ISUE-ISUE MANAJEMEN

1. COMPETITIVE ADVANTAGE

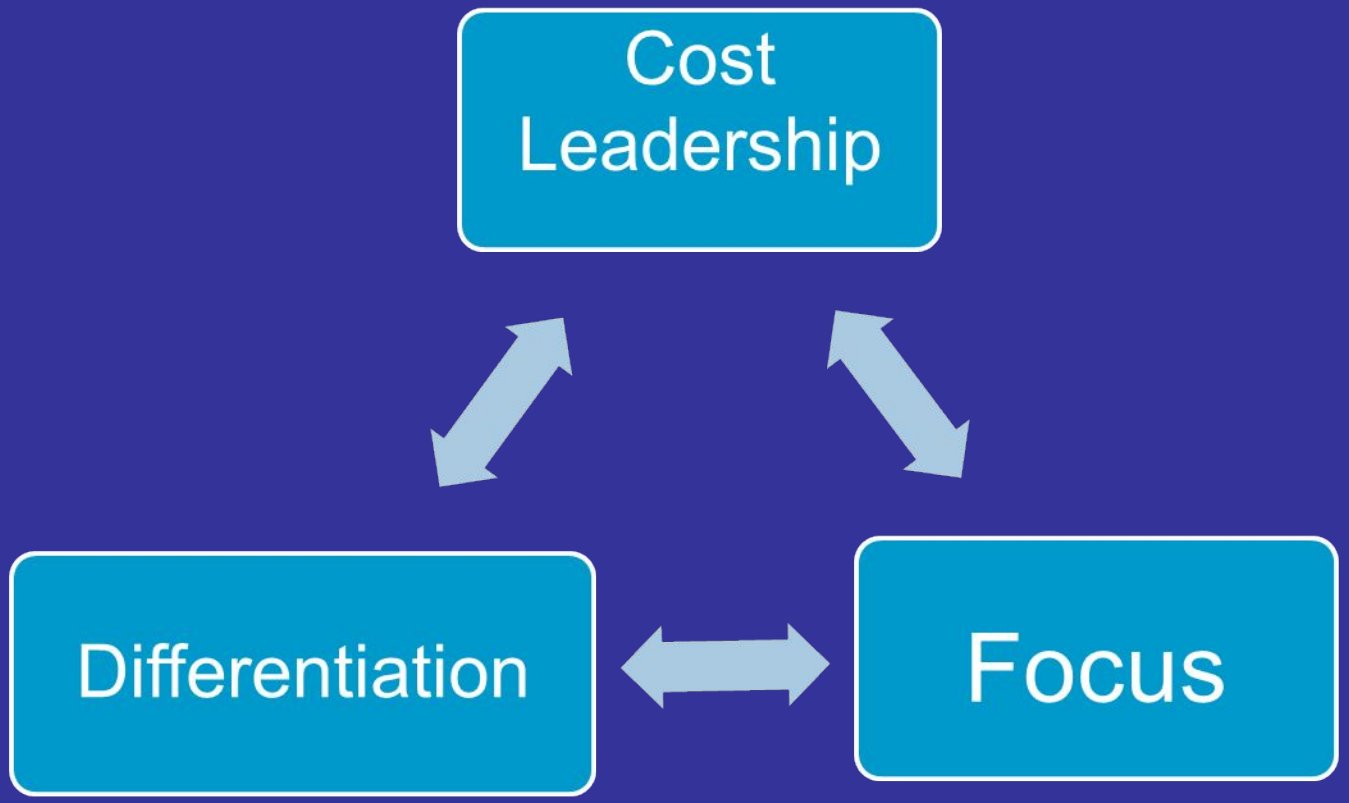
- The company occupies some positions where the competitors cannot copy its successful strategy and the company can gain the sustainable benefit from this successful strategy (Barney, 1991)

- Firm possesses resources and capabilities which are superior to those of competitors, then as long as the firm adopts a strategy that utilizes these resources and capabilities effectively, it possible for it to establish a competitive advantage (Sadler, 2003).

Competitive Advantage (Barney, 1991);

1) Company has low cost compared to other competitors.
2) The quality of products/services better than competitors
3) More capable of R&D and innovation than competitors
4) Better managerial capability than competitor
5) Company's profitability better than competitor.
6) Corporate image better than competitors.

Competitive Advantage (ME Porter, 1985)



Competitive Advantage in the Public Sector

(Popa dkk; Theoretical and Empiribal Researchers in Urban Management, Vol.1 Issue 4, Nop.2014)

- CA Porter; is not strategis interest, because competitive fight was and is defined as the battle for CA
- Strategy is to create and maintain strategic advantage, so organization has focused on creating new advantage that will lead to increase customer satisfaction and symmetry compared to that of the competitors.

The source CA of an organization:

1. Available of quantity/quality superior financial, physical and HR
2. Possession of superior technical, economic, org and managerial skill
3. Accupying a superior position on the market

Sources of CA in the public sector:

1. Emergence of a new service
2. Introduction of new management methods
3. Generation of a new of organization

The key questions to gains CA:

- Do distinctive element actually meet the needs, interest and expectation of stakeholders and customers ?
- Are they affordable as cost and sustainable in time ?
- Are they difficult to imitate by competitors ?

The information revolution:

1) Change the structure of industries and the rules competition
2) Gives companies the chance to gain CA and to evceed their rivals.
3) Gives rise to new businesses, sometimes even from existing operations in the company

Particularly of CA in the public sector:

- ***Important***; the CA has to be perceived by stakeholders of quality.
- ***Significant***; stakeholders so important that they feel forced to engage in relations with the institution.
- ***Sustainable***; supported and strengthened continuously

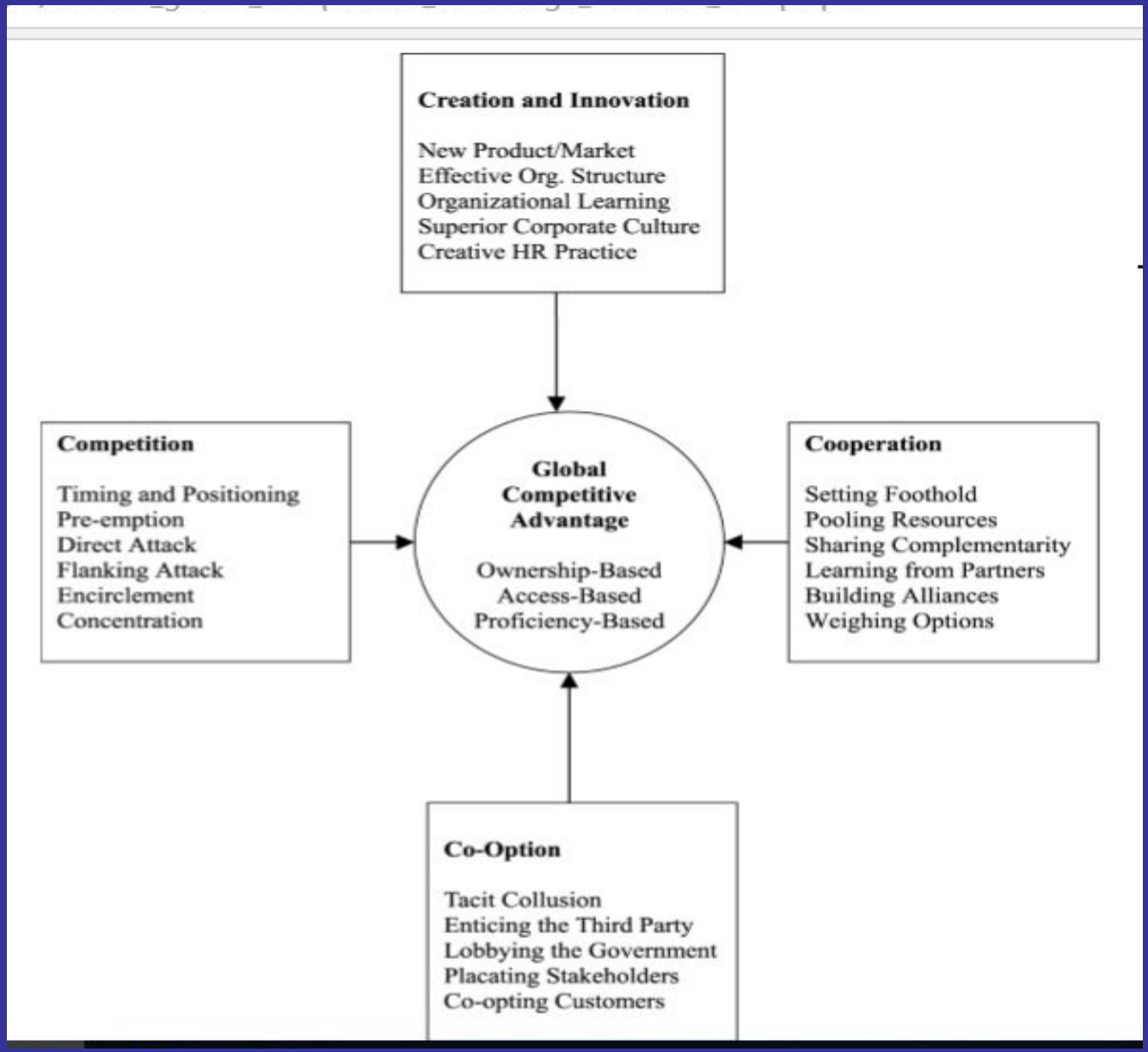
Innovative business models a factor for CA of the companies

(Stoilkovska dkk; UTMS journal of economics 6 (1)

Innovativeness is key characteristics which can enable a CA (exp: development new product/service, new technologies and processes, new markets, new innovative business models by supplying incremental innovations, new product/service by offer of values for the customers in a new and unconventional way).

Elaborate as sources of CA;

- Selection of a target market
- Contemporary information and communication technologies
- The vertical integrated strategy (demand and supply chain)
- Constant communication between the manager and employee
- Valuing, improving and upgrading the knowledge of managers and employee.
- Sharing the acquire knowledge
- Valuing and emphasizing the opinion of every employee.
- Innovativeness in the company business model
- Innovativeness in the products and service



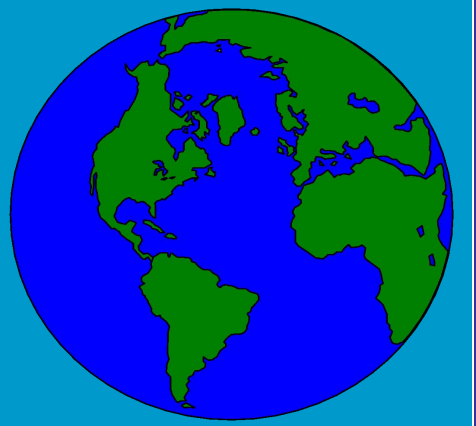
Toward global competitive advantage

(Creation, competition, cooperation, andco-option :Hao Ma,2004)

2. GLOBALISASI

Perkembangan ekonomi dimana perusahaan-perusahaan dari negara industri (Eropa,Jepang, Amerika Utara) mendominasi pasar dunia.

(Amerika Latin, Afrika, Asia)



NICs (Korea, Singapura dan Taiwan)

- Growing wealth from supplying technologically sophisticated product and services, like software and personal computer.

Customer

- Bagian dari inovasi dlm tehnologi komputer & telekomunikasi yang menghubungkan dunia.

