

Enterprise Strategy and IS

*Reference Texts: Management Information Systems – Laudon / Laudon
Management Information Systems – James O'Brien*

1

Strategic IT

- Technology is no longer an afterthought in **business strategy**, but the cause and driver
- IT can change the way businesses compete
- A **strategic information system** is any information system that uses IT to help an organization...
 - ✓ Gain a competitive advantage
 - ✓ Reduce a competitive disadvantage
 - ✓ Or meet other strategic enterprise objectives

2

Does IT matter?

No ?

Nicholas Carr argued that IT is infrastructure, much like electricity, too commonplace to offer a competitive advantage

Yes ?

It is not just networks and computers. The important part is the software and information and how IT is used

3



Competitive Forces

To succeed, a business must develop strategies to counter these forces...

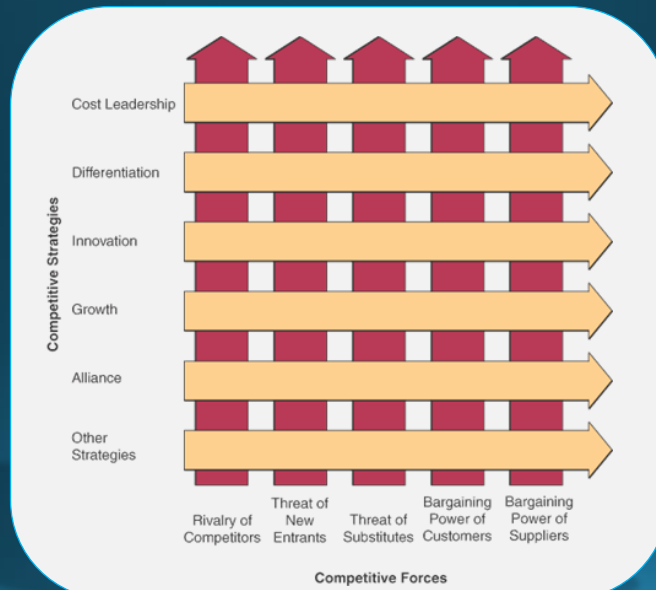
- ✓ Rivalry of competitors within its industry
- ✓ New entrants into an industry and its markets
- ✓ Substitute products that may capture market share
- ✓ Bargaining power of customers
- ✓ Bargaining power of suppliers

Michael Porter - 5 Forces

<https://www.youtube.com/watch?v=PeN1pvahsSA>

4

Competitive Forces and Strategies



5

Five Competitive Strategies



Cost Leadership

Become low-cost producers
Help suppliers or customers reduce costs



Differentiation Strategy

Differentiate a company's products from its competitors'
Focus on a particular segment or niche of market
Example: IKEA has a 3D room designer feature



Innovation Strategy

Unique products, services, or markets
Radical changes to business processes



Growth Strategy

Expand company's capacity to produce
Expand into global markets
Diversify into new products or services



Alliance Strategy

Establish linkages and alliances with customers, suppliers, competitors, consultants, and other companies
Includes mergers, acquisitions, joint ventures, virtual companies
Example: Wal-Mart uses automatic inventory replenishment by supplier

6

Using Competitive Strategies

These strategies are **not mutually exclusive**

- Organizations use one, some, or all
- A given activity could fall into one or more categories of competitive strategy



7

<i>Business Strategy</i>	<i>Use of IT</i>	<i>Example</i>
Lower Costs	Reduce costs of business processes Lower costs of customers / suppliers	Automate data integration with third parties
Differentiate	Develop new IT features to differentiate products / services Use IT features to reduce the differentiation advantages of competitors	Online web aids – e.g. a designer web app for rooms...
Innovate	Create new products and services that include IT components Make radical changes to business processes	Automate / combine business processes – e.g. expense claim management and VAT processing services
Promote Growth	Use IT to manage regional and global business expansion Use IT to diversify and integrate into other products and services	Common IT infrastructure over multiple sites...
Develop Alliances	Use IT to create virtual organisations of business partners Develop inter-enterprise information systems	Supply chain IT integration with multiple stakeholders

