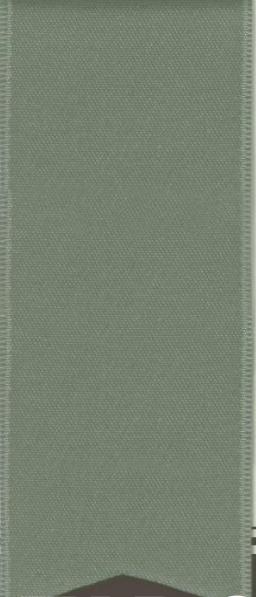


ACHIEVING COMPETITIVE ADVANTAGE WITH INFORMATION SYSTEMS

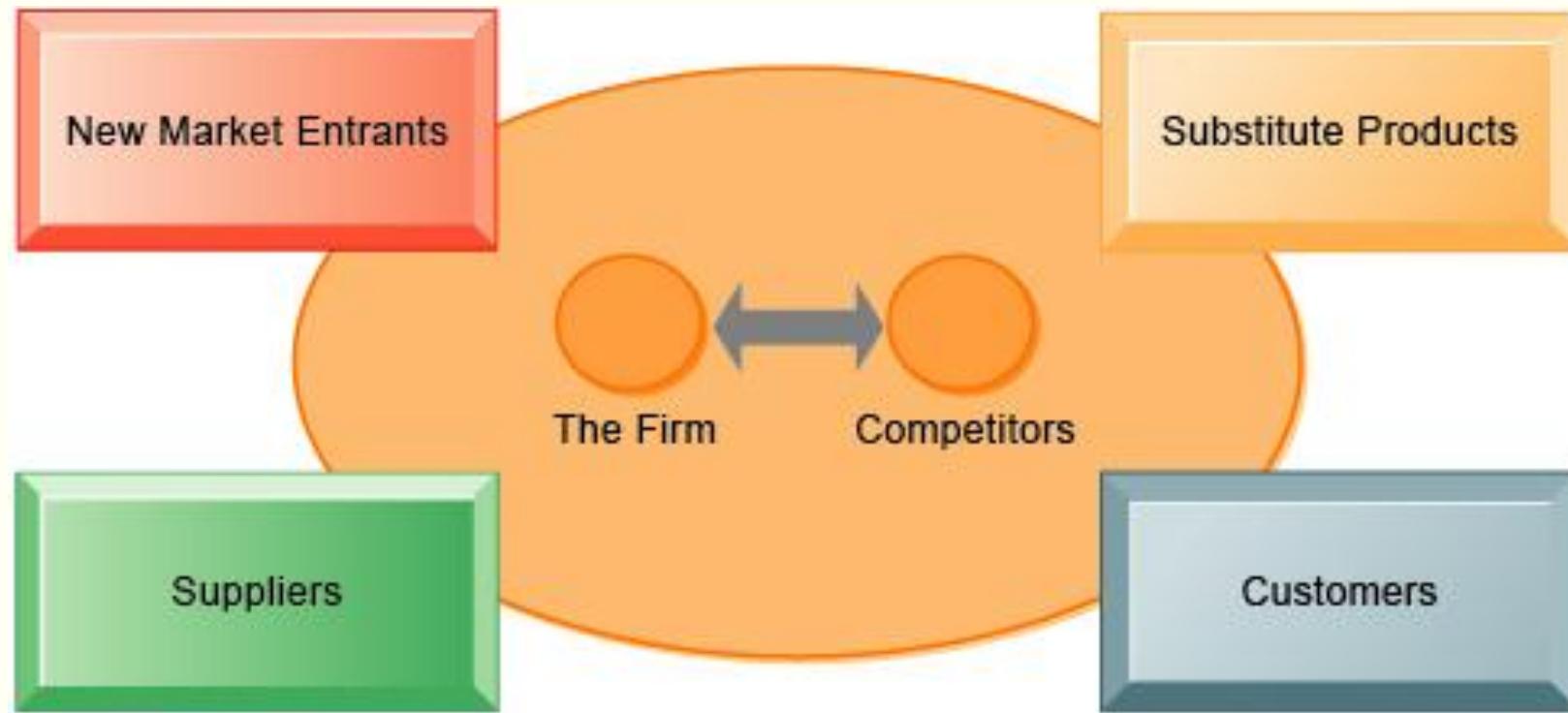
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HOW DO PORTER'S COMPETITIVE FORCES MODEL, THE VALUE CHAIN MODEL, SYNERGIES, CORE COMPETENCIES, AND NETWORK-BASED STRATEGIES HELP COMPANIES USE INFORMATION SYSTEMS FOR COMPETITIVE ADVANTAGE?

