



# DASAR SISTEM INFORMASI

www.esaunggul.ac.id

Dosen Pengampu : KARTINI S.Kom., MMSI Prodi Sistem Informasi - Fakultas Ilmu Komputer



# DASAR SISTEM INFORMASI

Pert.06



Competing with
Technology Information
system

Bagaimana sebuah bisnis menggunakan SI untuk bersaing ? Serta Kekuatan dan Strategi Competitive



# LEARNING OUTCOMES

- Apa itu Jaringan komputer
- Tujuan membangun Jaringan komputer
- Manfaat Jaringan Komputer
- Komponen-komponen dalam komunikasi data
- Kategori Jaringan



# Strategic IT

- Teknologi tidak lagi sebuah renungan dalam membentuk strategi bisnis, but the actual cause and driver (tetapi penyebab nyata dan penggerak).
- IT can change the way businesses compete.
- A strategic information system is
  - Any kind of information system
  - That uses IT to help an organization, sehingga :
    - Mendapatkan a competitive advantage
    - Mengurangi a competitive disadvantage/kerugian



# **Competitive Forces and Strategies**





# **Competitive Forces**

- Jika bisnis ingin berhasil harus mengembangkan strategi untuk melawan kekuatan-kekuatan berikut : strategies to counter these forces:
  - dari pesaing dalam industri
  - Ancaman pendatang baru ke dalam industri dan pasar yang
  - Ancaman produk pengganti yang mungkin
  - menangkap pangsa pasar
  - Bargaining/tawar power of customers
  - Bargaining/tawar power of suppliers



# **Five Competitive Strategies**

- Cost Leadership
  - Become low-cost producers
  - Help suppliers or customers reduce/mengurangi costs
  - Increase cost to competitors/pesaing
  - Example, Priceline uses online seller bidding so buyer sets the price
- Differentiation Strategy
  - Mengembangkan cara untuk membedakan produk perusahaan dari para pesaing
  - Dapat fokus pada segmen tertentu atau niche



# **Competitive Strategies (cont.)**

### Innovation Strategy

- Find new ways of doing business
  - Unique products or services/jasa
  - Or unique markets
  - Radical changes to business processes to mengubah struktur dasar industri
- Example, Amazon menggunakan online penuh-sistem layanan pelanggan

### Growth Strategy

- Expand company's capacity to produce (Memperluas kapasitas perusahaan untuk memproduksi)
- Expand into global markets
- Diversify into new products or services
  - Example, Wal-Mart menggunakan pemesanan barang melalui pelacakan satelit global



# Competitive strategies (cont.)

- Alliance Strategy
  - Menetapkan hubungan 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 (pengisian persediaan otomatis oleh pemasok)



# Using these strategies

- The strategies are not mutually exclusive
- Organizations use one, some or all



# Using IT for these strategies

### Basic Strategies in the Business Use of Information Technology

#### Lower Costs

- Use IT to substantially reduce the cost of business processes.
- Use IT to lower the costs of customers or suppliers.

#### Differentiate

- Develop new IT features to differentiate products and services.
- Use IT features to reduce the differentiation advantages of competitors.
- Use IT features to focus products and services at selected market niches.

#### Innovate

- · Create new products and services that include IT components.
- · Develop unique new markets or market niches with the help of IT.
- Make radical changes to business processes with IT that dramatically cut costs, improve quality, efficiency, or customer service, or shorten time to market.

#### Promote Growth

- Use IT to manage regional and global business expansion.
- Use IT to diversify and integrate into other products and services.

#### Develop Alliances

- Use IT to create virtual organizations of business partners.
- Develop interenterprise information systems linked by the Internet and extranets that support strategic business relationships with customers, suppliers, subcontractors, and others.



# Other competitive strategies

- Lock in customers and suppliers (mengunci agar tidak pindah)
  - And lock out competitors
  - Mencegah mereka dari beralih ke pesaing/competitors
  - Build in switching costs
  - Make customers and suppliers dependent on the use of innovative IS
- Barriers/hambatan to entry
  - Mencegah atau menunda perusahaan lain untuk memasuki pasar
  - Meningkatkan teknologi atau investasi yang diperlukan untuk memasuki pasar



# Other competitive strategies (cont.)

- Include IT components in products (Sertakan IT komponen dalam produk)
  - Membuat Pengganti produk Persaing lebih sulit
- Leverage investment in IT (Meningkatkan investasi di IT)
  - Mengembangkan produk baru atau jasa tidak mungkin tanpa TI



## **Customer-focused business**

## (Berfokus pada pelanggan bisnis)

- Apa nilai bisnis yang berfokus pada pelanggan?
  - Keep customers loyal
  - Anticipate their future needs
  - Respond to customer concerns/kekawatiran
  - Menyediakan top-quality customer service
- Focus on customer value
  - bukan harga menjadi penentu nilai utama tapi Kualitas.