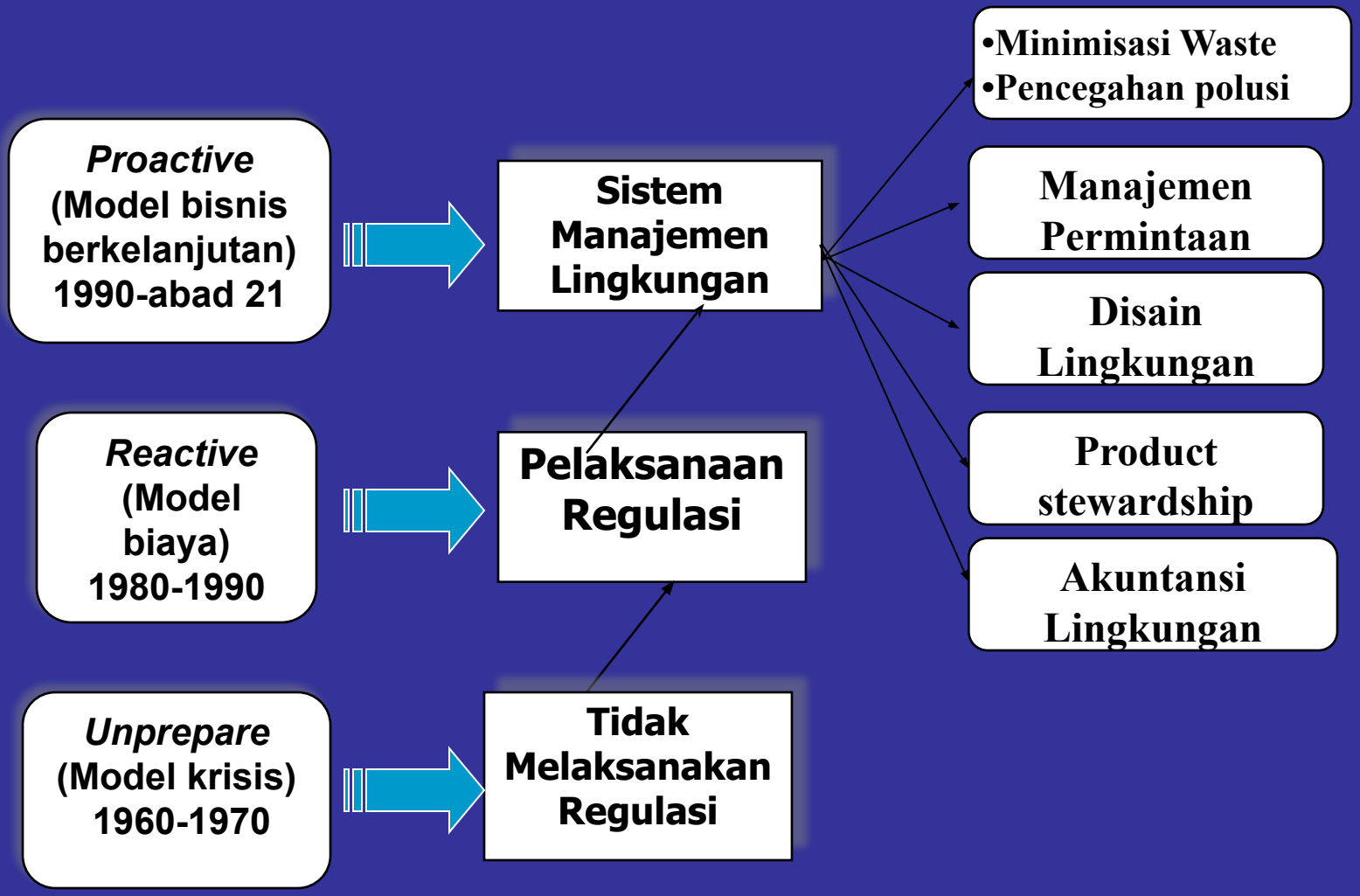
Manajer :

- Serving customer world wide with regional manufacturing and product feature, but with many common production processes and component design.

3. ENVIRONMENTAL

1) NEW INDUSTRIAL REVOLUTION
   (Berry & Rondinelli, 1998)
2) GREEN CUSTOMER
3) GREEN PRODUCT
4) GREEN PROCESS
5) GREEN TECHNOLOGY

TAHAPAN MANAJEMEN LINGKUNGAN PERUSAHAAN
Sumber: Berry and Rondinelli (1998)



4. CORPORATE SOCIAL RESPONSIBILITY (CSR)

CSR represent action that appears to further some social good, extends beyond the explicit economic interest to the firm, and is not required by law.
(Mc.Williams' & Siegel's, 2001)

Economic focused on corporation
Moral phylosophy focused on social responsibility

Definisi CSR

- **Vos (2003); As the obligations or duties of an organization to a specific systems of stakeholders.**
- **Michael, (2003); Continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large.**
- **Balabanis (1998); CSR adalah peran yang nyata dalam mendukung kesejahteraan masyarakat.**

CSR of public sector company: a case study of BHEL

(Khatik,2016; International business ethics in developing economics)

Companies feel that CSR is not an expense for a company, but it is important to enhance the goodwill and reputation.

Benefit for the company:

1. Builds relationship between company and the society
2. Enhances the profitability of the organization
3. Society becomes aware about CSR practices
4. CSR helps the organization to minimize the risk
5. Company has a positive impact on its culture and employee relations.

ISUE DALAM INDUSTRI

1) Intense competition
   a. Global restructuring
   b. Newly industrial economies

2) Global market, sourching,financing
   Domestic market to foreign market (society, customer, network)

Lanjutan……

3) Product variety & mass customization

   PLC continue to decrease

4) Emphasis on quality

   Zero defect will be the norm

5) Flexibility

   Ability to adjust to change in product design, product mix, volume of demand and process technology.

Lanjutan…….

6) Advance in technology

Information tech. change dramatically

7) Worker involvement

Ability to create, utilize knowledge as the key succes.

FACILITY LAYOUT

Managerial Issues

- Recognizing that many factors must be considered in choosing how to layout a facility.
- Understanding the significant impact that choosing a particular type of layout has on the firm's ability to compete in the market and its long-term success.
- Developing estimates of the investment costs of time and money associated with installing a particular layout.
- Attaining the goal of a smooth flow of material through the process through the choice of a layout that is both efficient and effective.

Facilities Layout

- The configuration of departments, work centers, and equipment, with particular emphasis on movement of work (customers or materials) through the system
- Arragement of machines, department, work station, and storage area.

Implication Layout:

- Reaching quality, productivity, and competitiveness of a firm.
- How efficient workers can do their job
- How fast goods can be produced
- How responsive the system can change product/service design, product mix and demand volume.

Objective of Layout Design

1. Facilitate attainment of product or service quality
2. Use workers and space efficiently
3. Avoid bottlenecks
4. Minimize unnecessary material handling costs
5. Eliminate unnecessary movement of workers or materials
6. Minimize production time or customer service time
7. Design for safety

Types of Manufacturing Layouts

Layout Type	
Process	Similar operations are performed in a common or functional area, regardless of the product in which the parts are used.
Product (Flow-shop layout)	Equipment/operations are located according to the progressive steps required to make the product.
Fixed-Position	The product, because of its size and/or weight, remains in one location and processes are brought to it.
Group Technology (GT) or Cellular	Groups of dissimilar machines are brought together in a work cell to perform tasks on a family of products that share common interests.

Basic Layout Types

Process layout

- Layout that can handle varied processing requirements
- Group activities together in department/work centre according to the process or function they perform.

Characteristics:

- Intermittent operation
- Job shop
- Customer order is low
- The worker skill in particular department

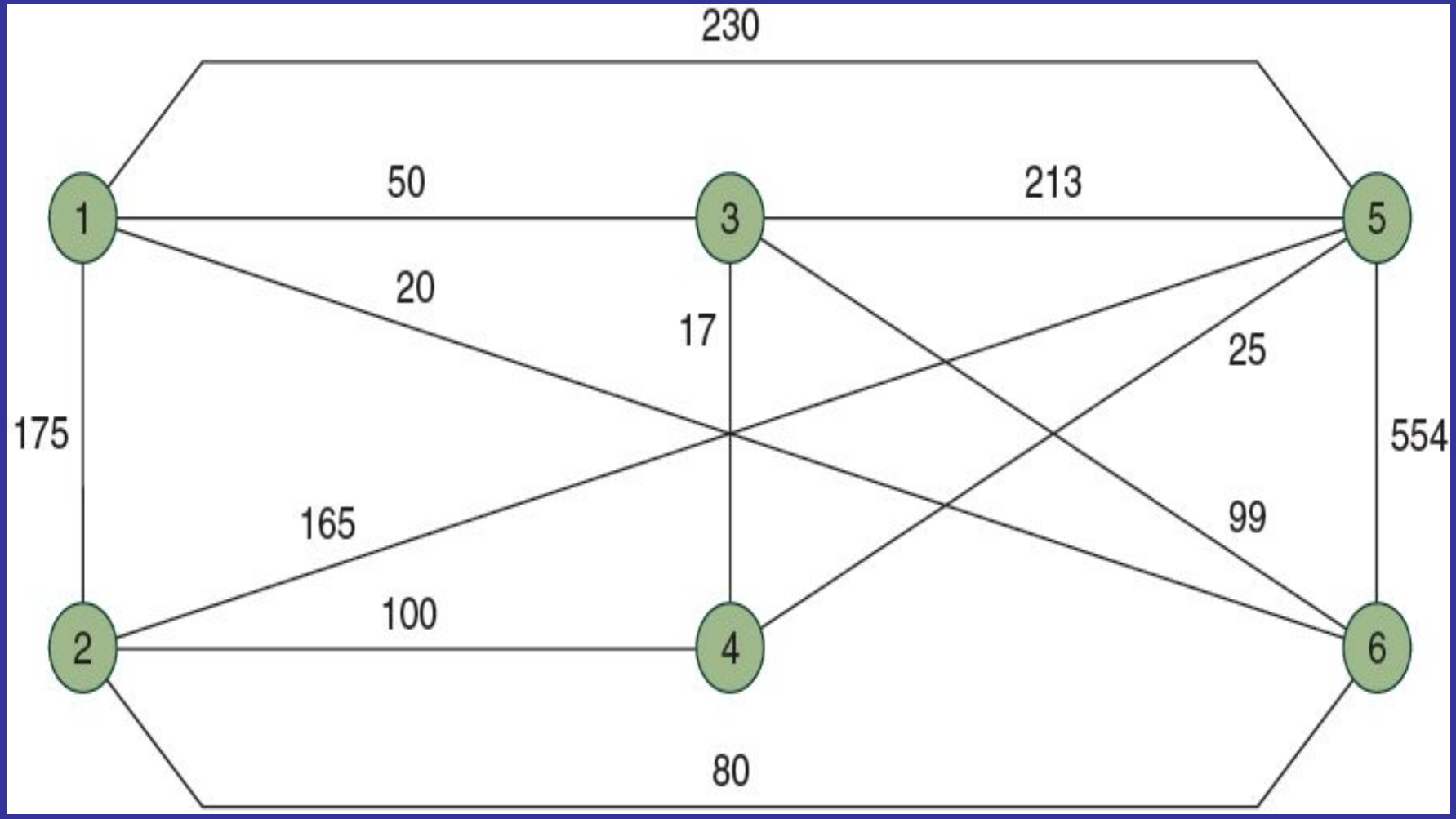
Advantages of Process Layouts

- Can handle a variety of processing requirements
- Not particularly vulnerable to equipment failures
- Equipment used is less costly
- Possible to use individual incentive plans

Disadvantages of Process Layouts

- In-process inventory costs can be high
- Challenging routing and scheduling
- Equipment utilization rates are low
- Material handling slow and inefficient
- Complexities often reduce span of supervision
- Special attention for each product or customer
- Accounting and purchasing are more involved

Interdepartmental Flow Graph with Number of Annual Movements



Steps for Process Layout

- Loading department to department
- Non-adjacent load
- Re-layout

Product Layout

1. Layout that uses standardized processing operations to achieve smooth, rapid, high-volume flow.
2. Arrange activities in a line to assembly a particular product
3. For mass or repetitive operation in which demand stable and volume is high.
4. Product or service is standard and make for general market.

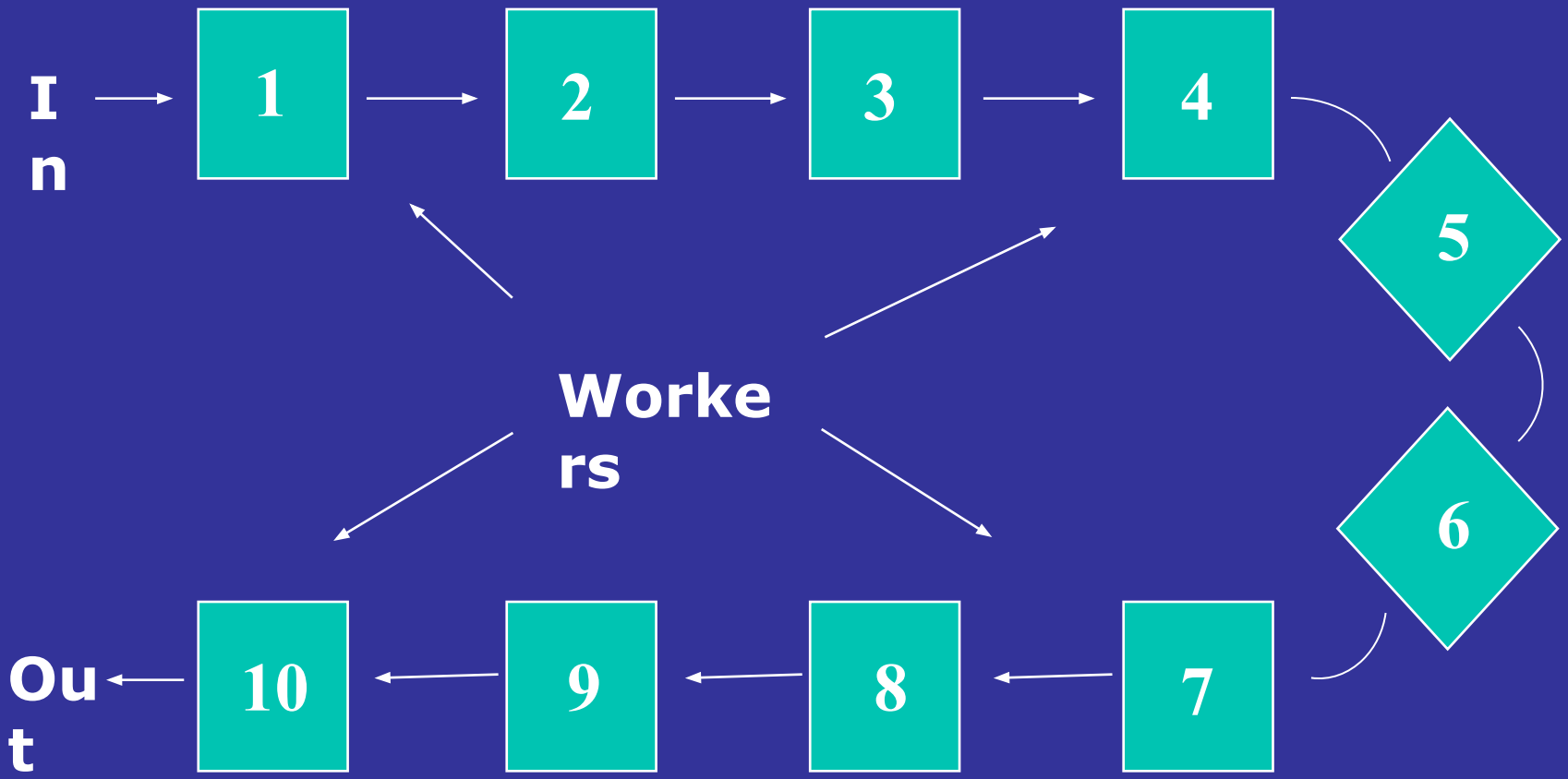
Advantages of Product Layout

- High rate of output
- Low unit cost
- Labor specialization
- Low material handling cost
- High utilization of labor and equipment
- Established routing and scheduling
- Routing accounting and purchasing

