

THE IMPACT OF COMPUTERS ON OUR SOCIETY

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Introduction

At this closing ceremony of the 1st computer training and issuance of certificate by Ascetic Computer Centre, let us lift our eyes toward the challenges that await us in the years to come. It is our great good fortune, as organisers, that time and chance have put us not only at the edge of a chapter in the lives of these graduands, but on the edge of a bright new prospect in their affairs —a moment that will define their course, and their character, for many years to come. Guided by the ancient vision of a promised future, let us set our sights upon a set of graduands of new promise. However, our march to this new future seemed less certain than it did yesterday. We must vow to set a clear course to renew our generation.

We should thank the organisers for their vision towards the creation of new Nigerians who will appreciate problems, exhilarated by challenges, and strengthened by achievements, Nigerians with better employment opportunities, who will be job creators. Computer is gaining vast popularity globally in recent years. Its use, which extended information-processing capabilities, are influencing organizations of all types and sizes bringing about changes in institutional goals, relations and operations. A large percentage of the activities in any institution or organisation comprise the processing of communicating information in the production and distribution processes. In the developing countries, computers are becoming part of everyday activities because of the kind of information they generate and their speed of delivery (Award 1988).

What is a Computer

A computer is an electronic device, which accepts and processes data by following a set of instructions (PROGRAM) to produce an accurate and efficient result (INFORMATION).

Since the ultimate aim of computer is to produce information, the art of computing is often referred to as information processing. The values of the computer lie solely on its high speed (due to its electronic nature), ability to store large amount of data, the unfailing accuracy and precision. These account for its supremacy over manual computation.

The computer industry began in the late forties with a very small initial investment, and has been increasing both in strength and importance. When one looks back with analytical mind, we can conclude that computer technology keeps on advancing with remarkable increase in speed, accuracy and reliability. Computing in whatever field, science, business, and industry is reaching directly or indirectly into various aspects of our society thereby, without loss of generality has shrunk the world into such a compactness that no part can afford to lack behind or live in isolation.

The advent of electronic computer was hailed by the world as a great revolution, like any industrial revolution, it promised to free man from simple routine jobs of repetitive nature by providing computing power. The first to have exploited this facility was the search for scientific enquiries. This was not unconnected with the fact that the designers of these systems were scientists themselves. Several problems have been eluding satisfactory solutions, though numerical methods of solutions exist but involved a very huge accomplishment. Not only did computer make reliable solutions possible it equally opened new application methods or areas.

To quote but a few are the optimization techniques of Operations Research (OR), the awe-stricken field of space research, the molecular restructuring in Biochemistry etc. It would have been tedious inexhaustible, incomplete and inaccurate to list all the

possible applications of computer. There is no limit to the uses and applications of computer; hence there is hardly a branch of science that can resist computer invasion.

After science was business. Because of the natural conservatism, oppressive and exploitative nature of this class coupled with their cautious approach to things, did not deem the computing machine fit until its worth and capabilities had been proved. What came to be recognized and embraced by this class was the importance of computer for decision making and data processing, for these reasons, elaborate mathematical tools like Operations Research (OR), Critical Path Method (CPM), and Program Evaluation and Review Techniques (PERT) which were developed in the early fifties attained respectable height in the eyes of this class.

Common examples of data processing are payroll, accounting, inventory management, banking, airline seat reservation etc. These required a lot of input and output and relatively little computing. Hence the costs of computing in such areas tend to be closely bound by inputting the data and outputting the results.

Some applications like airlines seat reservation, banking business and inventory control, call for real-time systems, which are dedicated to a particular application. They furnish "immediate" responses to input signals. For examples, it is easier today for one to know his statement of account in a bank the moment signals for such requests are sent to the computer. Similarly debited or credited accounts are updated almost immediately for further transactions.

The Need for Computer

Most of our national projects could better be accomplished with the use of computers. Consider the registration of voters for election, common entrance examination into Nigeria Secondary Schools and conducting head counts (census) to mention only a few. These involve a huge volume of data, and would naturally be unwise if accomplished manually as it would be tiring, inaccurate and full of errors.

Going through the history/evolution of computers, the search for a realistic head count by the United States census bureau in 1890 led to the development of an electro-mechanical machine that helped greatly during the census by cutting down the man-hour required for the processing of the census data.

The accuracy of computer cannot be over-emphasized and it conforms to the objective of using the computer. A cashier in a departmental store would definitely find life boring if all calculations, issuance of receipts and giving of change would be done manually for each customer after each transaction. But with the aid of an adding machine the job is done accurately and he feels relieved. Going from the adding machine to the computer itself, the ability of the computer to perform repetitive tasks makes things easier. Once the computer is programmed using the adequate software the whole job is done with ease. The need for computer in our banking system cannot be underrated because of the huge amount of transactions and the accuracy desired. Similarly in the data processing environment where the bulk of the job is either sorting, merging files, updating information, searching for a particular key in a pile of data etc., all these the computer does with ease and accurately too.

In a developing economy like ours, the speed of the computer is again one of the distinguishing factors that make it inevitable. From the saying that "Time is Money", speed is equally synonymous to time, and since computers work as a phenomenal speed coupled with its ability to access records or information directly from remote locations, efforts should be directed towards introducing computer into every facets of human endeavour.

Computer and Unemployment

The extent to which the computer has come to permeate all levels of our society is immeasurable. In fact, it does not matter, what you plan to do for a living, you will encounter the computer.