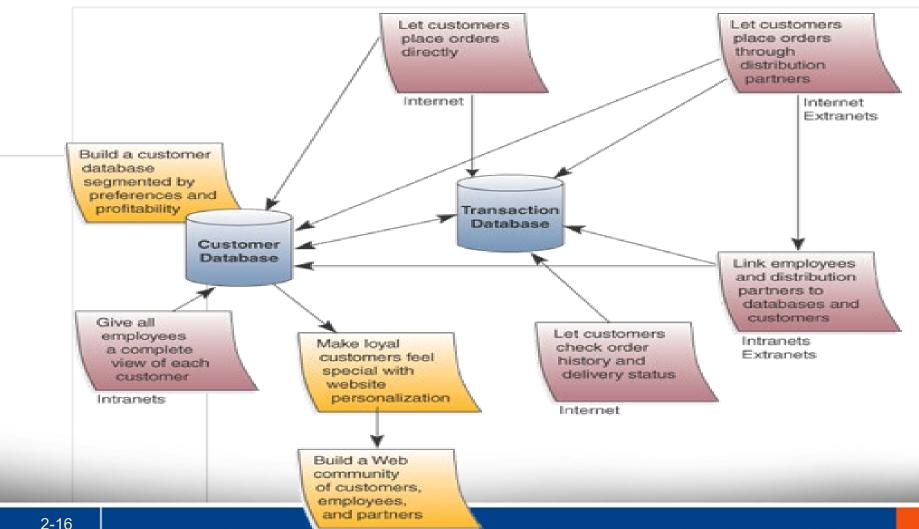
## How can we provide customer value?

(Bagaimana kita bisa memberikan nilai pelanggan)

- Track individual preferences
- Mengikuti market trends
- Supply products, services and information anytime, anywhere
- Menyediakan layanan pelanggan yang disesuaikan dengan kebutuhan individu
- Gunakan sistem Customer Relationship
   Management (CRM) to focus on customer



# **Building customer value using the** Internet



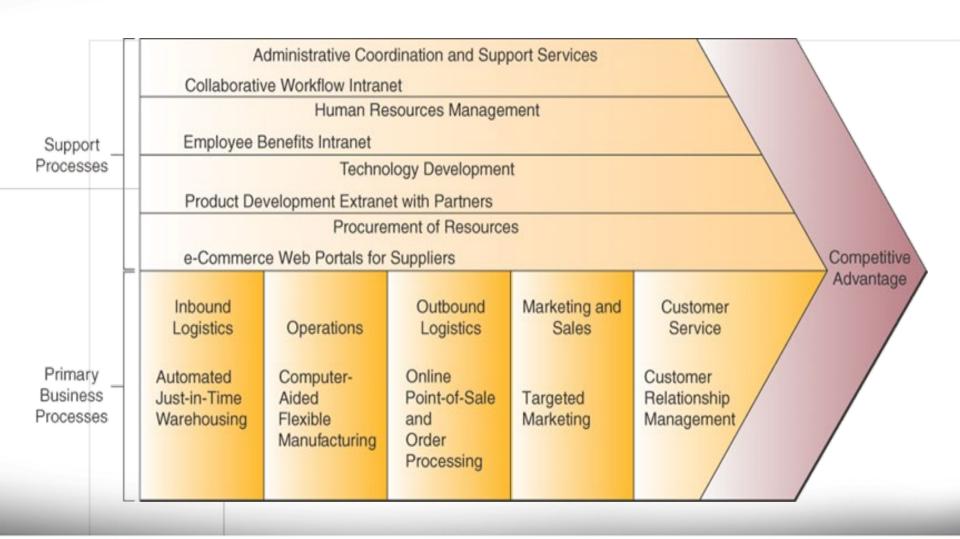


## **Value Chain**

- Lihat perusahaan sebagai rangkaian kegiatan that add value to its products and services
- Activities are either
  - Primary processes directly related to manufacturing or delivering products
  - Support processes mendukung aktivitas perusahaan sehari-hari dan secara tidak langsung contribute to products or services
- Gunakan rantai nilai untuk menyorot mana strategi kompetitif terbaik yang dapat diterapkan to add value of the firm



# Using IS in the value chain





# **Business Process Reengineering**

- Called BPR or Reengineering
  - Fundamental rethinking and radical redesign
  - Of business processes
  - To achieve improvements in cost, quality, speed and service
- Potential payback high
- Risk of failure is also high