Disadvantages of Product Layout

- Creates dull, repetitive jobs
- Poorly skilled workers may not maintain equipment or quality of output
- Fairly inflexible to changes in volume
- Highly susceptible to shutdowns
- Needs preventive maintenance
- Individual incentive plans are impractical

A U-Shaped Production Line



Assembly Line Balancing Formulas

$$\text{Task time } (T) = \frac{\text{Production time per day}}{\text{Output per day (in units)}}$$

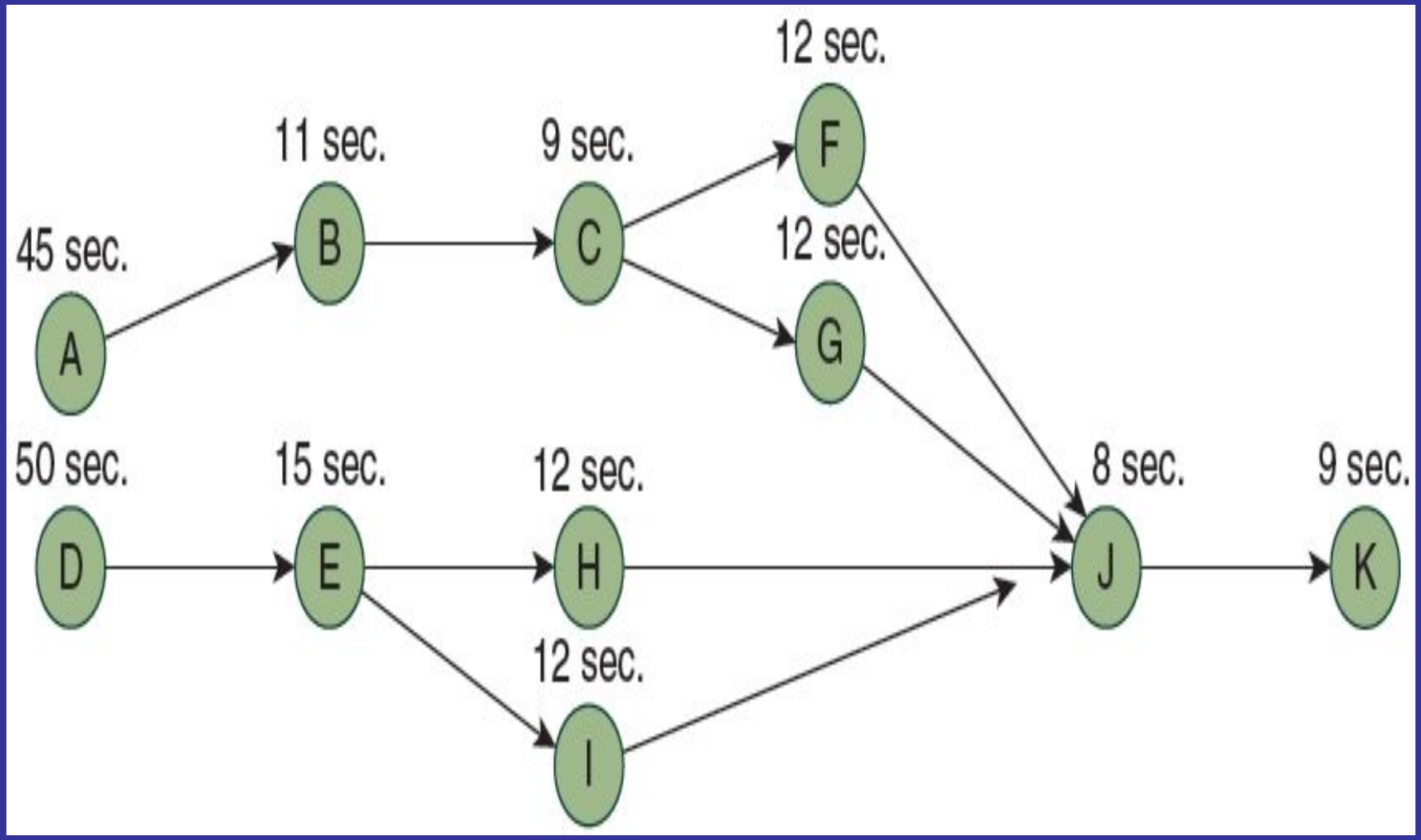
$$\text{Number of workstations} = \frac{\text{Sum of task times } (S)}{\text{Task time } (T)}$$

$$\text{Efficiency} = \frac{\text{Sum of task times } (S)}{\text{Actual number of workstations } (N_a) \times \text{Task time } (T)}$$

Assembly Steps and Times for Model J Wagon

Task	Performance Time (in seconds)	Description	Tasks That Must Precede
A	45	Position rear axle support and hand fasten four screws to nuts	—
B	11	Insert rear axle	A
C	9	Tighten rear axle support screws to nuts	B
D	50	Position front axle assembly and hand fasten with four screws to nuts	—
E	15	Tighten front axle assembly screws	D
F	12	Position rear wheel #1 and fasten hub cap	C
G	12	Position rear wheel #2 and fasten hub cap	C
H	12	Position front wheel #1 and fasten hub cap	E
I	12	Position front wheel #2 and fasten hub cap	E
J	8	Position wagon handle shaft on front axle assembly and hand fasten bolt and nut	F, G, H, I
K	9	Tighten bolt and nut	J
	195		

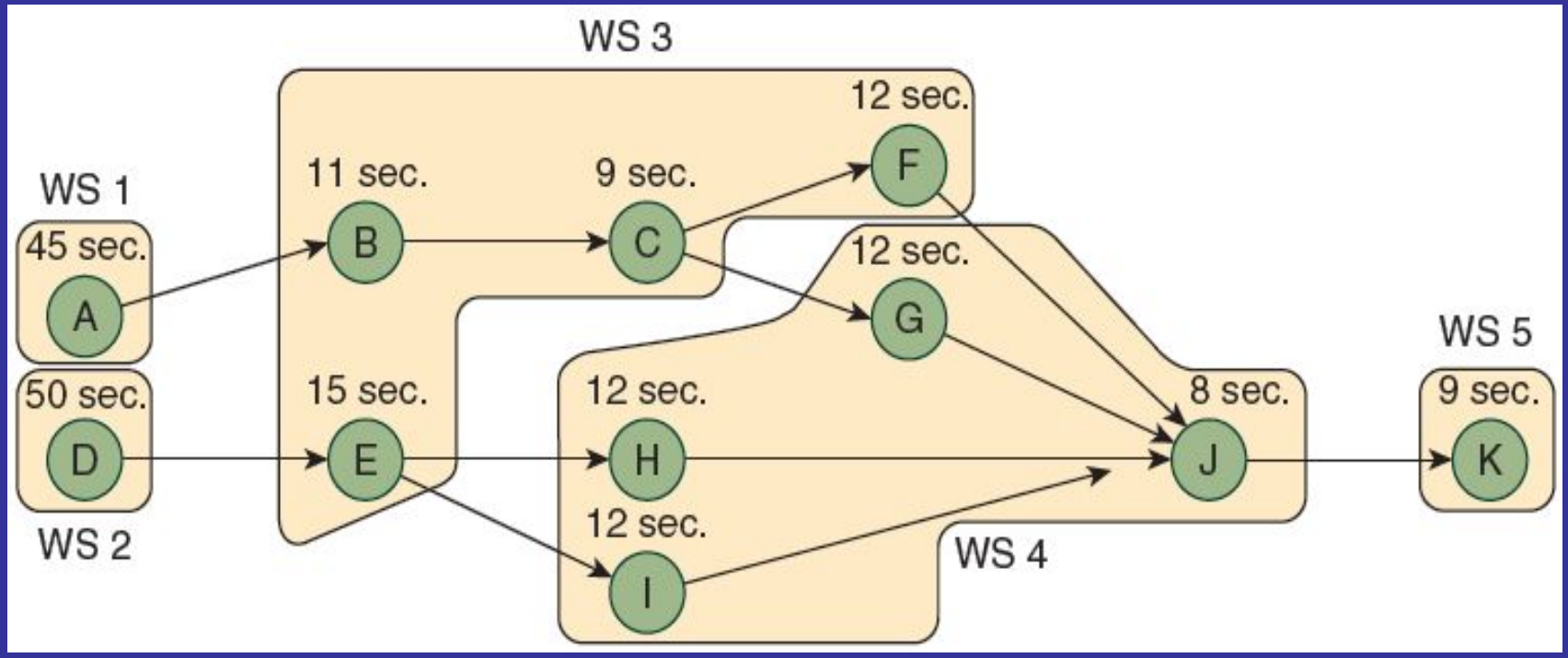
Precedence Graph



Balance Made According to Largest Number of Following Tasks Rule

	Task	Task Time (in seconds)	Remaining Unassigned Time (in seconds)	Feasible Remaining Tasks	Task with Most Followers	Task with Longest Operation Time
Station 1	A	45	5.0 idle	None		
Station 2	D	50	0.0 idle	None		
Station 3	B	11	39.0	C, E	C, E	E
	E	15	24.0	C, H, I	C	
	C	9	15.0	F, G, H, I	F, G, H, I	F, G, H, I
	F*	12	3.0 idle	None		
Station 4	G	12	38.0	H, I	H, I	H, I
	H*	12	26.0	I		
	I	12	14.0	J		
	J	8	6.0 idle	None		
Station 5	K	9	41.0 idle	None		

Precedence Graph



Efficiency Calculation

$$\text{Efficiency} = \frac{S}{NT}$$

$$= \frac{195}{(5)(50.0)} = 0.78, \text{ or } 78\%$$

Comparison of product and process layout

	Product layout	Process layout
Description	Squential arrangement	Functional grouping
Type of process	Continuous, mass production	Intermittent, job shop
Product	Standardized	Varied
Demand	Stable	Low
Volume	High	Low
Equipment	Special purpose	General purpose
Storage space	Small	Large
Material handling	Fixed path	Variable path
Layout decision	Line balancing	Dynamic
Goal	Equalize work at each station	Machine location
Advantage	Efficiency	Flexibility

JUST-IN TIME
(JIT)

Managerial Issues

- *The natural tension between effectiveness (satisfying customers) and efficiency (using resources well).*
- *The evolution of management styles and production systems reflecting societal changes and the incorporation of new management theories and insights.*
- *The increasing focus on achieving organizational objectives through the use of production systems that incorporate both a production strategy/ philosophy and a set of managerial tools.*

JUST-IN TIME (JIT)

IS A PHILOSOPHY OF IMPROVEMENT THROUGH AGGRESSIVELY DISCOVERING AND RESOLVING ANY PROBLEMS OR WEAKNESSES THAT IMPEDE THE ORGANIZATION'S EFFECTIVENESS AND EFFICIENCY.

Introductory Quotation

Waste is ‘anything other than the *minimum* amount of equipment, materials, parts, space, and worker’s time, which are absolutely essential to *add value* to the product.’

— Shoichiro Toyoda
President, Toyota

What is Just-in-Time?

- Management philosophy of continuous and forced problem solving
- Supplies and components are ‘pulled’ through system to arrive where they are needed when they are needed.

Lean Production;

Lean Production supplies customers with exactly what the customer wants, when the customer wants, without waste, through continuous improvement.

