Using Information Technology for Strategic Advantage

Management Information

- Code: 164292-02
- Course: Management Information
- Period: Autumn 2013
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- D. of Information & Electronic Commerce

1

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00. Contents

- 01. Strategic Management
- 02. Competitive Intelligence
- 03. Generic Strategies
- 04. Value System
- 05. Strategic Information System
- 06. IT Planning

2

01. Strategic Management

- Competitive Advantage
    - Any information system--EIS, OIS, TPS, KMS--that changes the goals, processes, products, or environmental relationships to help an organization gain a competitive advantage or reduce a competitive disadvantage.

http://www.read2learn.net

http://technoshf.blogspot.com

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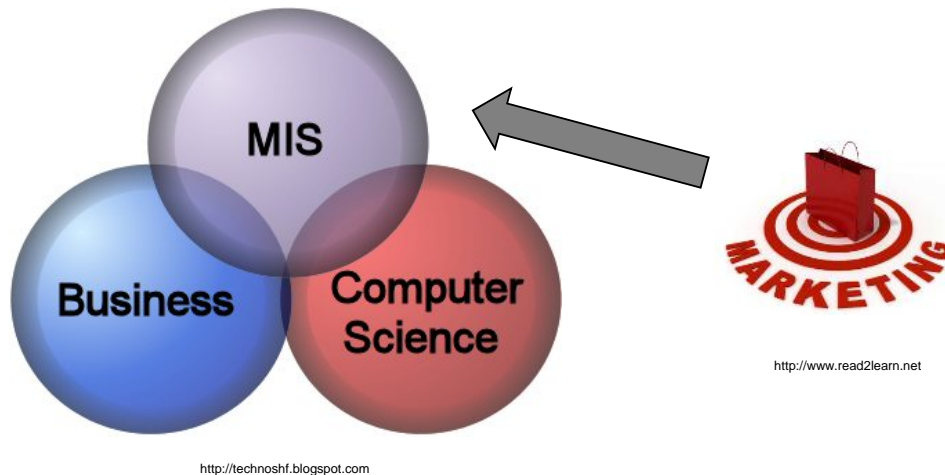
01. Strategic Management

- Competitive Advantage
    - An advantage over competitors in some measure such as cost, quality, or speed
    - A difference in the value chain data
    - Improving core competency
        - Employee productivity
        - Operational efficiency

http://communications.webalue.com

4

01. Strategic Management

- Competitive Advantage
  - The goals, processes, products, or environmental relationships that help an organization gain a competitive advantage or reduce a competitive disadvantage.
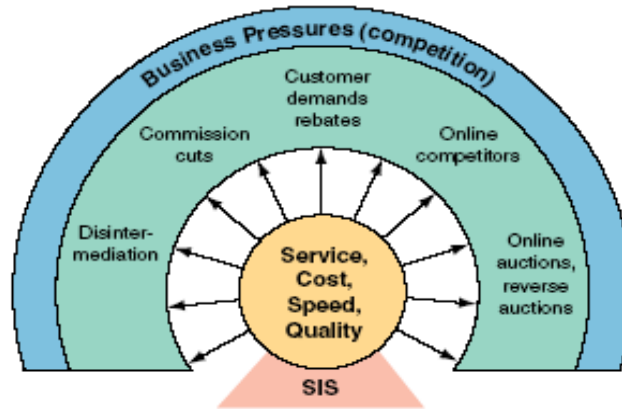
Information Technology for Management, Ed. 5, Efraim Turban et al., Wiley

5

01. Strategic Management

- Strategic Management
  - Strategic management is the way an organization maps or crafts the strategy of its future operations.
  - Ex.
    - SWOT analysis
    - Product life cycle
    - Quality preference
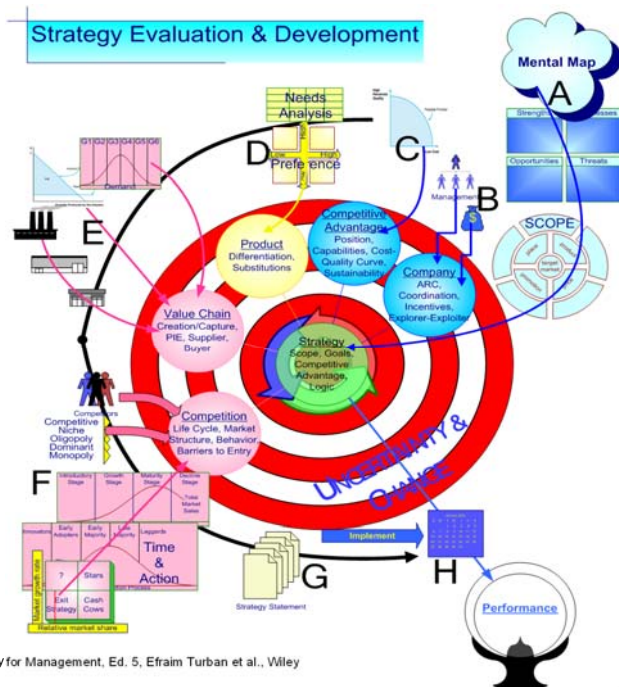
Information Technology for Management, Ed. 5, Efraim Turban et al., Wiley

6

01. Strategic Management

- Information Technology for Strategic Management
    - Innovative applications: Create innovative applications that provide direct strategic advantage to organizations.
    - Competitive weapons: Information systems themselves are recognized as a competitive weapon
    - Changes in processes: IT supports changes in business processes that translate to strategic advantage
    - Links with business partners: IT links a company with its business partners effectively and efficiently.

http://www.myvirtualgenie.com

7

# 01. Strategic Management

- Information Technology for Strategic Management
    - Cost reductions: IT enables companies to reduce costs.
    - Relationships with suppliers and customers: IT can be used to lock in suppliers and customers, or to build in switching costs.
    - New products: A firm can leverage its investment in IT to create new products that are in demand in the marketplace.
    - Competitive intelligence: IT provides competitive (business) intelligence by collecting and analyzing information about products, markets, competitors, and environmental changes .

http://www.apollogic.com

8

02. Competitive Intelligence

- Competitive Intelligence
  - One of the most important aspects in developing a competitive advantage is to acquire information on the activities and actions of competitors.
  - Such information-gathering drives business performance by
    - Increasing market knowledge
    - Improving knowledge management
    - Raising the quality of strategic planning

http://www.examiner.com

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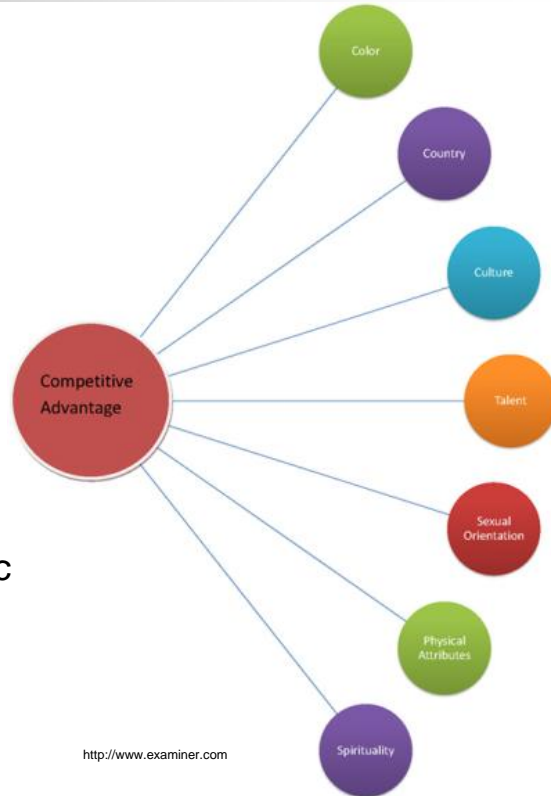
02. Competitive Intelligence

- Competitive Intelligence
  - However once the data has been gathered it must be processed into information and subsequently business intelligence.
  - Porters 5 Forces is a well-known framework that aids in this analysis.

http://www.joshstuff.net
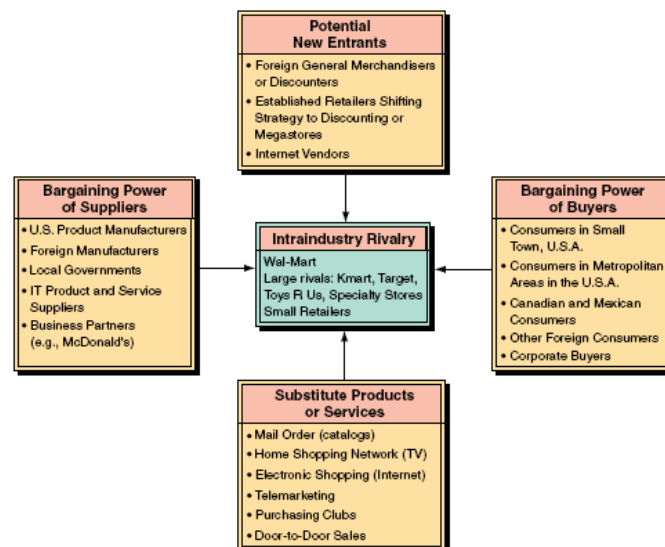
02. Competitive Intelligence