porter's Competitive Forces model



Information System Strategies For Dealing With Competitive Forces

Basic strategy 10

- Identify your business strategy and goals.
- Break these strategic goals down into concrete activities and processes.
- Identify how you will measure progress toward the business goals
- Ask yourself, “How can information technology help me achieve progress toward our business goals, and how will it improve our business processes and activities?”
- Measure actual performance. Let the numbers speak.

- low-Cost leadership

Use information systems to achieve the lowest operational costs and the lowest prices.

The classic example is Walmart.

Walmart’s continuous replenishment system is also an example of an **efficient customer response system**

In two or three columns

product differentiation

Use information systems to provide new products and services or greatly change the customer convenience in using your existing products and services. For instance, Google continuously introduces new and unique search services, such as Google Pay peer payments in 2014, and improvements in Google Docs and Google Drive.

Focus on market Niche

Use information systems to enable a specific market focus and serve this narrow target market better than competitors. Information systems support this strategy by producing and analyzing data for finely tuned sales and marketing techniques

strengthen Customer and supplier intimacy

Use information systems to tighten linkages with suppliers and develop intimacy with customers. Toyota, Ford, and other automobile manufacturers have information systems that give their suppliers direct access to their production schedules, enabling suppliers to decide how and when to ship supplies to the plants where cars are assembled.

