

A Socio–Technical Case Study of Bangladesh

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EXECUTIVE SUMMARY

The revolutionary advent of IT has accelerated the pace of day-to-day office, personal and corporate communication. However, even now, Bangladesh, despite its natural resources and easily trainable workforce, cannot cope with the evolution of technology when compared to most of the developed and developing countries. Of course, there are reasons behind the slow growth of technology in Bangladesh. Despite this IT implementation here has begun, albeit a little slowly in different private and public sectors. In Bangladesh, IT use is still in a backward stage in terms of information generation, utilization and applications. In the absence of any private entrepreneur, the government initiates and funds as many of these projects as possible.

Constructing a case study on Bangladesh IT scenario is an impetus to depict the real picture of its obstacles and pitfalls, and success as well, if any.

INTRODUCTION

This write-up topic presents the IT scenario of Bangladesh as a whole, not an organization in particular. Readers will be interested in knowing facts like:

- (1) Is there any historical background of computerization in Bangladesh?
- (2) Was there any chronological follow-up to next generation of computerization?
- (3) How did the private, autonomous and public agencies play roles in different periods of time for computerization?
- (4) What are the hindrances that prevent Bangladesh from attaining a sufficient pace for IT advancement?
- (5) What is the current status of IT as a whole in the country?

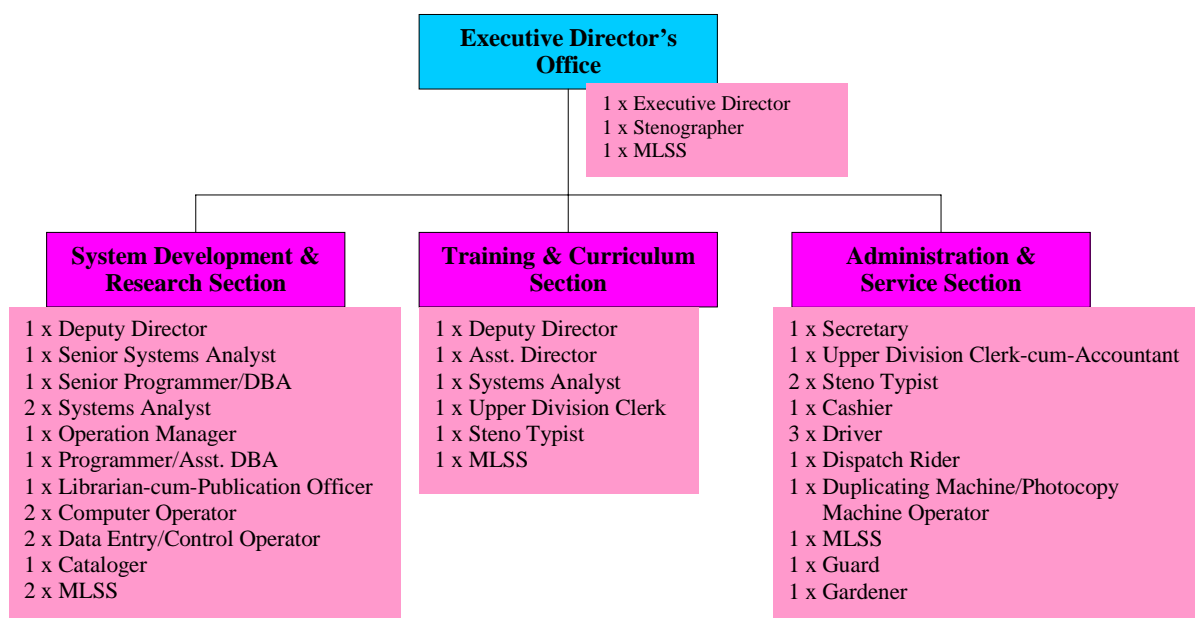
Readers will only get an organizational view as the spokesman for the IT organization (Bangladesh Computer Council) will offer his views during the case deliberations.