- Porter's Competitive Forces Model
  - The model recognizes five major forces that could endanger a company's position in a given industry.
  - 5 Forces
    - The threat of entry of new competitors
    - The bargaining power of suppliers
    - The bargaining power of customers (buyers)
    - The threat of substitute products or services
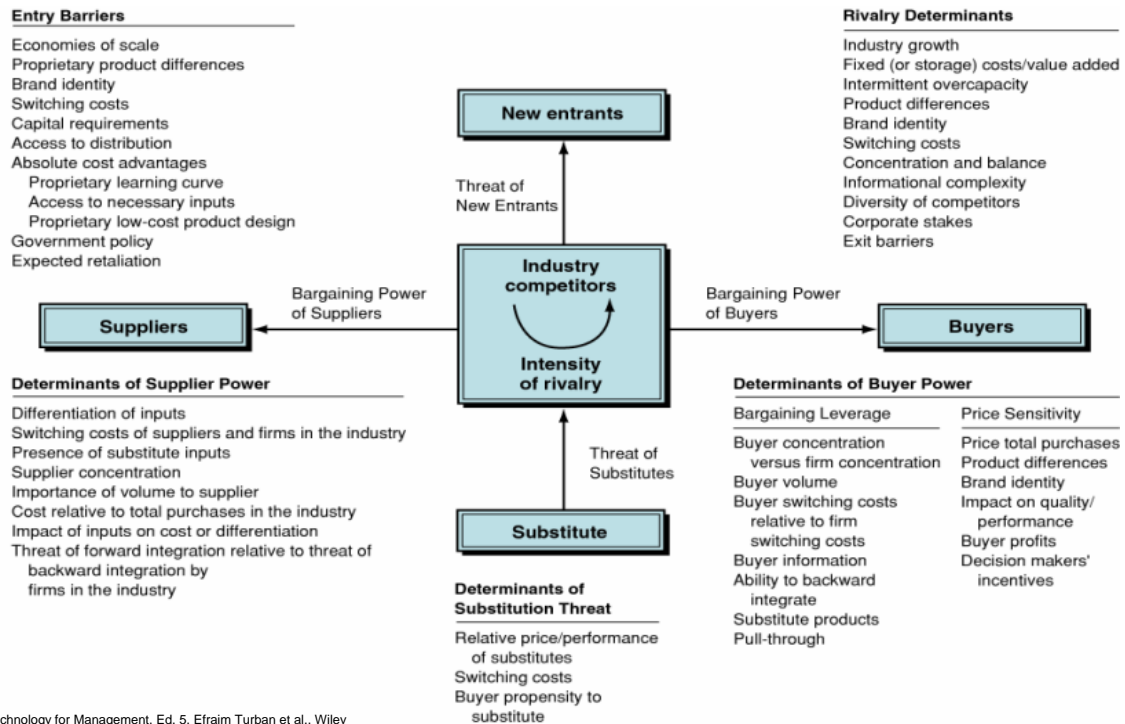   - The rivalry among existing firms in the industry

http://www.voicenet.asia

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02. Competitive Intelligence

- Porter's Competitive Forces Model

Potential New Entrants
- Foreign General Merchandisers or Discounters
- Established Retailers Shifting Strategy to Discounting or Megastores
- Internet Vendors

Bargaining Power of Suppliers
- U.S. Product Manufacturers
- Foreign Manufacturers
- Local Governments
- IT Product and Service Suppliers
- Business Partners (e.g., McDonald's)

Intraindustry Rivalry
Wal-Mart
Large rivals: Kmart, Target, Toys R Us, Specialty Stores
Small Retailers

Bargaining Power of Buyers
- Consumers in Small Town, U.S.A.
- Consumers in Metropolitan Areas in the U.S.A.
- Canadian and Mexican Consumers
- Other Foreign Consumers
- Corporate Buyers

Substitute Products or Services
- Mail Order (catalogs)
- Home Shopping Network (TV)
- Electronic Shopping (Internet)
- Telemarketing
- Purchasing Clubs
- Door-to-Door Sales

Information Technology for Management, Ed. 5, Efraim Turban et al., Wiley

02. Competitive Intelligence

- Porter's Competitive Forces Model

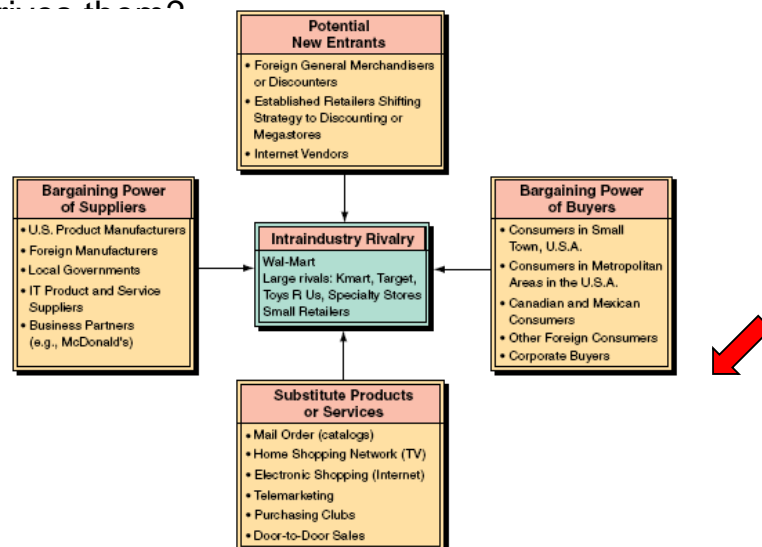# 02. Competitive Intelligence

- Porter's Competitive Forces Model
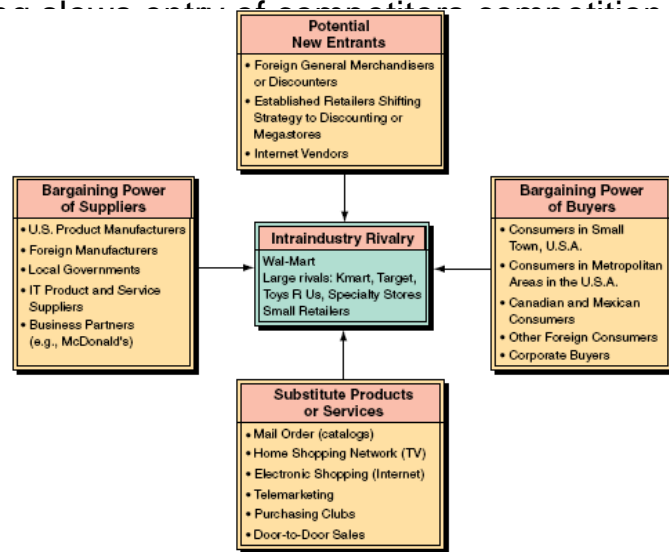 - Stage 1: We develop a competitor analysis.
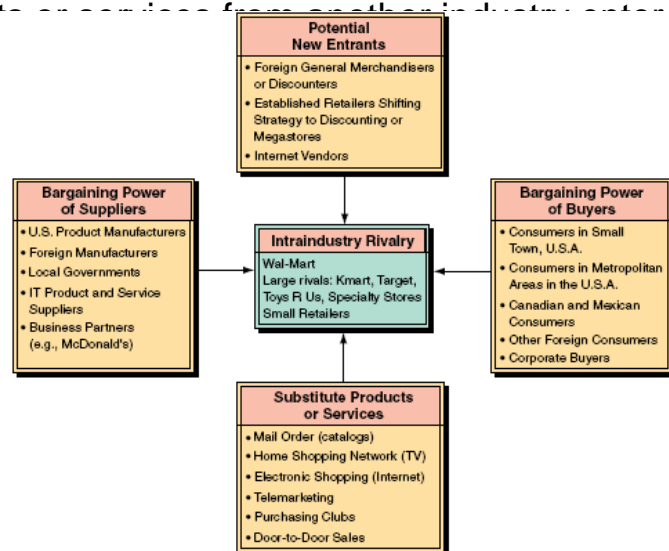   - What drives them?
    - What a
    - What a
    - Is com

02. Competitive Intelligence

- Porter's Competitive Forces Model
  - Stage 2: We analyze the entry barriers.
    - If nothing slows entry of competitors competition will become intense
    - Incumb
    - What a
    - Produc

Potential New Entrants
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- Door-to-Door Sales

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02. Competitive Intelligence

- Porter's Competitive Forces Model
  - Stage 3: We analyze the substitute products.
    - Products or services from another industry enter the market.
    - Custor utes is the substitu

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- Purchasing Clubs
- Door-to-Door Sales

02. Competitive Intelligence

- Porter's Competitive Forces Model
  - Stage 4: We analyze the supply chain.
    - The suppliers and the buyers.
    - Who c
    - Each e   s it?