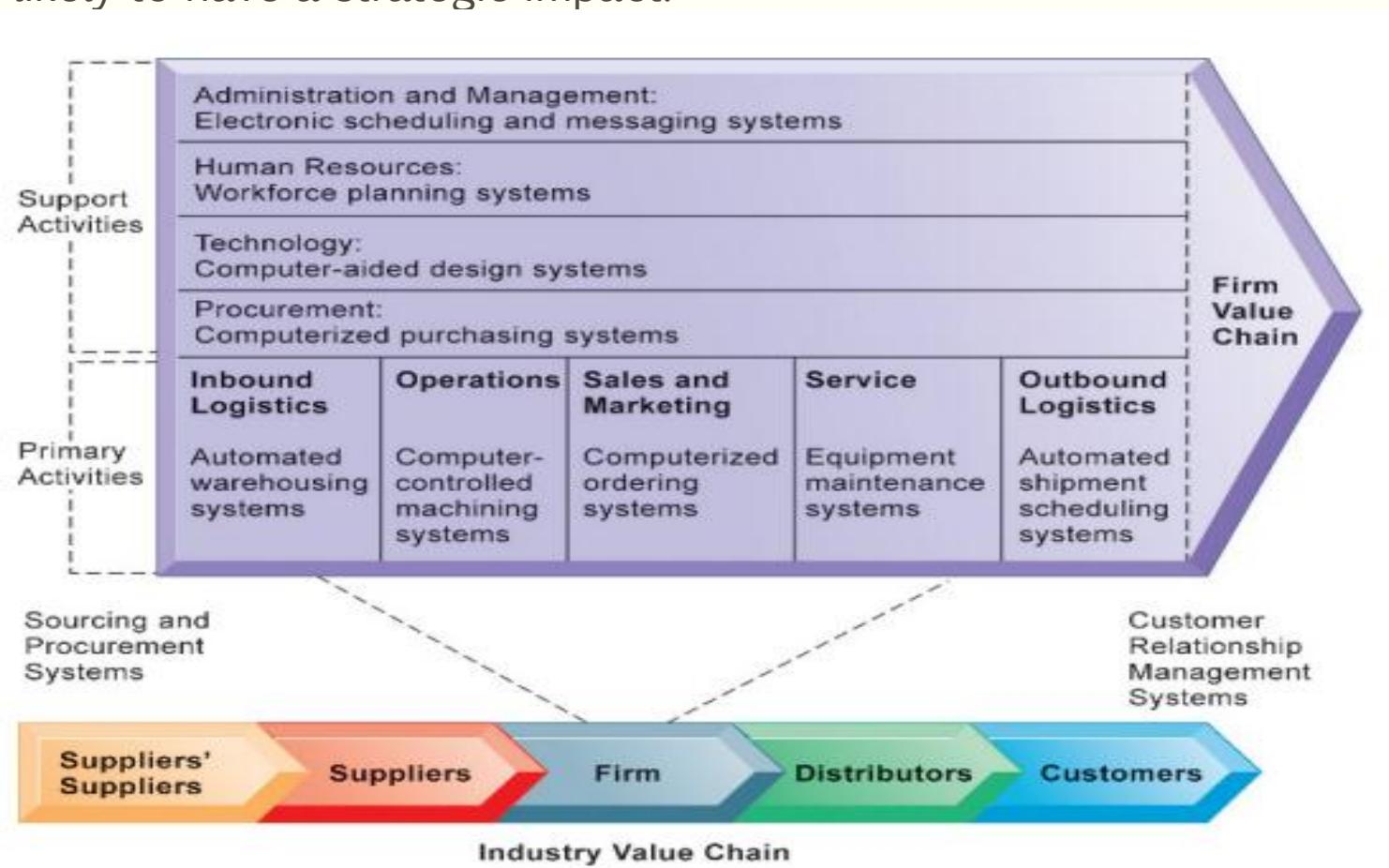
The Internet's Impact On Competitive Advantage

Smart Products And The Internet Of Things

| Competitive Force | Impact of the Internet |
|--|--|
| Substitute products or services | Enables new substitutes to emerge with new approaches to meeting needs and performing functions |
| Customers' bargaining power | Shifts bargaining power to customers due to the availability of global price and product information |
| Suppliers' bargaining power | Tends to raise bargaining power over suppliers in procuring products and services; however, suppliers can benefit from reduced barriers to entry and from the elimination of distributors and other intermediaries standing between them and their users |
| Threat of new entrants | Reduces barriers to entry, such as the need for a sales force, access to channels, and physical assets; provides a technology for driving business processes that makes other things easier to do |
| Positioning and rivalry among existing competitors | Widens the geographic market, increasing the number of competitors and reducing differences among competitors; makes it more difficult to sustain operational advantages; puts pressure to compete on price |

THE BUSINESS VALUE CHAIN MODEL

The value chain model highlights specific activities in the business where competitive strategies can best be applied (Porter, 1985) and where information systems are most likely to have a strategic impact.



EXTENDING THE VALUE CHAIN: THE VALUE WEB

- Make it easy for suppliers to display goods and open stores on the Amazon site.
- Make it easy for customers to pay for goods.
- Develop systems that coordinate the shipment of goods to customers.
- Develop shipment tracking systems for customers.



Synergies, Core Competencies, and Network-based Strategies

Synergies develop when the output of some units can be used as inputs to other units, or two organizations can pool markets and expertise, and these relationships lower costs and generate profits.

A **Core Competency** is an activity for which a firm is an industry leader, best in class leader.

Network-based strategies include the use of *network economics* and a *virtual company model*.