BACKGROUND

Bangladesh gained independence from Pakistan in 1971, missing out on much of technological wealth from its predecessor. To begin, the atomic energy commission acquired an IBM 1620 in 1964. This was the first computer in the country. Next, in line were Admajee Jute Mills (the biggest Jute mill in the world) and United Bank Limited (now Agrani Bank) acquiring an IBM 1400 and 1900 series. In early 1970s Bangladesh Bureau of Statistics (BBS) and Bangladesh University of Engineering and Technology (BUET) also acquired mainframe and mini computers. Until 1970s, use of computers was limited to research and calculations. As the boom of microcomputers occurred throughout the world, Bangladesh was merely touched by it. Gradually, the non-government sectors providing support to socio-economic development in the country took lead to accept the microprocessor-based standalone computers (XT and AT type) for their operations, research and office management. This revolution led to the slow but steady use of Microprocessors and Pentium series by government and non-government offices. Also, the installation of UNIX and CP/CMS operating systems on most Mainframe and mini computers in the 1970s made the punch cards and reading systems obsolete. This was followed by the quick adoption of operating systems such as DOS, OS/2, Windows NT, XENIX, AIX, and Mac.

Network technology in Bangladesh started in early 90s with banks and international organizations establishing LAN to meet business and office requirements. Very few government departments opted to have their computer under network environment. First Internet provider began in 1996 as opposed to the traditional dial-up Internet service provider from outside the country. There are more than 50 ISPs in the country, 8-10 more prominent than the others. Bangladesh had missed the opportunity to set up fiber optic infrastructure: first in 1992 when it passed up an almost free of cost opportunity to be connected with an underground cable SEAMEU-2; and second in 1998 when it passed up a minimum cost opportunity with SEAMEU-3. However, recently, there has been an initiation for a connection to the undersea cable

Figure 1. BCC's organizational structure



network APCN-2 and a tri-party contract agreement is under process.

However, very few firms are capable of customizing software; hence this is a small industry in Bangladesh. The necessary ingredients to become a potential exporter of computer software and data processing services do not currently exist in the required quantity in Bangladesh. If Bangladesh wants to enter into this market, it needs to cross a number of hurdles within a very short period. The National Computer Committee offered some ideas for the enhancement of the IT sector, and therefore the BCC designed an organizational structure to carry its functionalities with humanpower strength of 37 as shown in Figure 1.

BCC proposed a budget of US \$5 million in their fourth 5-year plan (1990-1995) for the following five proposed IT development projects:

- (1) BCC's Infrastructure Facilities
- (2) National Information Technology Training Institute (NITI)
- (3) National Data Network Authority (NDNA)
- (4) National Software Export Bureau (NSEB)
- (5) System Integrator Company Limited (SICOM)

Budget allocation was made for three of these projects for financial years 1991-92 and 1992-93. BCC also proposed a new project for establishment of a "data entry industry" in the country in 1992. However, none of the BCC's projects materialized due to some political controversy.

In fact, development of the IT sector and the role of BCC seemed to fade during the period between mid-1991 to mid-1996. In late 1996, a 14-member expert committee headed by a professor of BUET and members from different business and government bodies was formed by the government to study the feasibility of software export from Bangladesh. The committee submitted a report in September 2000 to the government with some very positive recommendations to boost the IT sector in order to create a favorable environment for software industry in the country and to export software. Following the recommendations of the expert committee, the government has taken some favorable decisions from 1998 and it is being continued to date, such as the following:

- (1) Declaring IT industry as a thrust sector
- (2) Patronizing of IT industry by different financial sectors, especially the banks
- (3) Full exemption of import tax for all IT products (e.g., hardware, software, network, peripherals and accessories)
- (4) Minimizing VSAT usage charge
- (5) Increase of budget allocation for IT sector

In formulating an IT policy in the country, the government has formed a probe committee. The body is active and arranges workshops to draft policies on IT related HRD, procurement and usage guidelines, creating markets and developing infrastructure. The information age



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