PARTNERSHIP BETWEEN PUBLIC AND PRIVATE ORGANIZATIONS THROUGH THE USE OF INFORMATION TECHNOLOGY SYSTEMS IN RIVERS STATE OF NIGERIA

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ABSTRACT

The study identified information technology (IT) systems available for partnership between public and private organizations in Port Harcourt, Rivers State of Nigeria. The population consisted of 300 senior officers (90 administrators and 210 supervisors) of 30 (5 large multinational companies and 25 medium-sized organizations including oil services and manufacturing companies, Banks, Universities and hospitals) in Port Harcourt, Rivers State. A sample of 90 senior officers (30 administrators and 60 supervisors) was drawn (using stratified random sampling technique) from the 30 organizations in Port Harcourt, Rivers State to participate in the study. A 25-item Likert format (forced choice) questionnaire validated and with test – retest reliability index of 0.83 was used to collect data for the study. The research question was answered with frequencies and percentages while the hypothesis was tested with t-test statistics. The results showed that all the 30 organizations studied have basic functional Information Technology Systems, but only the bigger companies have the most expensive mainframe and mini-computers. It was recommended that the smaller organizations in Port Harcourt, Rivers State of Nigeria should strive to acquire the bigger Information Technology Systems for economy, increased speed of information processing and a greater capacity to adapt to changes and partnership in the environment. The smaller organizations should also take advantage of the larger IT systems through some kind of shared-time arrangements with other bigger organizations.

Keywords: Information technology, public and private sector, partnership

INTRODUCTION

Administration is an integrating activity which permeates every facet of the operations of an organization. It is the cornerstone of organizational effectiveness, and contributes to economic and social needs of society. This applies as much to public sector and service organizations as to any other industry. The quality of administration is one of the most important factors in the success of any organization. Thus, administrators need a balance of technical, social and conceptual knowledge and skills, acquired through a blend of education and experience through partnership with management of other organizations. There is therefore, a continual need for administrative development and excellence. The organization must ensure the development of both present and future administrators there is often confusion over different interpretation of the two terms "management and administration".

Dictionary definitions tend to see the two words as synonymous. Management is sometimes referred to as administration of business concerns and administration as management of public affairs. There is clearly an overlap between the two terms and they tend to be used, therefore, in accordance with the convenience of individual writers. This confirms the feeling that although most people perceive a difference between the two terms, this difference is not easy to describe. There appears, therefore, to be growing acceptance of the term management as the general descriptive label, and administration as relating to more specific function of the implementation of system and procedures instigated by management. Administration can be seen as taking place in accordance with some form of rules or procedures, whereas management implies a greater degree of discretion (Babalola, 2006). For the purpose of this paper, management is viewed as applying to both private and public sector organizations and administration is interpreted as part of the management process, and concerned with

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the design and implementation of technology systems and procedures to help meet stated organizational objectives. Certain areas of the administrator's work demands high degrees of detail, planning and analysis and exacting timescales, (Nwafor, 2000 & 2012).

Eddy (1986) stressed that contrary to the opinion that the two concepts are synonymous or that they refer to different levels of operation, management is a concept applicable to the private sector operations and profit-oriented or business organizations while administration applies to public sector, non-profit and service oriented organizations such as the Universities and hospitals. Going by this then, administrators who do not make policies but who rather implement policies made by legislative or statutory bodies and who operate in public –sector and service environment are not managers since managers operate in private-sector and business oriented settings.

Information technology (IT) systems in the form of mainframe, mini/macro and personal computers and accessories used in standalone, shared logic or networked have become virtually a necessity in medium sized and large organizations (Knights & Murray, 1994). IT is brought into organizations by people, put to work by people and is discarded by people. This means that the ways technology is used are primarily a result of the decisions taken by members of the organization and the context within which those decisions were taken (Mcloughlin & Harris, 2002; Salhieh, 2004). It is therefore, essential that administrators have an understanding of the nature of technology, especially information technology and circumstances of use for partnership in the environment. Currently, Information Technology is found in its various forms in small and large businesses, the service sector, state institutions, manufacturing companies, education establishments, multinational organizations and some local corner stores. But, what is Information Technology?

The term Information Technology (IT) relates to both the physical aspects of machines, equipment, processes and work layout, and the actual methods, systems and procedures involved in the carrying out of work. IT is therefore a major influence on the general climate of the organization, behaviour of people at work and administrative excellence. IT demands new patterns of work organization. IT also affects the nature and content of individual jobs; the function and structure of work groups; changes in the nature of supervision, the hierarchical structure of jobs and responsibilities; the employment conditions of staff, job satisfaction and the administrative tasks (Mullins, 1999). Thus, IT which has the potential to transform organizational structures and processes in a progressive and liberating manner, has greatly increased the choices for communicators. For example, the personal computer, in both desktop and portable form, is a superb message centre for administrators receiving and relaying information quickly all around the world (Karrer, 2007).

