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**Effective Use of Computer at BPATC with Reference to Some Selected
Organizations: A Study**

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Mehedi Masud

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Introduction

In this age of globalization the wave of information technology is all-pervasive. Globalization & Information technology go hand in hand. Computer is a prime factor of globalization. The whole world has become a global village because of the forces of computers/information technology. As a training institute BPATC can no longer remain isolated from the effects of globalization. Technology-based training has become essential in the context of the present globalized era. Technology-based training (TBT) which is the largest single application of technology in training, is the delivery of learning through computer-based training or multimedia. BPATC has more than two hundred computers. Effective utilization of these computers is a must. The more one uses the computer the more one gathers expertise on it. Hence, the extent and dimension of the computer use should be identified first to see how effectively the computer is being utilized. Unfortunately this aspect is not properly addressed so far. Maximum utilization of computer is necessary for the productivity of a training organization. The lack of proper knowledge of computer is a hindrance to it. As an apex training institute, BPATC has to keep pace with the modern changes. In an era of globalization we see that people are becoming increasingly aware of the power of information.

Rationale of the Study:

Computer technology is a new frontier of knowledge. It increases efficiency and productivity of a training organization like BPATC. To impart training, trainers should always keep abreast of the latest concepts of training (GOB 1986:20). Hence the effective use of computers in the case of BPATC is a significant factor. It is viewed that maximum use of computers is essential for the efficiency and productivity which has long been remained unaddressed. Use of computer depends on the knowledge of computers. Use of computer indicates that one has knowledge of computer. Effective use of computers is essential to ensure the Human Resource Development.

Therefore, the governments have recognized the importance of computer technology. The use of information technology (IT) also saves time and thus making the system cost-effective.

Computerization started in Bangladesh back in 1964 in some private sector banks. In BPATC, the use of computer started way back in 1987. At that time computers were mainly used as glorified show-pieces. Later on, there has been gradual shift and the computers were mainly used as Word Processors. Some time back the Prime Minister had instructed that government offices should be computerized and the government had issued a circular in 1998 to promote the use computers instead of type machines in government offices (Rizwan, Golam Mahedi, Md. Zakir Hossain : Application and Effectiveness of

Computerization in Government offices at District level : A Study). But what is the present Status of computers use ? Are the computers under utilized ? Are the computers being used effectively? This study, therefore, aims at answering these questions and will strive to find out the status of using computers at BPATC.

Objectives & Scope of the Research:

- (a) To identify the present status of using computer at BPATC vis-à-vis other organizations
- (b) To suggest measures for effective use of computers at BPATC

The study is concerned with the officers responsible for the computerization i.e., officers charged with computer management. The scope is as follows:

- (a) Types of computer applications used by the officers under the study.
- (b) Different ways of utilization of computer under the study.
- (c) Problems associated with the use of computers

Methods:

Pre-tested questionnaire has been used to collect data. A Purposive sampling technique appeared to suit the purpose of the research. Observation method has been followed as well. As many as 20 suitable organizations have been selected under the study. Only the competent officers were selected as respondents from all the organizations. Respondents have been selected on the basis of one officer from one organization. The structure of the questionnaire has been same for all the organizations. Secondary data required for the study has been collected from books, research reports and journals as well as from the documents of the relevant offices.

Besides BPATC some important government/semi-government/autonomous /private organizations & NGOs have been taken under this study.

The study was conducted on the basis of primary as well as secondary sources of information. Primary data was collected on the basis of questionnaire using both interview and schedule method. Secondary source of information was collected through documents, research reports etc.

Collected data has been analysed by using non-inferential statistics and quantitative techniques.

Findings:

The following picture emerges from study:

It is found that all the twenty organizations use computers. They are well aware of the importance of computers.

As regards the starting year of using computers and number of computers in the studied organizations it illustrates that BIM started using computer way back in 1984 and the number of computer there is

seventy-five. This is rather a happy picture which proves that training organizations are the pioneer in using the computers.

In the case of BPATC, the data show that computer was installed in 1987 and the number of computers is above two hundred. It also reveals the fact that in terms of the number of computer, the training organizations are richer.

The study also has found that the percentage of computer literate personnel in the training organizations vis-a-vis the non-training organizations is surprisingly high. Another important finding is that 95% of the work done by computer is in the field of administration. Even the training organizations use the computers for administrative purpose mostly. Same is the case with BPATC. Mostly three types of work are done by computer- administrative, training & others.

The Study further reveals that computers are also being used in the decision making process. BPATC also uses computers in taking decisions in the case of training evaluation, Evaluation of the participants and library management. NAEM, RDA, BIM, D.U, R.U, BCS(Admn.) Academy and D.C. Office, Barisal are also using computers in decision making process.

In the training situation BPATC employs its computers for the purpose of preparing result sheet, preparation of training calendar & designing of courses. Other organizations use it for training scheduling, training technology, networking, training soft ware & research.

As for networking facility it is found that only eight organizations out of twenty have networking facility. In the case of utilization area one important finding is that most of the organizations use networking for the purpose of file sharing. Although BPATC has networking facility it is not activated.

As regards the sufficiency of computer use in terms of the number of computers it illustrates that most of the organizations are making sufficient use of computers. In the case of BPATC it is found that the Centre is not making sufficient use of computers. There is a good number of reasons behind it: want of computer literate personnel and expertise required for the proper maintenance of computers, aversion to computer use and the lack of technical knowledge of the top management.

Regarding the application software used in training it is found that most of the respondents have ticked for MS word. In BPATC use of MS office, MS-Excel, MS power point, MS access and MS project is preponderant. Considering the use of other software it depicts that WINDOWS is the most popular version of system software.