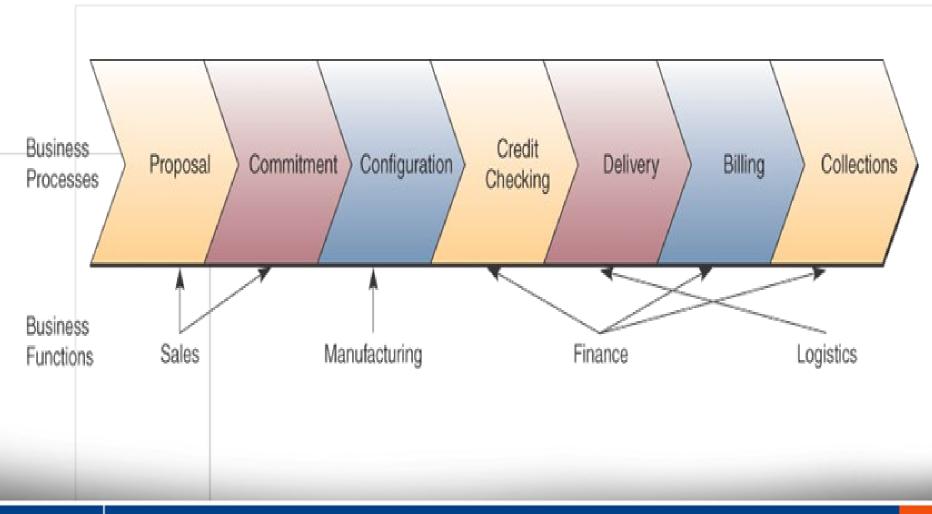
# How BPR differs from business improvement

	Business Improvement	Business Process Reengineering	
Level of Change	Incremental	Radical	
Process Change	Improved new version of process	Brand-new process	
Starting Point	Existing processes	Clean slate	
Frequency of Change	One-time or continuous	Periodic one-time change	
Time Required	Short	Long	
Typical Scope	Narrow, within functions	Broad, cross functional	
Horizon	Past and present	Future	
Participation	Bottom-up	Top-down	
Path to Execution	Cultural	Cultural, structural	
Primary Enabler	Statistical control	Information technology	
Risk	Moderate	High	

Source: Adapted from Howard Smith and Peter Fingar, Business Process Management: The Third Wave (Tampa, EL: Meghan-Kiffer Press, 2003), p. 118.



# A cross-functional process





# Reengineering order management

## Reengineering Order Management

- Customer relationship management systems using corporate intranets and the Internet.
- Supplier managed inventory systems using the Internet and extranets.
- Cross-functional ERP software for integrating manufacturing, distribution, finance, and human resource processes.
- Customer-accessible e-commerce websites for order entry, status checking, payment, and service.
- Customer, product, and order status databases accessed via intranets and extranets by employees and suppliers.



# **Agility**

- Agility is the ability of a company to prosper
  - In a rapidly changing, continually fragmenting
  - Global market for high-quality, high-performance, customer-configured products and services
- An agile company can make a profit with
  - Broad product ranges
  - Short model lifetimes
  - Mass customization
    - Individual products in large volumes



# Four strategies for agility

## An agile company:

- Provides products as solutions to their customers' individual problems
- Cooperates with customers, suppliers and competitors to bring products to market as quickly and costeffectively as possible
- Organizes so that it thrives on change and uncertainty
- Leverages the impact of its people and the knowledge they possess



# How IT helps a company be agile

Type of Agility	Description	Role of IT	Example
Customer	Ability to co-opt customers in the exploitation of innovation opportunities  • As sources of innovation ideas  • As cocreators of innovation  • As users in testing ideas or helping other users learn about the idea	Technologies for building and enhancing virtual cus- tomer communities for product design, feedback, and testing	eBay customers are its de facto product development team because they post an average of 10,000 messages each week to share tips, point out glitches, and lobby for changes.
Partnering	Ability to leverage assets, knowledge, and competen- cies of suppliers, distribu- tors, contract manufacturers, and logistics providers in the exploration and exploitation of innovation opportunities	Technologies facilitating in- terfirm collaboration, such as collaborative platforms and portals, supply-chain systems, etc.	Yahoo! has accomplished a significant transformation of its service from a search engine into a portal by initiating numerous partnerships to provide content and other media-related services from its website.
Operational	Ability to accomplish speed, accuracy, and cost economy in the exploitation of inno- vation opportunities	Technologies for modular- ization and integration of business processes	Ingram Micro, a global wholesaler, has deployed an integrated trading system allowing its customers and suppliers to connect directly to its procurement and ERP systems.

Source: Adapted from V. Sambamurthy, Anandhi Bhaharadwaj, and Varun Grover. "Shaping Agility Through Digital Options: Reconceptualizing the Role of Information Technology in Contemporary Firms," MIS Quarterly, June 2003, p. 246.