The purpose of this study was therefore, to identify Information Technology (IT) systems available for partnership in the organizations in Port Harcourt, Rivers State. In view of this, a research question was posed and one null hypothesis postulated for this study.

RESEARCH QUESTION

What are the information technology systems available for partnership between public and private organizations in Port Harcourt, Rivers State?

RESEARCH HYPOTHESIS

There is no significant difference between the mean scores of administrators and supervisors on the contributions of information technology to the partnership between public and private organizations in Port Harcourt, Rivers State.

METHOD

The survey research design was used for this study to identify the Information Technology systems available for partnership in the organizations in Port Harcourt, Rivers State. The population consisted of 300 senior officers (90 administrators and 210 supervisors) of 30 (5 large multinational and 25 medium-sized organizations (oil services and manufacturing companies, banks, universities and hospitals) in Port Harcourt, Rivers State.

A sample of 90 senior officers (30 administrators and 60 supervisors) was randomly drawn from the 30 organizations in Port Harcourt to participate in this study. One instrument in likert forced choice (Available = 2 points; non-available = 1 point) format called "Information Technology and Partnership Questionnaire (ITAPQ) developed by the researcher and validated by Administrators at the University of Port Harcourt Information and Communication Technology Centre (ICTC) and with a test-retest reliability index of 0.75 was used to collect data. Out of 90 copies of questionnaire administered, 65 copies (72.2%) were completed and returned. Finally, 60 of them were found usable for data analysis. The research question was answered with frequencies and percentages while the hypothesis was tested with t-test statistics at 0.05 level of significance.

RESULTS

The results of the research question and test of hypothesis together with their discussion are shown below.

Research Question 1

What are the Information Technology (IT) systems available for partnership between public and private organizations in Port Harcourt, Rivers State?

Table 1. Percentage responses on availability of information technology systems in public and private organizations in Port Harcourt, Rivers State. (N = 60)

S/No.	Items	Available (2)		Not available (1)	
A.	**Information technology system**	**N**	**%**	**N**	**%**
1.	Mainframe computer	5	8.3	55	91.7
2.	Mini-computer	15	25.0	45	75.0
3.	Micro-computer	60	100.0	0	0.0
4.	Word processing computer	60	100.0	0	0.0
5.	Personal computer	60	100.0	0	0.0
6.	Laptop	25	41.7	35	58.3
7.	Tele/video conferencing	10	16.7	50	83.3
8.	Internet	51	85.0	9	15.0
9.	Internet (inter-company)	45	75.0	15	25.0
10.	Electronic mail (E-mail)	50	83.3	10	16.7
11.	Basic website	32	53.3	28	46.7
12.	Facsimile (Fax)	40	66.7	20	33.3
13.	Intelligent knowledge-based IT	05	8.3	55	91.7
14.	Extranet (for customers)	10	16.7	50	83.3
B.	**Service provision system**				
15.	Automated teller machines (ATMS)	8	13.3	52	86.7
16.	Electronic funds transfer (ETF)	8	13.3	52	86.7
17.	Electronic data interchange (EDI)	10	16.7	50	83.3
18.	Teletext	40	66.7	20	33.3
19.	Electroc point-of-sale (EPOS)	5	8.3	55	91.7
20.	Patient monitoring systems	3	5.0	57	95.0

Table 1 shows that over one-half of the respondents, (54.8%) indicated that their organizations do not have most of the Information Technology (IT) systems such as mainframe computer, 55(91.7); mini-computer, 45(75.0%); laptop, 35(58.3%); intelligent knowledge-based IT system (Radio Scanner), 50 (83.3%) and Extranet system (for customers), 55(91.7%). Also, most of the service provision systems were not available in the service organizations that participated in this study as electronic point-of-sale (EPOS), 55 (91.7%) and patient monitoring system, 57(95.0%).

On the other hand, all the senior officers that participated in the 60(100%) revealed that their respective organizations have functional micro-computers, word processing units and personal computers in their offices. In addition, more than one-half of the senior officers agreed that their organizations have the following Information Technology systems as Internet, 61(85.0%); electronic mail (E-mail); 50(83.3%), and facsimile (fax) machines, 40(66.7%).