As for the daily use of computer in terms of working hours it is revealed that most of the organizations use computers four hours a day. Significantly two organizations - Computer Science Department, University of Dhaka and Rural Development Academy (RDA), Bogra are using the computer eight hours a day.

There are some problems associated with the use of computer of which as many as six problems are significant. Absence of proper training has been found to be the single major problem. Almost two-third of the respondents have identified it as the major problem. The problems that faced by BPATC are as follows: Absence of required number of technical personnel, aversion of concerned personnel to computer use and lack of technical knowledge of the top management.

Conclusion:

The researchers can only give suggestions/recommendations. Therefore the prime responsibility rests with authority. BPATC has a good number of computers. These computers are mainly used as the word processing machines, which should not be the ideal situation. The steps which are discussed in the recommendation part may be taken for effective use of computers at BPATC .

Recommendation:

BPATC as an apex training institute is committed to impart quality training to its customers. Use of computers in training is one aspect that has to be explored. Technology-based training (TBT) is a new concept that BPATC can adopt for its client. The advantages of TBT over paper-based open learning include:

- Interactivity which can improve motivation and retention
- Immediate feedback to questions and practice exercises
- Greater realism which results from including graphics, photographs, sounds, moving images and from simulations

The Study further suggests the following measures:

- a) A separate MIS Division headed by a System Analyst (equivalent to MDS) should be formed.
- b) A MIS policy should be formulated detailing the principles and objectives of the MIS Division.
- c) A core group of computer resource persons should be formed.
- d) BPATC has LAN facility. But LAN is not yet activated. Activation of LAN will certainly lead to better functioning of the office like less time consumption/less man-hour, saving of money etc.
- e) One important function of BPATC is to conduct research activities. To that end BPATC needs to have modern version of research softwares. These softwares should be immediately installed. The output of the research can be used as the input of training. Proper training should be imparted to the officers to get them acquainted with the research softwares.

- f) BPATC is going to found International Training Complex (ITC) soon. BPATC is to organize international training courses once the ITC is founded. As a result, BPATC will have to face global competition. A separate computer lab should be established there.
- g) BPATC has a rich library. It has a good collection. A complete data base can be developed for smooth functioning of the library.

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List of Abbreviations

BPATC	=	Bangladesh Public Administration Training Centre
BIM	=	Bangladesh Institute of Management (Former BMDC)
NAEM	=	National Academy for Education and Management
DU	=	Dhaka University
TTT	=	Training, Technology and Transfer
RU	=	Rajshahi University
RDA	=	Rural Development Academy
DC	=	Deputy Commissioner
BB	=	Bangladesh Bank
BARD	=	Bangladesh Academy for Rural Development
BDS	=	Bangladesh Development Society

CHAPTER-I

Introduction

The problem

In this age of globalization the wave of information technology is all-pervasive. All the traditional structures are becoming obsolete and redundant. Computer is a prime factor of globalization. The whole world has become a global village because of the forces of computers/information technology. As a training institute BPATC can no longer remain isolated from the effects of globalization. Technology-based training has become essential in the context of the present globalized era. Technology-based training (TBT) which is the largest single application of technology in training, is the delivery of learning through computer-based training or multimedia. At BPATC there is a good number of computer (above two hundred). Effective utilization of these computers is a must. The more one uses the computer the more one gathers expertise on it. Hence, the extent and dimension of the computer use should be identified first to see how effectively the computer is being utilized. Unfortunately this aspect is not properly addressed so far.

Maximum utilization of computer is necessary for the productivity of a training organization. The lack of proper knowledge of computer is a hindrance to it. As an apex training institute, BPATC has to keep pace with the modern changes. In an era of globalization we see that people are becoming increasingly aware of the power of information. **John Naisbitt**, a renowned, U.S. futurist in his book '**Megatrends**' pointed out ten directions that he thinks are good enough to transform our lives. Naisbitt identified five core areas in connection to the development of information society:

- Information society is an economic reality
- Innovation in Information and Communication Technology (ICT) will accelerate the pace of change
- ICT will at first be applied to old industries and then gradually evolve into newer activities
- In an emerging literacy intensive society the education system of the 1980s was and to a large extent still is turning out increasingly inferior products

- The new technology will succeed or fail according to the principle of high tech/high touch, i.e. how the human responses impact on the technological applications and the formation of new computer-mediated practices.

The 21st Century will be shaped by three great drivers of change. These are global interdependence, communication/information technology and the expectation of the public to be involved in the decision of the government (Commonwealth Secretariat, 1998). As a public sector training institution BPATC is also aware of this change.

As a training organisation BPATC attaches utmost importance to Human Resource Development. BPATC can enhance its training capacity by effective use of computer. Use of Computer has become a must. Therefore, we see that every organisation is getting more and more dependent on the computerization. One cannot do away with computers. Avoiding computer is like avoiding the nature.

Training is recognized as a means to develop human resources for further efficiency and productivity of an organization. The professional trainers must keep themselves abreast of the latest concepts of training techniques. This issue of computer use has long been remained unaddressed. The study therefore aims at finding out the present status of using computer at BPATC vis-a-vis other organisations and it gives suggestion for effective use of computer at BPATC. In this connection it is necessary to throw light on what is meant by efficiency and effectiveness.

Efficiency is generally measured by the ratio of out puts (return, benefit) to input (cost, effort). Ideally, all inputs and out puts are included (Field tein, Berry and Hage are among these who have measured efficiency in this fashion). The researcher who applies this measure of efficiency assumes that organization has inputs, a production process and outputs. The unit of measurement in empirical research in which these yardsticks have been used is that part of the organization which includes the production process, frequently the entire organization. (The Efficient organization, Selwyn W. Becker/ Duncan Neuhauser:1975) .