In **Network economics**, the marginal costs of adding another participant or creating another product are negligible, whereas the marginal gain is much larger.

The **virtual company** or virtual organization uses networks to link people, assets, and ideas, enabling it to collaborate with other companies to create and distribute products and services without being limited by traditional organizational boundaries or physical locations.

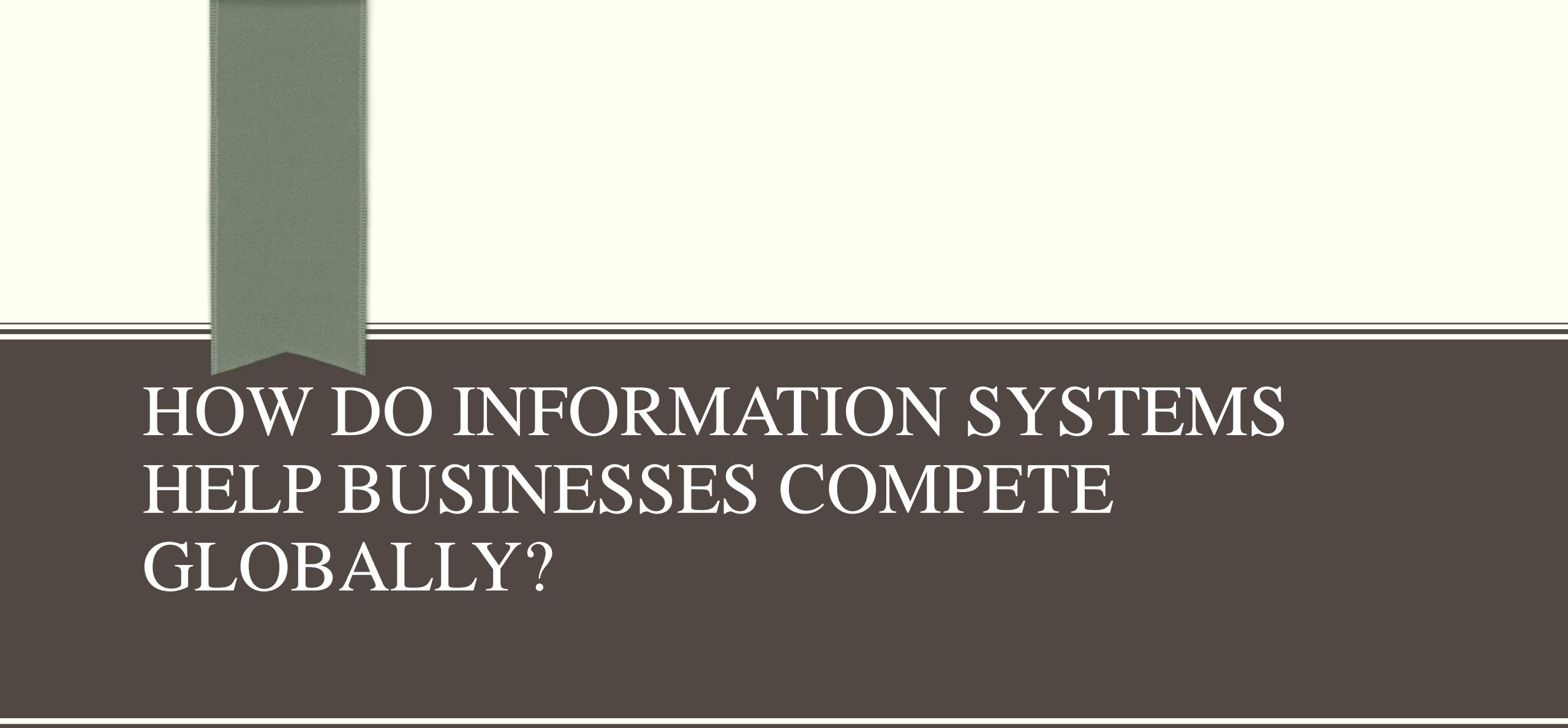
Disruptive Technologies: Riding The Wave

Sometimes a technology and resulting business innovation comes along to change the business landscape and environment radically that called **Disruptive**.

