

Influence of Information and Communication Technology on Sports Management of Tertiary Institutions of Ilorin Metropolis

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Abstract. This study examined the influence of information and communication technology on sports management of tertiary institutions of Ilorin Metropolis. The research design employed for the study was descriptive design of the survey type. The population of the study comprised all sports personnel and staff in sports units in tertiary institutions in Ilorin metropolis. 103 were selected for the study. The instrument used for the study was a validated researcher structured questionnaire which was tested for reliability using the test-retest method, a reliability co-efficient of 0.72 was obtained. The postulated hypotheses were tested with Chi-square (χ^2). Three hypotheses were tested at 0.05 significance level. All the hypotheses were rejected. The conclusion was that Computer system, Internet facilities and smart devices significantly influence sports management in tertiary institutions in Ilorin metropolis. It was recommended that ICT gadget such as smart devices should be made available for sports personnel in tertiary institutions in the State.

Keywords: Management, ICT, Internet facilities and smart devices.

1. Introduction

Sport is a global social giant that brings together people from different social, political and religious background for the attachment of a goal. It is a natural part of human life for

competitive or recreational purposes. Spaaij (2009) defined sport as an institutionalized physical activity which operates by rules fixed externally. Sport today is globally accepted as an instrument for promoting peace, unity and understanding among nations. Sports is education, is life, and above all character molder by all standard (Coakley, 2011). Information and Communication Technology (ICT), however, have become part of every individual in the world as regard to the flowing of information; it has been globally and universally accepted and applicable.

ICT according to Rosandich (2011) is a systematic process which has to do with various Information and Communication Technology devices such as floppy disk, CD Rom, DVD, Flash drives, scanner, hardware and other software. Development of computers has been acclaimed as the most technological development of the 21st century; they are input-process-output (IPO) system. Tondeur, Valcke & Braak (2008), defined computer as any machine or device which, under the control of a stored programme, can accept data, process the data, and give the result as information in a specified format.

Computer plays important role in making things easier for individuals and different sectors such as business, sport, education and health in the world and it has help the process for human

existence which has driven man to continuously seek ways to improve the processing of information and communication of such information to one another irrespective of distance and on a real-time basis (Apple Education, 2009). Mears (2009) noted that in a technology-driven society, getting information quickly is important for any administration; ICTs have made it possible to quickly find and distribute information. Many initiatives (eg. Fax, SMS, Social media etc) have been taken at the international level to support Africa's efforts to develop a communication infrastructure and these efforts are designed to enable African countries, including Nigeria, to find faster ways to achieve durable and sustainable development in tertiary institutions.

Nemcek (2013) observed that internet service is the access, and exchange of information, messages and files transmitted via communications networks. Nwachukwu (2012) agrees that importance of internet service cannot be overemphasized because people need information to plan and carry out their managerial tasks. Kulsum (2008) mentioned that ICTs make data updating very easy and available by sitting at any comfortable place and the desired information can be accessed by connecting to the internet and surfing through Web pages for smooth administration of sport.

Baca, Kolb and Eder (2009) stated that smart devices such as smart phones, digital camera and webcam could be very useful for tracking donors or potential donors for sport events. They could be very vital for general management of sport; issues like capturing moments, assessing and transferring database, keeping business records, employees' files, equipment inventories or facility maintenance records could be handled using different types of smart devices. Cumiskey (2011) further stated that the organizational marketing information system is a typical database program in which information such as season ticket sales; gate receipts or merchandise sales are tracked. Database could be regularly updated by gadgets to record changes, bearing in mind that the passage of time presents a more comprehensive future of most activities, the ability to record changes in sport and making sense and corrections out of it

is essential for long term survival of sport management in tertiary institutions.