Effectiveness is the quality or state of being effective. (Webster's third New International Dictionary: 1963). Effectiveness is the quality of being effective in various senses. (The Oxford English Dictionary, Volume III:1978) Effectiveness is the state of "Working or producing results (Dictionary of Marketing, edited by P.H. Collin: 1997).

Rationale of the Study

Computer technology is a new frontier of knowledge. It increases efficiency and productivity of a training organization like BPATC. To impart training, trainers should always keep abreast of the latest concepts of training (GOB 1986:20). Hence the effective use of computers in the case of BPATC is a significant factor. It is viewed that maximum use of computers is essential for the efficiency and productivity which has long been remained unaddressed. Use of computer depends on the knowledge of computers. Use of computer indicates that one has knowledge of computer. Effective use of computers is essential to ensure the Human Resource Development.

Therefore, the governments have recognized the importance of computer technology. The use of information technology (IT) also saves time and thus making the system cost-effective. In Andhra Province, India the Chief Minister is holding monthly video conferencing with the administration that saves both time and money. Consequently, the administration does not require rushing to capital.

Computer technology is being integrated into every aspect of workplace. In order for the workforce to use technology effectively, adequate training based on specific work-place needs must be provided for. Technology-based training has been available for a number of years in various forms and is growing in popularity. Most training professionals now accept it as a credible form of training delivery which has the following advantages when compared with traditional tutor-led training events:

- As a replacement for a tutor-led course usually on grounds of cost-effectiveness.
- As an alternative for staff who would have difficulty for a variety of reasons attending a course held away from their work location.
- Greater efficiency and saving of time.

- Better participant support.
- Enhanced & more flexible learning.

Technology-based training (TBT) which is the largest single application of technology in training is the delivery of learning through computer-based training or multimedia, typically as self-paced open learning.

Computerization started in Bangladesh back in 1964 in some private sector banks. Bangladesh Computer Council and UNDP jointly prepared a report indicating that though the last decade has seen ministries and other government departments procuring computers in the name of computerization, installations were under utilized both in terms of capacity and applications (Khan :2000).

In BPATC, the use of computer started way back in 1987. At that time computers were mainly used as glorified show-pieces. Later on, there has been gradual shift and the computers were mainly used as Word Processors. Some time back the Prime Minister had instructed that government offices should be computerized and the government had issued a circular in 1998 to promote the use computers instead of type machines in government offices (Rizwan, Golam Mahedi, Md. Zakir Hossain : Application and Effectiveness of Computerization in Government offices at District level : A Study). But what is the present status of the use of computers ? Are the computers under utilized ? Are the computers being used effectively?

This study, therefore, aims at answering these questions and will strive to find out the status of using computers at BPATC.

Expected benefits from the study

Use of computers in training situations will be useful in achieving greater efficiency. It will also save time leading to the expediting of training process. The Report picturizes the comparative situation of the use and application of computers of BPATC and other

organizations. Based on it, the report makes suggestions on effective use computers to achieve better productivity.

Structure of the Study Report

There are four chapters in this Research Report. Chapter-1 covers introduction, problems, and rationale of the study, expected benefits from the study and structure of the study report. Chapter-2 covers objective of the study, scope of the study, methodology, selection of respondents/organization, methods of data collection, methods of data analysis and limitation of the study. Chapter -3 deals with data analysis and Chapter-4 dwells on findings, recommendations and conclusions. In addition to that there are bibliography and annexure in this Report.

CHAPTER-II

Research Methodology

Objectives & Scope of the Research

- (a) To find out or identify the present status of using computer at BPATC vis-à-vis other organizations
- (b) To make suggestions for effective use of computers at BPATC

The study is concerned with the officers responsible for the computerization i.e., officers charged with computer management. The scope is as follows:

- (a) Types of computer applications used by the officers under the study.
- (b) Different ways of utilization of computer under the study.
- (c) Problems associated with the use of computers.

Methods

As many as 20 suitable organizations have been selected under the study. Only the competent officers were selected as respondents from all the organizations. Respondents have been selected on the basis of one officer from one organization. The structure of the questionnaire has been same for all the organizations. Secondary data required for the study has been collected from books, research reports and journals as well as from the documents of the relevant offices.

Besides BPATC some important government/semi-government/autonomous /private organizations & NGOs have been taken under this study.

Methods of Data Collection & Data Analysis

Pre-tested questionnaire has been used to collect data. Purposive sampling technique appeared to suit the purpose of the research. Observation method has been followed as well. The study was conducted on the basis of primary as well as secondary sources of information. Primary data was collected on the basis of questionnaire using both interview and schedule method. Secondary source of information was collected through documents, research reports etc.

Collected data has been presented by using tables & graphs and analysed by using non-inferential statistics.

Limitation of the Study

Computer is a new area of knowledge. Collecting data on the use of computers is really a difficult job. Dearth of budget is another problem.

CHAPTER-III

Data Analysis

Studied organizations, major functions and use of computer

The study was carried out in 5 divisions. Due to non-response one division i.e. Sylhet was not covered. As many as 20 different organizations from different government, autonomous & NGO sector were covered under the study. Government offices like office of the Divisional Commissioner, D.C. Office, Bangladesh Bank, Bangladesh Betar, Government College etc. were covered under the study. Autonomous organizations like BPATC, NAEM, BCS (Administration) Academy, BIM, RDA & BARD etc. were taken under the study. NGOs like Training, Technology & Transfer (TTT), BDS etc. were covered under the study (Table-1). Considering the use of computers the Table (Table-1) indicates that all the organizations are using computers.