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17

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03. Generic Strategies

- Developing a Sustained Competitive Advantage
  - Analyzing the forces that influence a company's competitive position will assist management in crafting a strategy aimed at establishing a sustained competitive advantage.
  - To establish such a position, a company needs to develop a strategy of performing activities differently than a competitor.

http://www.smalallah.com

18

03. Generic Strategies

• Developing a Sustained Competitive Advantage
  • Generic strategy options
    • Cost leadership strategy: Produce products and/or services at the lowest cost in the industry.
    • Differentiation strategy: Offer different products, services, or product features.
    • Niche strategy: Select a narrow-scope segment (niche market) and be the best in quality, speed, or cost in that market.

Competitive Advantage

	Lower Cost	Differentiation
Broad target	Cost Leadership	Differentiation
Narrow target	Focus	

Competitive Scope

http://www.coursework4you.co.uk
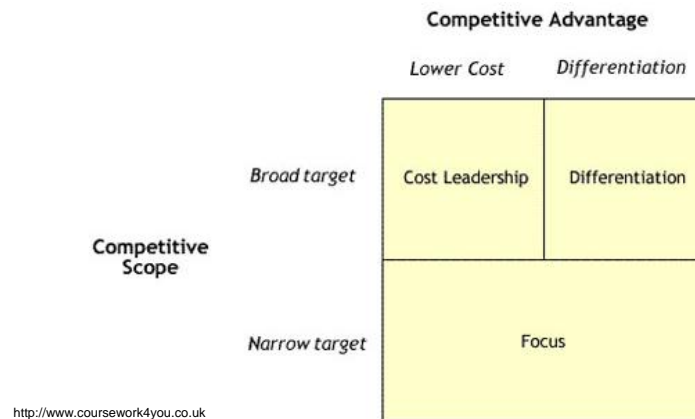
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03. Generic Strategies

• Developing a Sustained Competitive Advantage
  • Types of strategy
    • Growth strategy: Increase market share, acquire more customers, or sell more products.
    • Alliance strategy: Work with business partners in partnerships, alliances, joint ventures, or virtual companies.
    • Innovation strategy: Introduce new products and services, put new features in existing products and services, or develop new ways to produce them.
    • Operational effectiveness strategy: Improve the manner in which internal business processes are executed so that a firm performs similar activities better than rivals.

http://www.qualityscores.com

20

03. Generic Strategies

- Developing a Sustained Competitive Advantage
  - Types of strategy
    - Customer-orientation strategy: Concentrate on making customers happy.
    - Time strategy: Treat time as a resource, then manage it and use it to the firm's advantage.
    - Entry-barriers strategy: Create barriers to entry.
    - Lock in customers or suppliers strategy: Encourage customers or suppliers to stay with you rather than going to competitors.
    - Increase switching costs strategy: Discourage customers or suppliers from going to competitors for economic reasons.

http://www.qualityscores.com

21

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03. Generic Strategies

- Developing a Sustained Competitive Advantage
  - Our goal is to perform activities differently than a competitor.
  - Those activities can be linked in a Value Chain Model.

http://www.convergeconsulting.com.au

22

03. Generic Strategies

- Value Chain Model
    - According to the value chain model (Porter, 1985), the activities conducted in any organization can be divided into two parts:
        - Primary activities
        - Support activities
    - The initial purpose of the value chain model was to analyze the internal operations of a corporation, in order to increase its efficiency, effectiveness, and competitiveness.
    - We can extend that company analysis, by systematically evaluating a company's key processes and core competencies to eliminate any activities that do not add value to the product.

http://www.thinkfastsolutions.com
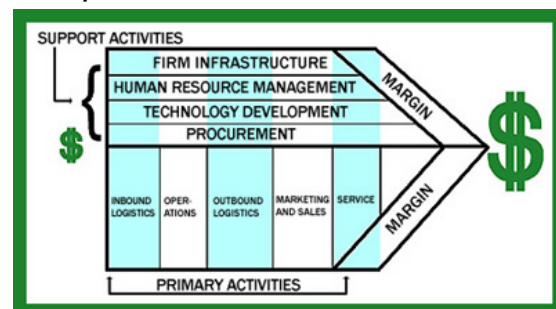
23

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03. Generic Strategies

- Value Chain Model
    - Primary activities are those activities in which materials are purchased, processed into products, and delivered to customers.
        - Each adds value to the product or service hence the value chain.
            - Inbound logistics (inputs)
            - Operations (manufacturing and testing)
            - Outbound logistics (storage and distribution)
            - Marketing and sales
            - Service

http://www.thinkfastsolutions.com
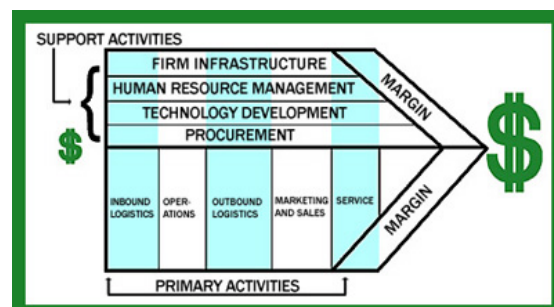
24

03. Generic Strategies

- Value Chain Model
    - Unlike the primary activities, which directly add value to the product or service, the support activities are operations that support the creation of value (primary activities)
        - The firm's infrastructure (accounting, finance, management)
        - Human resources management
        - Technology development (R&D)
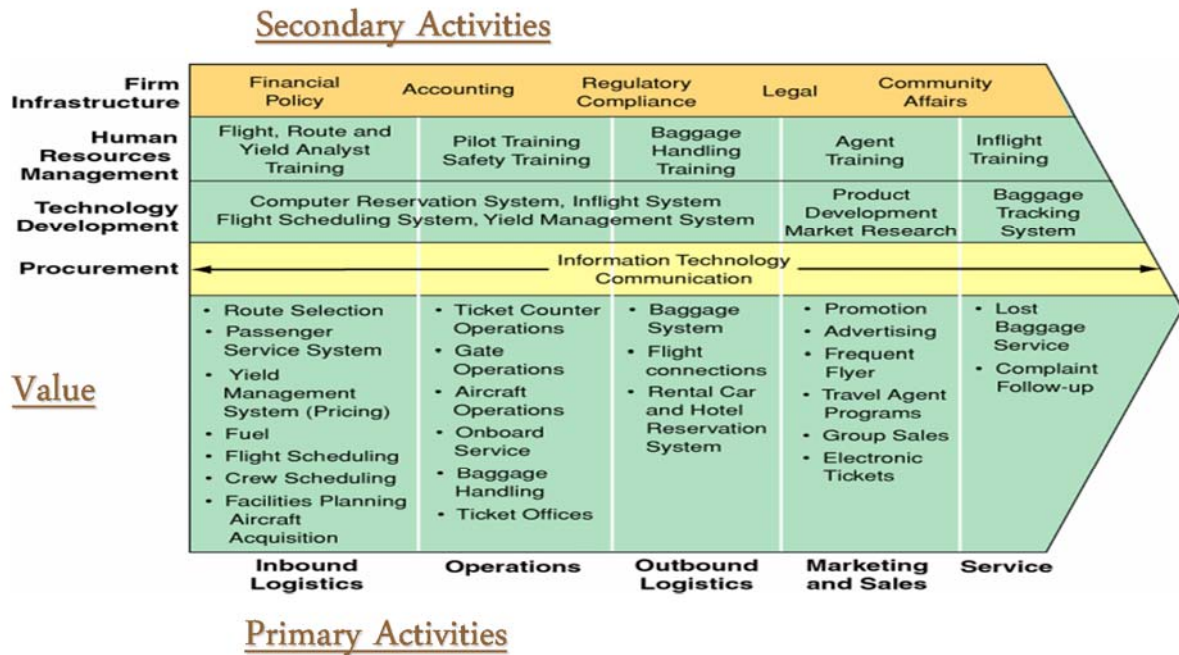   - Procurement

http://www.thinkfastsolutions.com

25

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03. Generic Strategies

- Value Chain Model

26

03. Generic Strategies

• Value Chain Model

Secondary Activities

Firm Infrastructure	Financial Policy	Accounting	Regulatory Compliance	Legal	Community Affairs
Human Resources Management	Flight, Route and Yield Analyst Training	Pilot Training Safety Training	Baggage Handling Training	Agent Training	Inflight Training
Technology Development	Computer Reservation System, Inflight System Flight Scheduling System, Yield Management System			Product Development Market Research	Baggage Tracking System
Procurement	Information Technology Communication				

