

CHAPTER 10

IMPACT OF COMPUTERS ON SOCIETY

10.1 Introduction



**“India lives in her seven hundred thousand villages”
- Mohandas Karamchand Gandhi**

To reach out the benefits of IT to the common man we need at least three technical elements :

- Connectivity [Computer networks and Internet facility]
- Affordable computers or other similar devices
- Software

It is interesting to observe that 85% of computer usage is “Word Processing”. Computers can do many more things for the common man than this. Quality IT education will enable the common man to put computers to a better use. This chapter presents the possible ways in which computers can be used to develop the society.

10.2 Computers for Personal Use

Personal computers have totally changed the way we work, live and think. Word Processing, Databases, Spreadsheets and Multimedia presentation packages have increased the efficiency at work. There are many packages that are being used. Desktop Publishing and other impressive packages for graphics are adding value to the work done. Paint, games and a large set of similar packages are providing facilities for people of all age groups to use the computer. Browsing, e-mail and chat have changed our life style.

Today computers come in different sizes and shapes. Some adaptation of the basic computer model is making it more useful in the homes of the user.

10.3 Computerized Homes

| Home | Products and a brief Description |
|-------------|--|
| Living Room | <ul style="list-style-type: none"><li>• LCD Screen, Camera and Speakers: Mounted on the Wall to provide better effect and save floor space.<li>• Archive Unit: Enables data storage and management.<li>• Emotion Containers: They are small compartments with a screen, speaker and a scent to derive emotional comfort. This can prevent people from acquiring bad habits<li>• Personal Archives: They store personal details like family photographs and personal treasures. In addition it enables connectivity to other people.<li>• Picture Phone and Pad: Picture based personal telephone directory. |

| | |
|-------------|---|
| Kids Room | <ul style="list-style-type: none"> • Devices that provide listening access to audio sources in home such as radio, television • Devices with kara-oke features allowing one to sing along with the audio coming from the original source • Robots that function as Electronic Pets. • Devices that enable game plying over the net. In addition real world characters are translated into the computer world and a kid can play with them |
| Home Office | <ul style="list-style-type: none"> • Packages to make animated stories. • Memo Frame: Easy interaction with other people through touch screen, scanner and microphone facilities. <p>Bookshelf: To manage and study electronic books.</p> <p>Personal Creativity Tool: To draw, capture and work with multimedia elements.</p> <p>Advanced data accessing systems</p> |
| Bed Room | <ul style="list-style-type: none"> • Touch and Voice Control for various appliances. • Display Monitors, Special Headphones and Moving Telephone. • Projection TV: Projects the TV pictures on the ceiling or walls • Alarm Clock |
| Bath Room | Mirrors, Medical Box and Special Speakers |
| Kitchen | Speakers, Rack Telephone, Intelligent Aprons, Kettle, Toaster, Food Analyzer, Health Monitor, Devices to preserve food |
| Dining Room | <ul style="list-style-type: none"> • Interactive Tablecloth to keep the food sufficiently warm • Ceramic Audio player and speakers. • Communication facilities around the dinner table • Interactive screens to consult with the cook and other kitchen staff |

Table 10.1 Computerized Products for Home

10.4 Home Banking and Shopping

Traditional banking needed the user to go to the bank to perform related activities. These activities include depositing or withdrawing money from the account or securing loans. Banks gradually began providing many other services including term deposits, agricultural loans, paying bills related to other services such as telephones, electricity and locker facilities. As the confidence of the common man in banking improved, banks became a key component in the national economy.

This also means long queues at the banks during working hours. Introduction of IT in banks reduced the time required to provide service to a user. Long queues were being handled quickly.

