FEATURES

A SURVEY OF CURRENT AND POTENTIAL USE OF PERSONAL COMPUTERS IN SRI LANKA

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Personal computers have made much progress in the Sri Lankan market within a few years but more efforts are definitely needed to raise the awareness of the general public on this subject according to this study carried out by Gamini Gunawardene Associate Professor in the Department of Management School of Business Administration and Economics at California State University Fullerton. We publish his findings compiled from a larger study he undertook in Sri Lanka recently. The data has not been verified by the Economic Review and it may be possible that certain dealers or others in the field of computers may not agree with some of the findings or have contrary views. The Economic Review is prepared to carry any reasonable viewpoints submitted for publication on this subject.

Introduction

Personal computers have been in the Sri Lanka market on a commercial scale for about two years. Currently over ten leading distributors market various models and over 3000 computers, including 2500 Sinclair models placed in schools, have been sold. In addition, there are several consulting, software and training organizations that have come up to fill gaps in these areas. Have the personal computers come to Sri Lanka to stay? What are their current and potential uses here? How would recent advances in the personal computers field in other countries like USA affect and influence the Sri Lanka market? What are some of the constraints limiting the growth of personal computers in Sri Lanka? This paper is the result of an investigation of these issues. In this paper, the terms 'microcomputer' and 'personal computer' are used synonymously.

Methodology

The author and a research assistant conducted this survey in Colombo during June 1984. Leading dealers were visited and information was gathered by interviewing management. Similar interviews were conducted with some of the leading users of personal computers and computer professionals (eg. President, Computer Society of Sri Lanka). The author also met the Council of the Institute of Chartered Accountants and an audience of present and potential personal computer users for a lecture and discussion. Current information on advances in the U.S. personal computer market was derived from publications listed in the references and the author's experience as a Director of a group of personal computer manufacturing and sales companies.

Sri Lanka - The Current Picture

The following information obtained directly from dealers describes the position of current personal computer use in Sri Lanka.

Major models, units in use and their uses

Table 1 below shows the major brand of personal computers in Sri Lanka numbers sold to date and their uses.

The market share distribution differs significantly from the pattern in the USA where, since its arrival in the market place in 1981, IBM has been the dominant force. IBM is expected to hold 30 percent of the market by 1985, and the IBM compatibles (other brands on which most IBM software can be used) about 40 percent. The absence of IBM in the Sri Lanka market is probably because of its continuing inability to meet the demand and its high price. However, the absence of the compatibles is surprising. These machines (eg. COMPAQ, CORONA, EAGLE) perform very well and their prices are certainly competitive (converted dollar value plus duty) with prices of PC's available in Sri Lanka today. It would not be surprising to see some of these compatibles in our market within the next few years.

Prices

It was difficult to make a proper price comparison between units because of differing RAM capacities and peripheral hardware offered. The average price, however, was found to be between Rs.100,000 and Rs. 200,000 for a computer with sufficent memory for business use. For example, Apple 11 sells at Rs.145,000; Cannon models sell between Rs. 120,000 and Rs.300,000; and Wang sells at Rs.200,000. In the U.S. market a good 64 model, together with two disk drives, monitor, printer and necessary controller cards can be bought for$3,000 -$4,000.|Additional memory, for example, enhancing tal

TABLE 1 MAJOR COMPUTER BRANDS, NUMBERS SOLD AND MAJOR USERS/USES

Brand	Number sold to date	Major Users/ Uses
BBC	220	Universities
TRS (Radio Shack)	155	Business (B) Scientific (S), Educational (E), Home (H)
LOTUS	5	B
WANG	40	B
SHARP	15	B
CANNON	85(5)	B (H)
APPLE	210	B
SINCLAIR	2500	E, B, H

Includes 10 16 bit systems machines.

256K would cost approximately another $300 - $ 500. Converting these prices directly, and considering duty and diseconomics of scale, prices in Sri Lanka seem reasonable. The business and professional sector feel that they are affordable too. Smaller models for home uses sell at much lower prices, for example, SINCLAIR 1K at Rs.2,450; 16K at Rs.5,250. These prices are also comparable to the world market prices. Dealers who were interviewed predicted that hardware prices would come down as competition increases.