While Management, is described by Roger (2010) as the planning, innovation, coordination and supervision as well as undertaking risks and handling uncertainties. Roger and Jackson further argued that management is the activity of working with people in organizations to accomplish results. Kehinde (2012) stated that effective management, therefore, involves ensuring efficiency and effectiveness in the use of the available human, physical and financial resources together with the ability to combat any constraints that might hamper the achievement of objectives. This, the primary function of management is to take decisions leading to the achievement of organizational objectives. Mears (2009) opined that a system is a set of interrelated components that function together to achieve a common goal. Management of information technology in sports encompasses the development, use management and study of computer based information system in the organization of sports in the Universities and the society at large.

According to Atajeromavwo (2010) internet is interconnection of millions of computer from one geographical location to another through the end of telecommunication system in other to accomplish sharing of information across the globe. It is important to note that computer networks need not be limited to a single site or facility. Wide Area Network (WAN) can together university sports administrators located throughout the Federation. For example, the zonal offices of a national sports governing body such as the Nigerian College of Education Games (NICEGA) can be linked together regardless of their geographic locations.

Computers are tied together through the medium of network. Today, apart from sports managers, most larger enterprises use computer networks to link their operations in a common computing environment. This network has a main server that houses most of the information and database files. Sports as a physically demanding profession should use computer to help push sporting organizations towards their goal of success (Atajeromavwo, 2010).

2. Statement of the Problem

Nowadays, Information and communication Technology (ICT) has become useful and applicable in different sectors as opined by Anderson and Glen (2003) that Information and Communication Technologies are generally related to those technologies that are used for accessing, gathering, manipulating and presenting or communicating information. The technologies could include hardware such as computers and other devices, software applications and connectivity such as access to the internet, local networking infrastructure and video conferencing.

Unavailability of computer systems as a means of keeping athletes; record in tertiary institutions has caused several misunderstanding during sporting competitions as a result of improper documentation. Objective of ICT devices is not to replace the role of the sport personnel but rather to support them in their decision-making and management of sport in tertiary institution especially in competitive situations. (Thomas, 2014). In spite of the benefits of the ICT devices-computer, internet and especially smart devices such as phones, digital camera, webcam on the transfer, and capturing of sport moments specific, changes are yet to be noticed in the sporting competition communication of among tertiary institutions in Ilorin metropolis which has created a research gap. The vacuum created by the situation of the state has led to the investigation of the influence of ICT on sport management in tertiary institutions in Ilorin metropolis.

3. Research Questions

The following research questions were answered by the study:

- (i) Do the sports managers in tertiary institutions in Ilorin metropolis have the knowledge of Information Communication Technology (ICT)?
- (ii) What types of ICT devices are available or being used by sports managers in tertiary institutions in Ilorin metropolis?

- (iii) What are the ICT training programmes available for sports managers in tertiary institutions in Ilorin metropolis?

4. Hypotheses

The following hypotheses were tested:

- (a) Knowledge of computer system will not significantly influence sport management in tertiary institutions in Ilorin metropolis.
- (b) Type of Internet facilities or ICT devices available will not significantly influence sport management in tertiary institutions in Ilorin metropolis.
- (c) ICT training programme will not significantly influence sport management in tertiary institutions in Ilorin metropolis.

5. Methodology

Descriptive research design was used for this study. Population comprised all sports personnel in sports units in tertiary institutions in Ilorin metropolis. A multi-stage sampling procedure was used to select the respondents. Stage one; Stratified sampling technique was applied to group institutions into University, Polytechnics and College of Education in Ilorin metropolis. Stage two; purposive sampling technique was used to select one institution from each stratum while simple random sampling technique was used to select the sports personnel in the selected institutions. One hundred and three (103) respondents were selected for this study (University of Ilorin, 33, Kwara State Polytechnic 39 and College of Education, Ilorin 31).