Its impact is analogous to that of the automobile and television. Things could be quite different with computers, but it has become part

of our society. The automobile is largely responsible for the air pollution and congestion of our cities today. The television has been accused of literally “rotting our minds”. Technology is usually a bit of mixed blessing and the computer is no exception.

There is a popular slogan and fear that computer causes unemployment. From a professional point of view, it is untrue. The problem therefore is the ability to distinguish between unemployment and job displacement. Hence with a thorough distinction between the two, computer should be seen as a saviour from slavery.

Before considering the question of displacement and unemployment, it might be necessary once again to define computer. Computer as earlier defined, is an electronic device or machine, which accepts data, following some sets of logical instructions to produce the needed results.

Therefore we have to ask ourselves, can this so-called computer operate without the full assistance of human being? Can we just go to the computer for a complaint and have our problems solved without having to call on some pre-written programs meant for specific assignments, and written by programmers of course?

The answer to these questions is NO. It is true that behind every successful man there is a woman, also behind the successful operations of computers there is a brain (the man). Computer on its own is just an empty box or a junk, and can in no way do any intelligent job, but with programs written the jobs are done. Therefore if a computer is given a job with the logical step to follow, it can do it better, faster and more accurately than human beings and these are some of the advantages.

Consider the developed countries like Japan, USA, UK etc., where their industries are filled with Robots. The word Robot means labour. Robots are no human beings but rather are machines that can be programmed to carry out complex and tedious task without getting bored or tired. Robots are blind, deaf and have no sense of touch. Therefore jobs that are hazardous, tedious, that could be left undone are done by these Robots. Considering an assembly plant where the

only thing a man does in such a plant is just to take the assembled goods out of the plant to give chance for the Robots to start assembling another. What a miracle it is to know that if a Robot breaks down in the course of its duty, almost immediately a fellow Robot (Doctor Robot) will attend to it to put it back to work. Think of the most dangerous tasks, which for the love of our dear lives we cannot do, these Robots do them.

Ample examples are, blast furnace, disaster area (caused by poisonous gas) marshy areas etc., of course Robots do these jobs not thinking of any relations or parents and in fact, at a faster speed enhancing productivity.

How does computer displace people and who are those displaced?

As earlier mentioned, computer can only do a routine job and cannot think in any form. Now come to think of some well-structured organizations, UAC, SCOA and Leventis etc., there are skilled personnel and unskilled workers/clerks. The daily job of these unskilled workers are mere routine jobs like accounting procedures, loading and assembling goods which can be taken over by computers that will do it better, faster and in fact, more reliable thereby enhancing greater productivity.

These labourers so displaced by computer can be taken to such areas as sales since more articles are produced. These workers should go out soliciting for markets.

While the managers, engineers and technician can not be displaced because they are skilled in their job, they do real thinking. Therefore to supplement these greater efficiency and productivity of the computer, these skilled workers should be kept in an air-conditioned office, and in fact, think of things yet to happen.

No wonder the United States of American sees nothing left on earth again and hence proceeded to exploit the outer space. With these productive forces in operation, the prices of goods and the workers conditions of service would be improved.

Recently, these big time companies embarked on agriculture. These unskilled workers could be better utilized there, and more of them is needed for such jobs.

In Africa, there are popular terms like laziness, redundancy, unproductively, etc. These are happening because there are no challenges to face. What we do mostly are routine jobs which could be boring thereby creating unhappiness and in such a situation we become less productive. The routine jobs should be given to computers while a conducive atmosphere be created for the skilled workers to think of ways of making the continent self reliant.

Computer and Job Creation

Let us consider a particular case study of an information system, the effect of computer and how it helps creating jobs. An information system means the collection and processing of data to yield useful information for decision making.

To collect data, enumerators are needed to actually go to the field for data collection, typist are needed too and other people employed in the course of recording the data and finally statisticians computer operators use the computer for processing the data to give useful results (information).

Again think of the case of our consultancy services. Any company going into such ventures like agricultural business needs a consultant having in his service Agricultural scientists, soil scientists and host of other professionals in allied discipline to perform the feasibility studies. They give useful information to customers are regards the type of crops to plant, the planting seasons, the fertilizers to apply and when, the type of pests attracted by such plants etc., all these lead to greater productivity and this is one of the things the attention of our professionals should be directed to.

Come to think of the perennial problems of Cancer, AIDS and some other deadly diseases, which we have no solutions to. Our scientist and medical personnel should use most of their time addressing their minds through intensive research towards providing

a remedy to such ills of the society while the computer is left to do their routine jobs for them.

History has it that the early jobs where computers were employed were in accounting, payroll, ledger etc., all of which had fixed procedures or routine hence it was easier to computerize these systems to enhance productivity and save workers from boredom. However, it must be recognized that computer requires lesser number of personnel, it can produce more and it is not likely to go on maternity leave, nor go on strikes, nor demand overtime or old age pension etc.

Also the use of computer creates more jobs such as consultancy, developing and selling of software and hardware while the displaced workers could be trained as salesmen to market the goods or taken to such areas like agriculture where they can serve humanity.

Therefore computer will lead to re-arrangement in the organizational set up and this will lead to greater productivity.

Conclusions

Computer offer innumerable benefits in enriching the quality and quantity of goods and services in any organisation. Despite the prevalent nature of computer in virtually every aspect of human endeavours, it has not been widely integrated into the production and distribution processes in Nigeria. Its integration will not only revolutionize the economy, it will engender the development of individual' innate scientific inquiry mind and their critical thinking abilities.

COMPUTER PROVIDES LONGER LIFE, REDUCES WORKING HOURS AND GREATER REMUNERATION IN RETURN.

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