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An Overview of The Prospects and Challenges of Office Systems Automation

Md. Saiful Islam*[1] and M. M. Reshedul Alam**

*Dept. of Computer Science & Information Technology, Islamic Institute of Technology, Dhaka Board Bazar-1704, Gazipur, Bangladesh

** Dept. of Electrical & Electronic Engineering, Bangladesh Institute of Technology (BIT), Chittagong Chittagong-4349, Bangladesh

ABSTRACT

In any work environment people, tasks, equipment and resources are organized to accomplish specific objectives, generally some type of product. In the office, the product is information. It is the raw material for decision making and foundation for producing products and providing services. Computer based technologies, popularly referred to as office systems automation provides new ways to manage and handle information. The purpose of this paper is to show the prospects and challenges ahead of implementing the office automation and how well the automation of information technology can be adapted to help people -- the managers, secretaries, professionals, clerks, technicians and all other office workers to perform their jobs more efficiently and effectively.

1. INTRODUCTION

Actually office automation is a process that started with the Industrial Revolution. The typewriter was introduced in the office in the 1840's and was followed by stenotypes machines, duplicators, tabulating machines and many other types. Office automation is a gradual, evolutionary process of change. In many ways, the evolution of office automation parallels to data processing. Both evolved primarily in responses to the advancements in computer technology, experienced in using the technology, and changing business and market conditions. The changes are implemented in response to specific business needs and not merely for sake of introduction of most modern equipment. However, the term office system automation or office automation is the application of computer technology to processing and using information in the office. Automation provides more efficient and effective use of information, as well as faster processing of information, and it puts tools in the hands of workers in the office. Thus office automation tools are for managers, professionals and technical workers as much as they are for clerical workers.

At present the office automation concept of administrative support emerged along with the data processing concept of Management Information System (MIS). The objective is to use computers to support administrative and management activities.

2. PROSPECTS OF OFFICE AUTOMATION

In the traditional office, secretaries and clerical worker support people who manage or supervise the operation of the enterprise, the boss/secretary team has been the basic organizational structure for offices in both public and the private sectors. Large enterprises are composed of multiple business units, each of which organized with one or more managers. Senior management personnel work together to co-ordinate these business units to accomplish the organization's basic goals. In every office, the requirements for shared information often result in considerable duplication of effort and for that additional cost are incurred. Today, the costs of computer technology have been falling at dramatic rates. Consequently, to capture the huge potential of this new technology, organizations have turned to office automation to increase their production.

Office automation is a process that requires understanding technology, business and people at work. It usually combines a large number of technologies including data processing, word processing, graphics and image processing, and communications. Office automation project

[1]Corresponding author E-mail: mdsaiful@iit-dhaka.edu

will mainly focus the need to accomplish a business objections. It is much more than selecting the right technology; the technology will help the organizations to achieve business goals. Automation of office offers the following benefits:

- Brings tools and techniques into office and assists people as they process information.
- Alters the Quality of Work Life(QWL) which focuses on opportunities to workers job satisfaction by providing meaningful job as a supportive environments.
- Increase productivity because it enables work to be done quickly and/or easily.
- Makes information readily available to all who need it.
- Enable an enterprise to restructure entire operation in new ways.
- Can be used to gain strategic advantage.
- Creates new task, required to support the system or related to new products or services. Existing job may be redesigned to incorporate these tasks or new jobs may created.

3. CHALLENGES OF OFFICE AUTOMATION

As we have seen that office automation offers new opportunities for improving the organizations and their employees—at all levels such as performance of work improve products and services etc. It also poses threat to the status quo and quality of work life. To take full advantage of the opportunities and avoids pitfalls, decision-makers should carefully integrate technology with business operations and goals. Capitalising the new opportunities requires foresight, careful planning and good magnet.

For most organiizations office automation is a gradual process of change. The changes are accommodated in response to specific business necessities. However, not all impacts of technology have been beneficial. Poorly planned applications of office automation may produce some of the following undesirable results:

- Factory or assembly line approach of office work.
- Displacement of people.
- Reduced autonomy of employees.
- Excessive monitoring of works.
- Social isolation or lack of social support in work areas.
- Poorly designed work areas, resulting in discomfort or health hazards.
- Stressful work environments.
- Low job satisfaction results absenteeism and turnover.