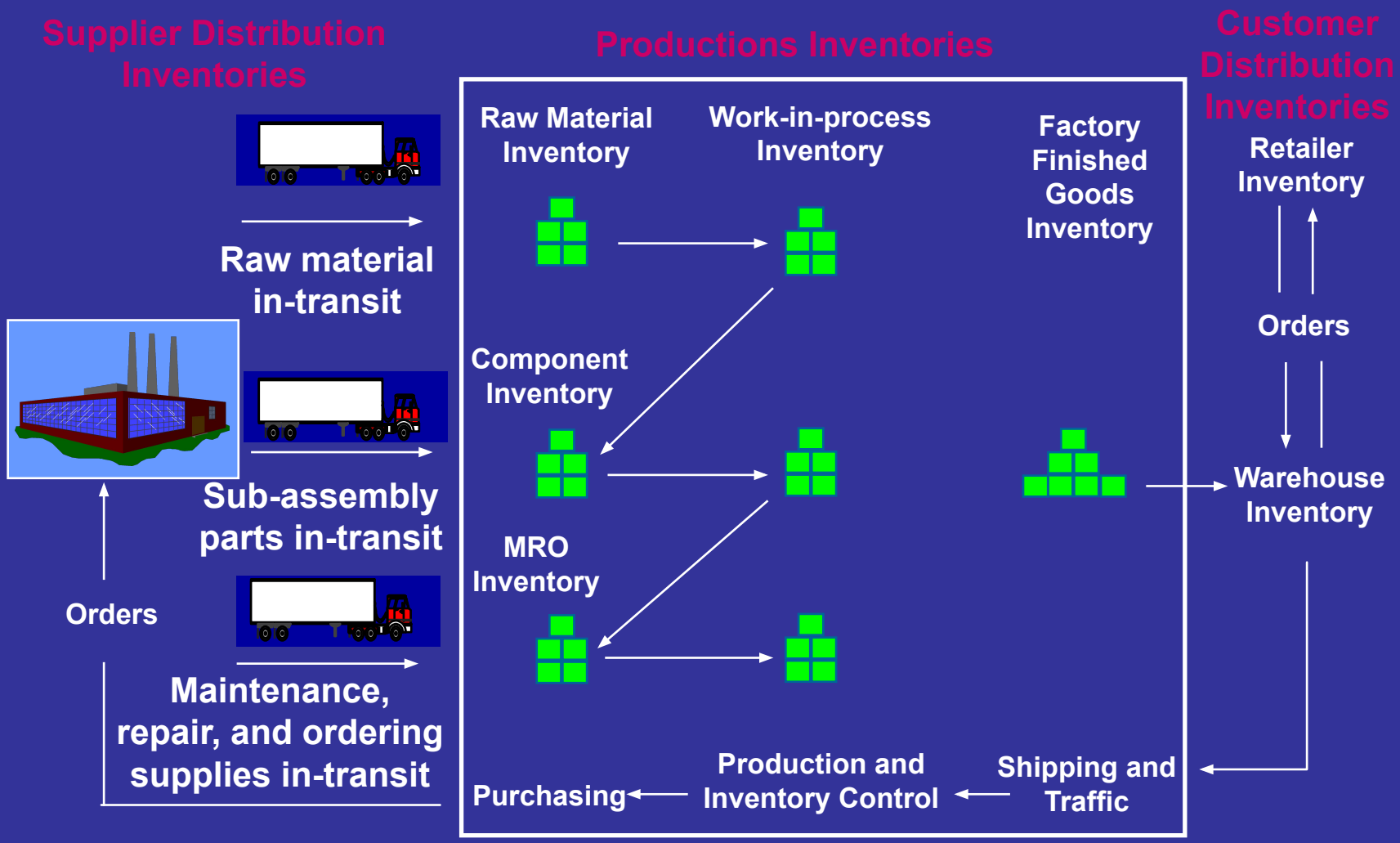
What Does Just-in-Time Do?

- Attacks waste
  - Anything not adding value to the product
    - From the customer's perspective
- Exposes problems and bottlenecks caused by variability
  - Deviation from optimum
- Achieves streamlined production
  - By reducing inventory

Types of Waste

- Overproduction
- Waiting
- Transportation
- Inefficient processing
- Inventory
- Unnecessary motion
- Product defects

Supplier – Production – Distribution System



JIT Contribution to Competitive Advantage

- Suppliers
  - reduced number of vendors
  - supportive supplier relationships
  - quality deliveries on time
- Layout
  - work-cell layouts with testing at each step of the process
  - group technology
  - movable, changeable, flexible machinery
  - high level of workplace organization and neatness
  - reduced space for inventory
  - delivery direct to work areas

JIT Contribution to Competitive Advantage – Continued……..

- Inventory
  - small lot sizes
  - low setup times
  - specialized bins for holding set number of parts
- Scheduling
  - zero deviation from schedules
  - level schedules
  - suppliers informed of schedules
  - Kanban techniques

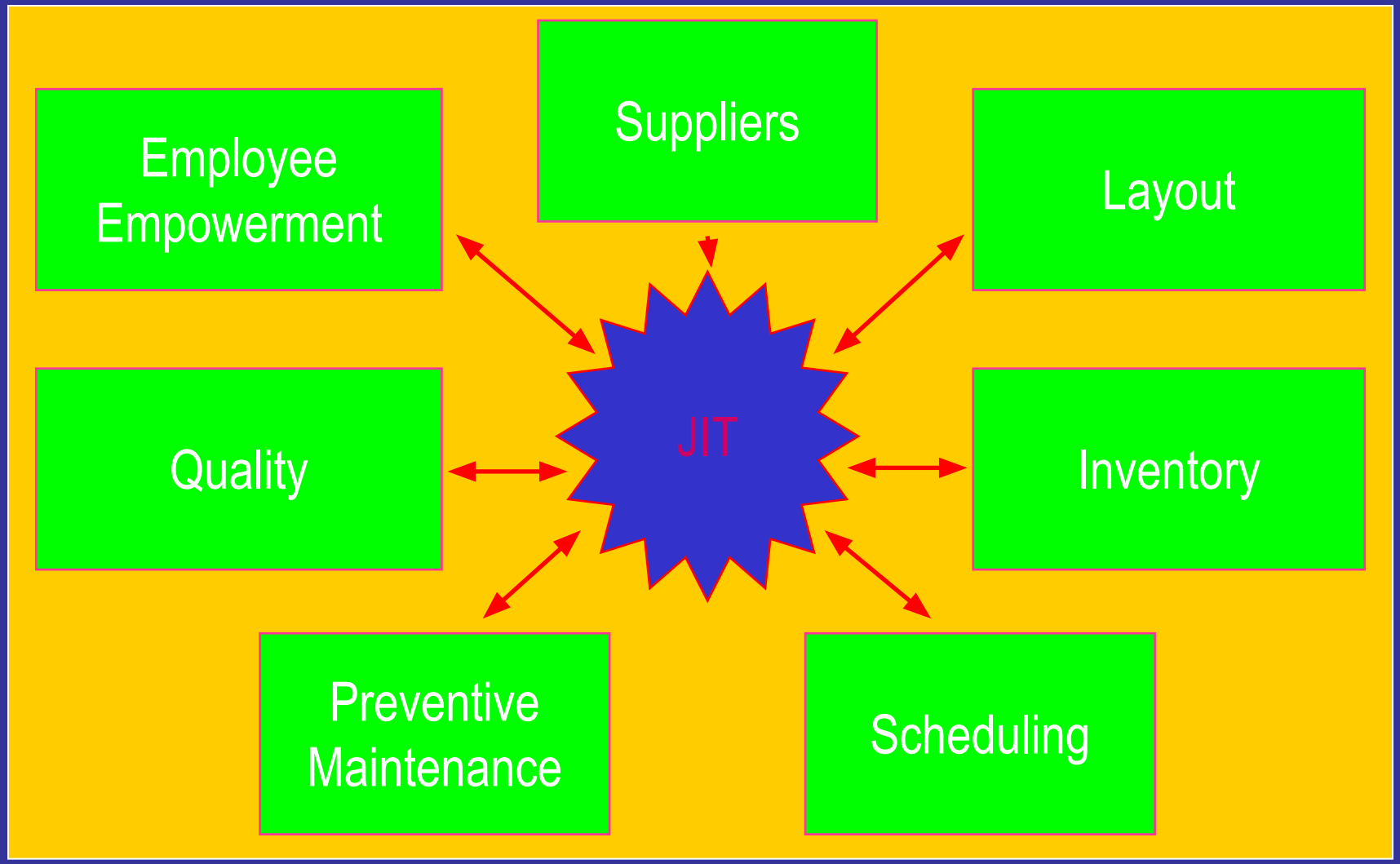
JIT Contribution to Competitive Advantage – continued……..

- Preventive Maintenance
  - scheduled
  - daily routine
  - operator involvement
- Quality Production
  - statistical process control
  - quality by suppliers
  - quality within firm

JIT Contribution to Competitive Advantage – continued……..

- Employee Empowerment
  - empowered and cross-trained employees
  - few job classifications to ensure flexibility of employees
  - training support
- Commitment
  - support of management, employees, and suppliers

Just-in-Time Success Factors;



KOMPONEN JIT

- **PEOPLE INVOLVEMENT**
  1. Team Work.
  2. Disiplin.
  3. Supplier Partnership.

TOTAL QUALITY CONTROL (TQC)

1. Quality is every body job
2. The Immediate customer
3. Quality at a source
4. A culture not a program

IMPLEMENTASI JIT

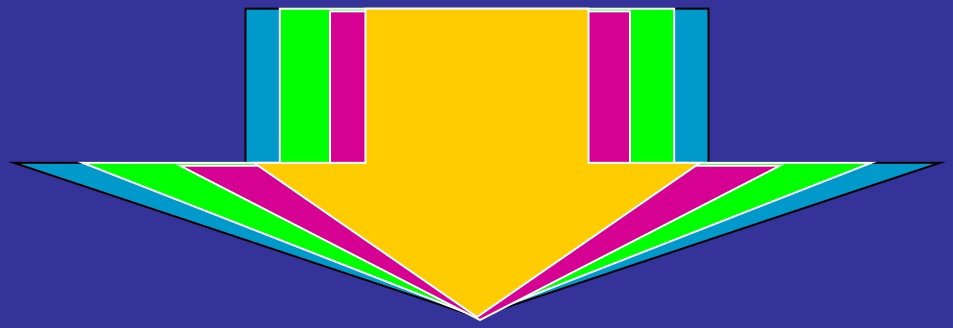
1. Pendidikan dan kepemimpinan bagi seluruh level manajemen.
2. Partisipasi dan keterlibatan karyawan.
3. Pengendalian mutu terpadu.
4. Penyederhanaan desain produk.
5. Pengurangan tingkat persediaan.
6. Produksi lot-lot kecil.
7. Pemasok sebagai partner.
8. Pengurangan pemborosan.

BENEFIT JIT

a) **Reduce Inventory.**
b) **Improve Quality.**
c) **Lower Cost.**
d) **Shorter Lead Time.**
e) **Increase Productivity.**
f) **Greater Flexibility.**
g) **Better Relation with Supplier.**
h) **Simplified Scheduling & Control Activities.**

Yielding

Faster response to the customer at lower cost and higher quality



A competitive advantage!

JIT (TOYOTA)

Sejarah berdirinya Toyota:

Penemu/konsep	Temuan-temuan
Sakichi Toyoda (1887-1928); seorang penemu dg semangat *kaizen* dan menghargai orang lain	▪Berhasil mendaftarkan hak patent untuk mesin pemintal benang pertama ciptaannya. ▪Menciptakan mesin pemintal benang dengan produktivitas 2 kali lebih efektif. ▪Menemukan mesin tenun semi otomatis pertamanya. ▪Mendirikan pabrik tenun Toyoda Spinning & ▪Weaving Co.Ltd
Klichiro Toyoda (1933-1937); Memulai bisnis otomotif yang terinspirasi dari kunjungan ke AS	▪Memperkenalkan proses Just-in Time ▪Menstandarisasi proses kerja
Shotaro Kamiya (1938-1950); Membawa Toyota ke AS dengan konsep Toyota Motor Sales	▪Mengadakan kontes untuk perubahan nama produk dari Toyoda menjadi Toyota. ▪Dikenal sebagai Bapak Dealer Toyota

Lanjutan.....

Eiji Toyoda (1960-1982); **Berorientasi global dengan membuat produk disesuaikan dengan kebutuhan pelanggan.**	▪**Mendorong Toyota membangun fasilitas produksi di Amerika Utara (dengan product customization)** ▪**Menggabungkan antara Toyota Motor Corp. (manufakturing) dengan Toyota Motor Sales (penjualan)**
Taichi Ohno (1958); **Membuat produk yang berkualitas dengan *delivery* yang lebih cepat.**	▪**Membangun sistem KANBAN sehingga produk dihasilkan secara fleksibel.** ▪**Produksi dapat memenuhi permintaan pelanggan yang bervariatif.**
Soichiro Toyoda (1984); **Memperkenalkan sistem Total Quality Control (TQC)**	▪**Membawa TMC untuk mendapatkan penghargaan Deming Aplication Prize.**

Toyota Production System (TPS)
Filosofi Bisnis Toyota (Toyota WAY)

2 Pilar TPS

1. Just-In Time

   Barang yang tepat, di waktu yang tepat, dalam jumlah yang tepat (jangan menahan barang yang tidak dibutuhkan dan jangan bekerja yang tidak perlu)

2. Jidoka

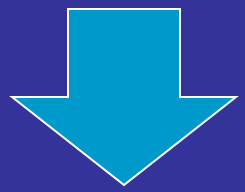
   Mesin dengan sistem *autostop*

   Jangan loloskan barang rusak

   Hentikan pekerjaan apabila ada hal yang tidak sesuai

Apakah Just-in Time itu ?