Ways to Implement Basic Strategies
in the Business Use of Information Technology

9



Other Competitive Strategies

- Lock in Customers and Suppliers
 - Deter them from switching to competitors
- Build in Switching Costs
 - Make customers and suppliers dependent on the use of innovative IS
- Erect Barriers to Entry
 - Discourage or delay other companies from entering the market
 - Increase the technology or investment needed to enter
- Build Strategic IT Capabilities
 - Take advantage of strategic opportunities when they arise
 - Improve efficiency of business practices
- Leverage Investment in IT
 - Develop products and service that would not be possible without a strong IT capability

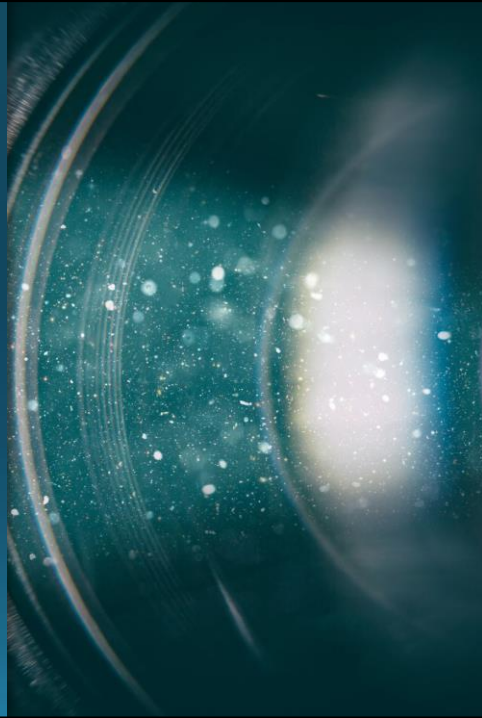
10

Customer Focused Business & the Value Chain

11

Customer-Focused Business

- What is the business value in being *customer-focused*?
 - ✓ Keep customers loyal
 - ✓ Anticipate their future needs
 - ✓ Respond to customer concerns
 - ✓ Provide top-quality customer service
- Focus on *customer value* – what does the customer value
 - ✓ Quality, not price, has become the primary determinant of value
 - ✓ Consistency



12

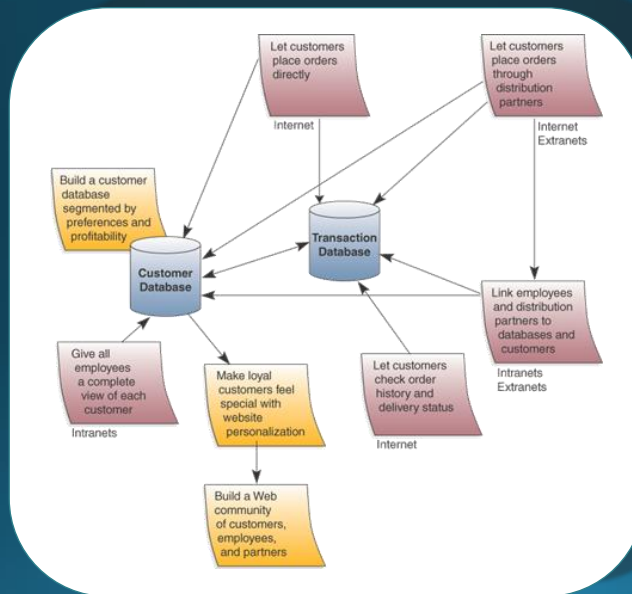
Providing Customer Value

- Companies that consistently offer the best value from the customer's perspective...
 - ✓ Track individual preferences
 - ✓ Keep up with market trends
 - ✓ Provide convenience - supply products, services, and information anytime, anywhere
 - ✓ Tailor customer services to the individual
 - ✓ Use Customer Relationship Management (CRM) systems to focus on the customer



13

Building Customer Value via the Internet



14

The **Value Chain** and Strategic IS

View the company as a chain of basic activities that add value to its products and services