Table-2 indicates an important fact that the training organizations are the pioneer in using computer. BIM started using computers in 1984, BPATC in 1987. On the other hand the rest of the offices started using computer in the nineties. Study further reveals that in terms of the number of computer, the training organizations are richer. BPATC owns above two hundred computers. Other training organizations also possess a good number of computers. The non-training organizations like DC Office, Divisional Commissioner Office, Bangladesh Bank, BDS etc. possess less number of computers.

The organization under the study can broadly be categorized into two types: training organizations like BPATC, BIM, NAEM and non training organizations like DC Offices, Divisional Commissioner Offices, Bangladesh Banks, Dhaka University etc.

Computer literate personnel, Types of work done by computers, use of computer in decision-making & Use of computer in training

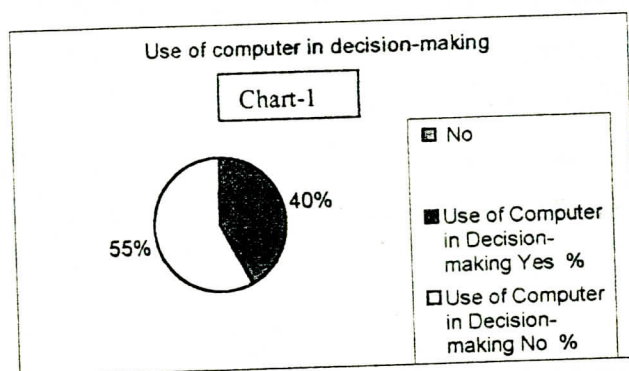
Table-3 indicates that the percentage of computer literate personnel in the training organization is astonishingly high vis-à-vis the non-training organizations. Most of the non training organization fall under <50% category while training institutes like BPATC,

BIM and PROMOTE fall under 80% + category. As compared to other training institute it shows that BPATC stands high (80%+) against NAEM, BCS (Admn.) Academy & BARD which have percentage of 50% +, 50% - 80% and <50% respectively.

These organizations are mainly concerned with three types of works namely administrative activities (95%) training activities (50%) and Other Activities (55%). The Other Activities category include research, action research, consultancy, judicial activities, library management etc. (Table-3).

Use of computers in decision-making

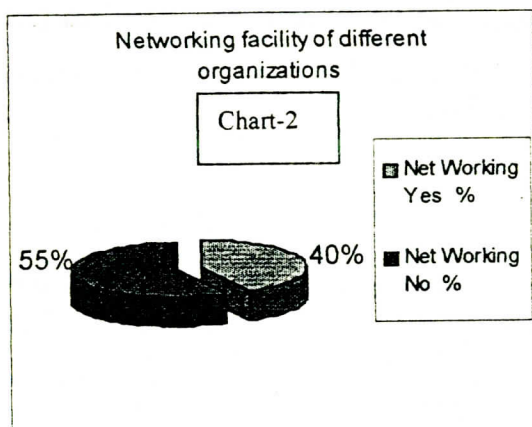
Chart-1 illustrates that only 40% of the organizations use computers in decision making. BPATC, NAEM, RDA, BIM, D.U. BCS (Admn.) Academy, R.U., DC Office, Barisal are the offices that use computers in decision making.



With regard to the use of computer in the decision making BPATC uses computer in the fields of training evaluation, evaluation of the participants and library management. Rajshahi University uses computer in preparing results. BIM uses computer in the case of action research. BCS (Admn) Academy also uses computers in the field of preparing result sheet of the participants. NAEM & RDA also engage computer in decision making in the field of training & publication respectively. Therefore, it is here evident NAEM RDA, BPATC, BIM & BCS (Admn) Academy are using the computers for decision making purpose.

Local Networking Facility & Utilization area of net working in different organizations

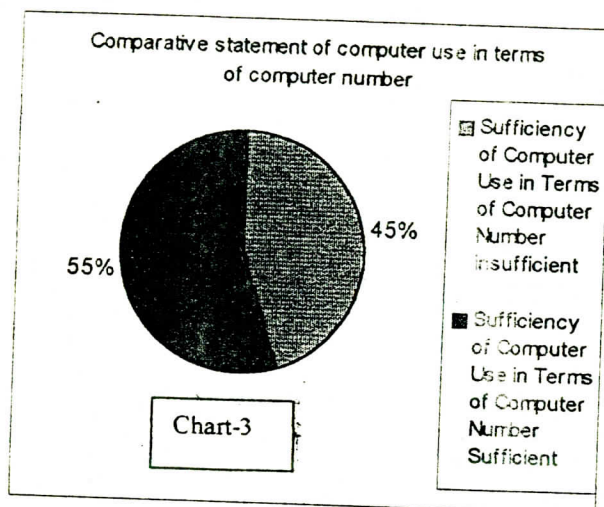
Considering the net working facilities Chart -2 show that as many as eight (40%) organizations have net working facility. Eleven (55%) organizations do not possess net working facility.



In case of NAEM it has been found that the net working facility is under process (Table-5). Table-5 further shows that most organizations use networking for the purpose of file sharing. As for BIM it is found that it uses networking facility for training purpose. Among other utilization areas of networking are e-mail communication, office management, and LAN. As for BPATC it is found that it has net working facility but it is not activated.