Uses

Dealers and users were asked what applications their computers are most commonly used for. Two patterns of use were revealed. Some organizations use their personal computers as intelligent terminals for data communication with their main frame computer. Others use them as stand alone modules for business applications.. Most commonly quoted applications were: travel trade reservations and information (data base) management, simple banking transactions such as foreign currency exchanging, stock control and accounting. The universities and schools, of course, use their computers mainly for teaching computer basics and some programming for students. It was somewhat surprising to find the low usage in Word Processing. Word processing is one of the major uses of personal computers in USA. Traditional secretarial techniques of shorthand, typing and filing still seem to prevail in our business world. Once again, as as the economy grows further, Word Processing is bound to become a more frequent application area.

In general, the survey revealed that users and potential users were not very familiar with applications possible with personal computers. Many consider a personal computer for a particular application, for example, stock control. Beyond this, they seem to be slow in using the machine for other applications. This is not surprising at this early stage when users are less familiar with available software. As shown in the next section, there is no shortage of application software. However, the capabilities of this software is not marketed well, and are not known to users. The knowledge among potential users is dangerously low. In a group of 49 users and non-users attending the lecture in computers, only a handful knew what Electronic Spread Sheets were. Much has to be done by dealers and educators to educate the market on capabilities of software.

Software

This appears to be the crucial area in Sri Lanka. Canned (ready made) software are offered for sale by dealers. Some well known software packages in USA for example, LOGO, EASY AMIL (and others in the EASY series),MULTIPLAN, VISI–CALC, WORLDSTAR, DBASE II, APPLEWRITER II and a variety of accounting and recreational software, are offered in the market. The prices are comparable with US 'prices. At this early stage, the market is only a little knowledgeable about the availability and capabilities of these packages. They are also doubtful how a particular software would fit their need and how flexible the software would be. Another notable factor was the gap between user needs and available software packages. The users, at least at this early stage, focus on specific needs and look for software exactly matching the need. The solution in these cases is the writing of original software. This service is now provided by consultants and in house programmers. This pattern will prevail for sometime as the justification for buying a personal computer in Sri Lanka still remains to be the computerization of a major aspect of the business/ organization. Thereafter, flexible software, that is, software that can be adopted for Sri Lanka by appropriate field changes for example, (spreadsheets where columns and rows are free of headings) would be used more frequently It would be a long time, perhaps another 2-3 years, before consumers would be knowledgeable and aggresive enough to buy canned software at a larger scale. The catalyst for this would be provided by local software houses eventually producing original (canned) software packages for Sri Lankan business use. It was heartening to observe several firms exploring this strategy.

Traning

There are several types of training programmes in personal computers available today in Sri Lanka. First, schools and universities are now providing some courses. The most effective among these are the various courses and hands-on experience provided to students in some Universities. For example, (the University of Colombo, equipped with a TRS 80 - 16 and 20 BBC machines is providing a wide array of opportunities to its students. These include programming and application training This University also holds short courses for the business community and has, at times, held workshops on very advanced issues such as systems programming. The University training, however, is still focussed mainly towards Science students.

Other types of training include courses provided by institutions such as the National Institute of Business Management, consulting firms and computer dealers. These courses provide instruction in computer basics, programming and sometimes, systems management.

In USA, the current trend in the Universities is to incorporate micro computers into almost every course. In Sri Lanka, we do not have enough funds for machines, and more importantly, enough trained personnel to reach such a level. But the coming years should see the inclusion of micro computers in at least the Engineering, Science and Business/ Commerce courses. A co-ordinated programme to train lecturers in these subjects (on personal computer basics) is needed. This is done frequently in the United States. Lecturers in these fields should explore opportunities to learn more about application software in their fields, original or canned. The central University micro computer labs should provide assistance at the hands-on use level. It was heartening to note that the University of Colombo was taking steps in these directions.

Conclusion

Within a few years personal computers have made much progress in the Sri Lanka market. The problems of user unfamiliarity seen in Sri Lanka today is little different from the situation seen in USA in the early seventies. User education necessary for faster growth in personal computer use must come, (just as it did in USA) in five ways : lower hardware prices; user-friendly and flexible software packages at affordable prices; drives towards top and middle management appreciation; concentrated educational and lab experience programmes at school and University level; and of course, a general national awareness of the benefits of personal computers at all levels. In a mixed economy such as ours, these will come from joint efforts of the government, dealers, computer professionals, top and middle management of organizations, educators and mass communicators. It is heartening to notice the current interest of all these groups. However, more efforts in raising the awareness of the general public through mass media programmes is definetly needed.

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