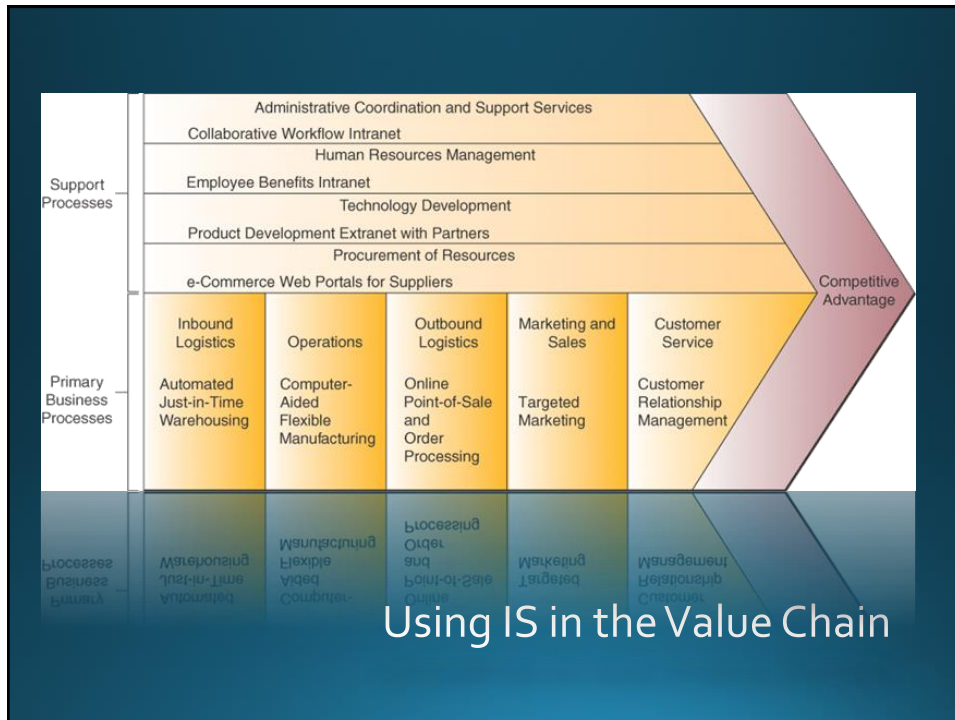
Primary processes directly relate to manufacturing or delivering products

Support processes help support the day-to-day running of the company and indirectly contribute to products or services



Use the value chain to highlight where competitive strategies will add the most value

15



16

Strategic Uses of IT



A company that emphasizes strategic business use of IT would use it to gain a **competitive differentiation**



- ✓ Products
- ✓ Services
- ✓ Capabilities

17

Business Process Reengineering

19



Business Process Reengineering

- Called **BPR** or simply **Reengineering**
 - Fundamental rethinking and radical redesign of business processes
 - Seeks to achieve improvements in cost, quality, speed, and service
- Potential **payback** is high, but so is **risk** of disruption and failure
- **Organizational redesign** approaches are an important enabler of reengineering
 - Includes use of IT, process teams, case managers

20

	BPO	BPR
<i>Where do you start?</i>	With existing processes	From the ground up
<i>What kind of change?</i>	Incremental	Radical
<i>Change to processes?</i>	New versions	New processes
<i>Effort</i>	Low but continuous	High and abrupt
<i>Drivers</i>	Operations	Directive
<i>IT leveraging</i>	Low to medium	High
<i>Risk</i>	Moderate	High

BPR Versus Business Process Optimisation (BPO)

21

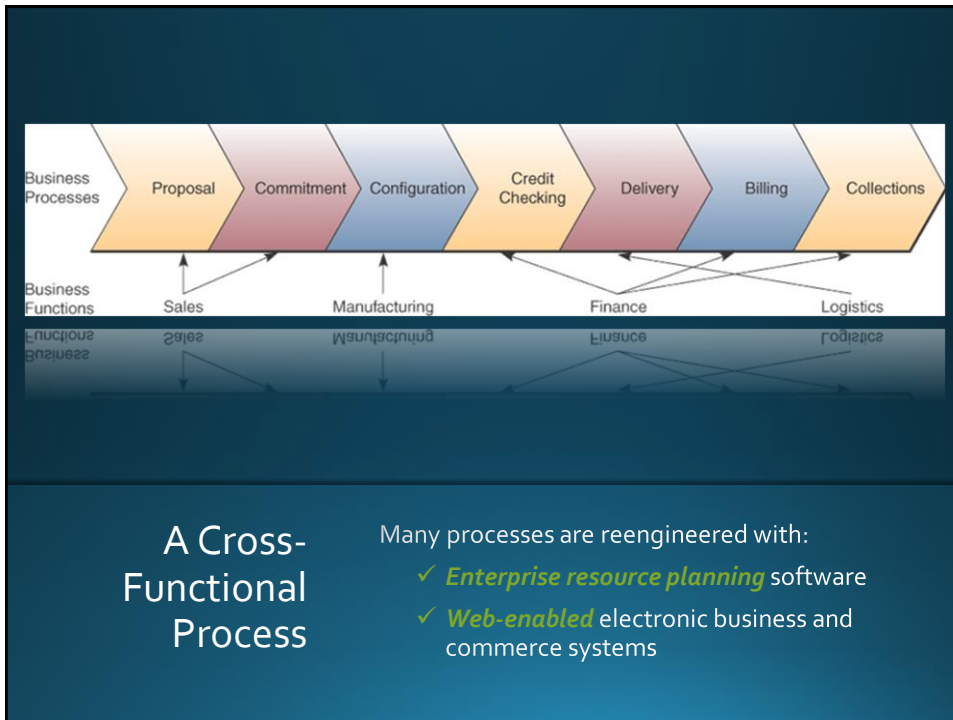
The Role of Information Technology in BPR

