

Business Seminar – Operations Management Spring 2025

Operations Management – 2025 April 10th
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AGENDA

1. Operations Management
2. Planning, Control & Implementation
 - 2.1. Process Analysis - Examples
 - 2.2. Operations Strategy
 - 2.3. Quality Management
Lean; Six Sigma; TQM; KAIZEN
3. Conclusions

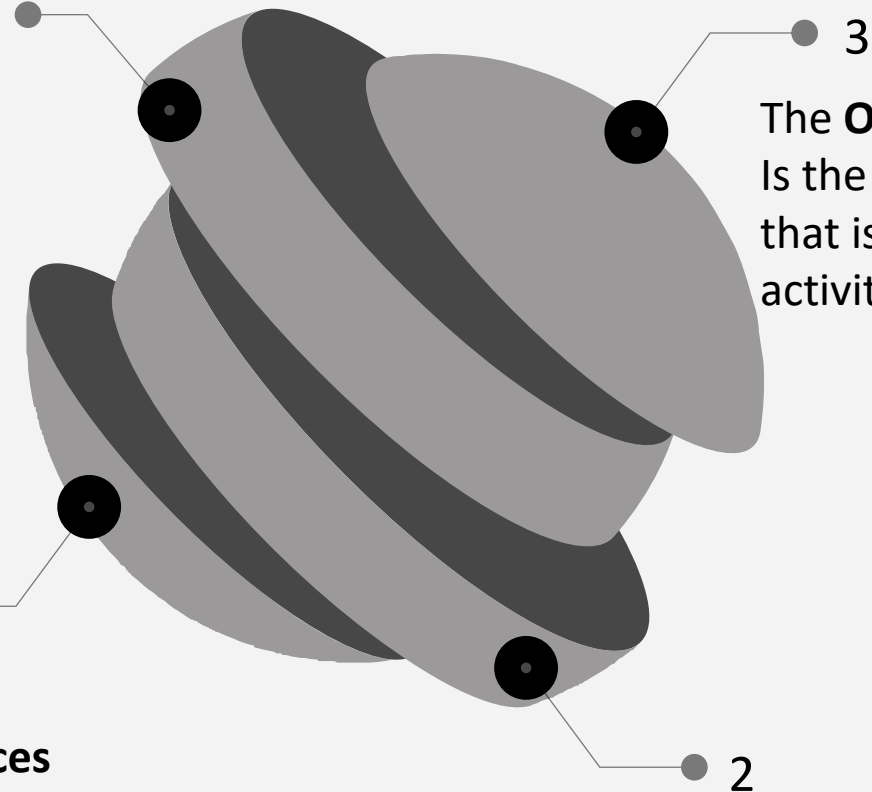
Key Question:

What is Operations Management? ...and
why is it important in business?

The **Operations Manager**
are the people who have
the responsibility to manage
the resources

WHAT IS OPERATIONS MANAGEMENT?

Operations Management is the
activity of **managing the resources**
which produce and deliver products
and services




The **Operations Function**
Is the part of the organization
that is responsible for this
activity

It is an applied discipline **dealing with**
real-world managerial issues

Nigel Slack • Alistair Brandon-Jones • Nicola Burgess

OPERATIONS MANAGEMENT

TENTH EDITION



Key Questions:

The importance of operations management in business

How does operations management contribute to organizational success?

THE POSITION OF THE OPERATIONS FUNTION

	Marketing	Accounting & Finance	Product Development	Operations
Church	Call on newcomers	Manage appeals	Retranslate scriptures	Conduct weddings
Fast food chain	Advertise on TV/Internet	Pay suppliers	Design hamburgers	
Furniture manufacturer	Sell to stores	Pay staff	Design new furniture	

NOVA SBE?

Process perspective	Identify needs	Raise capital	Develop products	?
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THE POSITION OF THE OPERATIONS FUNTION