Value

• Route Selection • Passenger Service System • Yield Management System (Pricing) • Fuel • Flight Scheduling • Crew Scheduling • Facilities Planning Aircraft Acquisition	• Ticket Counter Operations • Gate Operations • Aircraft Operations • Onboard Service • Baggage Handling • Ticket Offices	• Baggage System • Flight connections • Rental Car and Hotel Reservation System	• Promotion • Advertising • Frequent Flyer • Travel Agent Programs • Group Sales • Electronic Tickets	• Lost Baggage Service • Complaint Follow-up
Inbound Logistics	**Operations**	**Outbound Logistics**	**Marketing and Sales**	**Service**

Primary Activities

Information Technology for Management, Ed. 5, Efraim Turban et al., Wiley

27

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03. Generic Strategies

• Value Chain Model

http://marketing.gemzies.com

28

04. Value System

- Value System
  - A firm's value chain is part of a larger stream of activities, which Porter calls a value system.
  - A value system includes the suppliers that provide the inputs necessary to the firm and their value chains.
  - This also is the basis for the supply chain management concept.
  - Many of these alliances and business partnerships are based on Internet connectivity are called interorganizational information systems (IOSs).


http://www.igrescat.com

29

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04. Value System

- Value System

http://www.limengine.com

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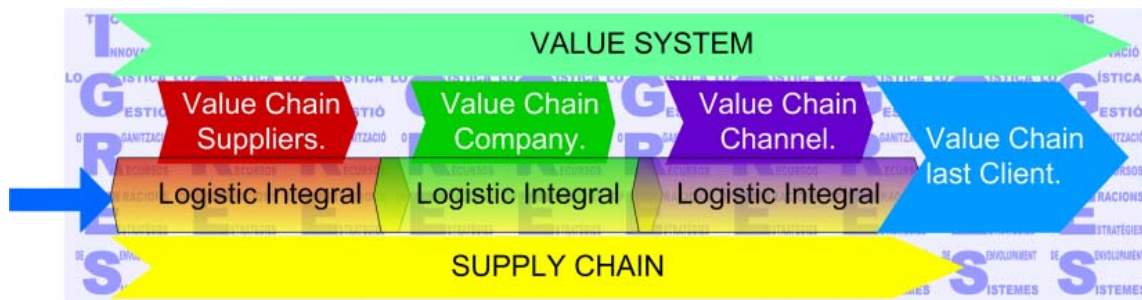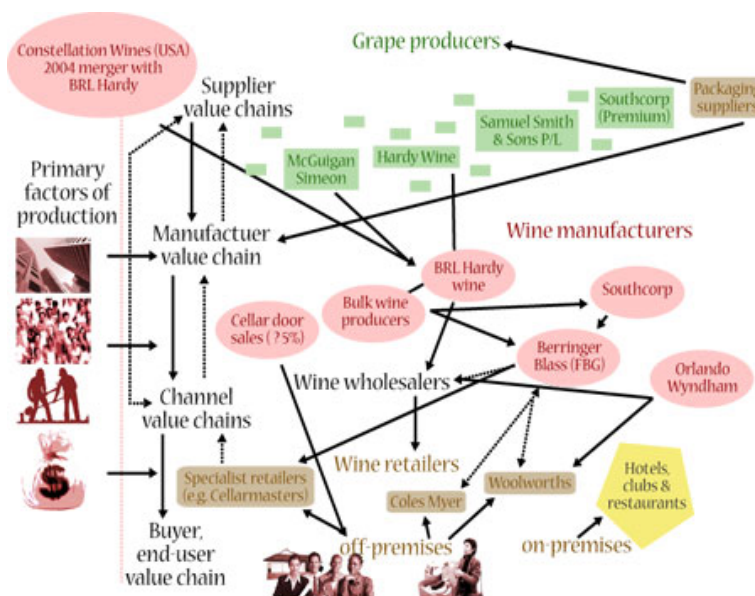
04. Value System

- EDI Systems
  - These Internet-based EDI systems offer strategic benefits
    - Faster business cycle (PO to receiving)
    - Automation of business procedures (automated replenishment)
    - Reduced operational costs
    - Greater advantage in a fierce competitive environment

http://www.bl56.net

31

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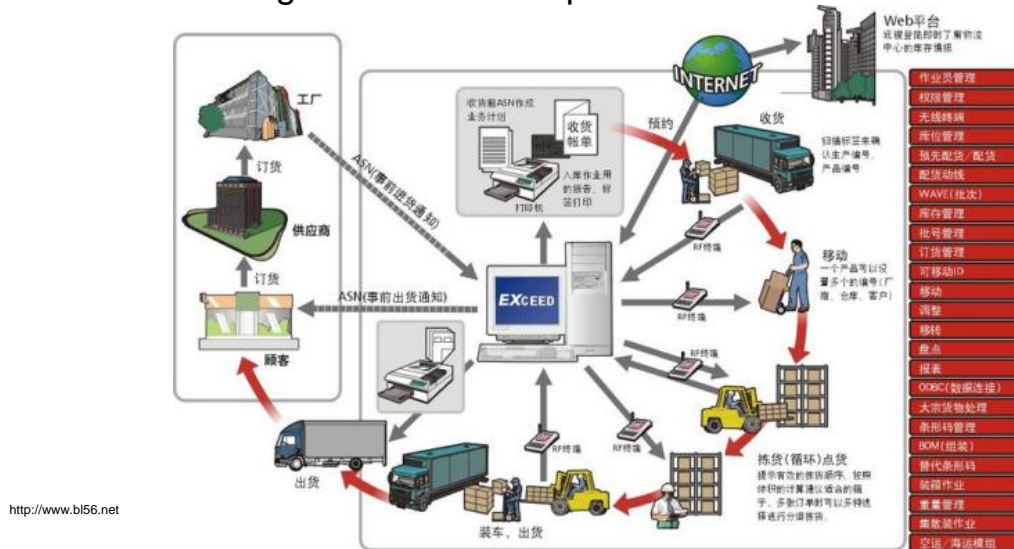
05. Strategic Information System

- Strategic Information System (SIS)
  - Strategic information systems are designed to establish a profitable and sustainable position against the competitive forces in an industry.
  - Due to advances in systems development it has become increasingly difficult to sustain an advantage for an extended period.
  - Experience also indicates that information systems, by themselves, can rarely provide a sustainable competitive advantage.
  - Therefore, the major problem that companies now face is how to sustain their competitive advantage.

Cost Down   **Sales Up**

32
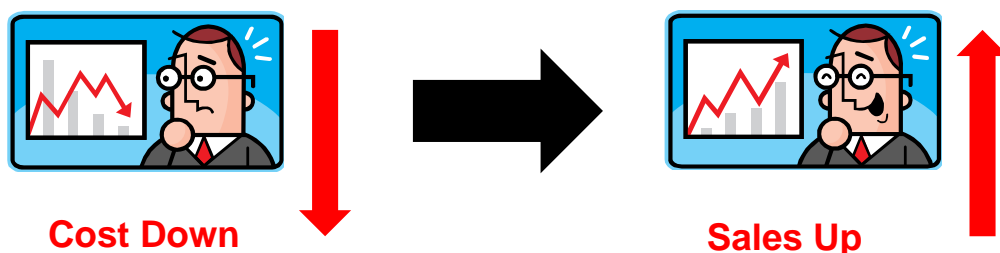
05. Strategic Information System

- Strategic Information System (SIS)
  - One popular approach is to use inward systems that are not visible to competitors.
  - These proprietary systems allow the company to perform the activities on their value chain differently than their competitors.

http://www.denovo-us.com

33

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05. Strategic Information System

- Strategic Resources and Capabilities
  - Key resource attributes that create competitive advantage

Resource Attributes	Description
Value	The degree to which a resource can help a firm improve efficiency or effectiveness.
Rarity	The degree to which a resource is nonheterogeneously distributed across firms in an industry.
Appropriability	The degree to which a firm can make use of a resource without incurring an expense that exceeds the value of the resource.
Imitability	The degree to which a resource can be readily emulated.
Mobility	The degree to which a resource is easy to transport.
Substitutability	The degree to which another resource can be used in lieu of the original resource to achieve value.

34

05. Strategic Information System

- Strategic Resources and Capabilities
  - IS resources and capabilities

IS Resource/Capability	Description	Relationship to Resource Attributes
Technology resources	Includes infrastructure, proprietary technology, hardware, and software.	Not necessarily rare or valuable, but difficult to appropriate and imitate. Low mobility but a fair degree of substitutability.
IT skills	Includes technical knowledge, development knowledge, and operational skills.	Highly mobile, but less imitable or substitutable. Not necessarily rare but highly valuable.
Managerial IT resources	Includes vendor and outsourcer relationship skills, market responsiveness, IS-business partnerships, IS planning and management skills.	Somewhat more rare than the technology and IT skill resources. Also of higher value. High mobility given the short tenure of CIOs. Nonsubstitutable.