IT plays a major role in reengineering most business processes

- ✓ Can substantially increase process efficiencies
- ✓ Improves communication
- ✓ Facilitates collaboration



23



24

The photograph shows a tablet screen with a business dashboard. The top section is titled 'Traffic Sources Overview' and features a pie chart with three segments: Direct (blue), Search (green), and Referring (red). Below this is a 'Visitors Overview' section with a line graph showing visitor trends over time. The graph has a y-axis labeled 'Visitors' with a value of 2,968. The x-axis shows dates from 10/11 to 10/12. The graph shows a fluctuating line with a peak around 10/11 and a dip around 10/12.

Example - Reengineering *Order Management* IT that supports this process...

- ✓ Customer-accessible **e-commerce websites** for order entry, status checking, payment, and service
- ✓ Supplier-managed **inventory systems** using the Internet and extranets
- ✓ Cross-functional **ERP software** to integrate manufacturing, distribution, finance, and human resource processes
- ✓ **CRM systems** using intranets and the Internet

25

Agile Companies

26

Becoming an *Agile Company*

Agility is the ability to prosper

- ✓ In rapidly changing, continually fragmenting global markets
- ✓ By selling high-quality, high-performance, customer-configured products and services
- ✓ By using Internet technologies

An **agile company** profits in spite of

- ✓ Broad product ranges
- ✓ Short model lifetimes
- ✓ Individualized products

27

Strategies for Agility

An agile company...