Kumpulkan hanya barang yang tepat,
diwaktu yang tepat, dalam jumlah yang tepat
dari proses sebelumnya



(jangan lakukan hal yang tidak perlu &
jangan buat orang lain melakukan hal yang tidak perlu)

Prinsip JIT: Pengurangan Lead Time

Lead time: Waktu yang diperlukan dari memperoleh material hingga merubahnya menjadi uang

Lead Time : Proses Waktu + Stagnasi (non proses)

Stagnasi = Pemborosan/nganggur

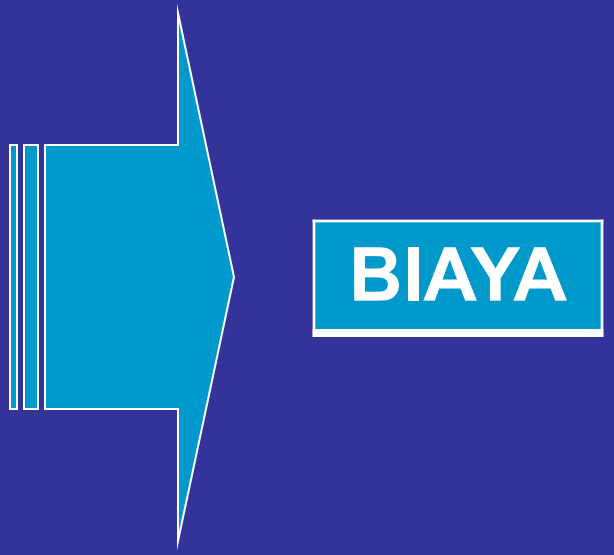
Akibat dari pengurangan lead time :

- **Meningkatkan perputaran modal**
- **Meningkatkan kemampuan untuk mengantisipasi kesalahan**
- **Perubahan pesan/fluktuasi (jumlah, tipe)**

Yang tidak boleh terjadi (Muda)

7 muda :

1. Over production
2. Menunggu
3. Transportasi
4. Over proses/kualitas
5. Stock (dana yang tidak cair)
6. Perpindahan
7. Kerusakan produk



Bagaimana menjadi kompetitif ?

Meningkatkan produktivitas kerja adalah penting

- Produktivitas Peralatan
- Produktivitas Material

Dapat ditiru secara langsung

- Produktivitas Kerja

Tidak dapat ditiru secara langsung

SUPPLY CHAIN MANAGEMENT (SCM)

Managerial Issues

- *Concentration of resources on the firm's core competencies such as supply chain management.*
- *Increasing proportion of purchased goods and services as inputs into products.*
- *Increased pressure to reduce inventories.*
- *Applying advances in information technology to strategically manage supplier relationships and the supply chain itself.*

VALUE CHAIN AND COMPETITIVE ADVANTAGE

- Competitive adv. Cannot be understand by looking at a firm as a whole.
- Activities can contribute to a firm's relative cost position and create a basis for differentiation
- Designing, producing, marketing, delivering and supporting its product.

Gossman (1977)

"Competition is no longer company to company, but supply chain to supply chain"

Dalam mencapai keunggulan bersaing, *supply chain* dilakukan dengan mengintegrasikan fungsi-fungsi internal dalam perusahaan (pemasaran, desain dan pengembangan produk, manufakturing) dan melakukan link secara efektif dengan eksternal operation, seperti supplier dan saluran distribusi.

A SUPPLY CHAIN

- Interrelated organization, resources, and processes that create and deliver products and services to end customer.
- Encompass all the facilities, functions and activities involved in producing and delivering a product or service, from suppliers to customers.
- Supply chain is a network of connected and interdependent organizations mutually and cooperatively working together to control, manage and improve the flow of materials and information from supplier to end user

Facilities

- Warehouses
- Factories
- Processing centers
- Distribution centers
- Retail outlets
- Offices

Functions and Activities

- Forecasting
- Purchasing
- Inventory management
- Information management
- Quality assurance
- Scheduling
- Production and delivery
- Customer service

SUPPLY CHAIN MANAGEMENT (SCM)

- Coordinate all these activities so that customers can be provide with prompt and reliable service of high-quality products at the least cost.
- SCM is a set of approaches utilized to efficiently integrate suppliers, manufactures, warehouse, and stores, so that merchandise is produced and distributed at the right quantities to the right location, at the right time in order to minimize system wide costs while satisfying service level requirement (Gotana & Walter, 1996)
- Supply chain is a network of connected and interdependent organization mutually and cooperatively working together to control, manage and improve the flow of materials and information from supplier to end user (Aitken, 2002)

continued…….

- Suatu jaringan bisnis yang otonom, atau semiotonom, terintegrasi dan bertanggung jawab terhadap penyediaan, pemrosesan dan pendistribusian segala aktivitas yang dikaitkan dengan satu atau beberapa kelompok terkait (Swaminathan, 1998)

- Menghubungkan serangkaian aktivitas yang bernilai (*value activities*) yang difokuskan pada perencanaan dan pengawasan bahan mentah, komponen-komponen dan barang jadi dari supplier sampai konsumen akhir (Vickery, 1999)

continued……

- Supply Chain Management
  - The long-term relationship between a firm and its suppliers to ensure the timely delivery of goods and services that are competitively priced.
  - The steps and the firms that perform these steps in the transformation of raw inputs into finished products bought by customers.

Logistics

- Inbound Logistics
  - The delivery of goods and services that are purchased from suppliers and/or their distributors.
- Outbound Logistics
  - The delivery of goods and services that are sold to a firm's customers and/or distributors.

A Company's Supply Chain

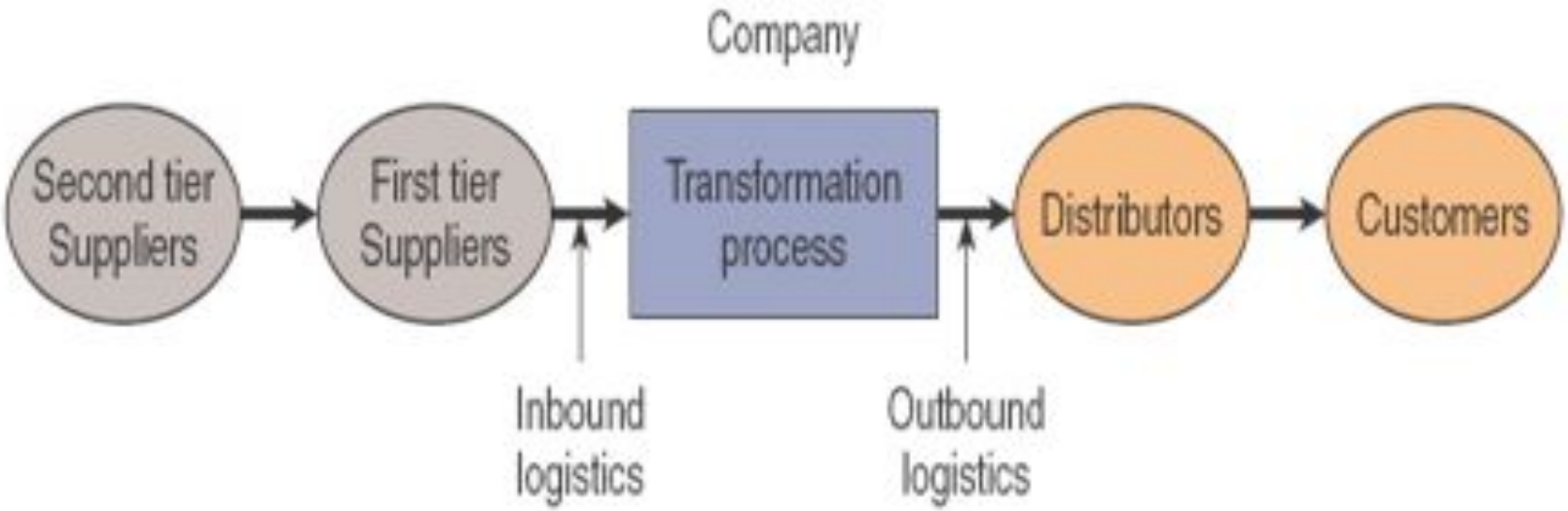


Exhibit 4.1

The Evolution of Supply Chain Management

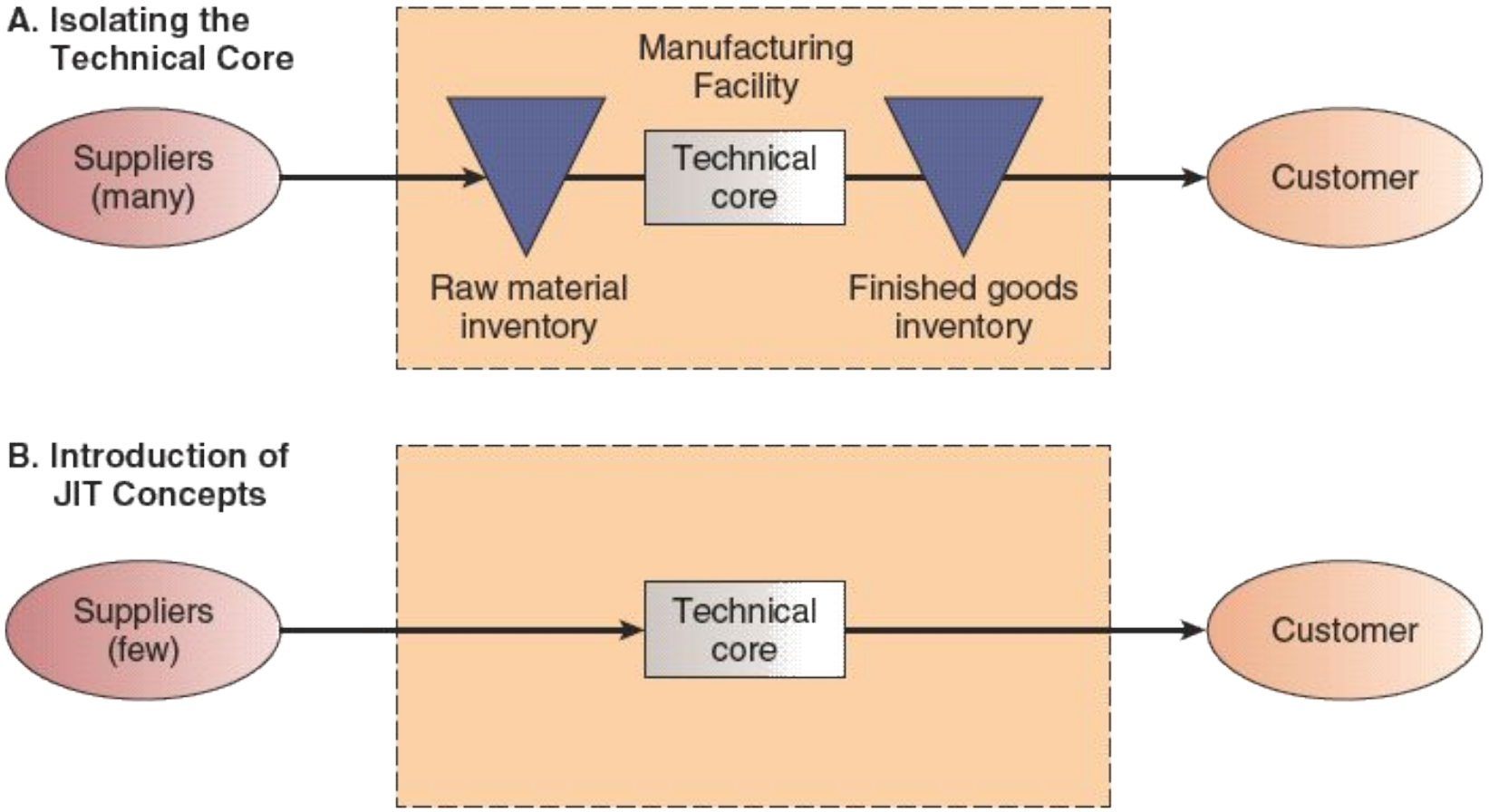


Exhibit 4.2A,B

The Evolution of Supply Chain Management (cont'd)

