

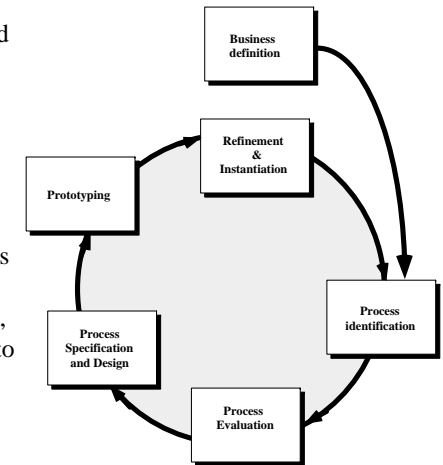
## Chapter 22: Management Issues

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## Business Process Reengineering (BPR)

- The fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical contemporary measures of performance, such as cost, quality, service, and speed
- The radical redesign of business processes, organizational structures, information systems, and values of the organization to achieve a breakthrough in business results



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## BPR Principles

- Organize around outcomes, not tasks.
- Have those who use the output of the process perform the process.
- Incorporate information processing work into the real work that produces the raw information.
- Treat geographically dispersed resources as though they were centralized.
- Link parallel activities instead of integrated their results. When different
- Put the decision point where the work is performed, and build control into the process.
- Capture data once, at its source.

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## Impact on BPR

- Changing the way work is done
- Impact across multiple departments
- May meet resistance

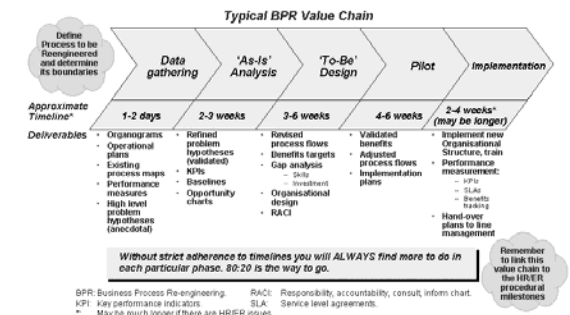


Fig 7A – The major phases of the Business Process Reengineering methodology followed as part of the AHMS Project.

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## Outsourcing

- A relatively new phenomenon in information technology.
- Another management option to deal with high IT costs.
- Arose out of management's concern that the company should focus on its core competencies.
- Tried to concentrate their resources on areas where they could add value to the customer.
- A business issue as much as it is a technical decision.

## Considerations of Outsourcing

- By performing these functions for many customers, outsourcing vendors may have more experience doing the work and greater ability to negotiate quantity discounts with hardware & software vendors
- Extensive outsourcing of IS activities may mean having a very small IS department limited to developing IS plans and negotiating with outsourcing vendors

## Advantages of Outsourcing

- The main advantages in outsourcing parts of the IT departments are:
  - ◆ Cost savings as vendor has economies of scale and is more efficient.
  - ◆ Service quality may be better
  - ◆ The cost is more predictable with outsourcing contract in place
  - ◆ Limited IT resources may be used for more strategic work.

## Disadvantages of Outsourcing

- The main disadvantages of outsourcing are:
  - ◆ Possible over-dependence on another firm
  - ◆ More difficult to control outsourced work areas
  - ◆ Greater potential loss of confidentiality.

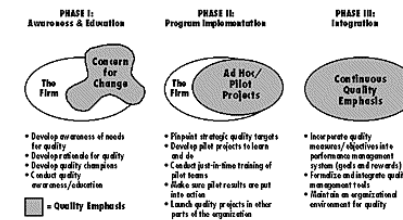
## Common Cause of System Quality Problems

- Requirements Gathering
- Hardware issues
- Capacity requirements
- Use of appropriate methodologies
- Implementation issues

## Total Quality Management (TQM)

- Total Quality Management (TQM) is a concept that makes quality control a responsibility to be shared by all people in an organization.

### Sample Roadmap for Introduction of Total Quality Management



## Total Quality Management (TQM)

- Everyone is expected to contribute to the overall improvement of quality
  - ◆ The **Engineer** who *avoids design errors*
  - ◆ The **Production Worker** who *spots defects*
  - ◆ The **Sales Representative** who *presents the product properly to potential customers*
  - ◆ The **Secretary** who *avoid typing mistakes*
- Quality improvements not only *raise the level of product and service quality*, but they also *lower costs*.

## TQM vs. BPR

- Total Quality Management (TQM) is more incremental than Business Process Reengineering (BPR) because its efforts focus making a series of continuous improvements rather than dramatic bursts of change.
- Sometimes, however, processes may have to be fully reengineered to achieve a specified level of quality.

## How IS Contribute to TQM?

- Information System can help firms achieve their quality goals by helping them
  - ◆ Simplify products or processes
  - ◆ Meet benchmarking standards
  - ◆ Make improvements based on customer demands
  - ◆ Reduce cycle time
  - ◆ Increase the quality and precision of design and production

## Software Liability

- It is very difficult, if not impossible, to hold software producers liable for their software products failure or injury because it is only when software acts as a part of a defective product that strict liability pertains.
- If the software is strictly a service (not part of a product), these laws do not apply.
- As part of a product, software is still considered to be like books, which historically are protected from liability claims by the First Amendment guaranteeing freedom of expression.