Presents products as solutions to customers' problems



Cooperates with customers, suppliers and competitors



Brings products to market as quickly and cost-effectively as possible



Organizes to thrive on change and uncertainty



Leverages the impact of its people and the knowledge they possess

28

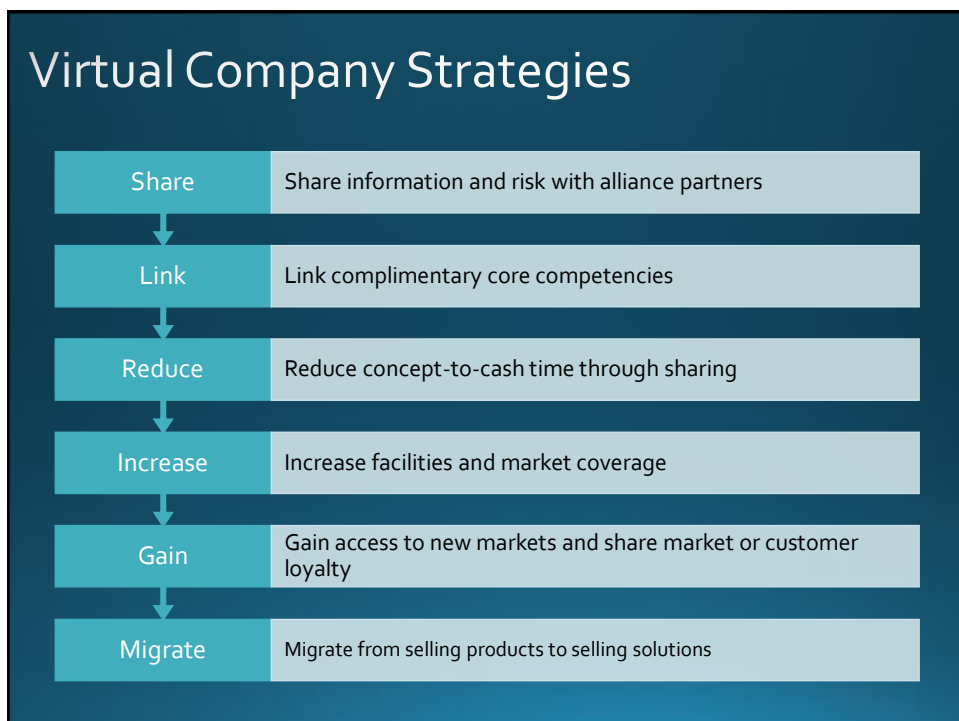
Agility	Description	Use of IT	Example
<i>Operational</i>	Exploit innovation opportunities (speed, accuracy, cost economy)	Technologies for loose coupling and business process integration	Integrated trading between the business, its customers and its suppliers E.g. use of ERP and integration middleware
<i>Customer</i>	Leverage customer base (source of idea, co-creators, use to test new ideas)	Technologies for building customer communities for feedback, product ideas and testing	Use of CRM, integrated social media and customer forums for feedback, product direction, problem resolution
<i>Partnering</i>	Leverage assets, knowledge and competencies of suppliers, distributors and manufacturers	Technologies for inter-enterprise collaboration	Use SCM and integration middleware. E.g. automatic product / materials replenishment through real-time connectivity

How IT Helps a Company be Agile

29



31



33

Enterprise Knowledge

34

Building a Knowledge-Creating Company

A *knowledge-creating company* or learning organization:

- ✓ Consistently creates new business knowledge
- ✓ Disseminates it throughout the company
- ✓ Builds it into its products and services

Two kinds of knowledge

- **Explicit Knowledge**
 - Data, documents, and things written down or stored in computers
- **Tacit Knowledge**
 - The "how-to" knowledge in workers' minds
 - Represents some of the most important information within an organization
 - A knowledge-creating company makes tacit knowledge available to others

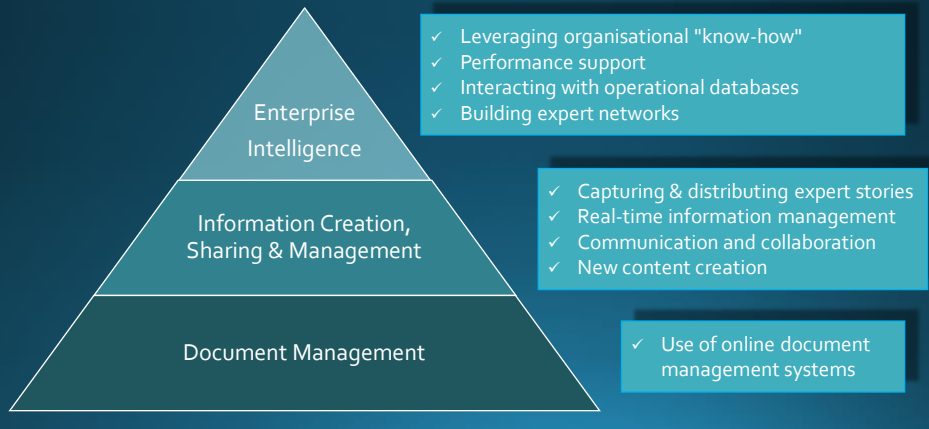


35

Knowledge Management

Successful knowledge management

- ✓ Creates techniques, technologies, systems, and rewards for getting employees to share what they know
- ✓ Makes better use of accumulated workplace and enterprise knowledge



36

Knowledge Management Systems (KMS)

- Knowledge management systems
 - A major strategic use of IT
 - Manages organizational learning and know-how
 - Helps knowledge workers create, organize, and make available important knowledge
 - Makes this knowledge available wherever and whenever it is needed
- Knowledge includes
 - Processes, procedures, patents, reference works, formulas, best practices, forecasts, and fixes

38

Strategy

Have a look at this from Duke University...



https://www.youtube.com/watch?v=vzB1HVt6_sk