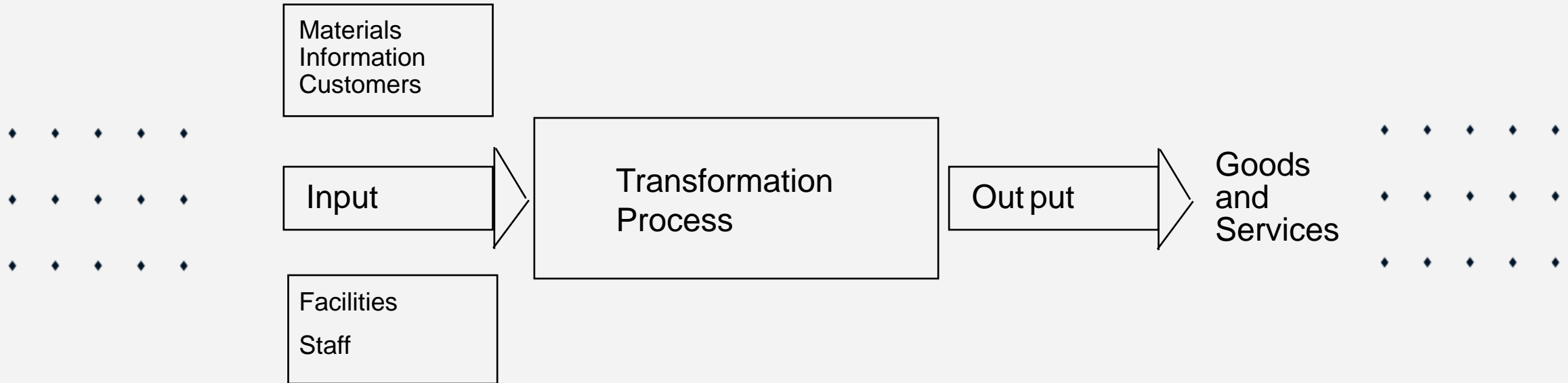
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Furniture manufacturer	Sell to stores	Pay staff	Design new furniture	Assemble furniture

NOVA SBE?

Process perspective	Identify needs	Raise capital	Develop products	Knowledge
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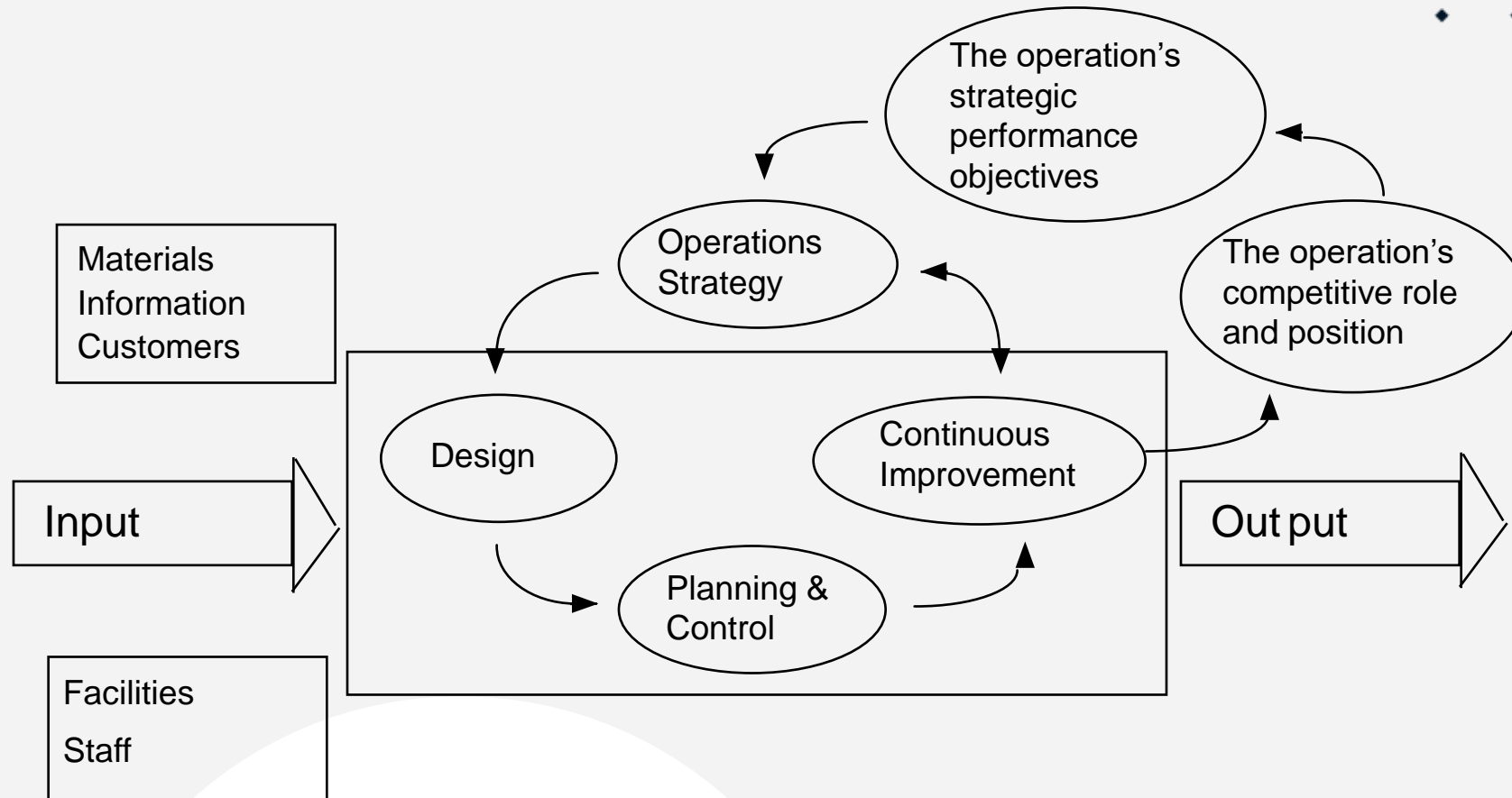