Comparative statement of computer use in terms of number of computers

As for the sufficiency of computer use in terms of the number of computer it has been found that 45% of the respondents are not making sufficient use of computers. The rest 55% of the respondents opine that they are making sufficient use of computers (Table-6). In the case of BPATC it is found that the Centre is not making sufficient use of computers in terms of the number of the computer. The reasons put forward by BPATC for it, is want of computer literate personnel and expertise required for proper maintenance of computer,



aversion to computer and the lack of support by top management. Dearth of budget is another factor singled out by most of the organizations responsible for insufficient use of computer.

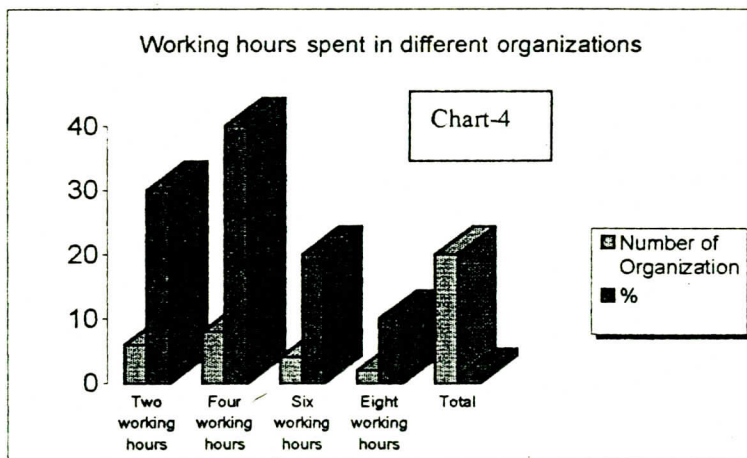
Usage of application software and other softwares

Regarding the usage of application softwares used in training the Table-7 reveals that 85% respondents are in favour of MS word. A total of 75% respondents have ticked for MS Excel, 45% have preferred MS Power & 20% use MS Access the case of training. In the case of BPATC it is found that it uses MS Word, MS Excel, MS power point, MS Access and also MS project.

Considering the use of other software Table-8 depicts that windows is the most popular version of system software. 17 respondents out of 20 have ticked for the 'Windows' apart from using other soft wares.

Working hours spent in different organizations

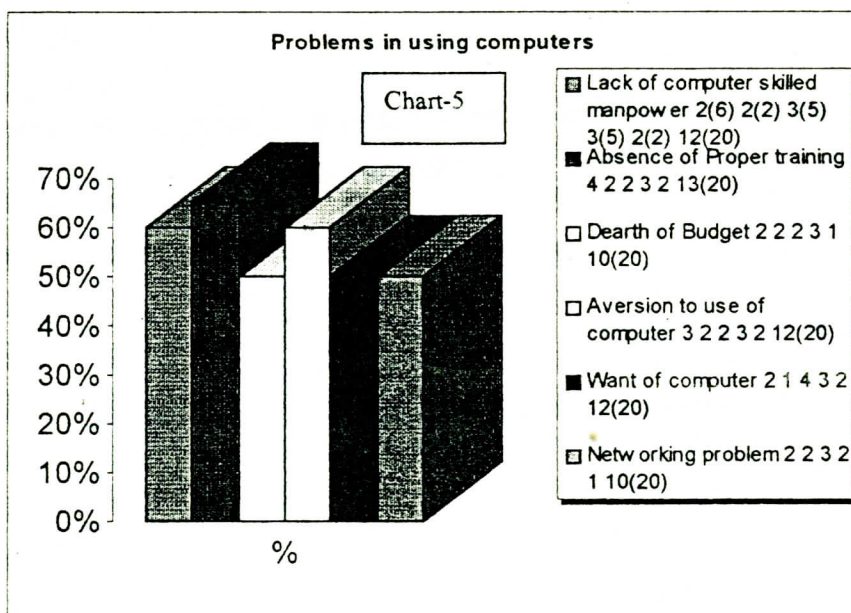
Chart-4 depicts that as many as eight organizations fall under the category of 'Four working hours' - that is these eight organizations use computers four hours a day.



Six organizations fall under the category of two working hours, four organizations under the category of six hours. The data reveal an astonishing fact that two organizations namely Computer Science Department, Dhaka university and Rural Development Academy (RDA), Bogra are using the computer eight hours a day. These two organizations are utilizing their computer at the maximum.

Problems associated with the use of computer

Considering the problems involved in using computer Chart-5 depicts that there are as many as six major problems that have emerged as prominent.



As many as thirteen respondents (65%) identified 'absence of proper training' as the major problem. Twelve respondents (60%) marked 'Lack of computer skilled manpower' as another big problem. Twelve respondents (60%) identified 'Aversion to use of computer' as a problem. Twelve respondents (60%) identified 'want of computer' as a major problem involved in using the computers. As many as ten (50%) respondents identified 'Dearth of Budget' as one of the major problems. Ten respondents (50%) identified 'Networking Problem' as another problem (Table-9). The problems associated with computer use at BPATC are as follows: want of required number of technical personnel, aversion of concerned personnel to computer use, and lack of technical knowledge of the top management.

CHAPTER-4

Findings, Conclusions & Recommendations

Findings

The study considers twenty organizations to assess the status of using computers. The study also has set out to find out the extent & effective use of computers.

It is found that all the twenty organizations use the computer. They are well aware of the importance of the use of computers.

As regards the starting year of using computer and number of computers in the studied/surveyed organizations it illustrates that BIM started using computer way back in 1984 and the number of computer there is seventy five. This is rather a happy picture which proves that training organizations are the pioneer in using the computers.

In the case of BPATC, the data show that computer was installed in 1987 and the number of computers is above two hundred. It also reveals the fact that in terms of the number of computer, the training organizations are richer.

