this study will go a long way in providing empirical information to enhance further development of libraries at this digital era.

LITERATURE REVIEW

Attitudes are “inclinations and feelings, prejudices or bias, preconceived notions, ideas, fears and convictions about any specific topic” (Taiwo, 1998). Many have cited Allport (1935), who states that an attitude “is a mental and natural state of readiness organized through experience exerting a directive or dynamic influences upon individual's response to all objects or situations with which it is associated.” This study explores the response and readiness of library staff to ICT applications. Attitudes represent the conceptual value of these technologies in the minds of the librarians, not the values of the technologies themselves. According to Spacey, et al. (2003), Fine (1986), and Evald (1996), positive attitudes are fundamental in implementing new technologies. The Technology Acceptance Model (TAM) (Davis, 1989) is another way of looking at the relationship between attitude and behaviour.

Winter et al. (1998) found a correlation between attitude toward technology and number of hours spent using a computer. Craghill et al. (1998) and Jones et al. (1999) both carried out research that reinforced the importance of a positive attitude on the implementation of ICT.

The use of ICT is growing in Nigerian libraries. Lee, in Popoola (2002), asserts that microcomputers will create remarkable changes in the nature of professional work. Krbec and Pakia (1994) describe the advantages of ICT for library processes and user services. Igberia et al., in Popoola (2002), argue that there is widespread fear and negative attitudes that have slowed the progress of ICT implementation. Attwell and Rule (1984) assert that many people resist using computers and other ICT technology.

The findings of a survey of more than 3,000 teachers by Williams, et al. (1998) revealed a correlation between levels of use, skills, familiarity, and knowledge of ICT and teachers' attitudes. (Johnson (1991) observes that a major reason for failure of library automation projects in developing countries is that librarians plan without sufficient knowledge of the purchase of hardware, software, and power supply requirements). Janes (2002) found that reference librarians with digital reference experience had more positive attitudes than those who had no experience.

Yaacob (1990) investigated the attitudes of librarians in government-supported special libraries in Malaysia, and examined the relationship between the librarians' attitudes toward IT and other variables.

A significant relationship was found among attitudes and awareness of the potential of IT, recency of attaining professional qualifications, and knowledge of IT. Librarians' level of knowledge of technology was good predictor of attitudes toward IT. Al-Zahrani (2000) investigated the perceptions of 147 library professional and paraprofessional staff concerning information technology innovations and training in university libraries in Saudi Arabia. He found a significant relationship among respondents' educational background, experience in using information technology, and their perceptions about IT.

HYPOTHESES

The following null hypotheses were tested at 0.05 level of significance.

1. There will be no significant relationship in the attitudes of library staff toward the use and application of ICT in Kenneth Dike Library.
2. There will be no significant relationship between ICT training or knowledge of ICT and attitudes of library staff towards use of ICT in Kenneth Dike Library.

METHODOLOGY

The design of the study is a descriptive survey on the attitudes of library staff to the use of ICT. The instrument used for this study was developed as Attitudes of Library Staff to the Use of ICT Scale (ALSUICTS) which was used to elicit information from the respondents. The instrument is divided into three sections. The Friedman test was used to analyze the data collated in section A and Pearson correlation matrix where (df = 39, r.obs = 5, at P<0.05) was used in analyzing the data in section B.

Section A: Demographic variables of the respondents
The items included in this part were respondent's gender, age, highest educational qualification, department/section/division, and length of service.

Section B: Attitude toward ICT
This part of the survey contains twelve items measuring attitudes of library staff toward the use of ICT in Kenneth Dike Library. They relate to both positive and negative effects of ICT in automated libraries. Respondents were asked to answer yes or no questions about their belief in ICT applications to library practices on a 2-point scale: 2 = Yes and 1= No.

Part 3: ICT Experience and Training
This part contains seven items assessing the staff ICT experience and training relating to query language, library software packages, operating systems, knowledge of programming, participation in design and implementation of ICT, and method of acquiring ICT experience.

Population and sample
The study targeted library staff (the professionals, Para-professionals and non-professionals) in Kenneth Dike Library. All categories of staff in the population were included in the survey. A librarian in this study is assumed to mean a full-time professional with at least a Masters’ degree in Library Science. A Para-professional in this population is assumed to mean a staff with at least a diploma certificate in Library Science while a non-professional means a staff of the library without a formal training in the field of Library and Information Science.

Table 1: Sample selection

<table>
<thead>
<tr>
<th>Category of Staff</th>
<th>Number of Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Librarian</td>
<td>21</td>
</tr>
<tr>
<td>Para-professional</td>
<td>32</td>
</tr>
<tr>
<td>Non-professional</td>
<td>48</td>
</tr>
</tbody>
</table>
Procedure
The researcher visited Kenneth Dike Library and its affiliates to administer the instrument.

RESULTS
The results of the analysis on the study are presented as follows:
Hypothesis 1: There will be no significant relationship in the attitudes of library staff toward the use and application of ICT in Kenneth Dike Library. To test this hypothesis, respondents were asked to rate the extent of their agreement with the attitude items. A Friedman Test with Percentage and Frequency Count was used to analyze the responses. The results are contained in table 2.

