

Chapter 19: The IT Department

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Functions of IT Department

- Systems Development
- Operations
 - ◆ Equipment Operations
 - ◆ Production Support
- Technical Support
 - ◆ End-User services
 - ◆ Systems Programming
 - ◆ Database Administration

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Systems Development

- The purpose of the systems development function is to develop new applications and to maintain existing ones.
- The systems developer has to analyze the application area, determine its requirements, and design and program the actual computer-based information system.

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Operations

- There is much less abstraction involved when organizing the operational function for a data-processing installation.
- The computer and associated machines must be fun, and someone must schedule this; essentially, that is the mission of operations.
 - ◆ Equipment Operations
 - ◆ Production Support

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Equipment Operations

- Equipment operations means running the machine and its peripheral equipment, keeping the printer supplied with paper, mounting magnetic tape onto magnetic tape drives, and monitoring the computer's console.
- In most installations data preparation is also one of the responsibilities of operations.
- Since computer operations often run two or three shifts, organization into these shifts is a key feature.

Production Support

- Production support schedules the running of the computer centre and controls jobs (programs) in terms of priorities, based upon when output is required.
- In these respects, the manager of computer operations will be implementing the policies set by the data processing installation manager.

Technical Support

- This part of a computer centre is meant to support both systems development and operations functions.
- Technical support is divided into these key areas:
 - ◆ End-User Services
 - ◆ Systems Programming
 - ◆ Database Administration

End-User Services

- Personnel in this group help users gain access to computer-centre facilities, conduct training courses, and troubleshoot when users have problems with their computer support.

Systems Programming

- Here personnel install the computer's operating system, tailor it and maintain it, and improve the efficiency of application programs.

Database Administration

- The skill of setting up and administering the organization's data base falls to this group.
- It is multifaceted assignment, which includes establishing the logical data requirements of the enterprise; setting up the data base; controlling security and providing backup to the data; and helping the systems development staff use the data in designing computer-based information systems.

The Information Centre Approach

- It is necessary to The most common approach to the management of End User Computing (EUC) is the **Information Centre (IC)** which formalize the support to be provided by users.
- The IC is a unit within the IT Department which is specifically responsible for the EUC support.
- By providing dedicated support personnel with a separate budget, focused attention is ensured.

Roles of an Information Centre

- Advice and Consultancy
- Training
- Procurement
- Define Standards

Roles of an Information Centre – Advice and Consultancy

- Many Information Centre are set up like a typical computer store. A user talk to the centre consultant about computing needs, and the user and the consultant sit down at a system or two and experiment with some hardware and software that seems appropriate to the user's job needs.
- Many ICs run a hotline service to help end-users with problems once an application is up and running.
- Some centre will audit end-user applications on a regular basis to ensure that they are working the way they are supposed to

Roles of an Information Centre – Training

- With so many end-users needing knowledge about computer Technology to do their jobs more effectively, training has become a major priority
- Information centre training can be provided on an individual, department wide, or companywide basis.
- Training may be directed to a specific need or a specific application (such as training the purchasing department to use Excel to store and access purchasing records)

Roles of an Information Centre – Procurement

- The user must take into account the fact that the centre can, realistically, support only a finite number of products. If the centre supports only Brand X spreadsheet, and the user wants Brand X, the user must bear complete responsibility for training, advising, and dealing with any problems that might later arise.
- It would be desirable for the Information Centre to be part of the evaluation committee for the acquisition of EUC products

Roles of an Information Centre – Define Standards

- The Information Centre should evaluate user needs and arrive at a set of packaged software for each type of EUC processing.

Advantages and Disadvantages

- The IC approach enables users to retain the autonomy to care for their own needs. Most end-users operate under normal budgetary constraints and are motivated to spend funds wisely. If properly managed, the IC provides some control over the unbridled proliferation of end-user systems.
- Some users may resent not having the complete freedom to buy any kind of software or hardware as they see it. There will be some conflict of interests between the objectives of the Information Centre and those of any individual user.

The Emergence of the CIO

- The **Chief Information Officers (CIO)** is a senior manager who takes part in business strategy formulation and who can ensure that the information strategy fits into and complements the overall business strategy.
- This is reflective of the growing recognition of the importance of information in the pursuit of the company's strategic goals.

Responsibilities of the CIO

- The **Chief Information Officer (CIO)** is the top executive in charge of information technology and its usage.
- The main responsibilities of the CIO are described below :
 - ◆ Strategic Use of IT
 - ◆ Information Management
 - ◆ Traditional Management Functions

Responsibilities of the CIO – Strategic Use of IT

- The CIO must identify ways in which information and information technology are able to support the company's strategic plans.
- This can include supporting a particular business activity, to actually developing a new information-based product for customers.

Responsibilities of the CIO – Information Management

- Information is an important resource and especially so in organizations which are information intensive.
- The management of information flows, processing and presentation is an important responsibility of the CIO.

Responsibilities of the CIO – Traditional Management Functions

- The usual management functions are also the responsibilities of the CIO.
- These include budgeting and staffing of the IT department.
- There will always be competing demands on the IT resources and the CIO must establish the priorities of the IT staff and allocate resources to areas that are more important.