Disruptive Technologies are substitute products that perform as well or better than anything currently produced.

In other cases, disruptive technologies simply extend the market, usually with less functionality and much less cost, than existing products.

Disruptive technologies are tricky.



HOW DO INFORMATION SYSTEMS HELP BUSINESSES COMPETE GLOBALLY?

The Internet and The Globalization

- The emergence of the Internet into a full-blown international communications system has drastically reduced the costs of operating on a global scale, deepening the possibilities for large companies but simultaneously creating many opportunities for small and medium-sized firms.
- The global Internet, along with internal information systems, puts manufacturing firms in nearly instant contact with their suppliers.
- Internet makes it possible to move very large computer files with hundreds of graphics, or complex industrial designs, across the globe in seconds.

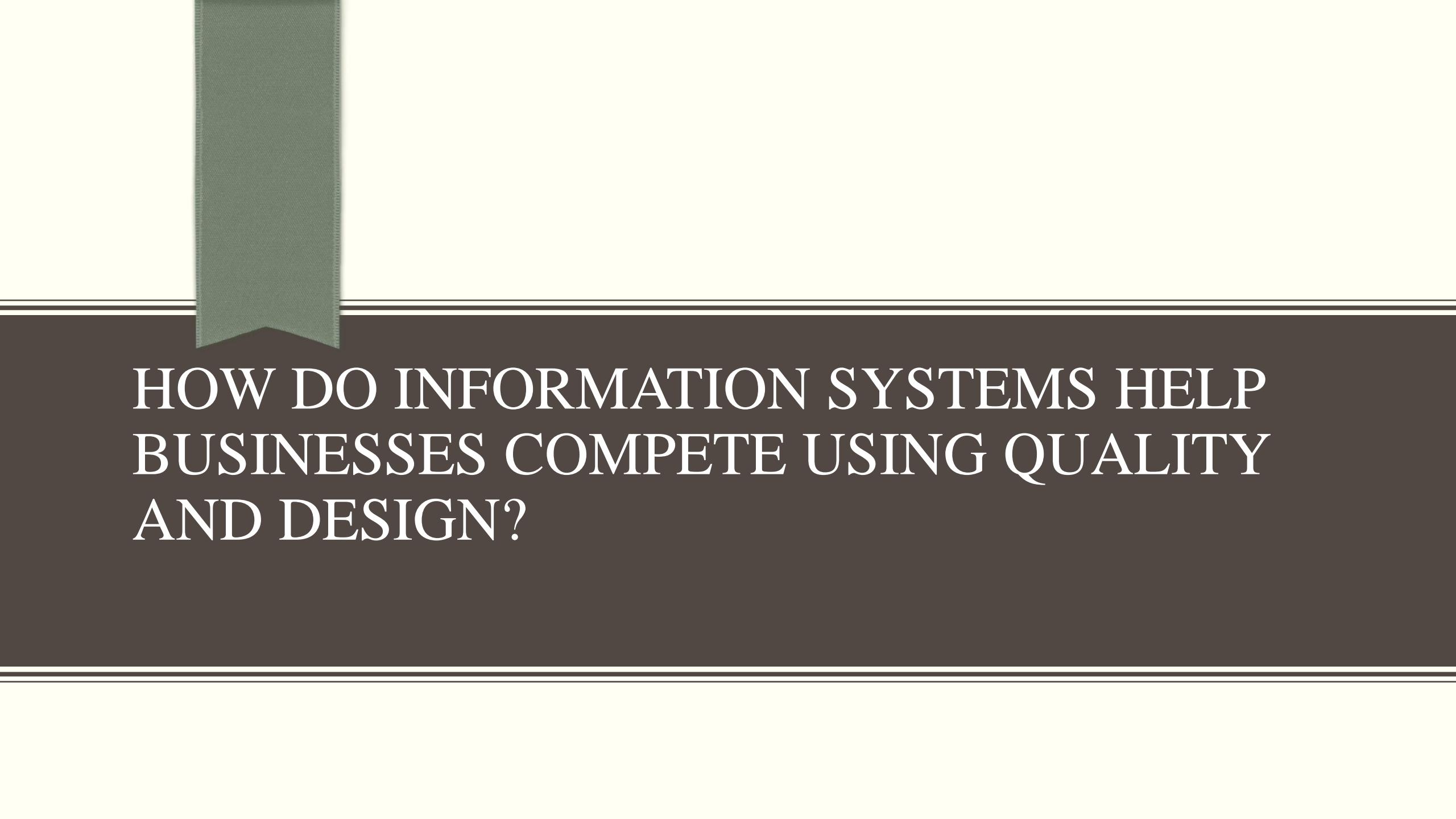
Global Business and System Strategies

There are four main ways of organizing businesses internationally:

1. **domestic exporter** strategy is characterized by heavy centralization of corporate activities in the home country of origin
2. A **multinational** strategy concentrates financial management and control out of a central home base while decentralizing production, sales, and marketing operations to units in other countries.