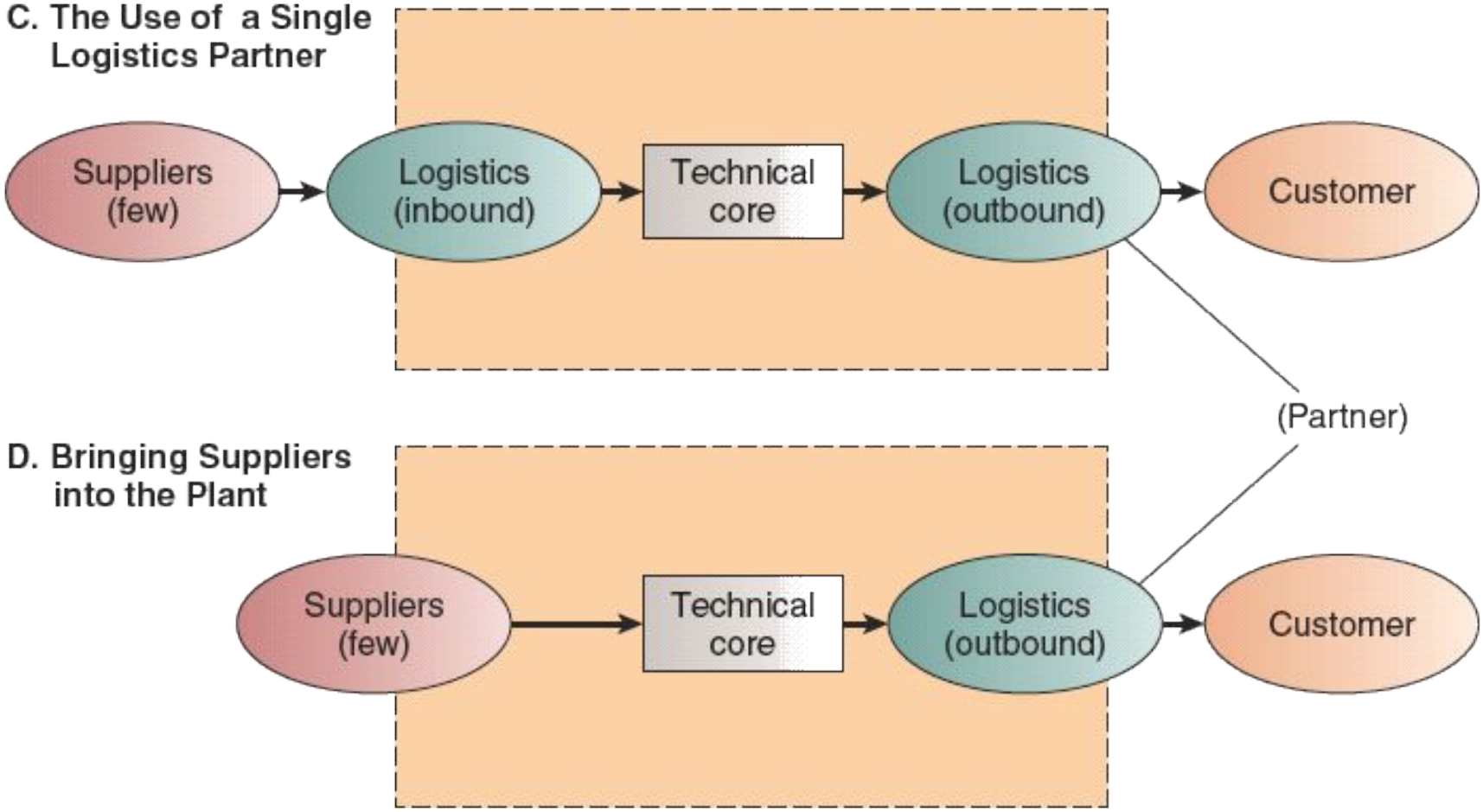


Exhibit 4.2C,D

Current Trends in Supply Chain Management

Reduced Number of Suppliers

Supplier-Managed Inventories

Increased Competition

Supply Chai n

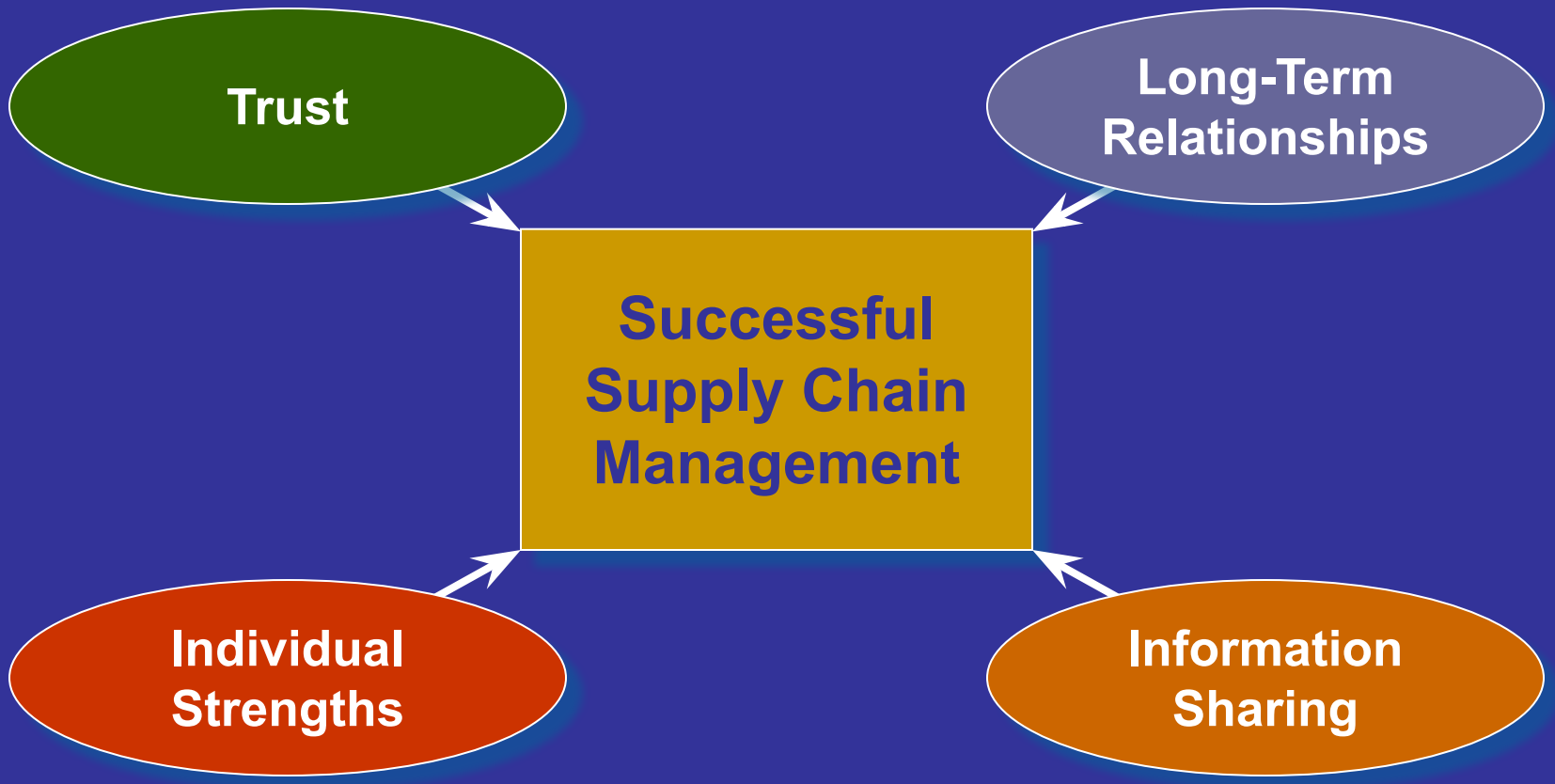
Contingent Inventories

Shorter Product Life Cycles

Shared or Reduced Risk

Advances In Technology

Requirements for Successful Supply Chain



OBJECTIVE SCM

To coordinate all the different activities, or “links” of the chain, so that goods can move smoothly and on time from suppliers to customers to distribution to suppliers to customers, while keeping inventories low and cost down.

Tujuan SCM:

- Penyerahan produk secara tepat waktu untuk memuaskan konsumen.
- Mengurangi biaya
- Meningkatkan value dari seluruh rantai supply.
- Mengurangi waktu
- Memusatkan kegiatan perencanaan dan distribusi.
- Mengintegrasikan aktivitas internal dan eksternal

PROBLEM IN SCM

- WRONG FORECAST
- SLOW INFORMATION
- POOR QUALITY MATERIAL/PARTS
- MACHINE BREAKDOWN
- CANCELED ORDER
- LATE DELIVERY

Faktor Pendorong SCM

- Consumer demand
- Globalisasi
- Competition
- Teknologi informasi dan komunikasi
- Government regulation
- Environment

EFFECTIVE SCM

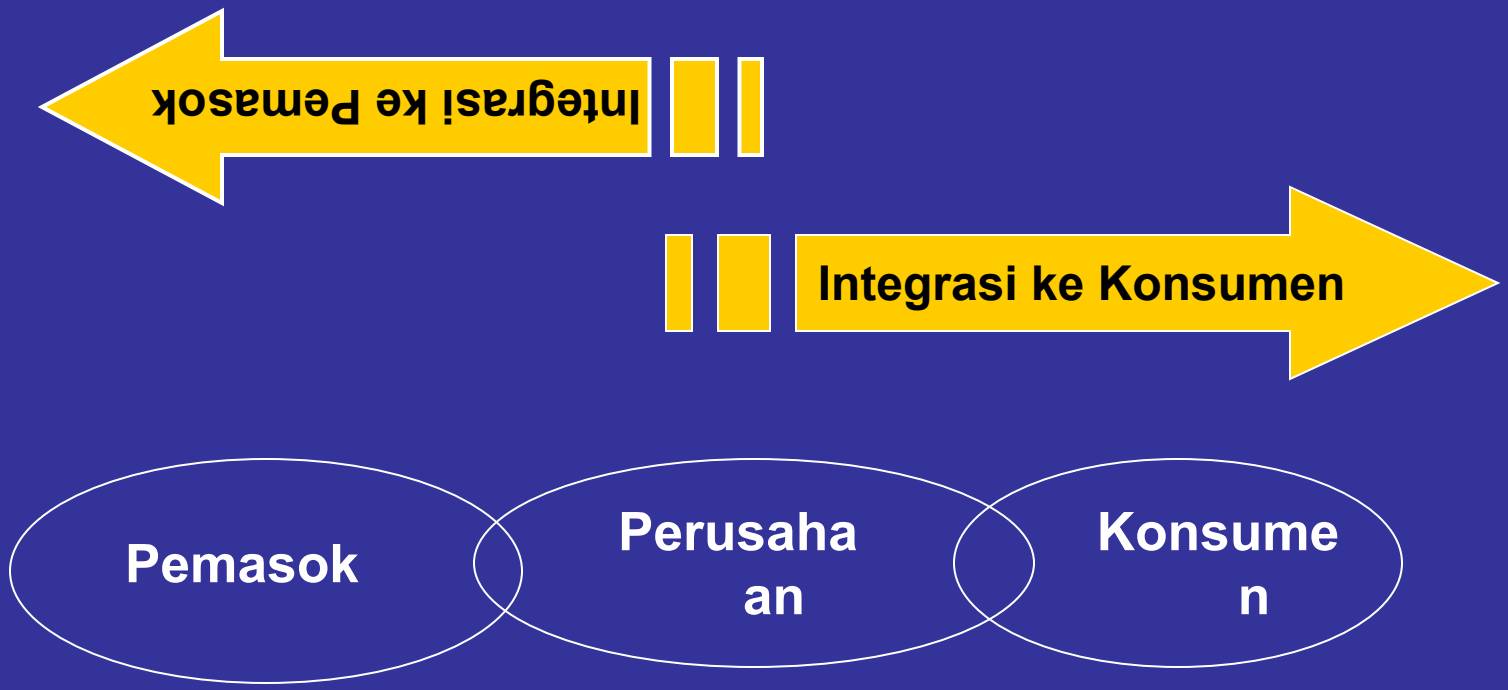
- Require that suppliers and customers work together in a coordinated manner by sharing and communicating information by talking to one another.

- Rapid flow of information among customers, suppliers, distribution centre and transportation systems.

