IS STRATEGY ,MANAGEMENT

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Acquiring information systems and services

◦ Information systems are a major corporate asset, with respect both to the benefits they provide and to their high costs. Therefore, organizations have to plan for the long term when acquiring information systems and services that will support business initiatives.

◦ At the same time, firms have to be responsive to emerging opportunities.

Acquiring information systems

◦ On the basis of long-term corporate plans and the requirements of various individuals from data workers to top management, essential applications are identified and project priorities are set.

◦ For example, certain projects may have to be carried out immediately to satisfy a new government reporting regulation or to interact with a new customer's information system.

◦ Other projects may be given a higher priority because of their strategic role or greater expected benefits.

Acquiring information systems and services

◦ Once the need for a specific information system has been established, the system has to be acquired. This is generally done in the context of the already existing information systems architecture of the firm. The acquisition of information systems can either involve external sourcing or rely on internal development or modification.

◦ With today's highly developed IT industry, companies tend to acquire information systems and services from specialized vendors. The principal tasks of information systems specialists involve modifying the applications for their employer's needs and integrating the applications to create a coherent systems architecture for the firm.

Acquisition from external sources

◦ There are several principal ways to acquire an information system from outside the organization.

◦ Many firms have resorted to outsourcing their information systems.

◦ Outsourcing entails transferring the major components of the firm's systems and operations—such as data centres, telecommunications, and software development and maintenance—to a specialized company that provides its services under long-term contracts specifying the service levels (that is, the scope and the quality of service to be provided).

Acquisition from external sources

◦ In some cases the outsourcing entails moving the services abroad—i.e., offshoring in pursuit of the cost or expertise advantages.

◦ Responsibility for the acquisition of new applications then falls to the outside company. In other cases the company may outsource just the development or maintenance of their information systems, with the outside company being a systems developer.

Cloud computing

◦ Cloud computing is increasingly being adopted as a source of information services. It offers on-demand access via the Internet to services furnished by a provider that runs data centres with the necessary software and other resources.

◦ The services can be provided at one of three levels: as the infrastructure for running existing applications, as the platform for developing new applications, or as software to be used by the firm over the network.

Cloud computing

◦ Generally, cloud computing is provided by external vendors, although some firms implement their own private clouds in order to share resources that employees can access over the network from a variety of devices, often including smartphones.

◦ Scalability and avoidance of capital expenditures are notable advantages of public clouds; the partial loss of control is a drawback.

Internal information systems development

◦ When an information system is developed internally by an organization, one of two broad methods is used: life cycle development or rapid application development (RAD).

◦ Increasingly, life-cycle development is being replaced by RAD. In various RAD methodologies a prototype a preliminary working version of an application is built quickly and inexpensively, albeit imperfectly.

Rapid application development (RAD).

◦ This prototype is turned over to the users, their reactions are collected, suggested modifications are incorporated, and successive prototype versions eventually evolve into the complete system.

◦ Formal processes for the collaboration between system developers and users.

◦ Sometimes RAD and life-cycle development are combined.