A researcher structured questionnaire was used for the conduct of the study. The questionnaire, tagged ICT and Sport Management (ICTSM) contained two sections (A and B). Section "A" designed in a 4-point likert-scale format of strongly agreed, agreed, disagreed and strongly disagreed will comprised the demographic data of the respondents while section "B" elicited questions based on the variables identified on

the influence of ICT on sport management in tertiary institutions in Ilorin metropolis. The instrument was validated by three (3) experts in the Department of Human Kinetics Education, Faculty of Education, University of Ilorin. To determine the reliability of the instrument, the test - retest method was adopted whereby 10 copies of the questionnaire were administered on a group of respondents two times at the interval

of two weeks on the group in an area that was not part of the study area which is Ilorin metropolis University (KWASU) Malet. Pearson's Product Moment Correlation was employed to test the reliability of the instrument. Reliability coefficient of 0.72 was obtained. The postulated hypotheses were tested with inferential statistical analysis of X^2 at the 0.05 level of significant.

6. Result

Hypothesis 1: Knowledge of computer system will not significantly influence sport management in tertiary institutions in Ilorin metropolis.

Table 1: X^2 analysis showing the influence of Knowledge of computer system on sport management in tertiary institutions in Ilorin metropolis.

S/N	ITEMS	SA	A	D	SD	ROW TOTAL	df	CAL. VALUE	TABLE VALUE	REMARK
1	Use of computer as data base for documentation is essential for the management of sport	48 (46.6%)	45 (43.7%)	5 (4.9%)	10 (9.7%)	103				
2	Computer system is essential for quick processing of information such as registration and accreditation of athletes	41 (39.8%)	53 (51.5%)	8 (7.8%)	1 (1.0%)	103				
3	Computer system ensures durability of sports records such as competition played, athletes, coaches and others	41 (39.8%)	54 (52.4%)	6 (5.8%)	2 (1.9%)	103	9	282.11	16.92	Ho Rejected
4	Computer system provides easy review and access past sports information.	50 (48.5%)	43 (41.7%)	8 (7.8%)	2 (1.9%)	103				
Column Total		180	195	27	15					

P < 0.05 alpha level

Table 1 above showed the calculated X^2 value of 282.11 and a table value is 16.92 at 9 degree of freedom at 0.05 alpha level. Since the calculated value of 282.114 was greater than the table value of 16.92, the null hypothesis was rejected. This implies that there was significant influence of Knowledge of computer system on sport management in tertiary institutions in Ilorin metropolis.

Hypothesis 2: Type of Internet facilities or ICT devices available will not significantly influence sport management in tertiary institutions in Ilorin metropolis.

Table 2: X^2 analysis showing the influence of Type of Internet facilities on sport management in tertiary institutions in Ilorin metropolis.

S/N	ITEMS	SA	A	D	SD	ROW TOTAL	Df	CAL. VALUE	TABLE VALUE	REMARK
5	Internet facilities ensure a swift access to information for effective management of sport	65 (63.1%)	36 (35.0%)	2 (1.9%)	0 (0.0%)	103				
6	Electronic Mail ensures fast communication on sport related issue	49 (47.6%)	48 (46.6%)	4 (3.9%)	2 (1.9%)	103				
7	Internet service helps to connect various sporting	46 (44.7%)	55 (53.4%)	2 (1.9%)	0 (0.0%)	103	9	210.12	16.92	Ho Rejected

	events simultaneously for easy access by athletes, officials and spectators					
8	Internet server serve as a bank for data base files and documents such as athletes and staff details	63 (61.2%)	33 (32.0%)	7 (6.8%)	0 (0.0%)	103
	Column Total	223	172	15	2	

P < 0.05 alpha level

Table 2 indicated that the calculated X² value is 210.12 and the table value was 16.92 at 9 degree of freedom at the 0.05 alpha level. Since the calculated value of 210.12 was greater than the table value of 16.92 at 9 degree of freedom, the null hypothesis was rejected. This means that Type of Internet facilities significantly influence the management of sport in tertiary institutions in Ilorin metropolis.

Hypothesis 3: ICT training programme will not significantly influence sport management in tertiary institutions in Ilorin metropolis.

Table 3: X² analysis showing the influence of ICT training programme on sport management in tertiary institutions in Ilorin metropolis.