<table>
<thead>
<tr>
<th>Attitude Questions</th>
<th>No.</th>
<th>Mean</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Does ICT enable effective ways of resource sharing</td>
<td>101</td>
<td>6.39</td>
<td>98(97.1%)</td>
<td>3 (2.9%)</td>
</tr>
<tr>
<td>2 I believe that ICT helps in making specific information available</td>
<td>101</td>
<td>6.23</td>
<td>96(95.1%)</td>
<td>5(4.9%)</td>
</tr>
<tr>
<td>3 Will adoption of ICT negatively affect staff strength in libraries</td>
<td>101</td>
<td>6.11</td>
<td>5(4.9%)</td>
<td>96(95.1%)</td>
</tr>
<tr>
<td>4 Has OPAC assisted in library services</td>
<td>101</td>
<td>6.05</td>
<td>94(93.1%)</td>
<td>7(6.9%)</td>
</tr>
<tr>
<td>5 I believe that Online databases provide more up-to-date Information</td>
<td>101</td>
<td>5.08</td>
<td>88(87.1%)</td>
<td>13(12.9%)</td>
</tr>
<tr>
<td>6 I believe that Data retrieval system is more reliable through ICT</td>
<td>101</td>
<td>5.92</td>
<td>90(89.1%)</td>
<td>11(10.9%)</td>
</tr>
<tr>
<td>7 I believe that ICT equipments are hazardous to health</td>
<td>101</td>
<td>3.32</td>
<td>30(20.8%)</td>
<td>80(79.2%)</td>
</tr>
<tr>
<td>8 Is Data storage on ICT risky in the library without backups</td>
<td>101</td>
<td>3.21</td>
<td>76(75.2%)</td>
<td>25(24.8%)</td>
</tr>
<tr>
<td>9 Are you afraid of loosing your job due to ICT adoption in the library</td>
<td>101</td>
<td>3.03</td>
<td>16(15.9%)</td>
<td>85(84.1%)</td>
</tr>
<tr>
<td>10 Automated acquisition is not feasible for our libraries</td>
<td>101</td>
<td>3.10</td>
<td>11(10.9%)</td>
<td>90(89.1%)</td>
</tr>
</tbody>
</table>
Table 2 shows the result of the Friedman test. Mean, and Percentages, which indicate that the library staff in the study have a positive attitude toward ICT, with large majorities agreeing about its usefulness. These results generally show that respondents have a positive response to all the attitude items. Hence the hypothesis is rejected. Thus there is a significant relationship in the attitudes of library staff toward the use and application of ICT in Kenneth Dike Library.

Hypothesis 2: There will be no significant relationship between ICT training or knowledge of ICT and attitudes of library staff towards use of ICT in Kenneth Dike Library.

To test this hypothesis, the responses to items in part 3 were correlated with the responses to items in part 2. The result obtained is presented in table 3.

<table>
<thead>
<tr>
<th>Variable</th>
<th>No</th>
<th>mean</th>
<th>SD</th>
<th>Df</th>
<th>r.obs</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training/knowledge of library staff</td>
<td>101</td>
<td>43.7</td>
<td>6.8</td>
<td>39</td>
<td>4.47</td>
<td>0.05</td>
</tr>
<tr>
<td>Attitude of Library staff to ICT</td>
<td>101</td>
<td>41.9</td>
<td>6.3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 shows a significant difference between training/knowledge of ICT and attitude towards ICT. This is shown with the Pearson correlation matrix where (df = 39, r.obs = 5, at P<0.05), which can therefore be interpreted to mean ICT training and knowledge possessed by library staff can influence their attitude toward ICT.

**DISCUSSION**

The results reveal generally that library staffs in Kenneth Dike Library have a positive attitude toward the use and implementation of ICT in the library. The reasons may include an understanding of the benefits of ICT. In Table 2 above, the respondents reacted favorably to the advantages of ICT, rather than to any perceived negatives. The results reveal further that the training and knowledge of ICT influence the attitudes of library staff toward its usage. This is consonant with the findings of earlier studies (e.g. Williams, et al., 1998), which revealed a significant correlation between levels of use, skills, familiarity, and knowledge of ICT and teachers' attitudes. Similarly, Finlay & Finlay (1996) established a connection between current knowledge and personality types in measuring librarians' attitudes towards the Internet. These findings lend credence to the results of this study. Moreover, Janes (2002) reveals that reference librarians with digital reference experience tended to have more positive attitudes than those who had no experience. Training and experience with particular events, behaviour, or action affects the attitude of an individual toward them.

Adequate training and knowledge of ICT are crucial in encouraging library staff to show a positive attitude toward it. Johnson (1991) observes that the major reason for the failure of library automation projects in developing countries is that library staff and funding agencies plan without sufficient knowledge of hardware, software, and power supply requirements. This reaffirms that sufficient knowledge of ICT and its resources are important to the development of a positive attitude to ICT by all categories of library staff.

It is expected that library staff are qualified to offer high quality services to those users, who are visiting the physical library. Likewise, it is expected, that they have substantial knowledge and skills needed for developing and maintaining electronic services and for dissemination of relevant services matching the web-user’s needs and expectations. Serving remote library users on the www calls for additional...
competencies within ICT, marketing, branding library services and communication via different media as well as knowledge of methods of measuring and evaluation of use and user satisfaction with the services provided. Libraries involved in collaborative virtual reference services might also appreciate skills in project management and abilities in collaboration across institutions.

It is a challenge to the staff to match particular needs and demands from many different user groups and communities, but also to library management staff to ensure that sufficient professional competencies and skills are available in the organisation to match the needs of today’s user – wherever he might be located.

CONCLUSION

Training brings about knowledge in the use of ICT which ultimately lead to a positive attitude toward the tools. In this era, when new technologies are introduced almost daily, it is essential for library staff to keep up with ICT developments. The fear of some library personnel in the developing world toward ICT is widening the digital divide. It is therefore suggested that libraries that are yet to be automated in Nigeria, should have a rethink. Training is the first step, which will reduce fear when implementation of ICT begins.

REFERENCES


