



## BUSINESS PROCESS REENGINEERING

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### What is a Process?

- A specific ordering of work activities across time and space, with a beginning, an end, and clearly identified inputs and outputs: a structure for action.

• فرایند:

– شیوه نظام یافته اجرای فعالیت ها



### What is a Business Process?

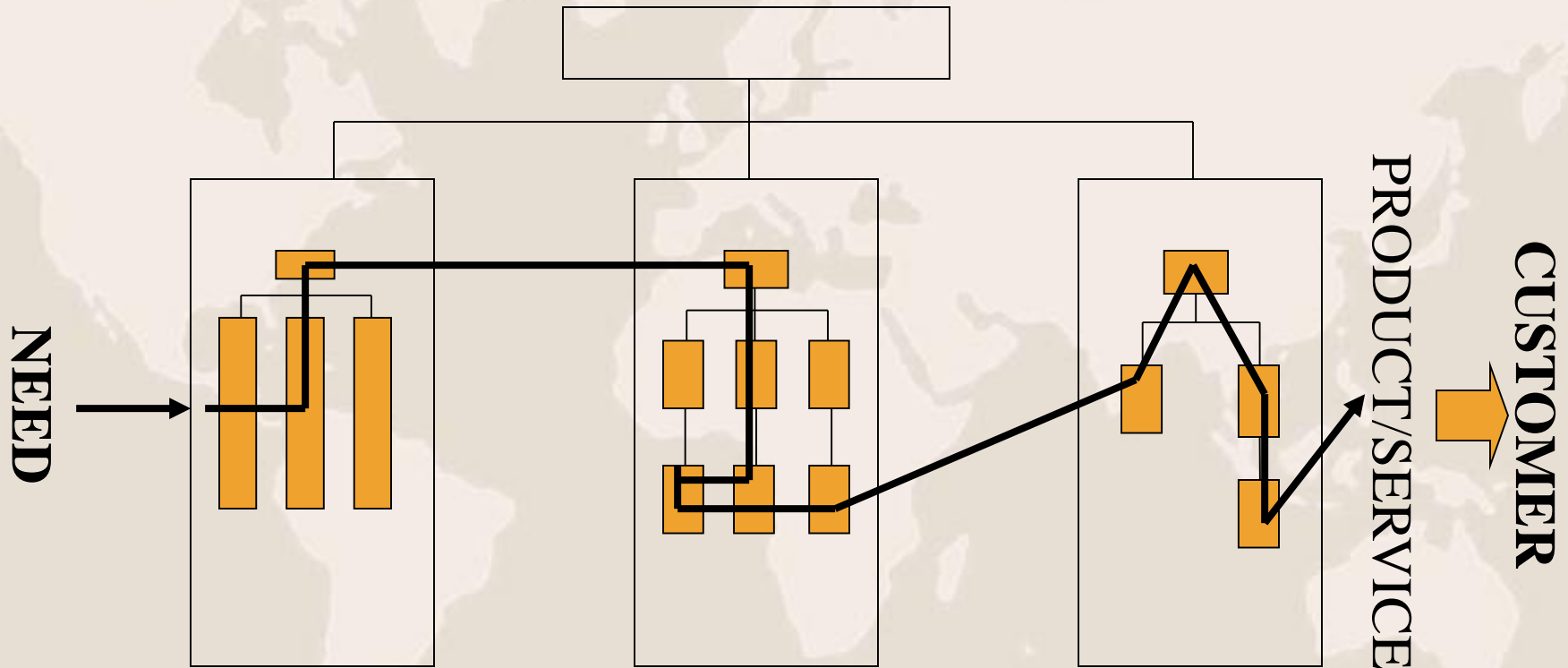
- A group of logically related tasks that use the firm's resources to provide customer-oriented results in support of the organization's objectives



# Management Information Systems

## BPR

### Process: Where and Who?





### Systems as Planned Organizational Change

- **Business process management (BPM)**
  - **Variety of tools, methodologies to analyze, design, optimize processes**
  - **Used by firms to manage business process redesign**



### Systems as Planned Organizational Change

- **Steps in BPM**
  1. **Identify processes for change**
  2. **Analyze existing processes**
  3. **Design the new process**
  4. **Implement the new process**
  5. **Continuous measurement**



