Computerisation And Bangladesh

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IN Bangladesh computers have been introduced since the sixties with the installation of main frame computer at the Bureau of Statistics. But the proliferation of computers have begun only after the introduction of micro and mini computers. There are at present eight mainframes, sixty-six mini/super mini and approximately 6000 micro computers.

This article presents the problem associated with computerisation gathered from research based on the six stages growth theory put forwasrd by Richard L. Nolan in his article Managing the Crisis in Data Processing published in the Harvard business Review in March-April 1979.

The information is gathered using the questionnaire survey of 30 organizations and informal discussions with the key personnel in the computer division of these organizations The questionnaire was designed using the criteria for stage assessment defined in different articles published in Harvard Business Regiew which have been compiled and published by Richard L. Nolan in the book titled managing the Data Resource Function's second edition and the questionnaire of previous study of four stage growth.

The characteristics of stages theory are helpful in managing and formulating strategies for computerising an organization. This also sheds light to management's following questions about EDP growth—

a) What underlies this growth ? b) Is it good ? c) Will it stop ? d) What are the limits ?

Stages Of Growth. The stages of growth of computerisation in an organization is measured in terms of attributes of four growth process. The four gwoth process are.

1. Application Portfolio. 2. DP organization. 3. DP planning and Control and 4. User awareness.

For each of these growth area there are six stages of Growth. viz.

Stage 1. The first oportunities to use DP are agreed. Computers are installed. There is a capital involvement and commitment to at least one application.

Stage II: Other departments identify their DP needs perhaps through encouragement from upper management or by a general disire to get their share. The cost of DP continue to rise. There is usually a lot of independent deelopment of systems and programs driven by local user enthusiams.

Stage III: At this point a variety of user oriented systems exit. They usually involve different standards of programming. Their further development is hampered by lack of data from other users and yet they have neigher the technical means nor programme compatibility to interconnect with them. management imposes control and attempt to rationalise the systems. There is a move towards a formal system management function. Database systems and more central control of computers are effected. Costs continue and the devleopment of user applications is in temporary stagnation.

Stage IV: Integration: With a sound infrastructure of database and computers the user applications enter a new phase of development. However, users have to be be more accountable for their use of, what by now is, a significant investment."

Stage V: Administration: Users can draw on the database source and are less concerned with hardware and software administration. The responsibility for the maintenance and security of databases, the basic resource of most users becomes and important task. Emphasis is on administering the date and information system. Users now share data and are accountable for using it.

Stage VI: Maturity: The fundamental operational activities are

confidently established with reliable links to all the management control functions, it is possible to use the integrated system for strategic purposes such as planning and resource management. The emphasis at this point is on the management of the corporation and its resources. The maintenance of a healthy DP system is necessary to achieve that end.

These six stages are grouped in two general eras of growth and development:

1. The computer Era: Stages I,II and III

2. The Data Resource Era: Stages IV, V, and Vi.

Questionnaires. were distributed among 32 respondents. Respondents were grouped in 6 broad categories (i) government organization, semi government organization; financial institutions, multinational companies and NGOs (local and international). In addition, informal discussions were hild with key persons of computer divisions/departments so these organization provided insights to the problems and opportunities faced by them. The final analysis was made on the basis of 30 respondents as 2 were not responded due to unavoidable circumstances.

The Sample size of 30 was selected on the basis of the resource available to conduct the survey and the time available.

The result of the research indicates the stagnant state of initiation. Major reasons behind this stagnation are —

Computerisation starts in an organization with fanfare and great enthusiasm but dies a premature death. The major reason behind this tragedy is the non-availability of personnel for proper system analysis, before design and implementation of the computerisation.

The present utilisation is basically in the word processing area. The use of data base softwares is limited to the data storage in an unplanned

manner. The data base is not used in decision making process. So the problem is not with the data base but the actual utilisation of the data base.

Bangladesh Computer Council without considering the organizational strength and weakness has made the purchase of certain brands of hardware, operating operating system and software mandatory for government and semi-government organizations. This has created following questions in the minds of the people related with computerization in these organizations:

Can the operating system solve our problem or give solution to those problems that we solve by a computer ?

How much contribution does an operating system has towards solution of human problems ?

Can computer personnel of BCC ensure data utilization ?

So to rectify this situation the following steps must be taken.:

1. Post-graduate diploma and MS in system analysis must be introuded in the universities or at BCC.

2. Restructuring of the BCC to avoid controversies.

3. Publication of news-letter or journal by BCC for people Related with computerisation to acquatint them of what is happening around them.

4. Setting up of a body to help the organizations in utilising the data base.

5. Selecting the hardware and system on the basis of need and resource analysis of the particular organization rather than imposing particular brand of hardware and software. At present only Bangladesh University of Engineering and Technology and Atomic Energy Commission, Bangladesh, have the personnel for such study. So setting a committee to recommend to individual government organizations comprising of experts from these institutions is best suited for the country.