3. **Franchisers** have the product created, designed, financed, and initially produced in the home country but rely heavily on foreign personnel for further production, marketing, and human resources.
4. **Transnational** firms have no single national headquarters but instead have many regional headquarters and perhaps a world headquarters.

Global System Configuration

| System Configuration | Strategy | | | |
|----------------------|-------------------|---------------|------------|---------------|
| | Domestic Exporter | Multinational | Franchiser | Transnational |
| Centralized | X | | | |
| Duplicated | | | X | |
| Decentralized | X | X | X | |
| Networked | | X | | X |

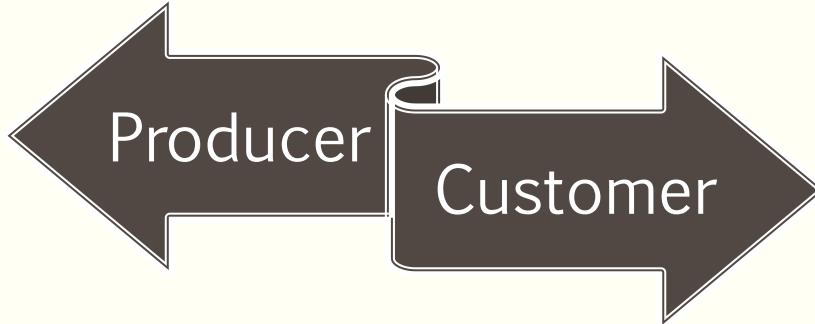


HOW DO INFORMATION SYSTEMS HELP BUSINESSES COMPETE USING QUALITY AND DESIGN?

What is Quality?

Producer perspectives

Quality signifies conformance to specifications or the absence of variation from those specifications.



Customer perspectives

1. Quality of physical product
2. Quality of service
3. Psychological aspects

Total Quality Management (TQM)

TQM is the concepts that makes quality the responsibility of all people and functions within an organization.

TQM holds that the achievement of quality control is an end in itself. Everyone is expected to contribute to the overall improvement of quality

Six Sigma

is another quality concept that widely implemented today

Most companies use this concept as a goal to implement a set of methodologies and techniques for improving quality and reducing costs.