Information Technology for Management, Ed. 5, Efraim Turban et al., Wiley

35

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06. IT Planning

- IT Planning
  - IT planning is the organized planning of the IT infrastructure and applications portfolios for all levels of the organization.
  - Corporate IT planning determines the IT infrastructure which in turn determines what applications end users can deploy.
  - Aligning the goals of the organization and the ability of IT to contribute to those goals can deliver great gains in productivity to the organization.

http://www.247itoutsourcing.com

36

06. IT Planning

- IT Planning Approaches
    - Business-led approach: The IT investment plan is defined on the basis of the current business strategy.
    - Method-driven approach: The IS needs are identified with the use of techniques and tools.
    - Technological approach: Analytical modeling and other tools are used to execute the IT plans.
    - Administrative approach: The IT plan is established by a steering committee.
    - Organizational approach: The IT investment plan is derived from a business-consensus view of all stakeholders in the organization.

planning IT ®

http://www.alfabet.com

37

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06. IT Planning

- 4 Stage Model of IT Planning
    - A four-stage model of IT planning that consists of four major activities.
    - The four-stage planning model is the foundation for the development of a portfolio of applications that is highly aligned with the corporate goals and has the ability to create an advantage over competitors.

Strategic IT Planning	▶	Information Requirements Analysis	▶	Resource Allocation	▶	Project Planning
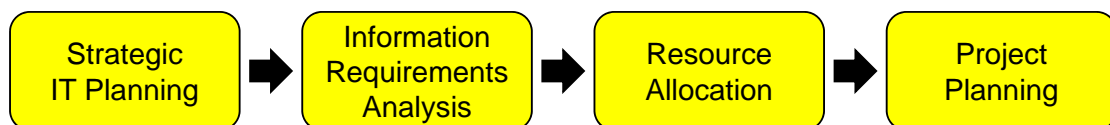
38

06. IT Planning

- 4 Stage Model of IT Planning
    - 1) Strategic IT planning: Establishes the relationship between the overall organizational plan and the IT plan.
    - 2) Information requirements analysis: Identifies broad, organizational information requirements to establish a strategic information architecture that can be used to direct specific application development.
    - 3) Resource allocation: Allocates both IT application development resources and operational resources.
    - 4) Project planning: Develops a plan that outlines schedules and resource requirements for specific IS projects.

| Strategic IT Planning | ➡ | Information Requirements Analysis | ➡ | Resource Allocation | ➡ | Project Planning |

39

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06. IT Planning

- 1) Strategic IT Planning
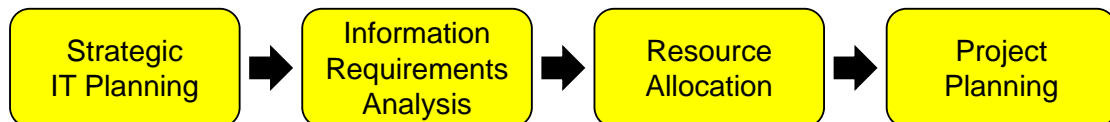
| Strategic IT Planning | ➡ | Information Requirements Analysis | ➡ | Resource Allocation | ➡ | Project Planning |

  - The first stage of the IT planning model identifies the applications portfolio through which an organization will conduct its business.
  - This stage can also be expanded to include the process of searching for strategic information systems (SIS) that enable a firm to develop a competitive advantage.
  - This involves assessing the current business environment and the future objectives and strategies.

http://www.merchantcircle.com

40

06. IT Planning

| Strategic IT Planning | → | Information Requirements Analysis | → | Resource Allocation | → | Project Planning |
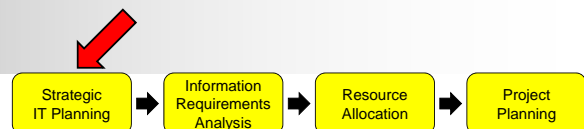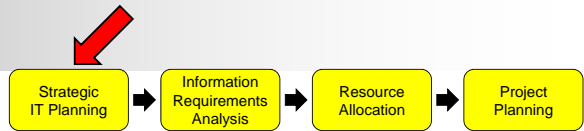
- 1) Strategic IT Planning
    - IT Alignment with organizational plans: The primary task of IT planning is to identify information systems applications that fit the objectives and priorities established by the organization.
    - Analyze the external environment (industry, supply chain, competition) and the internal environment (competencies, value chain, organizational structure) then relate them to technology (alignment).
    - Alignment is a complex management activity whose complexity increases in accordance with the complexity of organization.

http://www.empowercs.com.au

41

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06. IT Planning

| Strategic IT Planning | → | Information Requirements Analysis | → | Resource Allocation | → | Project Planning |
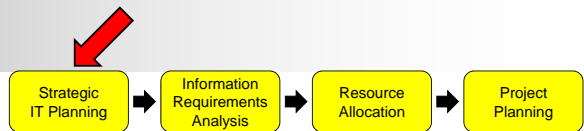
- 1) Strategic IT Planning
    - Methodologies
        - The business systems planning (BSP) model
            - Developed by IBM deals with two main building blocks which become the basis of an information architecture.
                - Business processes
                - Data classes

http://gmx.xmu.edu.cn

42

06. IT Planning

- 1) Strategic IT Planning
  - Methodologies
    - Growth model
      - Organizations go through six stages of IT growth
        - Initiation: When computers are initially introduced.
        - Expansion(contagion): Centralized growth takes place as users demand more applications.
        - Control: In response to management concern about cost versus benefits, systems projects are expected to show a return.
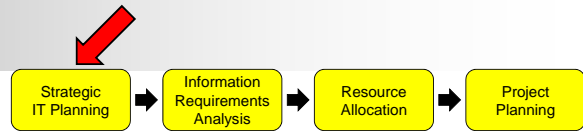   - Integration: Expenditures on integrating (via telecommunications and databases) existing systems
        - Data administration: Information requirements rather than processing drive the applications portfolio.
        - Maturity: The planning and development of IT are closely coordinated with business development
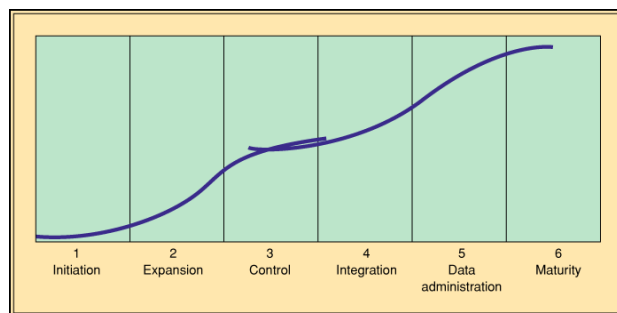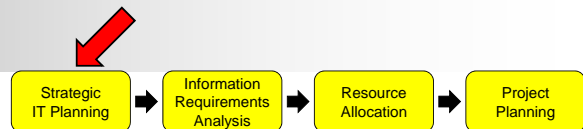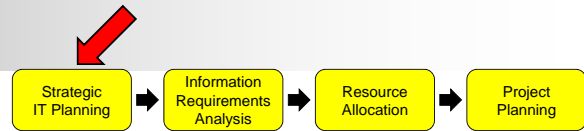
| Strategic IT Planning | → | Information Requirements Analysis | → | Resource Allocation | → | Project Planning |

http://www.accountingscholar.com

43

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06. IT Planning

- 1) Strategic IT Planning
  - Methodologies
    - Growth model

| Strategic IT Planning | → | Information Requirements Analysis | → | Resource Allocation | → | Project Planning |

| 1 Initiation | 2 Expansion | 3 Control | 4 Integration | 5 Data administration | 6 Maturity |

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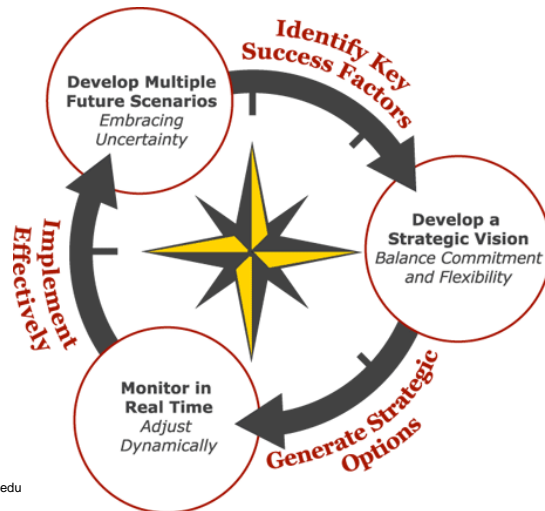
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06. IT Planning

- 1) Strategic IT Planning
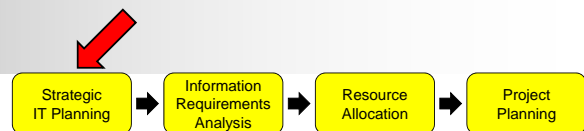 - Methodologies
    - Scenario planning
      - Planners first create several scenarios.
      - Then a team compiles as many as possible future events that may influence the outcome of each scenario.

