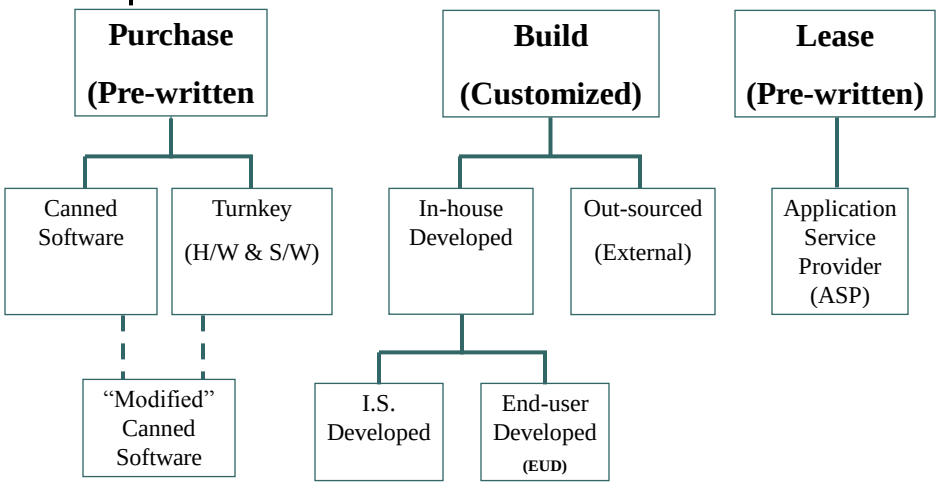
Ways to obtain an AIS



Lecture 4-1

Purchase Software

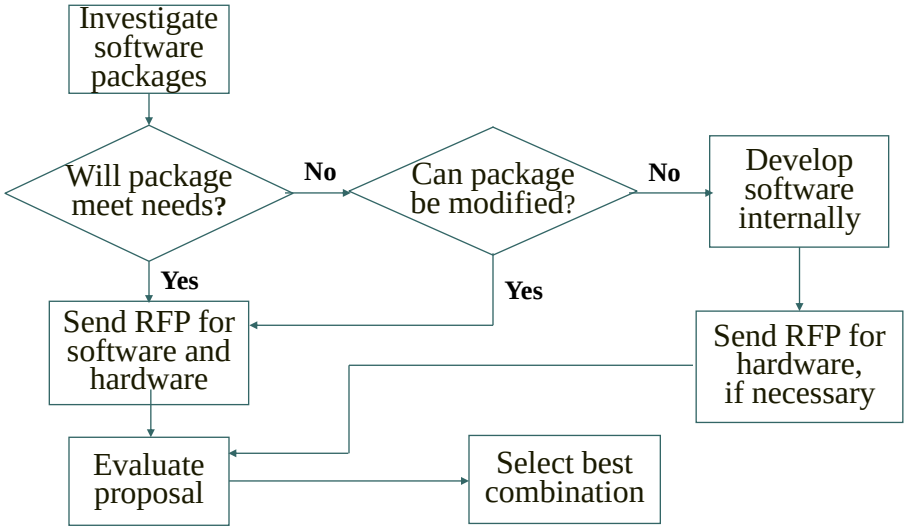
- *Canned software* is written by computer manufacturers or software development companies.
- It is sold on the open market to a broad range of users with similar requirements.
- *Turnkey systems* are a combination of software and hardware sold as a package.

Lecture 4-2

Purchasing Software and The SDLC

- Companies that buy rather than develop AIS software still go through the systems development life cycle (SDLC).
  1. Systems analysis
  2. Conceptual design
  3. Physical design
  4. Implementation and conversion
  5. Operation and maintenance

The Systems Acquisition Process



Development by In-House IS Department

- In the past, most organizations had their information system departments develop *custom software,* because canned software that fit their specific needs was not available.
- Developing custom software is difficult and error-prone.
- It also consumes a great deal of time and resources.

Development by In-House IS Department

- Custom software is usually developed and written in house.
- Alternatively, organizations may engage an outside company to develop a package or assemble it from their inventory of program modules.
- When contracting with an outside organization, a company should maintain control over the development process.

Development by In-House IS Department

- What guidelines are recommended?
  - carefully select a developer
  - sign a contract
  - plan and monitor each step
  - maintain effective communication
  - control all costs

Lecture 4-7

End-User-Developed Software

- *End-user computing* (EUC) is the hands-on development, use, and control of computer-based information systems by users.
- When end users began to meet their initial information needs two things happened:
  1. Users realized computers could be used to meet more and more information needs.
  2. Increased access to data created many new uses and needs for information.

Lecture 4-8

End-User-Developed Software

- What are some examples of end-user development uses?
  - retrieving information from company databases to produce simple reports or to answer one-time queries
  - performing “what if” sensitivity or statistical analyses
  - developing applications using prewritten software (spreadsheet or database system)

End-User-Developed Software

Benefits of End-User Computing
User creation, control, and implementation
Systems that meet user needs
Timeliness
Freeing up IS resources
Versatility and ease of use

End-User-Developed Software

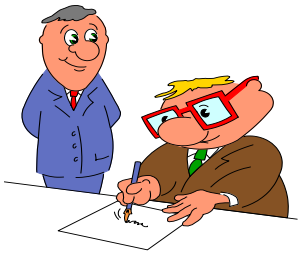
Risks of End-User Computing
Logic and development errors
Inadequately tested applications
Inefficient systems
Poorly controlled and documented systems
Systems incompatibility
Duplication of systems
Increased costs

Outsource the System

- What is outsourcing?
  - It is hiring an outside company to handle all or part of an organization's data processing activities.
- In a mainframe outsourcing agreement, the outsourcers buy their client's computers and hire all or most of the client's employees.

Outsource the System

- In a client/server or PC outsourcing agreement, an organization outsources a particular service, a segment of its business, a particular function, or PC support.



Lecture 4-13

Outsource the System

Benefits of Outsourcing
A business solution
Asset utilization
Access to greater expertise and more advanced technology
Lower costs
Improved development time
Elimination of peaks and valleys usage
Facilitation of downsizing

Lecture 4-14

Outsource the System

Risks of Outsourcing
Inflexibility
Loss of control
Reduced competitive advantage
Locked-in system
Unfulfilled goals

ASPs

- An Application Service Provider (ASP) is a company that provides access to and use of application programs via the Internet.
- The ASP owns and hosts the software; the contracting organization accesses the software via the Internet.

Factors to Consider When Evaluating ASPs

Advantages	Disadvantages
Lower costs	Viability of ASP
Automatic upgrading to current version of software	Security and privacy of data
Need fewer in-house IT staff	Availability and reliability of service
Reduced hardware needs	Inadequate support or poor responsiveness to problems
Flexibility	Standard software that may not meet all customized needs
Knowledge support	
Security and privacy of data	

End of Lecture