

CHAPTER 11

IT ENABLED SERVICES

11.1 Introduction

Information Technology that helps in improving the quality of service to the users is called IT Enabled Services [ITES]. IT Enabled Services are human intensive services that are delivered over telecommunication networks or the Internet to a range of business segments. ITES greatly increases the employment opportunities.

Is typing a letter using the computer an ITES? The answer is No. However, a facility that allows the user to speak into a special device called 'Dictaphone' and then convert the speech into a letter is an ITES.

Word processors, Spreadsheets and Databases have ensured that many traditional services are IT Enabled. However, the user is expected to learn several aspects of these IT tools before gaining from their use. ITES adds value to these services by reducing the learning that needs to be done by the users. ITES thus has the potential to take the power of IT to users who do not know IT.

ITES can improve the quality of the service either directly or indirectly. Improved customer satisfaction, better look and feel and an improved database are some direct benefits. Indirect benefits are seen after sometime. Data collected for one purpose may be useful for some other purpose also after some time.

Some of the IT enabled services presented in this chapter are:

- e-Governance
- Call Centers
- Data Management
- Medical [Telemedicine and Transcription].
- Data Digitization
- Website Services

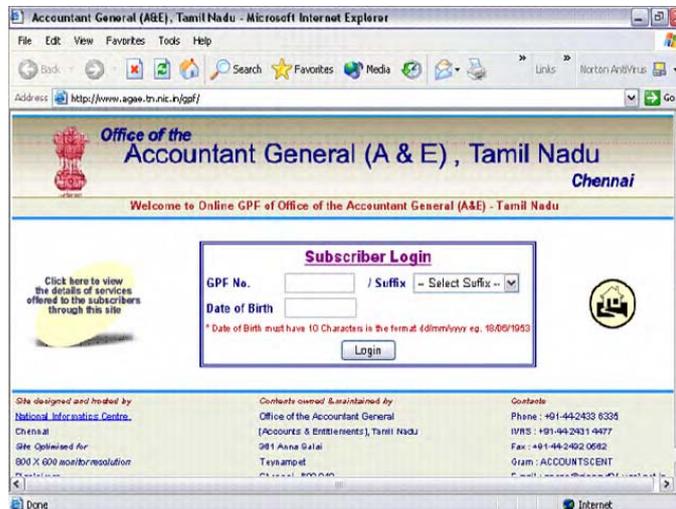


Fig.11.2 Office of the Accountant General (A & E), Tamil Nadu

11.3 Call Centers

Information Technology is happening all over the globe. Users or Customers of IT products are all over the world. The customers are in need of a facility that ensures communication services on all days of the year all round the clock – 24 X 365.

A call center is sometimes defined as a telephone based shared service center for specific customer activities and are used for number of customer-related functions like marketing, selling, information transfer, advice, technical support and so on. A call center has adequate telecom facilities, trained consultants, access to wide database, Internet and other on-line information support to provide information and support services to customers. It operates to provide round the clock and year round service i.e.24 x 365 service.

11.4 Data Management

Data Management is a category of IT Enabled Services pertaining to collection, digitization and processing of data coming from various sources. Traditional data processing services comprise punching data from manually filled forms, images or publications; preparing databases and putting them together. However, with the

advent of multimedia and internet, sources have increased to include manually printed documents, images, sounds and video. Equally diverse are the new output media which include databases on servers, hard copy publications, CD-ROM records emanating from internet based queries.

Data management is the key for effective and profitable use of IT in organizations. The range of ITES in this category are:

- ASCII format for upload to your database
- Character Recognition and Processing
- Custom reports
- Data Entry
- Data entry front end edits
- Document Preparation

- Forms are imaged and transferred to CD ROM
- Handwritten, Machine Print, Mark Sense, Bar Coding (Reader Response can be captured and processed from any hard copy or faxed document).

- Image Capturing
- Image Keying
- Image Storage & Retrieval
- Outcome studies
- Statistical analysis

Some of the organizations that can potentially benefit from ITES in this category are:

- Back office Operations such as Accounts, Financial services
- Banking
- Government agencies
- Hospital
- Insurance
- Legal
- Manufacturing
- Municipalities
- Police departments

- Public utilities
- Publishing
- Telecom
- Transportation

Each of the organizations mentioned above presents a huge opportunity in ITES in the critical area of Data Management. Banking, Financial Services and Insurance sectors are popularly termed BFSI. BFSI and Pension Services are high growth areas for ITES.

Data Security and Customer Privacy are two important aspects that must be ensured by the ITES provider in this area. An ITES provider may be serving multiple organizations. The service provider must ensure the privacy aspects of every organization. Computer Ethics is critical for the success of ITES.

11.5 Medical Transcription and Tele-Medicine

Medical Transcription is a permanent, legal document that formally states the result of a medical investigation. It facilitates communication and supports the insurance claims. There are three main steps involved in Medical Transcription. These include:

Step 1: Hospitals that want to use this form of ITES sign up with a service provider. Doctors are trained in the process. The doctor dictates into a special device or a free telephone. The sound is then stored on a server at the other end.

Step 2: The sound is digitized and sent to the ITES provider. This service provider is usually in a different country. Providing transcription services in countries like USA is becoming very expensive both to the patient and the hospital. So, ITES in this category reduces the cost by having it done in a country where the cost is affordable. The digitized data is converted back to sound. The trained transcriptionists listen to the dictation and transcribe. This is a formal record of the diagnosis made by the doctor.

Step 3: The transcribed files are sent out to quality control persons, who listen to the dictation and check the transcription. Corrections are made if required. Then the transcribed reports are transmitted back to hospital as a word document. This is valid for legal purposes and making insurance claims.

11.6 Data Digitization

Digitization refers to the conversion of non-digital material to digital form. A wide variety of materials as diverse as maps, manuscripts, moving images and sound may be digitized.

Digitization offers great advantages for access, allowing users to find, retrieve, study and modify the material. However, reliance on digitization as a preservation strategy could place much material at risk. Digital technologies are changing rapidly. Preservation is a long term strategy and many technologies will become obsolete soon. This instability in technology can lead to the loss of the digitized objects. This defeats the purpose of preservation. Some application areas of the digital technology are as follows:

- Annual reports and price list
- Books
- Database archiving
- Electronic Catalogues & Brochures
- Engineering and Design
- Geographical Information System.
- Movies, Sounds and High quality image preservation
- Product/Service Training Manuals
- Research Journals and Conference Papers

The steps in data digitization are:

- Understanding the customer needs
- Customer needs are used as the basis for defining the objectives of digitization

- A pilot application is built
- After the pilot application is approved, the full digitization of data identified by the customer is undertaken.
- Different types of data are digitized using different techniques. Many advance software packages are available to improve the quality of the digitized form of the original document.
- The digitized data is indexed and a table of contents is produced to improve accessibility. Highly advanced and reliable storage facilities are used to stock the digitized data.

There are many benefits of digitization. Some of the key benefits are:

- Long term preservation of the documents.
- Storage of important documents at one place.
- Easy to use and access to the information.
- Quick and focused search of relevant information in terms of images and text.
- Easy transfer of information in terms of images and text.
- Easy transfer of information through CD-ROM, internet and other electronic media

11.7 Website Services

Computers also help us in accessing website services such as:

- Agriculture Marketing Network
- Career guidance
- Employment Online
- General Provident Fund
- Results of various Examinations

In the very near future there will be many more ITES that can be utilized even from the remote corners of the world.

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.