The above mentioned undesirable consequences of office automation results when decision makers ignore the potential impact of newly designed systems on individual workers and organization. Negative consequences also may result for inexperience with the technology, inadequate planning, lack of foresight, excessive focus on short term benefits, or management practices insensitive to employees welfare. In the long term, ignoring these issues not only lowers the quality of work life, but productivity as well.

4. SOME REPRESENTATIVE OFFICE SYSTEM TOOLS

Office automation is more than a computer system or a specific software program, however, office automation offers new ways of organizing people, task and technology to meet business objectives. It also involves implementing various tools that solve specific problems. Some representative tools generally include under office automation are listed in the following table:

Tool name	Hardware/ Software involved
Text handling tools	Electronic typewriters, dictation transcription systems, word processing, desktop publishing, electronic file and retrieval, optical character recognition (OCR), prints, photocopiers.
Data handling computing tools	Calculators, electronic spreadsheets, statistical packages, databases, decision support systems.
Communication tools	Telephones, Local Area Networks, electronic mail and messaging, voice mail messaging, videotext, teleconferencing
Image processing tools	Micrographics, computer output microfilm (COM)., computer aided retrieval (CAR), optical disk.
Time management tools	Electronic calendars, project management software, electronic notebooks and tracking systems.
Graphics tools	Computer graphics packages, computer-aided design, plotter, digitizers, scanners.
Artificial intelligence tools	Natural languages interface, expert systems, voice recogniser/syntheses.

5. OFFICE SYSTEMS OF A TYPICAL ENTERPRISE

The term office systems is used to describe all the support activities of an organization. It may also be considered subsystems of larger business system. Fig. 1 shows the business system to be comprised of distinct functional subsystem such as accounting, finance, production etc. The mission of each function is to support business objectives.

The functions overlap, but office system is common to all of them. Office system n general term that describe the subsystem responsible for office automation.

Fig.2 shows, office systems are composed of subsystems. Office system support services such as word processing. Data processing, reprographics or facilities or facilities management all work together for the completion the common goal of office automation. The co- ordination of all subsystem is what makes office automation truly office system.

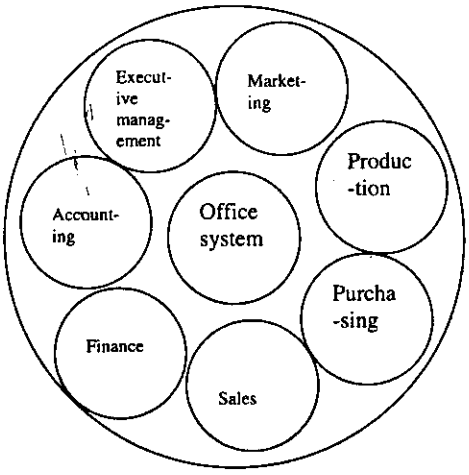

Fig. 1: The business system

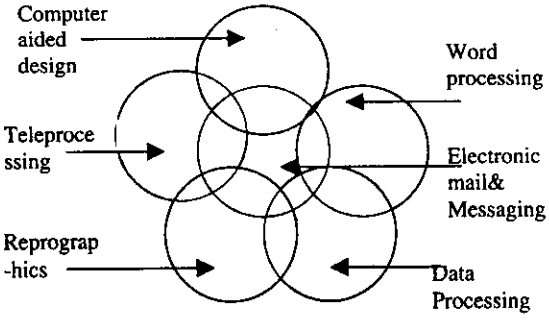

Fig.2 : The office system

6. CONCLUSION

The growing economic importance of information in the modern society has led the sociologist to characterise our society as the Information age. Today, office automation is no longer a luxury, this costly resource can improve worker productivity, morale and overall operation of an organization.

According to our observation, to achieve maximum benefits from office systems automation organizations should take the following measures:

1. Need to develop long-range strategic plans based on business requirements. Traditional Return-on-Investment (ROI) methodologies for justifying capital expenditure are not always applicable to office because many of the benefits for office work are difficult to quantify.
2. Old work force should be frequently trained to use the new technology and to adopt to change in occupation and the work environments. This should be a learning process that enable individuals to assimilate the new technologies.
3. To cope with the national and international competition, electronic information system should link globally enabling to move and share information.
4. The office automation manager should assume an active role as a change agent, collaborate effectively with various staff groups, co-ordinate the skills of the office automation team and understand the business requirements.

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