RELEVANCE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) TO EFFECTIVE MANAGEMENT

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Abstract

Information Communication Technology (ICT) in modern business transaction and daily interaction has become the bedrock of achieving organizational or managerial objectives. Communication, whatever purpose it is intended for is geared towards accomplishing an end. This ends cannot be effectively achieved without proper and efficient utilization of ICT devices. Managerial problems have evolved and the deficiency in communication process between managers and subordinates which results in reduction of output. Upon this background, the paper explored the relevance of ICT to management problems and its effects on productivity. Attention is adequately given to the definition of ICT and the relationship that exist between ICT and management. Finally, efforts were made to highlight the essentials of information and communication Technology (ICT) to effective management plans and its implementation. Part of the recommendation and conclusion is that stakeholders are enjoined to fund and develop this all-important innovation which will give management system a global recognition and pride of place.

Introduction

Globalization era has ushered in changes cutting across all human spheres and boundaries. We now live in an "Information Society" as a high dependence on information and communication technology for facilitating effective use of information interchange is regarded as the defying element of the 20th – 21st centuries. This is as important as the industrial revolution.

The world has gradually become a global village and this has made it really very competitive. All nations of the world are daily struggling for relevance and only those who are able to keep pace with others, are likely to be relevant in the scheme of things.

Attention was paid initially to the Western World where every other nation relied upon to get its food, technology, quality managers as well as good life but today, just as the Americans were challenged by the Russian Sputnik in space; other countries today have seen and are gradually coming to terms with the Asian Tigers. Japan has become an electronic wizard and the unprecedented revolution in the electronic and textile industry by the Chinese has also made them strong in technology.This paper is an attempt to bring to the fore the relevance of ICT to management.

What is ICT?

This is a broad term that has to do with the harnessing of process, the methods and the product of electronic and communication-related technologies. And other related resources in today's effective management driven society for enhancing the production, the spread and efficiency of a set of programmed activities geared towards the achievement of clearly determined goals. (Obanya, 2002; Onuma, 2007) as cited by Ekwevugbe,Adeyanju & Ezele, N.E (2008)

Computers enable us to process information and perform a variety of tasks much more quickly than we could do manually. ICT allows us to distribute and share information quickly and over a long distance. Its developments was designed to make lives easier, but human expectation of what they can

achieve are often leading to unrealistic demands being placed in people and the technology around them.

Qualitative management cannot be achieved without sound knowledge of ICT which has been identified as a factor that can promote quality in management profession (Gbodamosi 2006).

What is Management?

Management is the achievement of objectives through people. It is the effective utilization of scare human and physical resources to achieve goals in a conducive environment (Adiotomre, 2005). More specifically, the key functions of management are to manage policy, people and resources. Effective management results in empowerment with the acquisition of the essential knowledge and skills which enable one to engage in activities required for effective functioning of the individual in his group and community and use these skills towards his own and his community development. Management has the responsibility of making the above come to reality through effective supervision of staff. The manager's effectiveness must be seen in action by setting achievement goals for his establishment.

For the manager to achieve his objectives, he must plan and develop his strategies with current technologies in mind hence, management is the process of building a programme of experience calculated to result in the attainment of set goals. This concept of information communication technology and management can be said to yield maximum result if the many ICT products and processes are brought to bear in management, especially during planning and implementation.

Need for ICT in Effective Management

Managers cannot plan, organize, lead, and control effectively unless they have access to information. Information is the source of the knowledge and intelligence that they need to make the right decisions. Information, however, is not the same as data. Data is raw unsummarized and unanalyzed facts such as volume of sales, level of costs, or number of customers. Information is data that is organized in a meaningful fashion, such as in a graph showing the change in sales volume or costs over time. By itself, data does not tell managers anything, information in contrast, can communicate a great deal of useful knowledge to the person who receives it such as a manager who sees sales falling or costs rising. The distinction between data and information is important because one of the uses of information technology is to help managers transform data into information in order to make better managerial decisions.

Information technology is the means by which information is acquired, organized, stored, manipulated, and transmitted. Rapid advances in the power of information technology specifically, through the use of computers are having a fundamental impact on information systems and on managers and their organisations. So important are these advances in information technology that many experts argue that organisations that do not adopt new information technology will become uncompetitive with those that do. Managers need information for three reasons namely
1. To make effective decisions
2. To control the activities of the organisation
3. To coordinate the activities of the organization

Management is about making decisions. The marketing manager for example, must decide what price to charge for a product. Manufacturing manager must decide how much of a product to make. The purchasing manager must decide from whom to purchase. The human resources manager must decide how much employees should be paid, trained and what benefits they should be given

regardless of their functional orientation. All managers have to make decisions about matters such as what performance evaluation to give to a subordinate.