S/N	ITEMS	SA	A	D	SD	ROW TOTAL	df	CAL. VALUE	TABLE VALUE	REMARK
9	ICT training programme exposes managers to skills useful for screening exercise and ticketing during sporting events for security purposes	67 (65.0%)	29 (28.2%)	4 (3.9%)	3 (2.9%)	103				
10	Gadget such as smart phones, CD Rom, flash drive ensures mobility of saved game reports	54 (52.4%)	39 (37.9%)	6 (5.8%)	4 (3.9%)	103				
11	Smart device help in the testing of equipment and facilities and in the procurement of these items.	66 (64.1%)	29 (28.2%)	8 (7.8%)	3 (2.9%)	103	9	157.21	16.92	Ho Rejected
12	Smart phone is essential for the regular update of sport information like current trends and updates in sport industry	33 (32.0%)	35 (34.0%)	20 (19.4%)	15 (14.6%)	103				
	Column Total	220	132	38	25					

P < 0.05 alpha level

Table 3 indicated that the calculated X² value is 157.21 and the table value was 16.92 at 9 degree of freedom at the 0.05 alpha level. Since the calculated value of 157.21 was greater than the table value of 16.92 at 9 degree of freedom, the null hypothesis was rejected. This means that ICT training programme has significant influence on management of sport in tertiary institutions in Ilorin metropolis.

7. Discussion of Findings

The results of the study are discussed below based on the hypotheses tested.

Hypothesis 1 revealed that knowledge of computer system has significant influence on sport management in tertiary institutions in Ilorin metropolis. The finding supports the assertion of Tondeur, Valcke & Braak (2008) that computers have been acclaimed as the most technological development of the 21st century; computer is an input-process-output (IPO) system. Computer play important role in making things easier for individuals and different sectors such as business, sport, education and health in the world and it has have been the basis for human existence from time immemorial and this has driven man to continuously seek ways to

improve the processing of information and communicating such information to one another irrespective of distance and on a real-time basis (Apple Education, 2009).

Hypothesis 2 revealed that Type of Internet facilities or ICT devices available have significant influence on sport management in tertiary institutions in Ilorin metropolis. This finding is supported by Nwachukwu (2012) who agreed that importance of internet service cannot be overemphasized because people need information to plan and carry out their managerial tasks. Kulsum (2008) also mentioned that ICTs make data updating very easy and available by sitting at any comfortable place the desired information can be accessed by connecting to the internet and surfing through Web pages for smooth administration of sport.

Hypothesis 3 revealed that ICT training programme has significant influence on sport management in tertiary institutions in Ilorin metropolis as stated by Baca, Kolb and Eder (2009) stated that smart device such as smart phones, digital camera and webcam could be very useful for tracking donors or potential donors for sport events, it could be very vital for general management of sports; issues like capturing moments, assessing and transferring database, keeping business records, employees' files, equipment inventories or facility maintenance records could be handled using different type of smart devices. Cummiskey (2011) further stated that the organizational marketing information system is atypical database program in which information such as season ticket sales; gate receipts or merchandise sales are tracked database could be regularly updated by gadgets to record changes, bearing in mind that the passage of time Presents a more comprehensive future of most activities.

8. Conclusion

The conclusion of the study states that:

Based on the findings of the study it was concluded that information and communication technology (ICT) has significant influence in the

management of sports in tertiary institutions in Ilorin Metropolis.

9. Recommendations

Conclusion made above, it was recommended that tertiary institutions in Ilorin metropolis should endeavor to upgrade the ICT facilities from time to time to assist in the management of sports. This is because of the dynamic ranging out of new ICT devices that shoe forth in the market to improve global communication.

Latest ICT devices should be provided for the sports managers to afford them carry out sports management effectively.

Sports mangers should, on daily basis, exposed to in-service training in ICT recognized outfits to update their knowledge of use of improved ICT facilities.

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