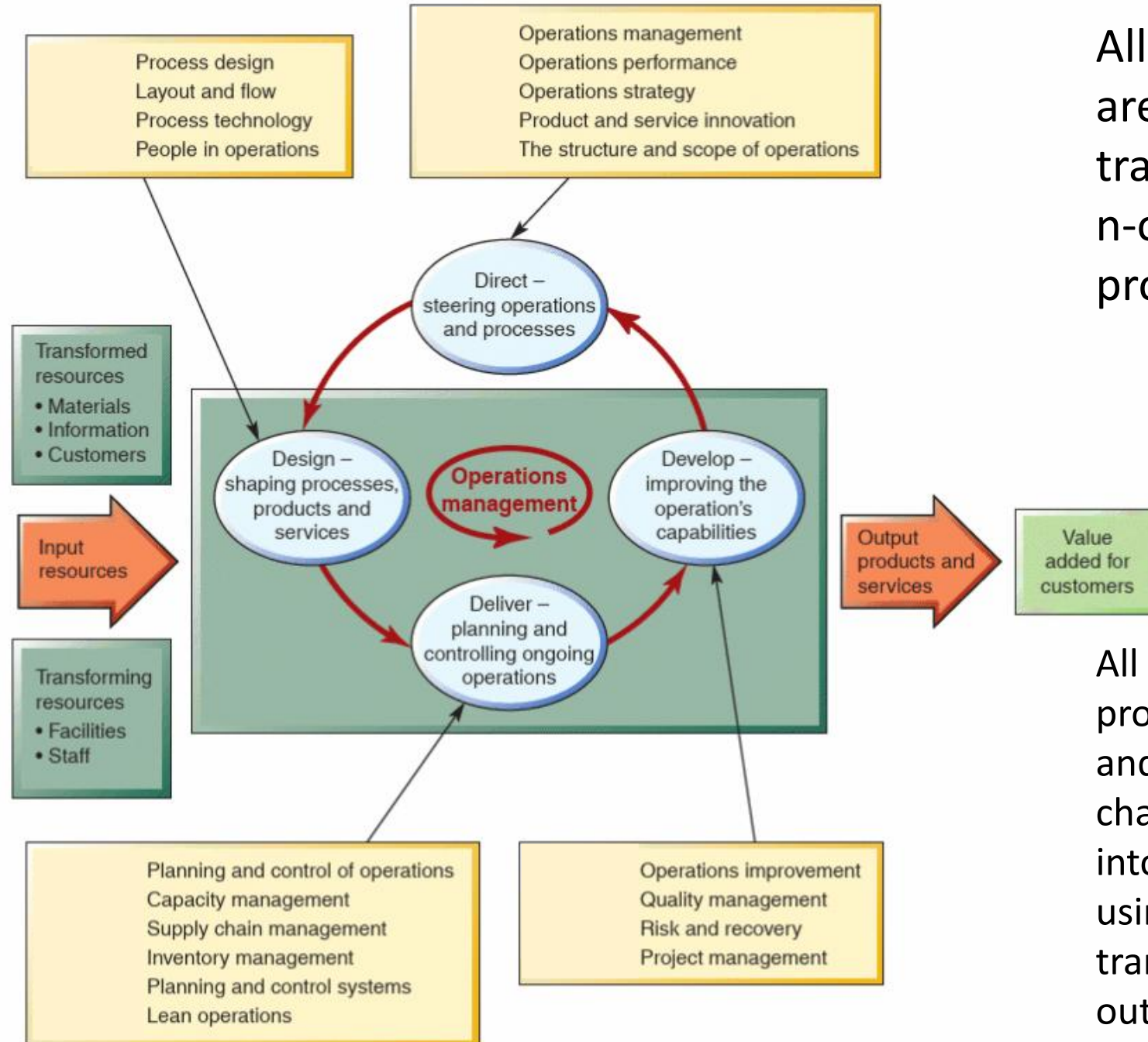
All operations are input-transformation-output processes