| Strategic IT Planning | → | Information Requirements Analysis | → | Resource Allocation | → | Project Planning |

http://wp.tlt.psu.edu
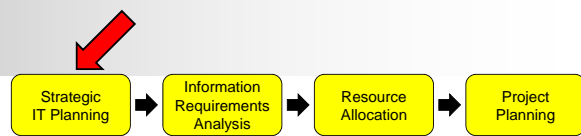
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06. IT Planning

- 1) Strategic IT Planning
  - Methodologies
    - Critical success factors (CSFs)
      - Few things that must go right in order to ensure the organization's survival and success.
      - Critical success factors vary by industry categories—manufacturing, service, or government—and by specific industries within these categories.

| Strategic IT Planning | → | Information Requirements Analysis | → | Resource Allocation | → | Project Planning |

http://www.barry-overstreet.com

46

06. IT Planning

- 1) Strategic IT Planning
  - Methodologies
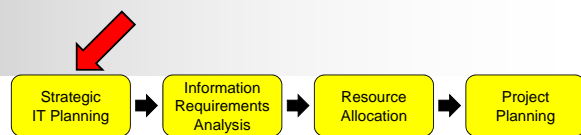   - Critical success factors (CSFs)
      - Sample questions asked in the CSF approach are:
        - What objectives are central to your organization?
        - What are the critical factors that are essential to meeting these objectives?
        - What decisions or actions are key to these critical factors?
        - What variables underlie these decisions, and how are they measured?
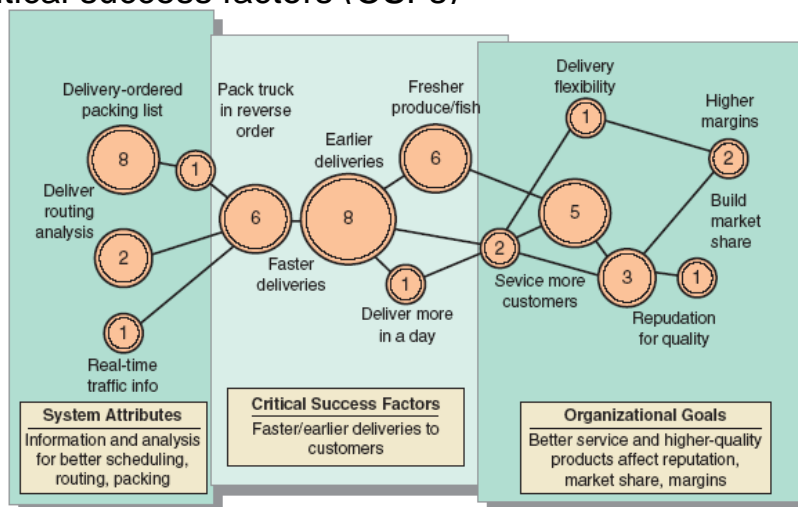   - What information systems can supply these measures?

| Strategic IT Planning | → | Information Requirements Analysis | → | Resource Allocation | → | Project Planning |

http://www.creative-wealthbuilding.com

47

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06. IT Planning

- 1) Strategic IT Planning
  - Methodologies
    - Critical success factors (CSFs)

| Strategic IT Planning | → | Information Requirements Analysis | → | Resource Allocation | → | Project Planning |

Delivery-ordered packing list — 8 — 1
Deliver routing analysis — 2
Real-time traffic info — 1
Pack truck in reverse order — 6
Faster deliveries — 8
Earlier deliveries — 6
Deliver more in a day — 1
Fresher produce/fish — 6
Sevice more customers — 2
Delivery flexibility — 1
— 5
— 3
Higher margins — 2
Build market share
Repudation for quality — 1

System Attributes
Information and analysis for better scheduling, routing, packing

Critical Success Factors
Faster/earlier deliveries to customers

Organizational Goals
Better service and higher-quality products affect reputation, market share, margins

Information Technology for Management, Ed. 5, Efraim Turban et al., Wiley

48

06. IT Planning

- 2) Information Requirements Analysis

| Strategic IT Planning | → | Information Requirements Analysis | → | Resource Allocation | → | Project Planning |

- The second stage of the model is the information requirements analysis, which is an analysis of the information needs of users and how that information relates to their work.
  - The goal of this second stage is to ensure that the various information systems, databases, and networks can be integrated to support the requirements identified in stage 1.
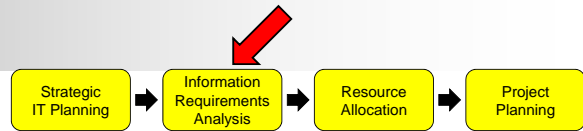
http://www.eckelmann.de

49

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06. IT Planning

- 2) Information Requirements Analysis

| Strategic IT Planning | → | Information Requirements Analysis | → | Resource Allocation | → | Project Planning |

- Information requirements analysis in stage 2 is a more comprehensive level of analysis.
  - It encompasses infrastructures such as the data needs (e.g., in a data warehouse or a data center), requirements for the intranet, extranet, and corporate partners are established.
  - It identifies high payoffs IT projects which will produce the highest organizational payoff.
  - It provides an architecture that leads to a cohesive, integrated systems that offers the most benefit.
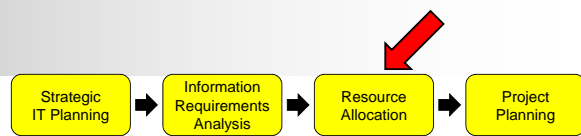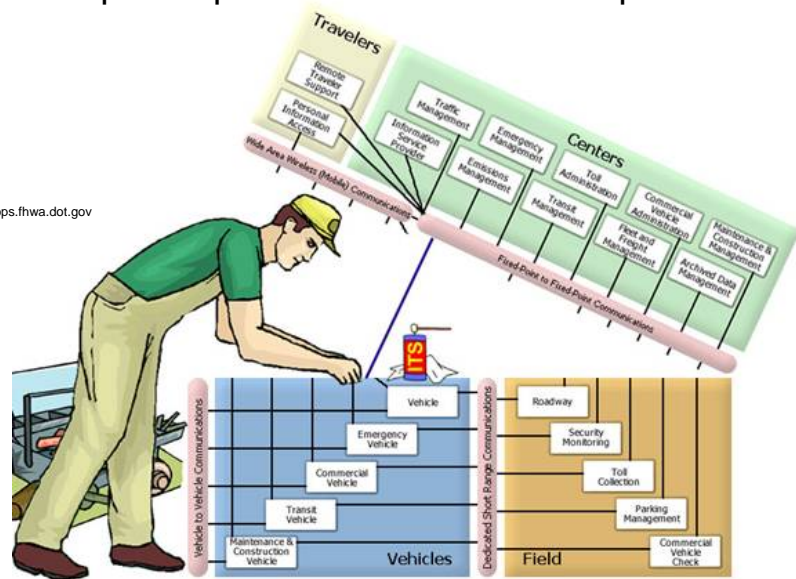
http://www.igcseict.info

50

06. IT Planning

- 3) Resource Allocation

| Strategic IT Planning | → | Information Requirements Analysis | → | Resource Allocation | → | Project Planning |
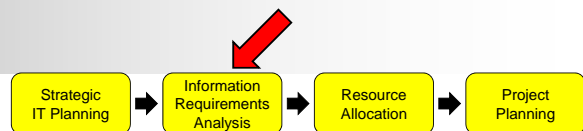
- Resource allocation, the third stage of the IT planning model, consists of developing the hardware, software, data networks and communications, facilities, personnel, and financial plans needed to execute the master development plan as defined in the requirements analysis phase.

http://www.ops.fhwa.dot.gov

51

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06. IT Planning

- 3) Resource Allocation

| Strategic IT Planning | → | Information Requirements Analysis | → | Resource Allocation | → | Project Planning |

- Allocation is a difficult and in many cases a political process.
  - Difficult since opportunities and requests for spending far exceed the available funds.
  - Difficult since some projects and infrastructures are necessary in order for the organization to stay in business.
 - Another major factor in resource allocation is employing outsourcing strategy.

http://www.iseesystems.com

52

06. IT Planning

• 4) Project Planning
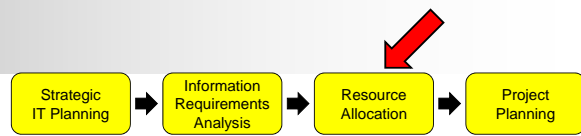
| Strategic IT Planning | Information Requirements Analysis | Resource Allocation | Project Planning |

- The fourth and final stage of the model for IT planning is project planning.
- It provides an overall framework within which specific applications can be planned, scheduled, and controlled.

http://techchai.com

53

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06. IT Planning

• 4) Project Planning
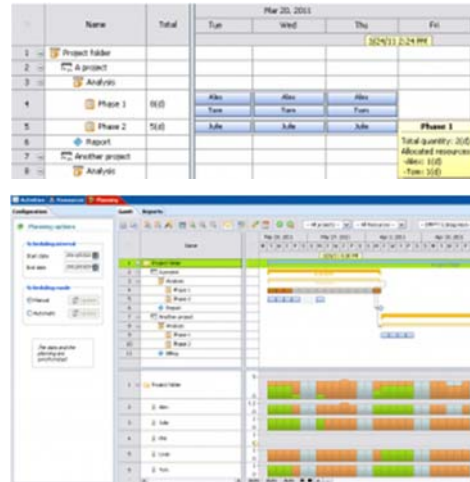
| Strategic IT Planning | Information Requirements Analysis | Resource Allocation | Project Planning |