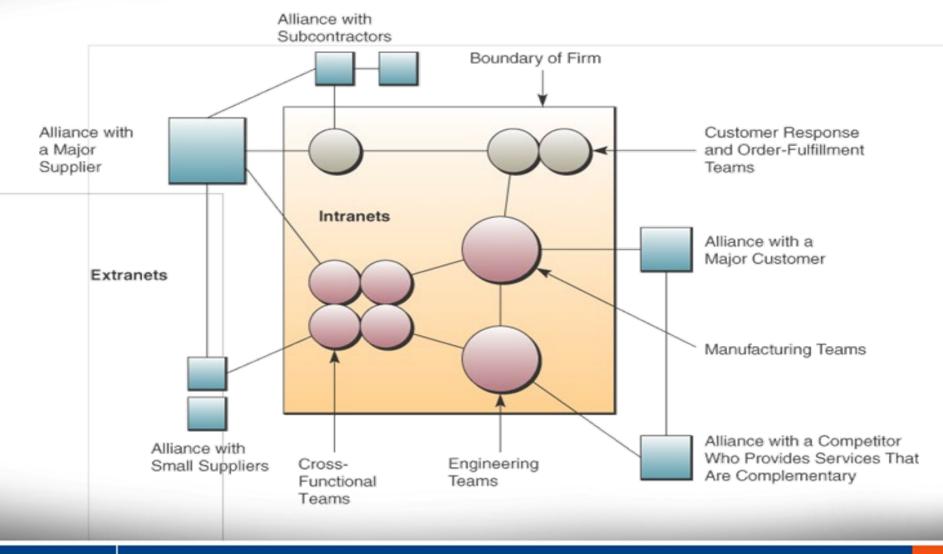


# **Virtual Company**

- A virtual company uses IT to link
  - People,
  - Organizations,
  - Assets,
  - And ideas
- Creates interenterprise information systems
  - to link customers, suppliers, subcontractors and competitors



# A virtual company





# Strategies of virtual companies

## Strategies of Virtual Companies

- Share infrastructure and risk with alliance partners.
- Link complementary core competencies.
- Reduce concept-to-cash time through sharing.
- Increase facilities and market coverage.
- Gain access to new markets and share market or customer loyalty.
- Migrate from selling products to selling solutions.



# **Knowledge Creation**

- Knowledge-creating company or learning organization
  - Consistently creates new business knowledge
  - Disseminates it throughout the company
  - And builds in the new knowledge into its products and services



# Two kinds of knowledge

- Explicit knowledge
  - Data, documents and things written down or stored on computers
- Tacit knowledge
  - The "how-to" knowledge which reside in workers' minds
- A knowledge-creating company makes such tacit knowledge available to others

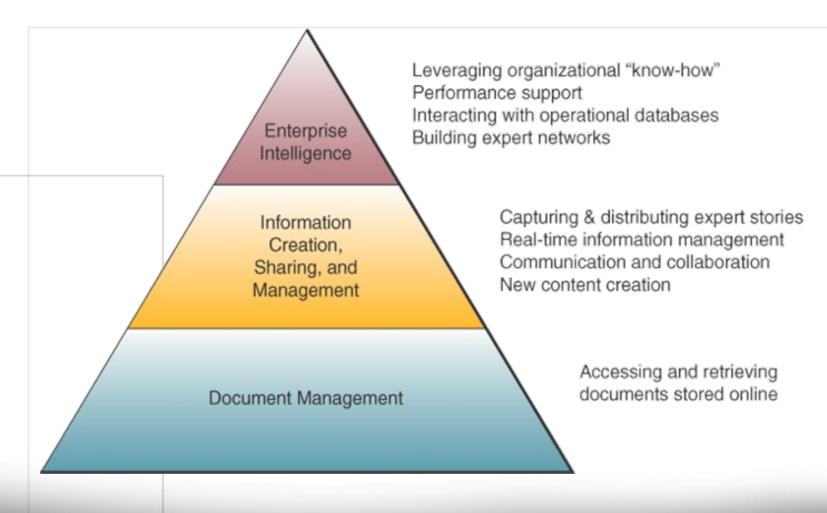


# **Knowledge issues**

- What is the problem with organizational knowledge being tacit?
- Why are incentives to share this knowledge needed?



# Knowledge management techniques



Source: Adapted from Marc Rosenberg, e-Learning: Strategies for Delivering Knowledge in the Digital Age (New York: McGraw-Hill, 2001), p.70.



# **Knowledge management systems (KMS)**

- KMS manage organizational learning and business know-how
- Goal:
  - Help knowledge workers to create, organize, and make available knowledge
  - Whenever and wherever it's needed in an organization





# Terima Kasih

www.esaunggul.ac.id

**Good Luck**