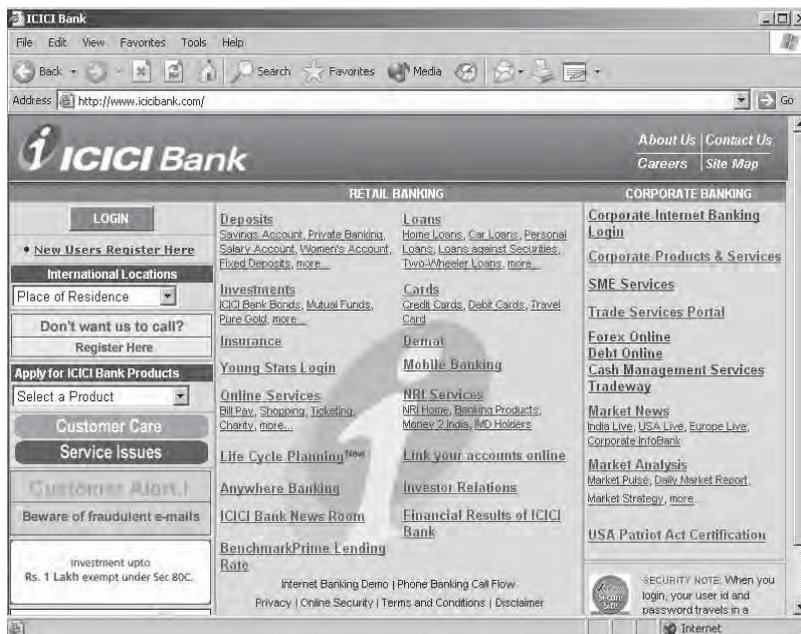


Fig.10.1 ICICI Bank



Fig.10.2 State Bank of India

Advanced machines like ATM enable withdrawal of money from the accounts in a particular bank anytime and anywhere. This helps the user in emergency situations where money is needed during the nights and holidays. However, the user has to go to the nearest ATM facility. It is possible that every branch of any well recognized bank will have a ATM facility soon.

e-Banking permits banking from the comfort of the home by using internet facilities. It has truly improved the reach and services of banks.

Computers are used in many areas even for Shopping. You can purchase any product, any brand, any quantity from anywhere through e-shopping. You need not go to the shop. The pictures and other details of what can be purchased are available on the website of the shop. You have to select and order. Advance payment for these items is assured by various methods. Credit cards and prior registration with the shop are the popular methods. The items purchased will be delivered at your home.

10.5 Computers in Education

Computers are used in many areas of Education including:

- Buying and browsing the latest edition of books by both local & foreign authors Educational CDROMs
- Computer Based Tutorials (CBT).
- Spreading information about schools, colleges, universities and courses offered, admission procedures, accommodation facilities, scholarships, educational loans, career guidance.
- e-Learning that enables online educational programs leading to degrees and certifications