How Information Systems Improve Quality

1. Reduce Cycle Time and Simplify the Production Process
2. Benchmark
3. Use Customer Demands to Improve Products and Services
4. Improve Design Quality and Precision
5. Improve Production Precision and Tighten Production Tolerances



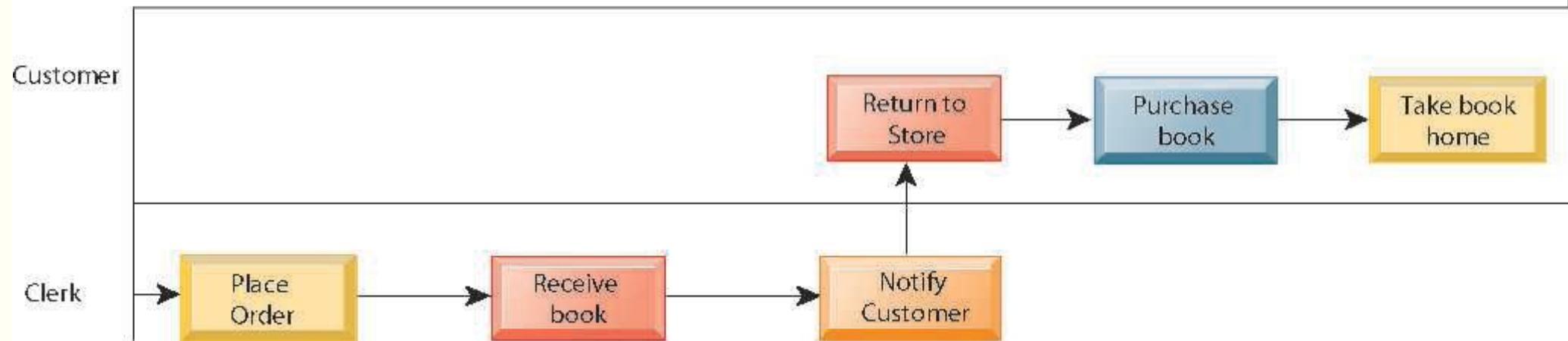
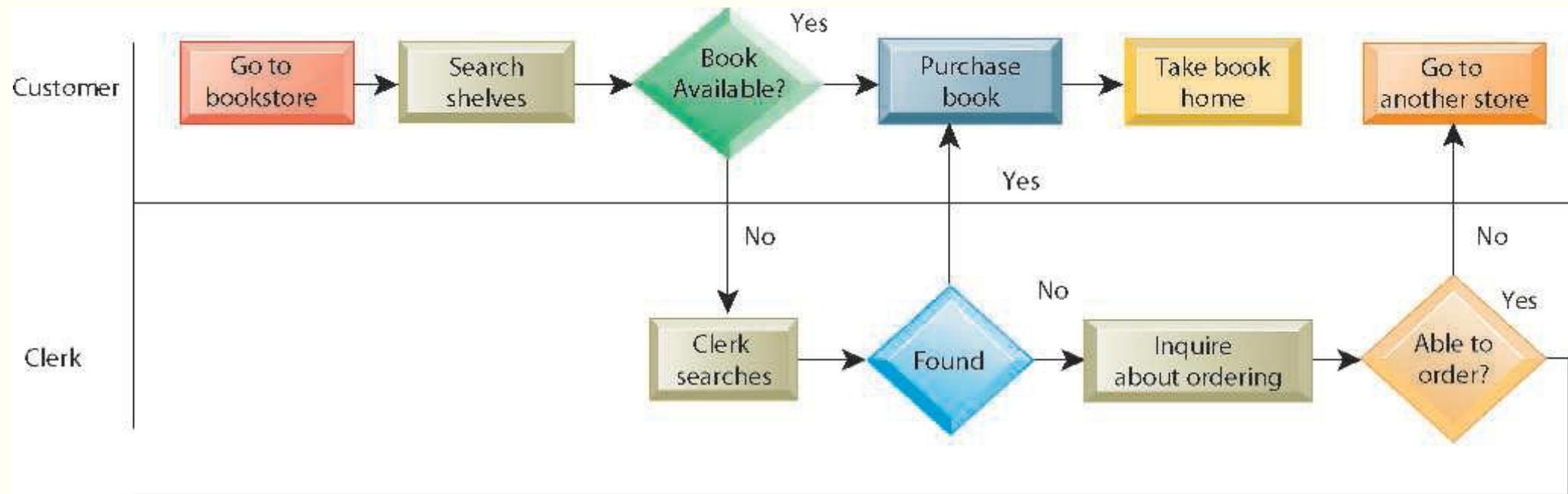
WHAT IS THE ROLE OF BUSINESS
PROCESS MANAGEMENT (BPM) IN
ENHANCING COMPETITIVENESS?