The study also found that the percentage of computer literate personnel in the training organizations vis-a-vis the non-training organizations is surprisingly high. Another important finding is that 95% of the work done by computer is in the field of administration. Even the training organizations use the computers for administrative purpose mostly. Same is the case with BPATC. Mostly three types of work are done by computer-- administrative, training & others.

It is revealed that computers are also being used in the decision making process. BPATC also uses computers in taking decisions in the case of training evaluation, Evaluation of the participants and library management. NAEM, RDA, BIM, D.U, R.U, BCS(Admn.) Academy and D.C. Office, Barisal are also using computers in decision making process.

In the training situation BPATC employs its computers for the purpose of preparing result sheet, preparation of training calendar & designing of courses. Other organisations

use it for training scheduling, training technology, networking, training soft ware & research.

As for networking facility it is found that only eight organizations out of twenty have networking facility. In the case of utilization area one important finding is that most of the organizations use networking for the purpose of file sharing. In the case of BPATC it is found that it has networking facility but it is not activated.

As regards the sufficiency of computer use in terms of the number of computers it is revealed that most of the organizations are making sufficient use of computers. In the case of BPATC it is found that the Centre is not making sufficient use of computers. There is a good number of reasons behind it: want of computer literate personnel and expertise required for the proper maintenance of computers, aversion to computer use and the lack of technical knowledge of the top management.

In the case of application software used in training it is found that most of the respondents have ticked for MS word BPATC, it is found that, use MS office, MS-Excel, MS power point, MS access and also MS project. Considering the use of other software, Table-8 depicts that WINDOWS is the most popular version of system software.

As for the daily use of computer in terms of working hours it is revealed that most of the organizations (eight) use computers four hours a day. An important fact found here is that two organizations - computer science Department, University of Dhaka and Rural Development Academy (RDA), Bogra are using the computer eight hours a day.

There are some problems associated with the use of computer. As many as six problems have cropped up. Of which absence of proper training has been found to be the single major problem. 65% of the respondents have identified it as the major problem. The problems faced by BPATC are as follows: Want of required number of technical personnel, aversion of concerned personnel to computer use and lack of technical knowledge of the top management.

Conclusion

BPATC has a good number of computers. These computers are mainly used as the word processing machines, which should not be the ideal situation. Following steps may be taken for effective use of computers at BPATC specially in the case of training.

- A separate MIS Division headed by a System Analyst (equivalent to MDS) should be formed.
- A MIS policy should be formulated detailing the principles and objectives of the MIS Division.
- A core group of computer resource persons should be formed like that of gender resource persons.
- BPATC has LAN facility. But LAN is not yet activated. Activation of LAN will certainly lead to better functioning of the office like less time consumption/less man-hour, saving of money etc.
- One important function of BPATC is to conduct research activity. To that end BPATC needs to have modern version of research softwares. These softwares should be immediately installed. The output of the research can be used as the input of training. Proper training should be imparted to the officers to get them acquainted with the research softwares.
- BPATC is going to found International Training Complex (ITC) soon. BPATC is to organize international training courses once the ITC is founded. As a result, BPATC will have to face global competition. A separate computer lab should be established there.
- BPATC has a rich library. It has a good collection. A data base can be developed for smooth functioning of the library.

The researchers can only give suggestions/recommendations. The authority has the power to execute the suggestions. Therefore the prime responsibility rests with authority.

Who is it for ?

TBT is suitable for a wide range of learners, whatever are their age or learning goals. It does not require expertise in computer use and properly designed learning packages are user-friendly.

Apart from this BPATC can use its Internet facility for on-line training. The Internet can be used for on-line training in various ways:

- Provide tutor and mentor support for learners, using e-mail and 'conferencing'
- Provide a directory of all staff training opportunities, not just confined to those available over the Internet
- Provide a time table of forthcoming training
- Give full content details of all training programmes and accreditation information.
- Enable people to book places on courses.

The wave of information technology has an all-pervasive effect. Computerizations started in Bangladesh in the year of 1964 in some private sector banks. In BPATC the use of computers started back in 1987. From then on BPATC has been inching towards achieving greater efficiency in the case of computers.

The International Training Complex (ITC) of BPATC is going to start its activities soon. The founding of ITC will undoubtedly place BPATC in international training competition. In this perspective, information technology will play a crucial role. Technology-based training (TBT), On-line training and other training related technology would have their own places. Therefore, we see that for the sake of its own survival BPATC should pay attention to the effective use of computer.

BPATC's MIS Division should be given more weight. All the computers/computer related job should be brought back under MIS Division instead of AVR Branch. Because MIS is the right authority for this job. The post of System Analyst equivalent to the MDS

Recommendations

Human-computer interfaces (HCIs) are found in every training situation. HCI means where the human meets the computer. An useful HCI will go a long way in maximizing the effective use of computers at BPATC. The government of Bangladesh is also keen to introduce modern technology which is reflected in the suggestions made by the Public Administration Reforms Commission. Public Administration Reforms Commission (2000) has recommended to introduce modern technologies and their optimal use in government offices functioning at all levels. It has suggested the use of optical fibres, utilisation of e-mail and other facilities in the functioning of the government offices.

Technology-Based Training (TBT) is one option BPATC can adopt in its effort to enhance the effectiveness of computer use. The advantages of TBT over paper-based open learning include:

- interactivity which can improve motivation and retention.
- immediate feedback to questions and practice exercises.
- the greater realism which results from including graphics, photographs sound and moving images and from simulations.

How and where is it used ?