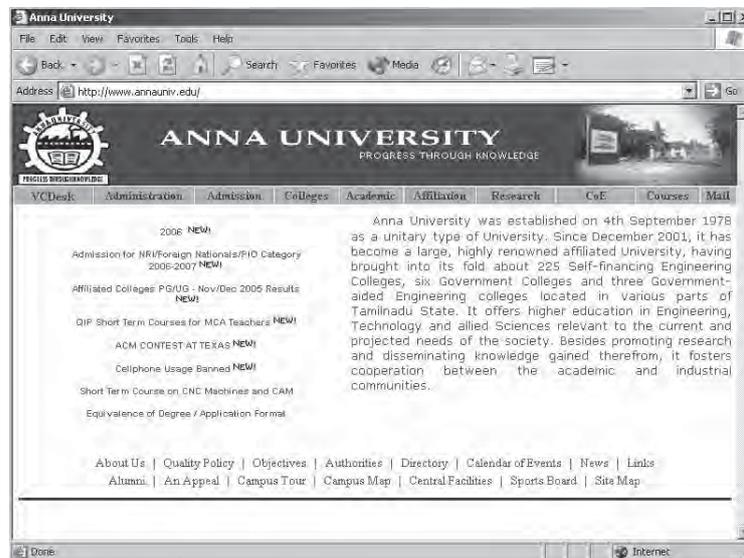


Fig. 10.3 Anna University

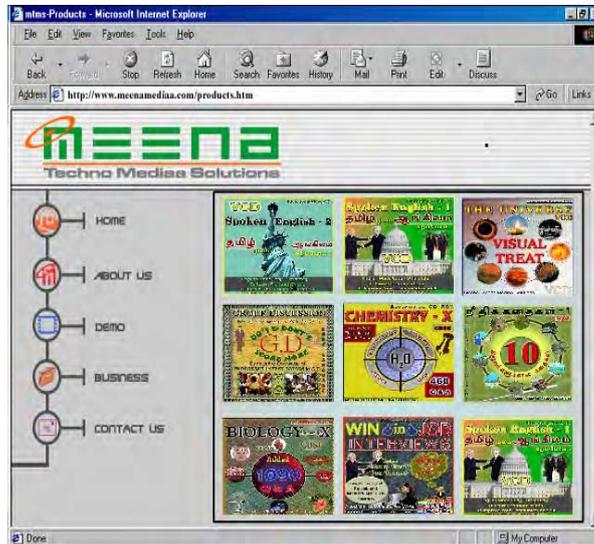


Fig.10.4 Computer Based Tutorials

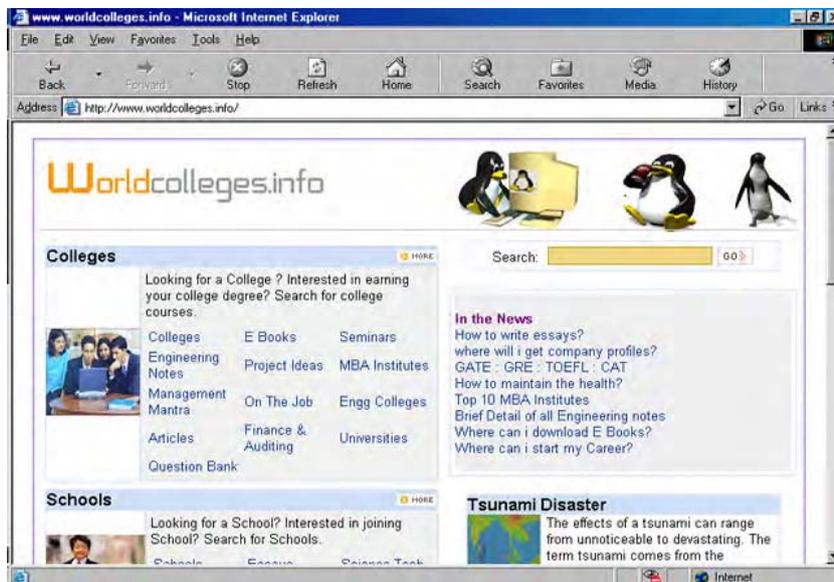


Fig.10.5 Information on Education around the Globe

10.6 Computers in Entertainment

Computers contribute to entertainment also. You can update your knowledge in fine arts like painting, music, dance, yoga, games, science, nature, latest news and events. You can know more about various places of worship and places of interest for tourists.



Fig. 10.6 Computers in Entertainment



Fig.10.7 Computers in Tourism (Tamil Nadu)



Fig.10.8 Computers in Tourism (India)

10.7 Computers in Healthcare

Healthcare is dominated by large amounts of data and limited financial and human resources and need for accountability of those resources

Healthcare has improved significantly ever since computers found their way into the hands of doctors and health administrators.

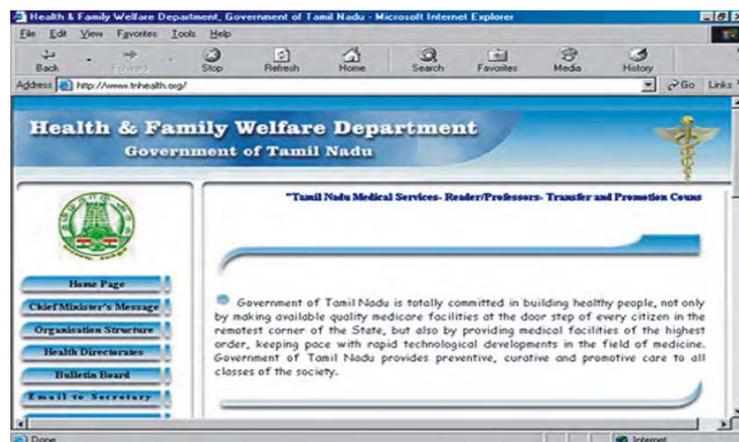


Fig.10.9 Computers in Health and Family Welfare

Computers are used in many areas of healthcare including

- Hospital Management System
- Patient Tracking System
- Exchange of diagnostic records between healthcare units
- Tracking and Monitoring Communicable Diseases
- Decision support systems with highly advanced computing techniques

Today many doctors are innovating to suit their needs. It is indeed a good sign for the patients. Tele-medicine is built largely on the foundational systems mentioned above. Internet facilitates remote diagnostics. This ensures expert advice at places where it is not there.

10.8 Computers in Agriculture

Farming and agriculture might seem like low technology enterprises, but these industries have benefited from computerization more than the casual observer might think. Farmers, both professional and hobbyists benefit from online resources such as seed estimators and pest information sites. Professional farmers can use revenue estimators to help them plan which crops will produce the highest profits based on weather patterns, soil types, and current market values.



Fig.10.10 Computers in Agriculture

Some of the areas where software has been developed are:

- Agricultural Finances and Accounting
- Alternative farming techniques
- Animal Husbandry
- Buildings and Irrigation
- Chat with other agriculturists and scientists
- Farmland Assessment
- Fertilizer Analysis
- Finding links to farm resources, chat boards, classified advertisements, and other farm-related information
- Gardening
- Improving Cow Herds and Increasing revenues
- Land Management
- Livestock
- Milk production
- Use of satellite imagery to decide on the crops

10.9 Internet in real time Applications

All applications mentioned above happen in real time and over the net. You can reserve or book air and train tickets from your own place and at your own pace through computers.



Fig.10.11 Computers in Realtime Applications

Exercises

This Chapter has the support of multimedia content to understand more about the applications presented. You must see this content and where possible visit the websites indicated.

This multimedia content is provided to your school on a separate CD. Please contact your teacher to get this CD.