What is Business Process Management (BPM) ?

Business process management is an approach to business that aims to improve business processes continuously. BPM uses a variety of tools and methodologies to understand existing processes, design new processes, and optimize those processes.

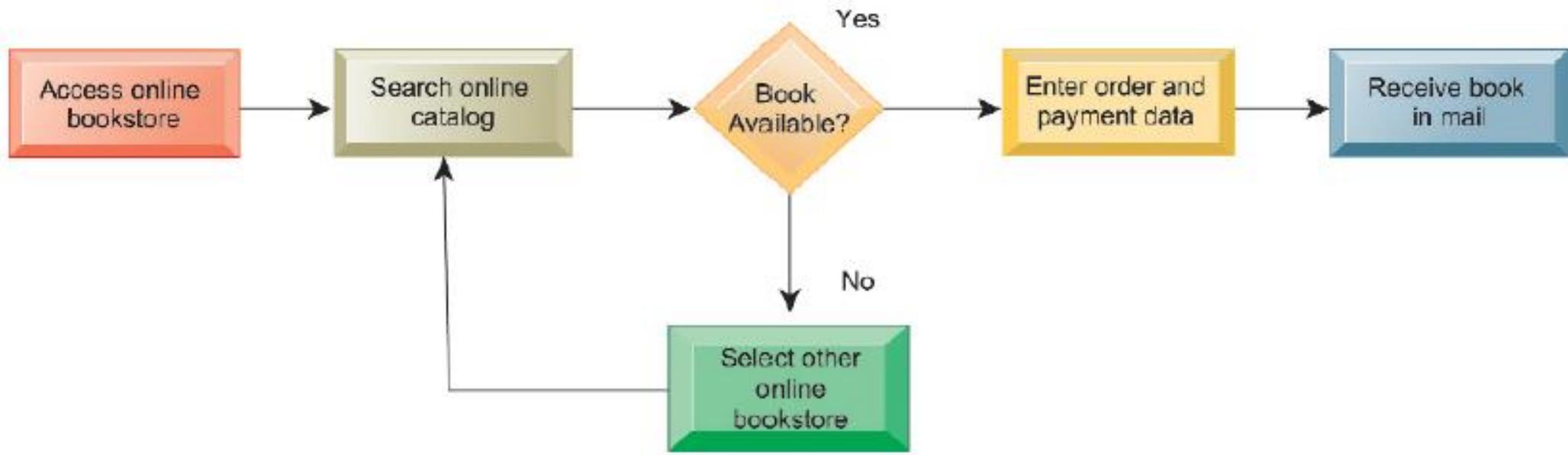
There are following steps Companies practicing business process management :

1. **Identify processes of change** :One of the most important strategic decisions that a firm can make is not deciding how to use computers to improve business processes but, rather, understanding which business processes need improvement.
2. **Analyze existing processes:** Existing business processes should be modeled and documented, noting inputs, outputs, resources, and the sequence of activities.



The Next Step....

3. **Design the new process:** Once the existing process is mapped and measured in terms of time and cost, the process design team will try to improve the process by designing a new one. A new, streamlined to-be process will be documented and modeled for comparison with the old process.



The Next Step....

4. **Implement the new process:** After the new process has been thoroughly modeled and analyzed, it must be translated into a new set of procedures and work rules.
5. **Continuous measurement:** After a process has been implemented and optimized, it needs to be measured continually.

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Thank you