Technology-based training may be used:

- as a self-study resource without tutorial support
- for self-study but with tutorial support and /or mentoring
- for small groups
- as part of a larger course or training event

Learners may study:

- at a single TBT workstation in the work place
- in a learning resource Centre
- on the premises of an external training provider
- at home, if they have the right equipment

should be created who will be heading this division. A MIS policy should also be formulated detailing the principles and objectives of the MIS Division.

BPATC has LAN facility. But LAN is not yet activated. Activation of LAN will certainly lead to better functioning of the office like less time consumption/less man-hour, saving of money etc. It should be taken care of.

Conducting research activity is one important function of BPATC. To that end BPATC needs to have modern version of research software. These software should be immediately installed. The output of the research can be used as the input of training.

A core group of computer resource persons should be formed like that of gender resource persons. This core group will act as the resource persons for all the computer sessions. They will also take care of the software & hardware problems. For this, proper training should be imparted to them.

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Table-1: Organizations/Departments Studied and use of computer there.

Division	Organisation/Department	Use of Computer	
		Yes(%)	No(%)
Dhaka	BPATC	1	
	BIM	1	
	NAEM	1	
	DU(Computer Science Department)	1	
	TTT	1	
	BCS Administration Academy	1	
Rajshahi	Bangladesh Bank	1	
	Office of the DC(Taxes)	1	
	RU(Political Science Dept.)	1	
	PROMOTE	1	
	RDA	1	
Khulna	DC Office, Kushtia	1	
	Bangladesh Betar, Khulna	1	
	Divisional Commissioner Office, Khulna	1	
	Office of the Director(Health)	1	
	Sadharan Bima Corporation	1	
Chittagong	Khagrachari Govt. College	1	
	BARD, Comilla	1	
Barisal	BDS, Barisal	1	
	DC Office, Barisal	1	
Total	20	20 (100%)	0

Table-2: Starting year of using computer and number of computer in studied/surveyed organization

Organisation/Department	Starting Year of Using Computer	Number of Computer
BPATC, Dhaka	1987	200+
BIM, Dhaka	1984	75
NAEM, Dhaka	1995	45
DU(Computer Science Department), Dhaka	1990	140
TTT, Dhaka	1995	15-20
BCS Administration Academy, Dhaka	1997	25
Bangladesh Bank, Rajshahi	1990	14
Office of the DC(Taxes), Rajshahi	*NR	
RU(Political Science Dept.), Rajshahi	1993	5
PROMOTE, Rajshahi	1996	5
RDA, Bogra	1991	20
DC Office, Kushtia	2000	3
Bangladesh Betar, Khulna	2001	1
Divisional Commissioner Office, Khulna	2000	3
Office of the Director(Health), Khulna Division	1992	3
Sadharan Bima Corporation, Khulna	2001	1
Khagrachari Govt. College, Khagrachari	2001	4
BARD, Comilla	1993	35
BDS, Barisal	1998	10
DC Office, Barisal	1999-2000	3

***NR= No Response Received from the Concerned Office.**

Table-3: Percentage of computer literate personnel (Excluding staff) and types of work done by computer.

Organisation/Department	Percentage of Computer Literate Personnel (Excluding Staff)	Types of Work Done by Computer		
		Administrative %	Training %	Other %
BPATC	80%+	✓	✓	✓
BIM	80%+	✓	✓	✓
NAEM	50%+	✓	✓	✓
DU(Computer Science Department)	100%	✓	✓	✓
TTT	50%-80%	✓	✓	X
BCS Administration Academy	50%-80%	✓	✓	X
Bangladesh Bank	<50%	✓	X	✓
Office of the DC(Taxes)	<50%	✓	X	X
RU(Political Science Dept.)	50%-80%	✓	X	X
PROMOTE	80%+	✓	✓	X
RDA	80%	✓	✓	✓
DC Office, Kushtia	<50%	✓	X	X
Bangladesh Betar	<50%	✓	X	X
Divisional Commissioner Office, Khulna	<50%	✓	X	✓
Office of the Director(Health)	<50%	✓	X	✓
Sadharan Bima Corporation	<50%	✓	✓	✓
Khagrachari Govt. College	<50%	X	X	✓
BARD	<50%	✓	✓	✓
BDS	50%-80%	✓	X	X
DC Office, Barisal	<50%	✓	X	X
Total		✓ =19(95%) X=01(5%)	✓ =10 (50%) X=10 (50%)	✓ =11(55%) X=09 (45%)

Here ✓ = Yes

X= No

Table-4: Use of computer in Decision making

Organisation/Department	Use of Computer in Decision-making	
	Yes (%)	No (%)
BPATC	1	
BIM	1	
NAEM	1	
DU(Computer Science Department)	1	
TTT		1
BCS Administration Academy	1	
Bangladesh Bank		1
Office of the DC(Taxes)		1
RU(Political Science Dept.)	1	
PROMOTE		1
RDA	1	
DC Office , Kushtia		1
Bangladesh Betar		1
Divisional Commissioner Office, Khulna		1
Office of the Director(Health)	*NR	
Sadharan Bima Corporation		1
Khagrachari Govt. College		1
BARD		1
BDS		1
DC Office, Barisal	1	
Total	8 (40%)	11 (55%)

*NR= No Response Received from the Concerned Office.