### Systems as Planned Organizational Change

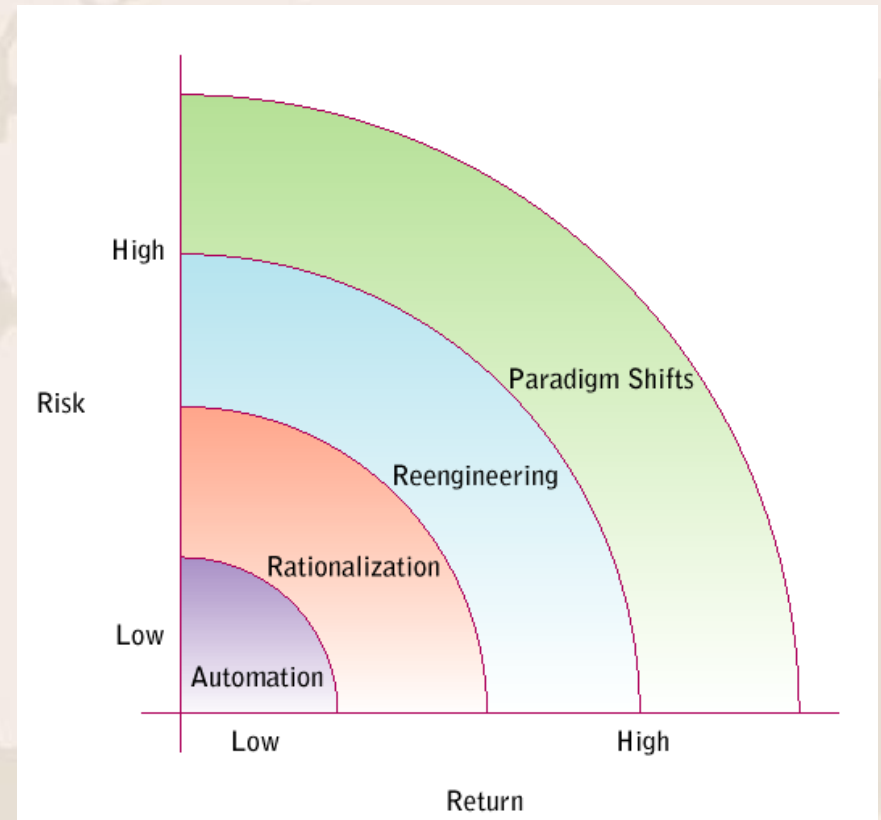
- **Variety of tools for BPM, to**
  - **Identify and document existing processes**
    - Identify inefficiencies
  - **Create models of improved processes**
  - **Capture and enforce business rules for performing processes**
  - **Integrate existing systems to support process improvements**
  - **Verify that new processes have improved**
  - **Measure impact of process changes on key business performance indicators**





