## INFORMATION SYSTEMS ACQUISITION

The process of obtaining or acquiring information systems for an organization.

# Methods for acquiring MIS applications

**1. Software development lifecycle:** This is a methodology for developing an information system that partitions the system development process into formal stages that must be completed sequentially with a very formal division of labuor between the user and the specialists.
The characteristics of this method are;
i. The development is in stage.
ii. Its advantages for large organizational systems e.g. T.P.S.

iii. Supports project planning and control organization of team development effort and the production of a maintainable system.

iv. Relatively inflexible with respect to the user requirements that change during the development cycle.
v. There is vigorous documentation.
vi. It can be costly and time consuming.

**2. Prototyping:** This is the provision of a model that is given to the users for them to clarify their requirements and gain a measure of confidence in the general approach.
In some cases the prototype is upgraded through several iterations, thoroughly undergoing testing and documentation. In some cases the prototype may be thrown away once the user requirements have been captured.

**Characteristics**
1. Development by gradually modifying an initial prototype based on feedback from the users.
2. It's a relatively fast development with early availability of the first model of the system (the first version).
3. Its advantageous when user requirements are uncertain.
4. It works well for project that are limited in size and for systems that are being computerized for the first time. Typical application of this is the development of DSS.
5. Unless precautions are taken it may evolve into a quick and dirty system hampering maintenance.

**3. Internal development via end-user computing;-**
This is the development of I.S by end-user with little or no formal assistance from technical personnel.

**Characteristics**
i. It leads to increased user satisfaction and involvement.
ii. It reduces applications back-log (this is the queue of systems awaiting implementation)
iii. It requires tools such as the fourth generation languages which are user friendly.

iv. It leads to improve requirements determination.
v. It requires the involvement of information centers /helpdesk /hotlines.

## 4. Off-the-shelf package

This is actually the purchase of a license to use the package. At times these packages may have to be tuned to fit the needs of the user company. When purchasing an offthe-shelf package, requests for proposals are sent to potential suppliers. This document outlines the requirements of the organization and asks questions as to how the vendor systems may satisfy them.
The selection is based on the characteristics of the software package and the requirements that the user organization wants.

**Characteristics**
i. They are more reliable and have better documentation than internally produced systems.
ii. They often need to adjust work within the organization to fit the needs of the package.
iii. It may cost the company to forego competitive advantages, if this was done internally.
iv. It satisfies most user requirements due to the fact that it has been developed by experts.
v. Due to its mass production its relatively cheaper to buyer and that the implementation is quick.

## 5. Outsourcing

This is the hiring of external firms known as the software houses or system integrators to develop and install systems that can easily be executed. They also perform other services i.e. developing strategic plans to carryout organizational functions. In the rather case we refer to this as facility management.

Outsourcing is necessary and appropriate in the following circumstances:-
1. When you want to reduce development cost.
2. Relief the firm from the burden of developing the system.
3. When the firms existing information systems capabilities are limited, ineffective or technical inferior.
4. When the company needs to off-load some of pending workloads from the I.S. department.

### Problems of outsourcing

1. The firm may lose control over the I.S function i.e. No control over the type of software or hardware being used.
2. There is total vendor dependency i.e. the firm may have to pay whatever the vendor charges and accept whatever he does.
3. If the firm lacks expertise to negotiate a sound contractor, this dependency may eventually lead to loose of control over the technical direction.
4. Trade secrets may leak to outsiders and the company may lose competitive advantage.

### Solutions to outsourcing problems

1. Organizations should manage the outsources as they would manage this over information systems departments by setting priorities and targets to be met by the outsourced company.
2. Establishment of criteria to evaluate the outsourcing vendor.
3. Designing outsourcing contracts carefully so that outsourcing functions can be adjusted if the nature of the business changes.

4. A climate of trust should exist between both parties i.e. they should be in partnership.

Development of information systems will involve the following group:-
1. End-user
2. M.I.S Developer
3. Management

**END-USERS:-** It's the function of the end-user to prepare their information requirement and to ascertain the working environment of the system developed by making sure that the system interfaces are proper.

**M.I.S DEVELOPERS:** - Their function is to implement system that satisfy user requirement as well as the objectives of the management by establishing that they have adequate resources, develop a quality system and meet the development constraints.

**MANAGEMENT:** - It's the function of the management to control and allocate resources that go in the development of the system and to approve the various stages in the process.