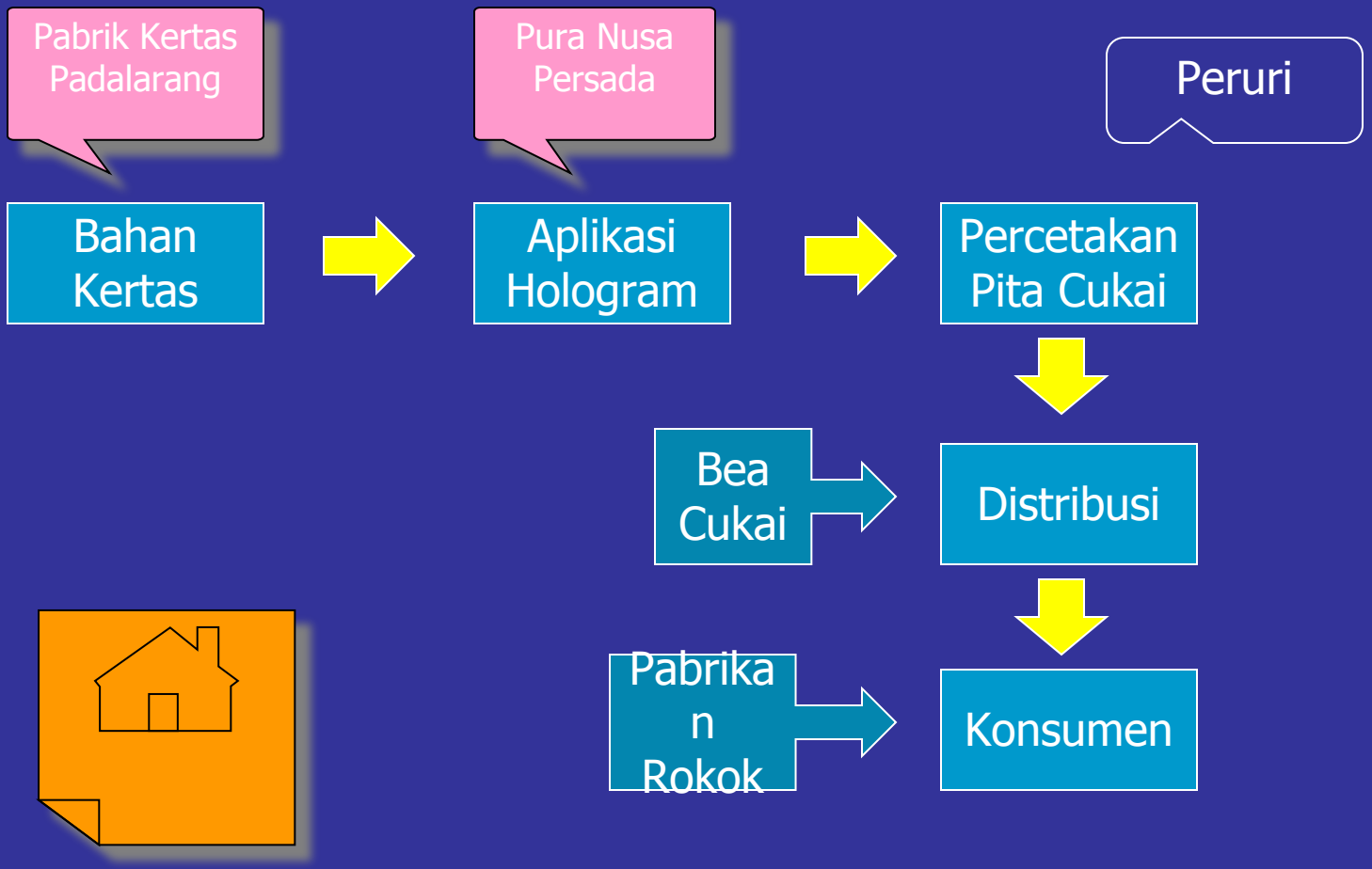
TWO PRIMARY ELEMEN SCM

- Structure
  - Include org. units that interact within the supply chain such as the company, its suppliers, its customer, distribution channel, design and engineering centers and manufacturing.
- Process
  - Demand planning & supply planning, forecasting, sourcing & purchasing, logistics, materials management, product development.

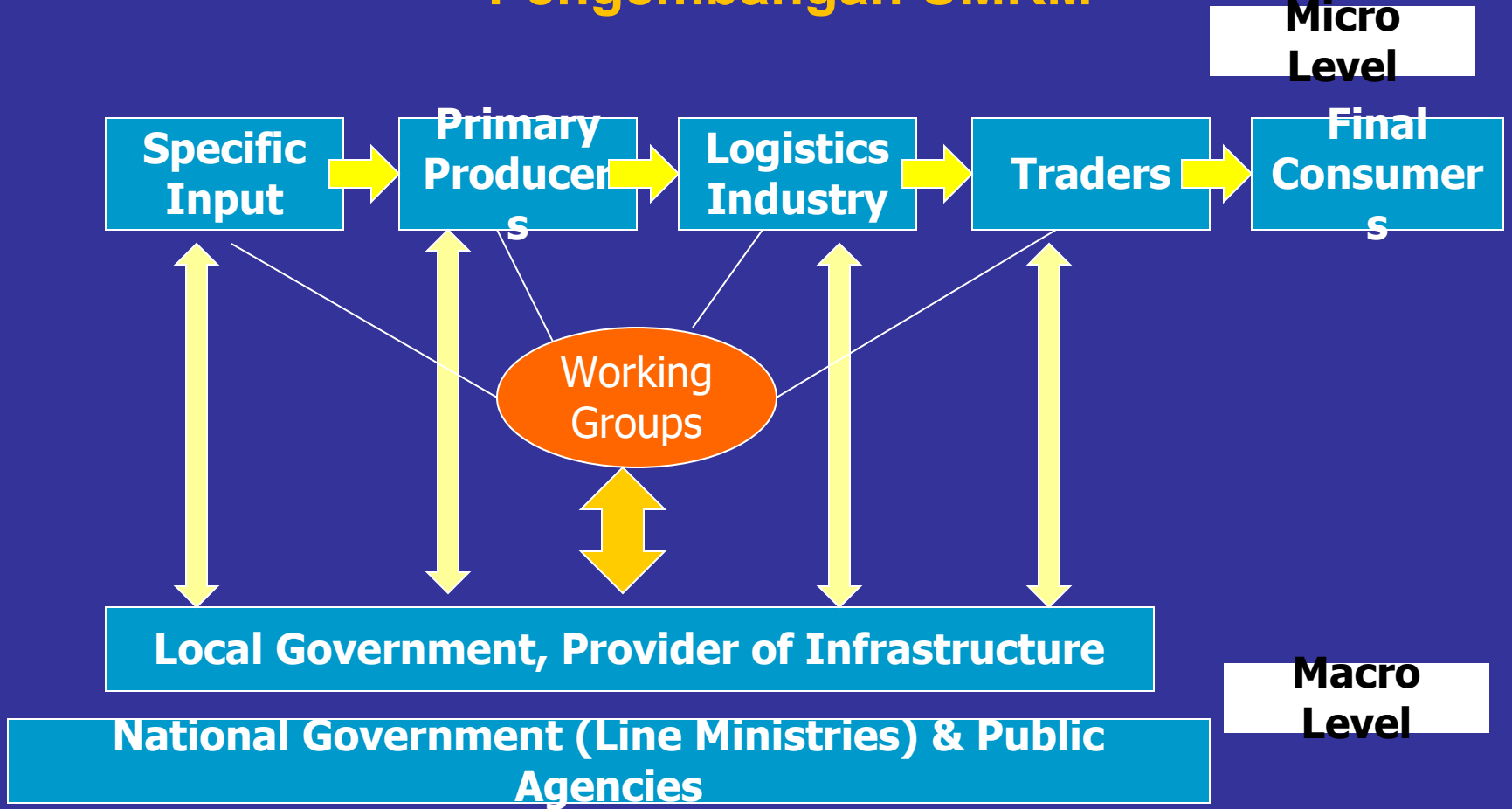
Model Integrasi Supply Chain



Proses Pabrikan dan Distribusi Pita Cukai



Pendekatan *Value Chain* dalam Pengembangan UMKM



Fleksibilitas SCM

Kemampuan organisasi secara efektif beradaptasi atau merespon berbagai perubahan. (Gerwin, 1993)

Fleksibilitas yang secara langsung berdampak dari konsumen perusahaan kepada perusahaan, yaitu dampak sebagai akibat adanya nilai tambah yang timbul dari pandangan konsumen yang bersumber dari internal (marketing dan manufakturing) atau dari eksternal (supplier dan saluran distribusi) (Vickery, 1999)

Product flexibility:

Kemampuan memenuhi produk non-standar (feature, warna, desain dll)

Volume flexibility:

Kemampuan perusahaan scr efektif meningkatkan atau menurunkan tingkat produksi dalam merespon konsumen.

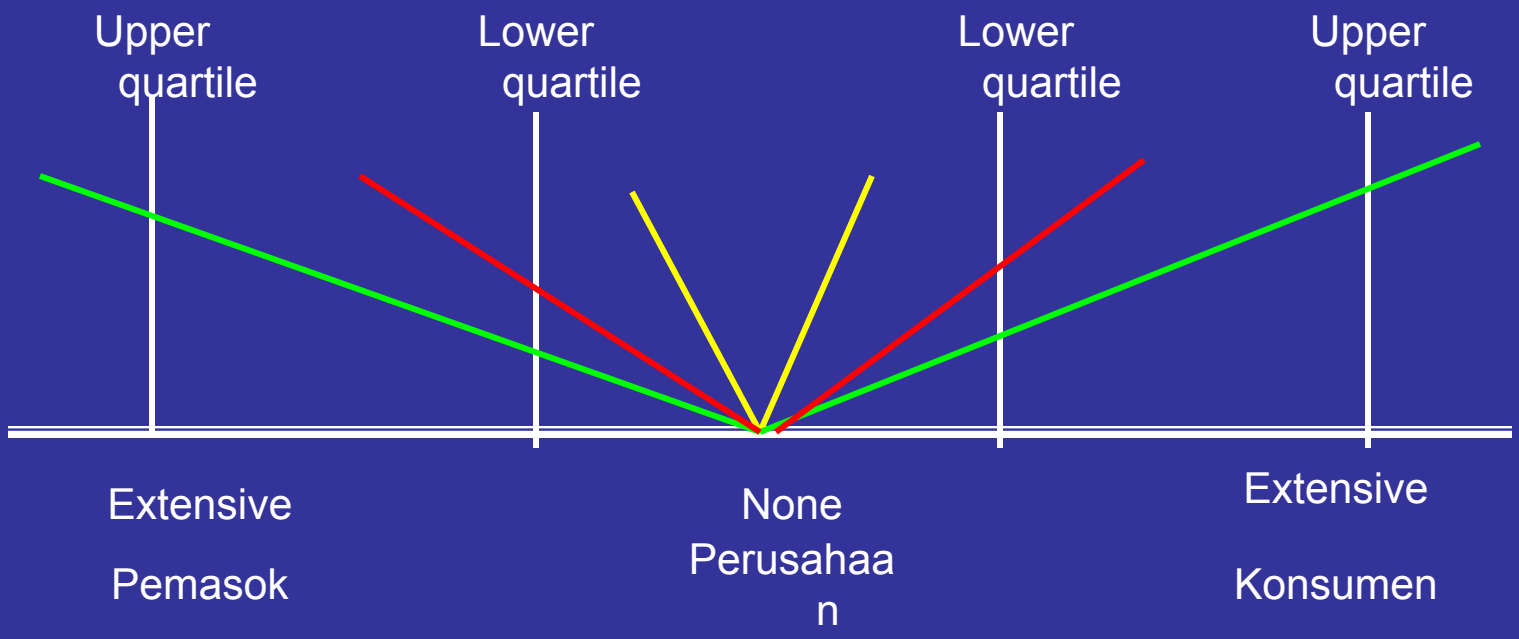
Access flexibility:

Kemampuan menciptakan jangkauan distribusi yang luas.

Target market flexibility:

Kemampuan merespon berbagai kebutuhan target pasar.

Pola Integrasi dlm SCM



: **inward facing**
: **periphery facing**
: **outward facing**

: **supplier facing**
: **customer facing**

QUALITY MANAGEMENT

Managerial Issues

- *Defining quality from the customer's perspective.*
- *Constant increases in the level of quality of today's goods and services.*
- *Difficulties encountered in managing service quality.*
- *Identifying quality dimensions that are most important to customers.*
- *Avoiding the costs of poor quality products and services.*
- *The shift from producers' markets to consumers' markets as markets become globalized.*
- *Customer loyalty that is increasingly based on quality.*

Mobil mana yang berkualitas ?

Bagaimana menilai kualitas jasa?

What is Quality ?

1. A degree or level of excellence

   (Oxford American dictionary)

2. The totally of features and characteristics of a product or service that bears on its ability to satisfy given needs.

   (American National Standard Institute/ANSI)

The Quality Gurus

- *Quality Gurus*

  Individuals who have been identified as making a significant contribution to improving the quality of goods and services.

  - **Walter A. Shewhart; *Plan-Do-Check-Act (PDCA) Cycle***
  - **W. Edwards Deming; *low cost and suite in the market***
  - **Joseph M. Juran; *fitness for use***
  - **Armand Feigenbaum; *total quality control***
  - **Philip Crosby; *conformance to specification***
  - **Genichi Taguchi; *minimization of variation***
  - **Kaoru Ishikawa; problem-solving tools such as the cause-and-effect (*fishbone*) diagram**

Quality Dimension (goods):
perspektif konsumen

- Performance
- Features; extra items added to the basic feature.
- Reliability; kehandalan
- Conformance; standard
- Durability; how long the product lasts
- Serviceability; getting and speed repair.
- Aesthetics; how product looks, feets, sound, smells, or tastes
- Safety; product assurance
- Other perceptions; brand name, advertising.