### Spectrum of Change

- Automation
- Rationalization of procedures
- Reengineering
- Paradigm shift

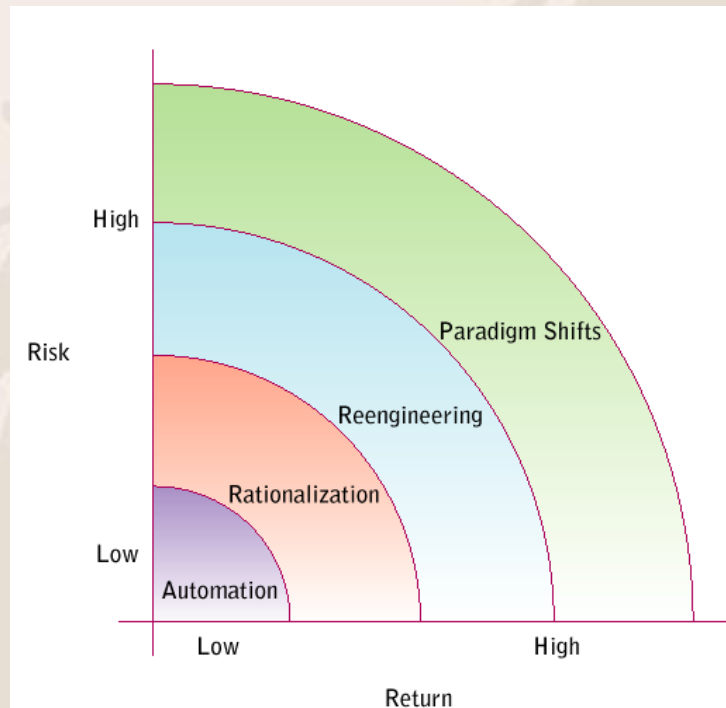






### Automation

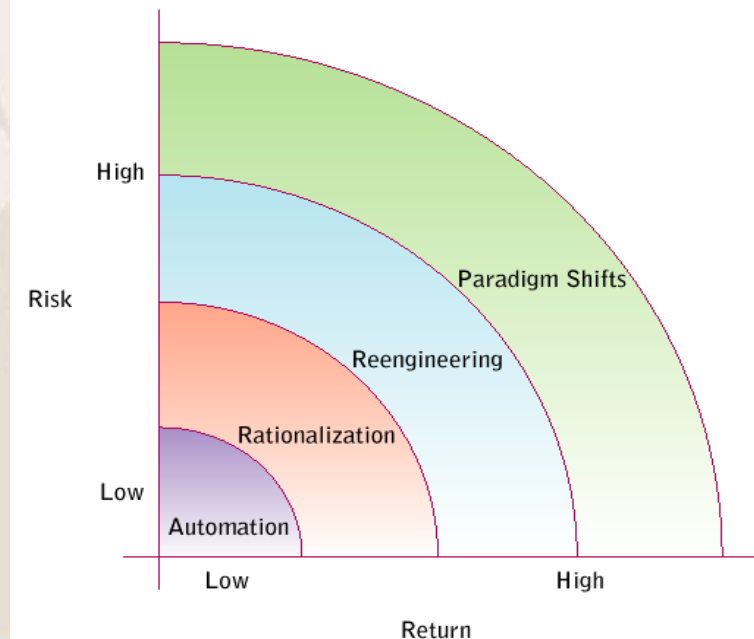
- refers to computerizing processes to speed up the existing tasks.
- improves efficiency and effectiveness.





### Rationalization of Procedures

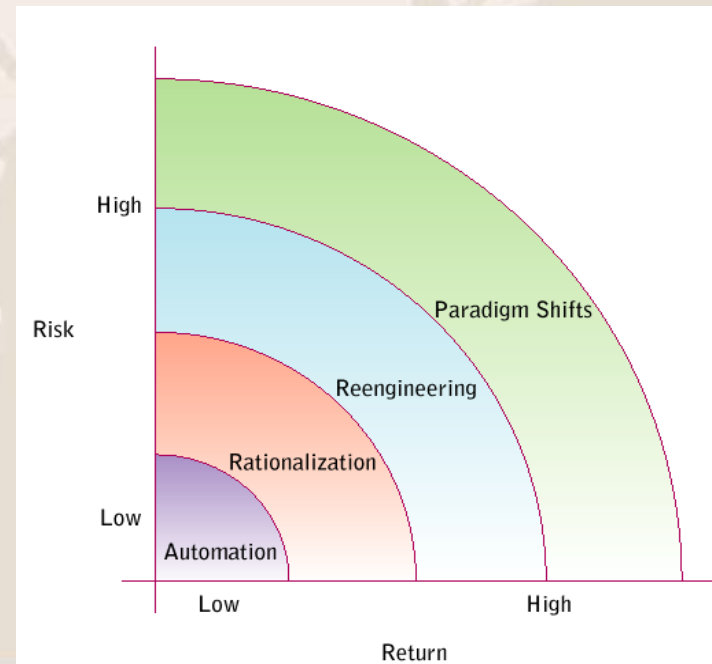
- refers to streamlining of standard operating procedures, eliminating obvious bottlenecks, so that automation makes operating procedures more efficient.
- improves efficiency and effectiveness.