Table-5: Networking facility of different organizations

Organisation/Department	Net Working	
	Yes (%)	No (%)
BPATC	1	
BIM	1	
NAEM	Under process	
DU(Computer Science Department)	1	
TTT	1	
BCS Administration Academy		1
Bangladesh Bank		1
Office of the DC(Taxes)		1
RU(Political Science Dept.)	1	
PROMOTE	1	
RDA		1
DC Office, Kushtia		1
Bangladesh Betar	1	
Divisional Commissioner Office, Khulna		1
Office of the Director(Health)	1	
Sadharan Bima Corporation		1
Khagrachari Govt. College		1
BARD		1
BDS		1
DC Office, Barisal		1
Total	8(40%)	11(55%)

Table-6: Comparative statement of the use of computer in terms of the number of computers

Organisation/Department	Sufficiency of Computer Use in terms of Computer Number	
	Insufficient (%)	Sufficient (%)
BPATC	1	
BIM	1	
NAEM		1
DU(Computer Science Department)		1
TTT		1
BCS Administration Academy		1
Bangladesh Bank	1	
Office of the DC(Taxes)	1	
RU(Political Science Dept.)	1	
PROMOTE		1
RDA		1
DC Office, Kushtia	1	
Bangladesh Betar		1
Divisional Commissioner Office, Khulna	1	
Office of the Director(Health)		1
Sadharan Bima Corporation		1
Khagrachari Govt. College	1	
BARD		1
BDS	1	
DC Office, Barisal		1
Total	9 (45%)	11 (55%)

Table-7: Use of Application Software

Use of application Software in Training	Number & percentage of using Organizations
MS Word	17(85%)
MS Excel	15(75%)
MS Power point	9(45%)
MS Access	4(20%)

Table-8: Types of other software used in computers

Organisation/Department	Other Soft ware Used in Computer
BPATC	Windows, CDSISIS, Visual Basic, NT, Internet, E-mail,
BIM	Windows
NAEM	Windows -95, Windows-98, FoxPro, Adobe PhotoShop
DU(Computer Science Department)	Windows, NT, UNIX, Linux, C++, Oracle,VHDL, JAVA, VB
TTT	*NR
BCS Administration Academy	Windows
Bangladesh Bank	NR
Office of the DC (Taxes)	Windows
RU (Political Science Dept.)	Woindows
PROMOTE	Windows
RDA	Windows
DC Office, Kushtia	Windows
Bangladesh Betar	Windows-98, Norton Anti Virus, Winamp, Adobe PhotoShop, Office-2000
Divisional Commissioner Office, Khulna	Windows
Office of the Director(Health)	Windows
Sadharan Bima Corporation	Windows
Khagrachari Govt. College	*NR
BARD	Windows
BDS	Windows, Windows
DC Office, Barisal	Windows

*NR= No response

Table-9: Problems in Using Computers

Nature of Problems	Dhaka Div.	Chittagong Div.	Rajshahi Div.	Khulna Div.	Barisal Div.	Total	%
Lack of computer skilled manpower	2(6)	2(2)	3(5)	3(5)	2(2)	12(20)	60%
Absence of Proper training	4	2	2	3	2	13(20)	65%
Dearth of Budget	2	2	2	3	1	10(20)	50%
Aversion to use of computer	3	2	2	3	2	12(20)	60%
Want of computer	2	1	4	3	2	12(20)	50%
Networking problem	2	2	3	2	1	10(20)	50%

The number in bracket shows Total surveyed/studied organizations under this study.

Table-10: Daily use of computer in terms of working hours

Working hours spent in computer daily	Number of Organization	%
Two working hours	6	30
Four working hours	8	40
Six working hours	4	20
Eight working hours	2	10
Total	20	100%

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Savar, Dhaka

(This the age information technology. Appropriate use of computer is playing a pioneering role here. The present study will focus on multifarious use of computer at BPATC and some selected organisations. Information gathered through the questionnaire will be used only for research work. Respondents' identity will not be disclosed. The researchers request you to extend your cooperation in collecting the information).

Name of Research: Effective use of computer at BPATC with reference to some selected organizations: A Study.

1. Respondent's Name :
2. Designation of the respondents:
3. Name of the Organization:
4. Main function of the organization:
 - a.
 - b.
 - c.
 - d.
5. Is computer used in performing these functions?

Yes	No
-----	----
- 5.1 If the answer is yes, what types of functions are done by computer?
- 5.2 If the answer is no, why computer is not used?
 - a.
 - b.
 - c.
 - d.
 - e.

- 6.0 From what year did your organization start using computers?
- 7.0 How many computers are there in your organization?
- 8.0 Please mention the percentage of computer literate personnel (excluding staff) in your organization.
- 100% above 80% 50%-80% below 50%
- 9.0 What type of work is done by computer in your organization?
- Administrative Training Other
10. Is computer used in decision making? If yes, mention the areas?
- a.
- b.
- c.
11. If computer is used in training, mention specifically the areas.
- a.
- b.
- c.
- 11.1 What application softwares are used in case of training?
- MS Word MS Excel MS Power point
- MS Access Others,
12. What other of System Softwares are used in the computer ?
- a.
- b.
- c.
- d.
- e.
- f.

13. Does your organization have Net Working?

Yes

No

13.1 If yes, what functions are performed by Net Working?

a.

b.

c.

d.

14. Please mention the hours of your daily schedule spent in case of computer use?

• 2 hours 4 hours 6 hours 8 hours

15. Do you think that the use of computer is insufficient in comparison to the number of computers?

Yes

No

16. If the answer is yes please give reasons(tick):

a. Want of computer literate personnel

b. Aversion to computer use

c. Other

17. What are the problems to the dynamic and modern use of computer in your organization?

18. What do you suggest to solve these problems?

19. What should be the priority areas for computer use in your organization to make your organization more dynamic and modern?

We express our sincerest thanks to you for your co-operation. Mehedi Masud, Evaluation Officer, & Md. Abul Basher, Research Officer.