Decision-making cannot be effective in an information vacuum. To make effective decision, managers need information, both from inside the organization and from external stakeholders. As this example suggests, manager's ability to make effective decisions rests on their ability to acquire and process information.

Controlling is the process whereby managers regulate how efficiently and effectively an organization and its members are performing the activities necessary to achieve organizational goals. To achieve control over any organizational activity, managers must have information, which can only be achieved through the implementation of a computer based information system

Nowadays, the coordination problems that managers face are complicated by organizations expansion of operations abroad to take advantage of national differences in the cost of production. To deal with global coordination problems, managers have been adopting sophisticated computer-based information systems that help them coordinate the flow of materials; semi finished goods, and finished products around the globe.

Information communication technology is an enabling technology. It has allowed managers to develop computer-based management information system that prove timely, complete, relevant and high quality information.

Relevance of ICT to Management

The use of ICT can bring about the following when brought into management

➢ **Quick Assess to Information**

The emergence of ICT in management has brought managers closer to all especially those involved in planning, organizing coordinating, controlling and other activities in the establishment.

Before now, information was difficult to get and as a result, one may need to travel far and wide to source and get relevant information. Today, the story has changed as ICT has brought about our acquaintance with the computer and the use of the internet facilities. This information that is needed to plan and enhance our management system can now be tapped online with the internet in place.

The management system of other countries can now be easily accessed and the way and manner their managers, and all those concerned with the day to day running of establishment can become obvious and this increases our level of awareness and hence, a better plan is gotten when management system is being designed in our own country.

The level of information, the quality of information as well as the ease of accessing materials relevant to management is amazing when ICT is employed in sourcing information.

➢ **Easy Processing of Collated Materials**

Another relevance of ICT to management is the ease of processing of collated materials. This has to do with how the global information gotten from the advanced economies are managed.

Sub-Saharan African countries used to have very poor information handling and processing culture but the emergence of computers, flash drives, diskettes, etcetera have helped to reduce the cumbersome nature of information processing. Today's world of ICT has brought about ease of typing, storage and retrieval of information through the use of the computer. Information gathered are now fed into the computer and at certain commands, results are

churned out from the computer due to its advanced and complex nature of mathematical and algebraic built-in memories.

The computers and other ICT materials and products can help separate, relate as well as process materials fed into it to make the effort of the managers minimal and with great results. The era of use of the four figure table in Mathematics is gradually becoming over. Thanks to the calculators that have emerged, quantitative technique in management science are now solved and handled with greater ease and speed.

> **Emergence Of A Globalized Management**
> The bringing together of experts from across the globe through ICT has made managers more globally friendly and acceptable. Nigeria managers have benefited a great deal from this new window of opportunity by producing globally accepted products

> **Quality Managers Inputs And Outputs**
> The use of ICT has helped to develop managers that have improved the establishment system as well as transformed the inputs of the establishment system into quality outputs/skilled personnel.
> An ICT assisted or driven establishment will ensure that the workforces of the establishment are competent and ranked among the best in the world.
> Today, Nigerians are able to research, plan, market and buy from other parts of the world as a result of the emergence and application of this "global helper".
> The top and lower managers in our establishment are now able to interact freely and at minimal cost with counterparts in other parts of the world.

Conclusion/Recommendations

ICT is an essential ingredient or tool for the realization of management plans. Management decisions and execution will be fruitless if not properly communicated to parties who may be involved or use such information for desired results. ICT is the "Life blood" of any system; it is the cementing force of ideas between management and other stakeholders within and outside an organization.

Arising from the above, the paper recommends that:-

1. Stakeholders should invest in ICT so as to reap the benefits accruable.
2. Constant power supply is needed in order to reduce other costs that might be incurred from any alternative sources.
3. Management should embark on consistent training and retraining of staff in ICT for the effective and efficient performance of their official responsibilities.
4. Irrespective of geographical location, establishment should be equipped with alternative source of power to enable them use this resource which can translate into effective management system.
5. Adequate provision should be made for the procurement of modern ICT equipment to keep pace with time.
6. For the creation of interest in ICT involvement and development, management should motivate existing expert for the full utilization of their effort and experience.
7. Finally, stakeholders are enjoined to fund and develop this all-important innovation which will give management system a global recognition and pride of place.

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