### Business Process Reengineering

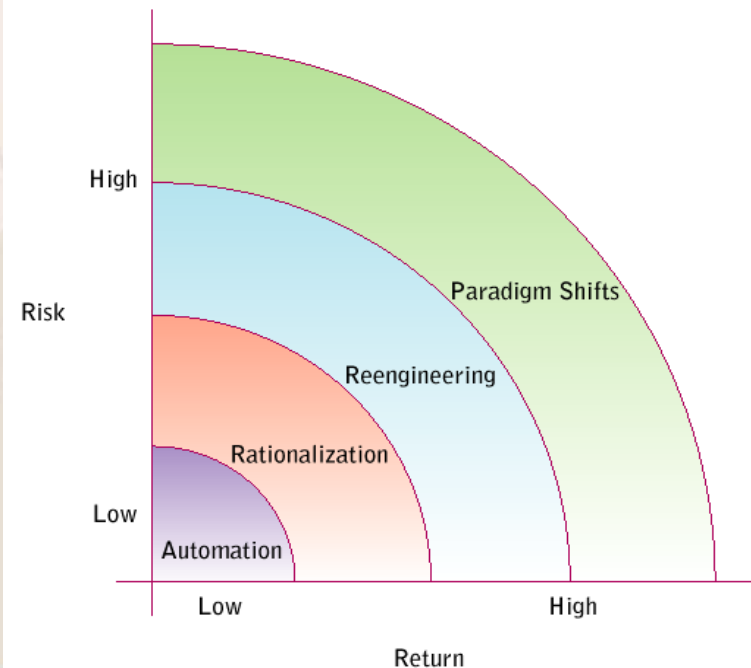
- refers to radical redesign of business processes.
- Aims at
  - eliminating repetitive, paper-intensive, bureaucratic tasks
  - reducing costs significantly
  - improving product/service quality.





### Paradigm Shift

- refers to a more radical form of change where the nature of business and the nature of the organization is questioned.
- improves strategic standing of the organization.





### Spectrum of Change

#### 1. Automation

- Increases efficiency
- Replaces manual tasks

#### 2. Rationalization of procedures

- Streamlines standard operating procedures
- Often found in programs for making continuous quality improvements

#### 3. Business process redesign

- Analyze, simplify, and redesign business processes
- Reorganize workflow, combine steps, eliminate repetition

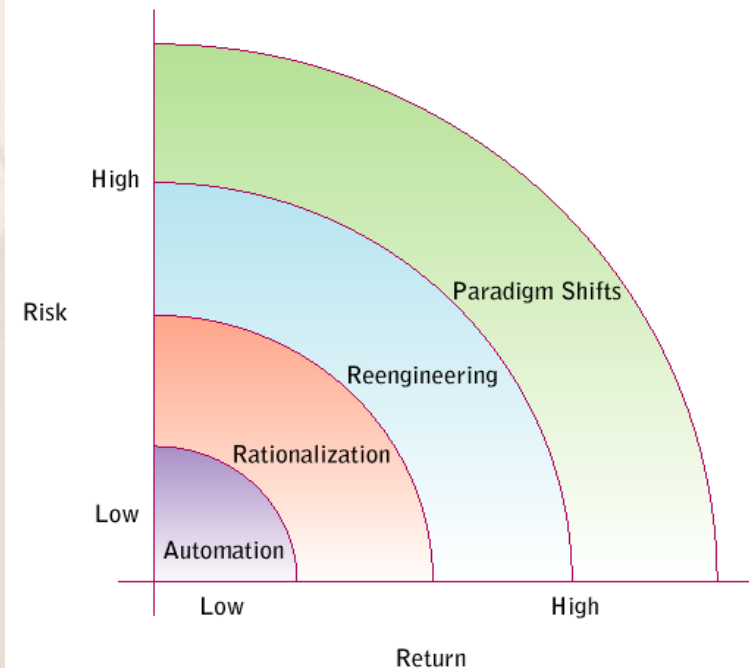
#### 4. Paradigm shifts

- Rethink nature of business
- Define new business model
- Change nature of organization



### Business Process Reengineering

- “Reengineering is 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.”