Quality Dimension(services):
perspektif konsumen

- Time and timeliness
- Completeness
- Courtesy; how customers are treated by employees
- Consistency
- Accessibility and convinience
- Accuracy
- Responsiveness

Dimension	Examples
1.Convenience	Was the service center conveniently located?
2. Reliability	Was the problem fixed?
3.Responsiveness	Were customer service personnel willing and able to answer questions?
4. Time	How long did the customer wait?
5. Assurance	Did the customer service personnel seem knowledgeable about the repair?
6. Courtesy	Were customer service personnel and the cashier friendly and courteous?
7. Tangibles	Were the facilities clean, personnel neat?

Quality (perspektif produsen)

- Conform to specification
- Quality is **free** (Philip Crosby)

Dipengaruhi oleh:

1. Desain proses produksi
2. Performance level of machine, equipment, and technology
3. The material use
4. Training and supervision of employee
5. SQC

Management Quality Awards

- International Standard Organization (ISO)-9000, 14000
- Standard Nasional Indonesia (SNI)
- Akreditasi
- Museum Rekor Indonesia (MURI)
- Malcolm Baldrige National Quality Award (MBNQA)

3 Mitos dalam MBNQA

1. The Baldrige Award requires large expenditures on the application and preparation for site visits.
2. The Baldrige Award is flawed because it fails to predict a company's financial success.
3. The Baldrige Award does not honor superior product or service quality.

MBNQA Items (1000 points)

1. Leadership (100 point)
2. Information and Analysis (70 point)
3. Strategic Quality Planning (60 point)
4. Human Resources Utilization (150 point)
5. Quality Assurance of Products & Services (140)
6. Quality Result (180 point)
7. Customer Satisfaction (300 point)

Quality Certification

- ISO 9000
  - Set of international standards on quality management and quality assurance, critical to international business
- ISO 14000
  - A set of international standards for assessing a company's environmental performance

ISO 9000 Quality Management Principles

- Customer focus
- Leadership
- People involvement
- Process approach
- A systems approach to management
- Continual improvement
- Factual approach to decision making
- Mutually beneficial supplier relationships

ISO 14000

- ISO 14000: a set of international standards for assessing a company's environmental performance
- Standards in three major areas
  - Management systems
  - Operations
  - Environmental systems

ISO 14000

- Management systems
  - Systems development and integration of environmental responsibilities into business planning
- Operations
  - Consumption of natural resources and energy
- Environmental systems
  - Measuring, assessing, and managing emissions, effluents, and other waste

TOTAL QUALITY MANAGEMENT (TQM)

The management of quality in every facet of the business and the understanding that continuous improvement is an essential component of a competitive organization

PRINCIPLES OF TQM

1) The customer defines quality, and the customer needs are the top priority.
2) Top management must provide the leadership for quality.
3) Quality is a strategic issue.
4) Quality is the responsibility of all employees at all levels of the organization.
5) Continuous quality improvement by all functions of the company.
6) Quality problem are solved through cooperation among employees and management.
7) Use statistic quality control methods.
8) Training and education as basis for continuous quality improvement.

KEY TQM CONCEPTS

- Long term perspective
- Upper management commitment
- Employ a system approach
- Training and tools
- Participation
- New measurement and reporting systems
- Cross-organizational communication
- Leadership

5 reason for resistance to change

- Fear of losing something (authority, pay, status or job)
- Poor understanding of goals or objectives of change
- Pride of ownership in status quo
- Transparent management
- Inadequate participation of all affected

KAIZEN

Usaha perbaikan terus menerus dan tidak pernah berhenti untuk mencapai keadaan atau kondisi yang lebih baik.

Dasar pemikiran Kaizen adalah suatu usaha dari karyawan untuk meningkatkan *keuntungan* bagi perusahaan dengan jalan *mengurangi biaya* yang tidak perlu.

Bentuk Aplikasi Kaizen

- Jishuken

  Suatu aplikasi kaizen yang dilakukan di area dimana proses kerja berlangsung dengan melakukan pengamatan, pengumpulan data, analisis dan melaksanakan konsep PDCA
- Quality control circle

  Kelompok kecil yang biasanya terdiri dari 5-10 orang anggota dari tempat kerja yang sama secara sukarela melakukan aktivitas perbaikan.
- Ide perbaikan berkonsep

  Mrp usulan konsep perbaikan yang dibuat secara perorangan dalam satu format yang baku, shg dapat mempermudah pelaksanaan proses implementasinya.

Tujuan Kaizen

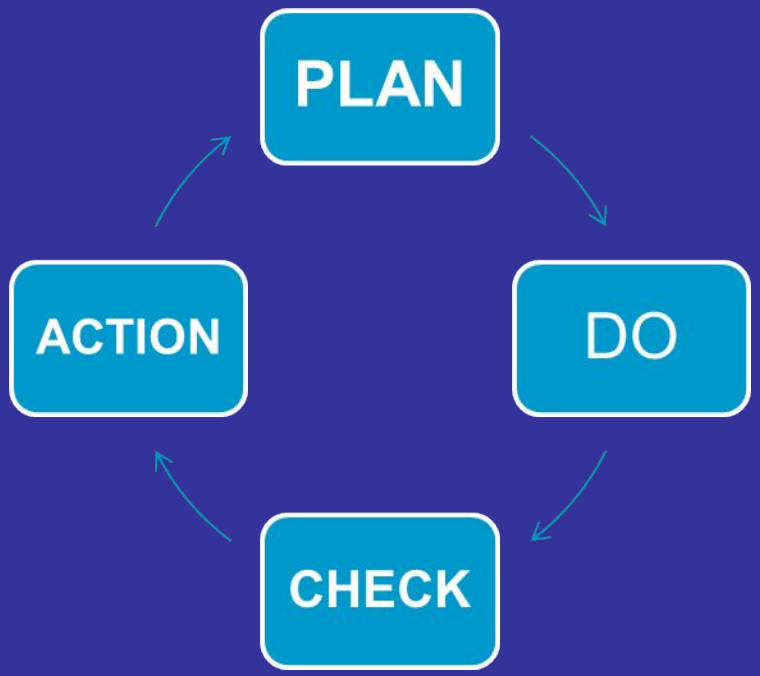
- Memberikan sumbangan untuk perbaikan dan pengembangan perusahaan.
- Menghormati harkat manusia di dalam usahanya untuk mengembangkan diri pribadinya
- Membuktikan bahwa SDM mampu menciptakan kemungkinan-kemungkinan baru.

Sasaran Kaizen:

1) Lebih baik (kualitas meningkat, produktivitas)
2) Lebih murah (pengurangan biaya yang tidak perlu).
3) Lebih aman (keamanan kerja lingk. meningkat)
4) Lebih cepat (lead time pendek)
5) Lebih ergonomi (kenyamanan bekerja)
6) Lebih mudah (proses kerja lebih kompak)
7) Lebih tinggi (penjualan parts meningkat)
8) Lebih rendah (stock month, claim, error).
9) Lebih puas (kepuasan pelanggan meningkat)

Kaizen diciptakan untuk menghilangkan :

- Muda (pemborosan); menunggu, gerakan, persediaan, pengiriman, proses, peduksi, dan repair.
- Mura (tidak teratur); pemakaian/hasil bervariasi dari hari ke hari, beban pekerjaan tidak merata.
- Muri (beban berlebihan); mesin, peralatan, pekerja.



Prinsip dasar siklus Deming

- Plan; buatlah rencana yang baik/sesuai sebelum mulai bekerja.
- Do; laksanakan tindakan sesuai dengan rencana yang telah disusun.
- Check; periksa hasil pekerjaan apakah telah sesuai dengan rencana
- Action; ambil tindakan koreksi atas penyimpangan.

STATISTICAL QUALITY CONTROL (SQC)

LATAR BELAKANG

- Global Competition
- Pergeseran level persaingan (state-corporate-product)
- Improve Quality
- Increase customer satisfaction and competitiveness

STATISTICAL PROCESS CONTROL (SPC)

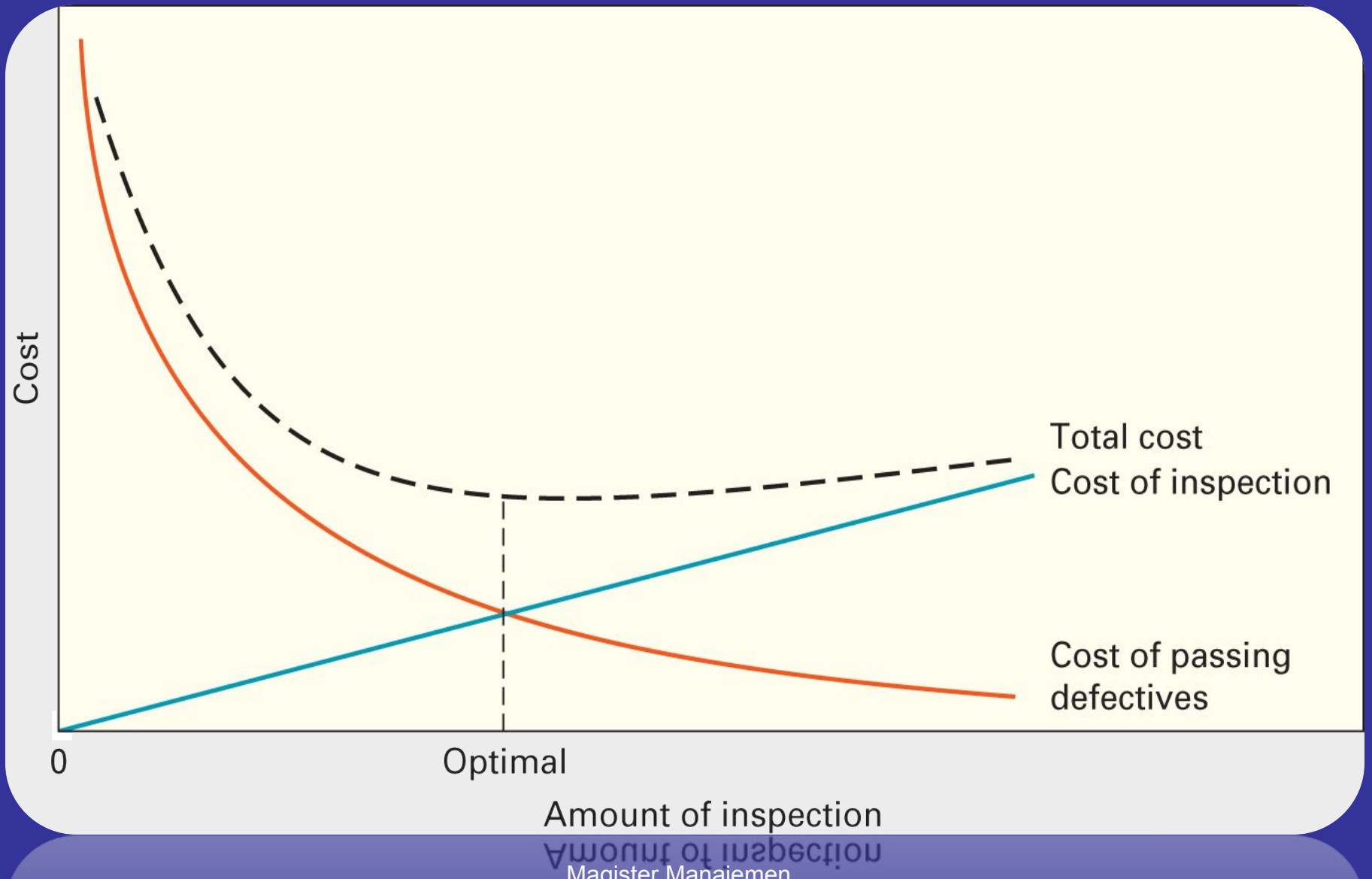
- A statistical procedure using control chart to see if any part of a production process is not functioning properly and could cause poor quality.
- Is a tool for identifying problems in order to make improvement.

CONTROL CHART

- Is a graph that establishes the control limits of a process.

- Fungsi Control Chart :
  - Þ Can detect problem quickly
  - Þ Prevent poor quality items
  - Þ Mengurangi rework, wasting time & resources

Hubungan antara Bi. Inspeksi dg Bi. kerusakan



Cost of Quality

- Appraisal Costs
  - Costs of activities designed to ensure quality or uncover defects
- Prevention Costs
  - All TQ training, TQ planning, customer assessment, process control, and quality improvement costs to prevent defects from occurring

SPC Applied to Service

- *Hospital*: quickness of care, staff responses, accuracy of lab tests, cleanliness.
- *Grocery Store*: waiting line of check out, quality of food items, customer complaints.
- *Airlines*: flight delay, waiting time at ticket counter, passanger cabin cleanliness and maintenance.

Why use sampling ?

- Sampling often is faster
- Some test require that the product be damaged
- The test may be very expensive to conduct
- Accuracy

Atribute

- Is a product characteristics that can be evaluated with a discrete response. (Qualitative classification)

Variable

- Is a product characteristic that can be measured (Quantitative classification)