- Additional emphasis is placed on vendor management and control it the organization will outsources some of the requirements.
  - We have to understand what we are going to do.
  - We need to know the start and end dates.
  - We need to know the resources.
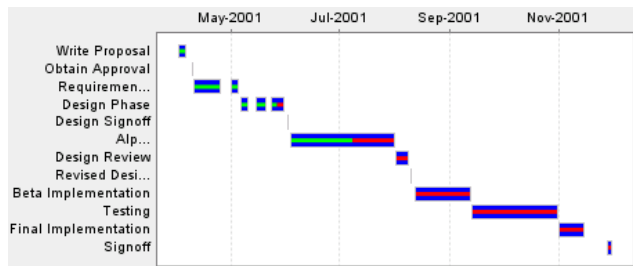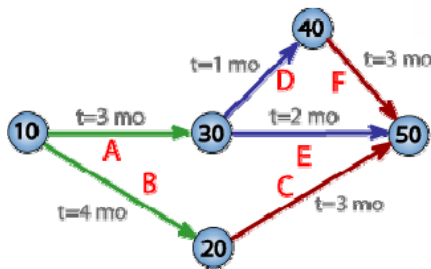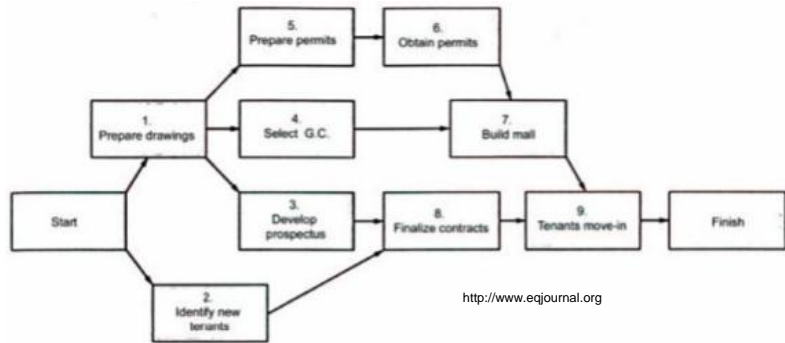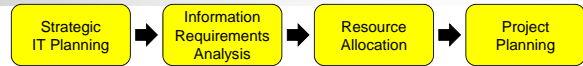 - We need to know the tasks.

http://www.tma.com
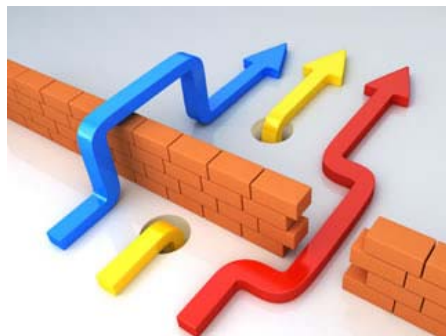
54

06. IT Planning

- 4) Project Planning
  - Various tools exist for planning and control:
    - PERT & CPM
    - Gantt charts

| Strategic IT Planning | → | Information Requirements Analysis | → | Resource Allocation | → | Project Planning |

http://www.eqjournal.org

http://ko.wikipedia.org

http://www.java2s.com

55

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06. IT Planning

- Applications Portfolio
  - An applications portfolio is the mix of computer applications that the information system department has installed or is the process of developing on behalf of the company.
  - The applications portfolio categorizes existing, planned, and potential information systems based on their business contributions.

**Application Portfolio Management**

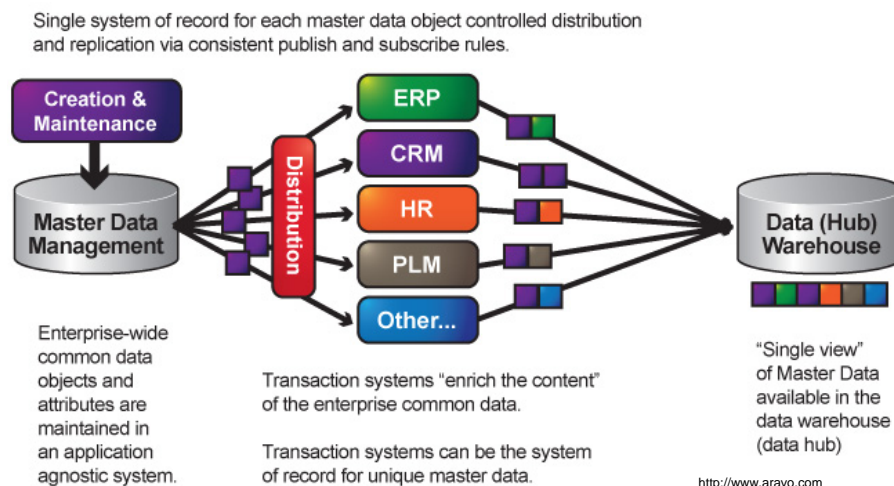**Organizational Policy**
- Policies
- Standards
- Reference Models

IT Strategy
- Architecture Envisioning
- Future, Current and Transition Architectures

Program
- Project (s)

http://blogs.msdn.com

56

06. IT Planning

• Applications Portfolio

STRATEGIC	HIGH POTENTIAL
Applications that *are critical to* sustaining future business strategy	Applications that *may be important* in achieving future success
Applications on which the organization *currently depends* for success	Applications that are *valuable but not critical to* success
KEY OPERATIONAL	SUPPORT
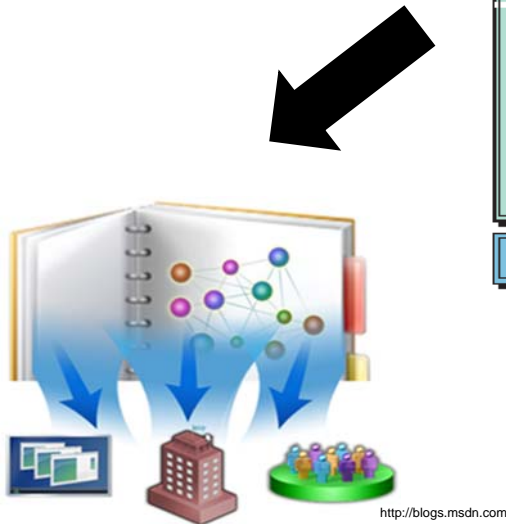
Information Technology for Management, Ed. 5, Efraim Turban et al., Wiley

http://blogs.msdn.com

57

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06. IT Planning

• Information Technology Architectures
  • Information technology architecture refers to the overall structure of all information systems in an organization.
  • This structure consists of applications for various management levels operational control
    • Management planning and control
    • Strategic planning

Single system of record for each master data object controlled distribution and replication via consistent publish and subscribe rules.

Creation & Maintenance

Master Data Management

Distribution

ERP
CRM
HR
PLM
Other...

Data (Hub) Warehouse

Enterprise-wide common data objects and attributes are maintained in an application agnostic system.

Transaction systems "enrich the content" of the enterprise common data.

Transaction systems can be the system of record for unique master data.

"Single view" of Master Data available in the data warehouse (data hub)

http://www.aravo.com

58

06. IT Planning

- Information Technology Architectures
  - Applications oriented to various functional-operational activities
    - Marketing
    - R&D
    - Production
    - Distribution
  - It also includes infrastructure
    - Databases
    - Supporting software
    - Networks

http://blog.trginternational.com

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06. IT Planning

- Information Technology Architectures
  - Different organizations have different IT infrastructure requirements.
  - Two general factors that influence infrastructure levels
    - Information intensity (the extent to which products or processes incorporate information)
    - Strategic focus (the level of emphasis on strategy and planning)

http://www.ibm.com
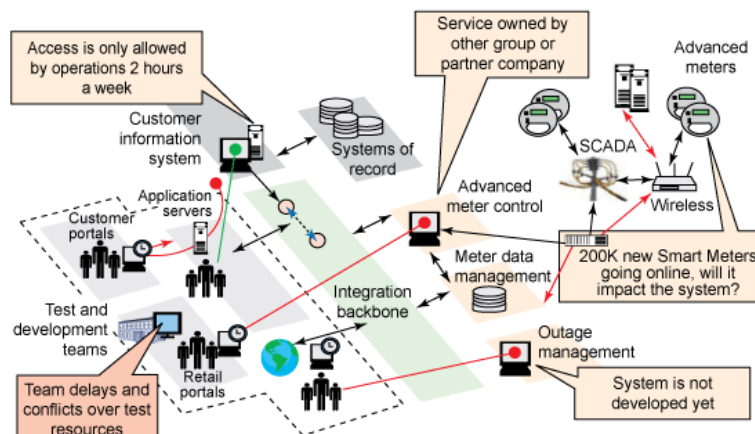
06. IT Planning

- Information Technology Architectures
  - Firms with higher levels of these two factors use more IT infrastructure services,
    - Industry: Manufacturing firms use fewer IT infrastructure services than retail or financial firms.
    - Market volatility: Firms that need to change products quickly use more IT infrastructure services.
    - Business unit synergy: Firms that emphasize synergies (e.g., cross-selling) use more IT infrastructure services.
    - Strategy and planning: Firms that integrate IT and organizational planning, and track or monitor the achievement of strategic goals, use more IT infrastructure services.