### Business Process Reengineering, WHY ?

- **Competition**
  - Local
  - Global
- **Change**
  - Technology
  - Customer Preferences
- **Integrate people, technology, & organizational culture**
- **To Respond to rapidly changing technical & business environment and customer's needs to achieve Big performance gains**





# Management Information Systems

## Business Process Reengineering

### Key Steps

**Select The Process & Appoint Process Team**

**Understand The Current Process**

**Develop & Communicate Vision Of Improved Process**

**Identify Action Plan**

**Execute Plan**



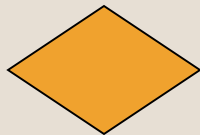
### BPR Symbols



An Activity



A Document



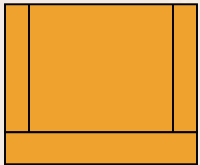
A Decision



Data (input as outputs)



### BPR Symbols



A Predefined Process



The Start of a Process



The End of a Process



Representing a Relation



### BPR Symbols



Continuation of the process at the same page at an equal symbol with the same number. Used when a relation arrow crosses another relation arrow



Off-Page Connector - Process will continue on the next page



Integration Relation - A relation to another module is identified and described



### Rules For Data Symbols



Start

Symbol used to identify the start of a business process



Generate  
Purchase  
Order

Activities must be described as a verb



OK?

Yes

Decisions have *only* two possibilities (Yes & No)

No



Crossing lines are not allowed



End

If one side of the decision has no further processes defined this symbol has to be used



### Rules For Data Symbols



Continuation symbol within the same number must be present twice on the same page

Purchase  
Order

Name the document



Off- Page Connector is used to continue a process at the next page or to let the process to flow over at the previous to the next page. If more than one is needed use A, B, C, D ...

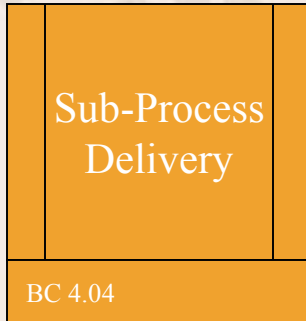
Posting  
of Bonus

Name the data





### Rules For Data Symbols



Predefined Processes always have a relation to level and stream by a number in the line below a sub-process description

A predefined process must be described in a different flowchart. To make the relation clear between the predefined process and the belonging flowchart a unique alpha numeric number should be assigned to this predefined process.