Hypothesis

There is no significant difference between the mean ratings of administrators and supervisors on the contributions of Information Technology (IT) to the partnership between public and private organizations in Port Harcourt, Rivers State.

Table 2. Mean scores, standard deviation and t-test analysis of the difference between the perceptions of administrators and supervisors on the availability of information and technology systems in organizations in Port Harcourt, Rivers State.

Status	N	$\bar{x}$	SD	T-value calculated	T-value critical	Decision
Administrators	15	97.80	9.20			
				1.58	1.96	Accept H_o
Supervisors	45	98.69	10.41			

Note: N = 60: DF = 58; level of significance = 0.05

As shown in table 2, the calculated t-value of 1.58 is less than the critical T-value of 1.96. The null Hypothesis is therefore accepted. That is, there is no significant difference between the perceptions of administrators and supervisors on the Information Technology systems available for partnership between public and private organization in Port Harcourt, Rivers State.

DISCUSSIONS

The main purpose of this study was to identify Information Technology (IT) systems available for partnership between the organizations in Port Harcourt, Rivers State of Nigeria. The results of the research question for this study showed that all the 30 organizations investigated have the basic IT systems such as personal and mini-computer systems and word processing units. Majority of the organizations do not have advanced IT systems as mainframe and mini-computers, extranet and intelligent knowledge-based IT systems. On the other hand, the senior officers who participated in this study have the under listed IT systems as Internet, E-mail and fax machines. Gilbert (2002) stressed that successful administrators stay on the leading edge of Information Technology. They understand that an effective and stress-free business life depends on keeping up with opportunities offered by available technologies so that they are able to increase their proactivity and administrative excellence through partnership with other organizations.

The only hypothesis tested was accepted. That is, there is no significant difference between the perceptions of the senior administrators and supervisors on the IT systems available for partnership in the organizations in Rivers State. The high mean scores for both the administrators and supervisors show that they strongly agreed that IT systems contribute immensely to partnership between public and private organizations in Port Harcourt, Rivers State of Nigeria.

Information Technologies have transformed the ways in which organizations can do business. For example, e-mail can be used for quick communication of messages and transference of electronic files; intranet for access to organizational databases and shared corporate information; Internet for on-line transactions and access to the world-wide web; video conferencing for reduced travel budgets and improved global "team" communication (Nwafor, 2000; Gilbert, 2002).

Implications of the Findings to Administrators for Partnership

Electronic computers, Information Technologies and the like have become virtually a necessity in medium-sized and large organizations. Many smaller organizations are taking advantage of computers through some kind of shared-time arrangements. But, in spite of the wide acceptance and application of Information Technologies, some organizations are still involved in the difficulties of installing electronic computers in their offices.

Shared-time computer systems evolve from technologies and economic considerations. The tremendous speed at which the electronic computer performs informational, computational and other functions means that a large volume of operations is necessary if there is to be no unused capacity. Large computer systems are generally more economical if they are fully utilized and they have much more problem-solving and processing capacity than smaller systems. The difficulty is that many large organizations in Rivers State are able to use only a small proportion of the potential of a large system. A solution is to share a large computer system like the mainframe and mini-computers with other organizations such as the Universities and hospitals. One approach is a joint-venture in which several organizations participate. Another is to acquire larger computers and lease a portion of its capacity to other organizations. Still another is to lease computer time from a company set up for that purpose in the manner of telephone, electric power and other public utilities. Shared-time computer and Information Technology systems have shown that they can be successful and contribute to partnership between public and private organizations, and there are good reasons for believing they will become more popular in this 21st century and beyond.

CONCLUSIONS

As technology continues to leap forward, administrators have learned to make the most use of the IT systems and other electronic tools which increase their efficiency, effectiveness and performance objectives as shown in this paper. The reason could be traced to the fact that all the administrators who participated in this study have personal and micro-computers and word processing units in their organizations. Thus, all the organizations investigated in Port Harcourt, Rivers State have basic functional Information Technology (IT) systems for partnership with other organizations in the environment, but only the larger organizations have the most expensive mainframe and mini-computer Information Technology systems.

RECOMMENDATIONS

Based on the findings and conclusions of this study it is recommended that:

1. Organizations in Port Harcourt, Rivers State should procure large Information Technology systems (mainframe/mini-computers) for economy, increased speed of information processing and a greater capacity to adapt to changes and partnership in the environment.

2. The smaller organizations should take advantage of large IT computer systems through some kind of shared-time arrangements with other larger organizations.

3. Administrators and supervisors should take advantage of the existing (IT) computer systems by regularly attending seminars, conferences and workshops organized by IT consultants on adaptation to changes and partnership in the environment.

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