http://blog.trginternational.com

61

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06. IT Planning

- Information Technology Architectures
  - Each organization has its own particular needs and preferences for information.
  - Therefore, today's IT architecture is designed around business processes rather than traditional departmental hierarchy.

http://www.ibm.com

62

06. IT Planning

- Information Technology Architectures
  - Architectural choices are:
    - Centralized computing: puts all processing and control authority within one computer to which all other computing devices respond.
    - Distributed computing: gives users direct control over their own computing by providing a decentralized environment
    - Blended computing: a blend of the two models

http://www.ibm.com

63
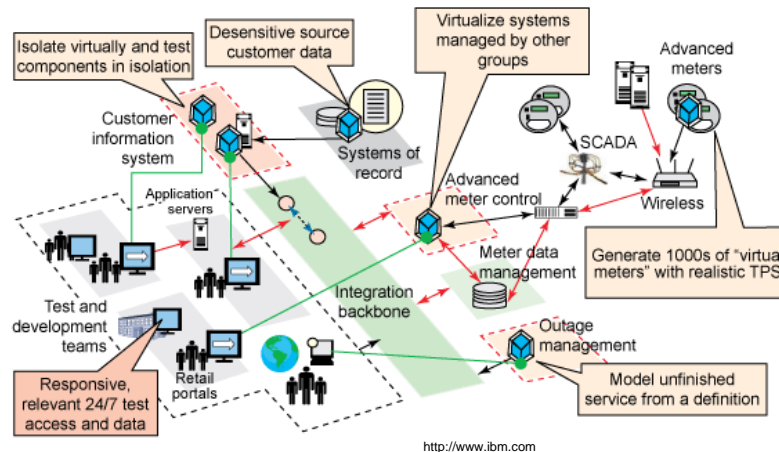
06. IT Planning

- Information Technology Architectures
  - End-user configurations (workstations):
    - Centralized computing with the PC functioning as "dumb terminals" or "not smart" thin PCs.
    - A single-user PC that is not connected to any other device.
    - A single-user PC that is connected to other PCs or systems, using a telecommunications connections.
    - Workgroup PCs connected to each other in a small P2P network.
    - Distributed computing with many PCs fully connected by LANs via wireline or Wi-FI.

http://blog.kofc.edu

64

06. IT Planning

- Planning Challenges
  - Information technology planning gets more complicated when several organizations are involved, as well as when we deal with multinational corporations.

http://vtiinformation.com

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06. IT Planning

- Planning Challenges
  - Planning for interorganizational systems (IOS) involving several organizations may be complex.
    - Those involved with hundreds or even thousands of business partners is extremely difficult.
    - IT planners in those cases should focus on groups of customers, suppliers, and partners.

http://www.royalekutir.com

06. IT Planning

- Planning Challenges
    - IT planning for multinational corporations face a complex legal, political, and social environment, which complicates corporate IT planning.
        - Therefore, many multinational companies prefer to decentralize their IT planning and operations.
        - Thus evolving into local systems.
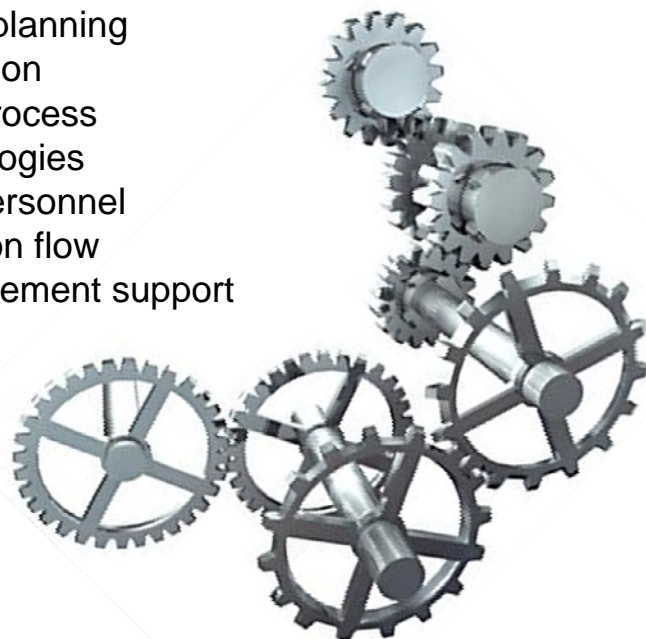
http://www.inovision.net

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06. IT Planning

- Planning Challenges
    - Other problems for IT planning
        - Cost, ROI justification
        - Time-consuming process
        - Obsolete methodologies
        - Lack of qualified personnel
        - Poor communication flow
        - Minimal top management support

http://surgisenergyautomation.blogspot.com

06. IT Planning

- Global Competition
    - Many companies are operating in a global environment.
    - Doing business in this environment is becoming more challenging as the political environment improves and as telecommunications and the Internet open the door to a large number of buyers, sellers, and competitors worldwide.
    - This increased competition is forcing companies to look for better ways to compete globally.

http://www.stockfresh.com

69

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06. IT Planning

- Global Competition
    - Global dimensions along which management can globalize
        - Product
        - Markets & placement
        - Promotion
        - Where value is added to the product
        - Competitive strategy
        - Use of non-home-country personnel - labor

http://images.businessweek.com

70

06. IT Planning

- Global Competition
  - Strategies for global dimensions
    - Multidomestic strategy: Zero standardization along the global dimensions
    - Global Strategy: Complete standardization along the seven global dimensions.

http://aloktyagi.wordpress.com

71

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06. IT Planning

- Web-based Systems
  - Strategic planning for Web-based systems can be viewed as a subset of IT strategic planning.
  - However, in many cases it is done independently of IT planning.
  - E-planning mostly deals with the EC infrastructure uncovering business opportunities and deciding on an applications portfolio that will exploit those opportunities.

http://www.inventory-online.com

72
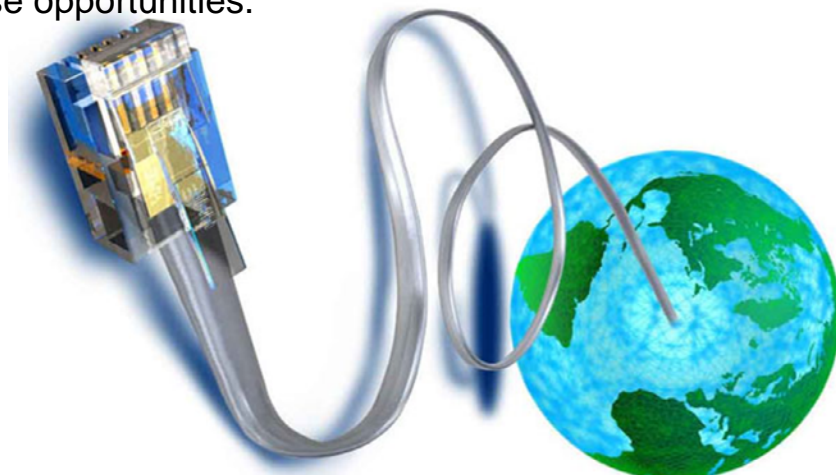
06. IT Planning

- Web-based Systems
  - The Web environment is very turbulent.
  - E-planning is usually less formal
  - E-planning must be more flexible
  - In e-planning more attention is given to:
    - Applications portfolio
    - Risk analysis, the degree of risk in Web-based systems can be high
    - Strategic planning issues such as the use of metrics (industry standards)
    - Strategic planning must integrate, e-business and knowledge management

http://www.webdesignbognorregis.co.uk

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06. IT Planning

- Web-based Systems

EC Application	Market-Value Potential	Time to Positive Cash Flow	Personnel Requirement	Funding Requirement	Average
e-Marketplace	85	70	20	20	49
Sell-side	70	70	60	50	63
MRO Procurement	80	60	80	90	80

Viability Metric (on 1–100 scale)

EC Application	Alignment with Core Capabilities	Alignment with Other Company's Initiatives	Fit with Organizational Structure	Fit with Company's Culture and Values	Ease of Technical Implementation	Average, Overall Fit
e-Marketplace	90	60	90	70	80	78
Sell-side	10	30	30	40	60	35
MRO Procurement	90	60	90	80	80	84

Fit Metric (on 1–100 scale)

Information Technology for Management, Ed. 5, Efraim Turban et al., Wiley