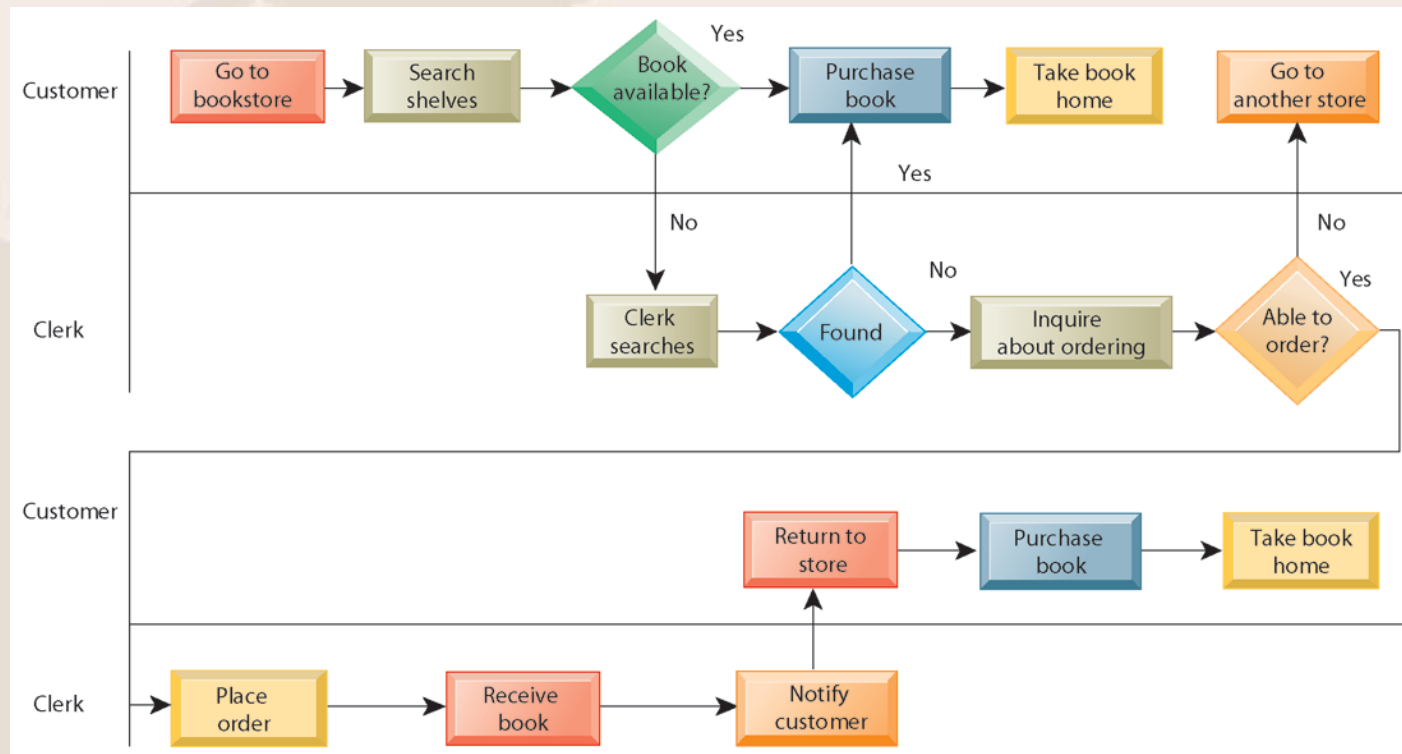
# Management Information Systems

## Business Process Reengineering

### Systems as Planned Organizational Change

#### AS-IS BUSINESS PROCESS FOR PURCHASING A BOOK FROM A PHYSICAL BOOKSTORE

#### Process Flow Diagram (PFD)/ Process Model (PM)





# Management Information Systems

## Business Process Reengineering

### Systems as Planned Organizational Change

#### REDESIGNED PROCESS FOR PURCHASING A BOOK ONLINE

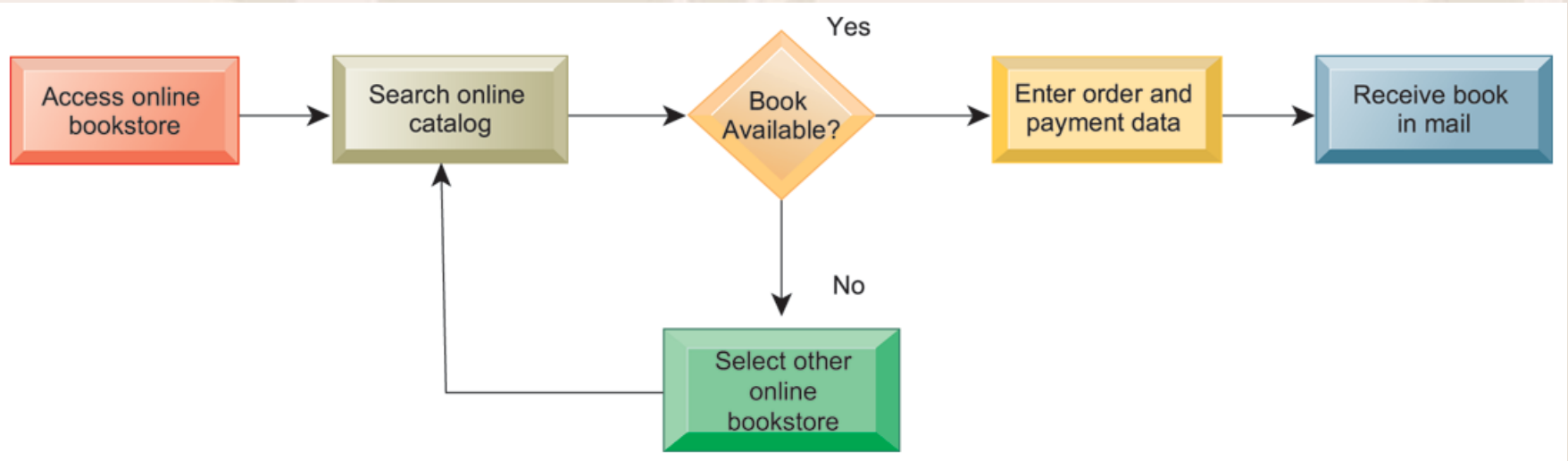


FIGURE 13-3

Using Internet technology makes it possible to redesign the process for purchasing a book so that it requires fewer steps and consumes fewer resources.



امام سجاد عليه السلام:

نظير المؤمن في وجه أخيه المؤمن للمودة والمحبة له عبادة

نگاه مؤمن به چهره برادر مؤمن خود از روی دوستی و محبت به او، عبادت است.

(تحف العقول ص 282)

پایان