All operations produce products and services by changing inputs into outputs using an “in-put-transformation-output process”

The Operations Management Model





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are input-
transformatio
n-output
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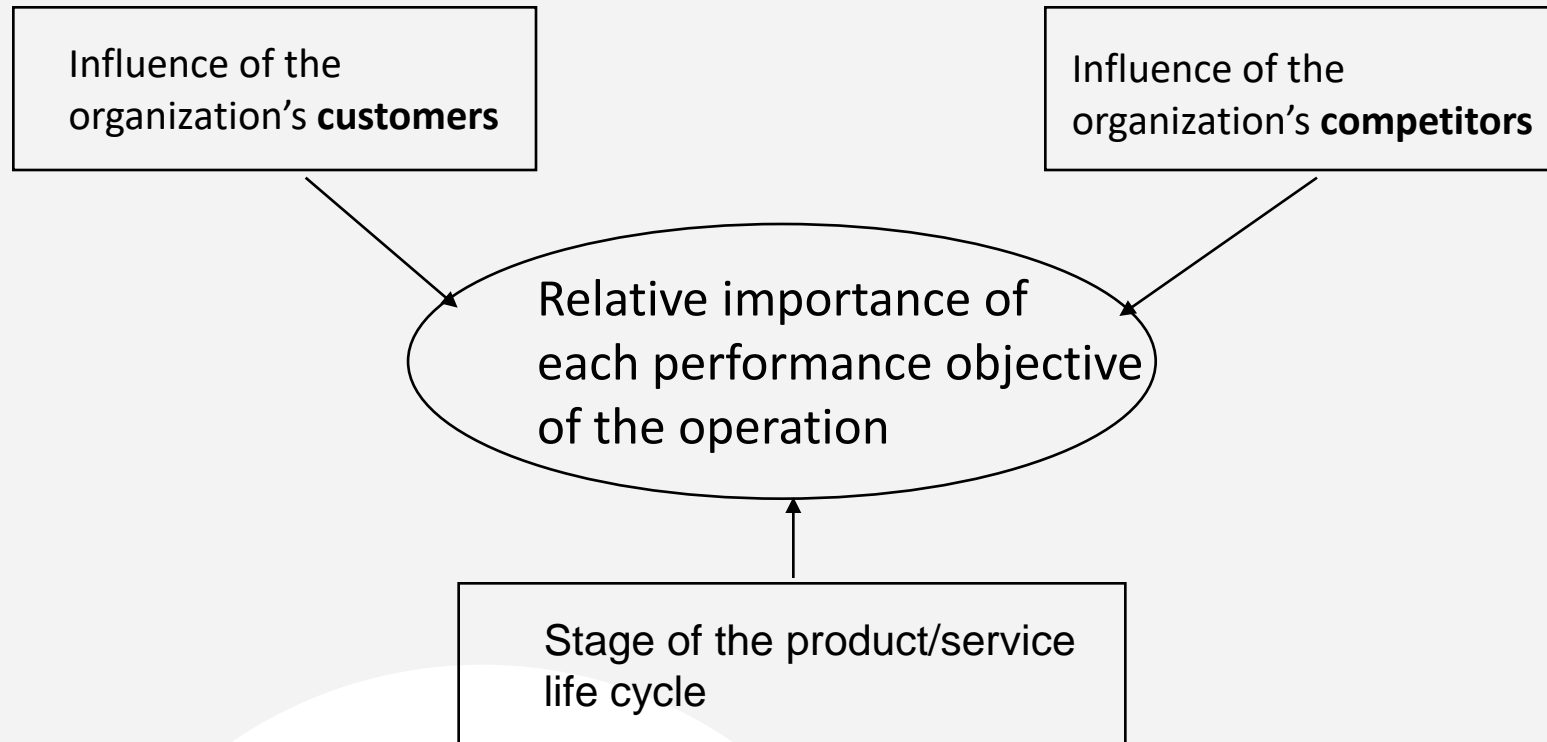
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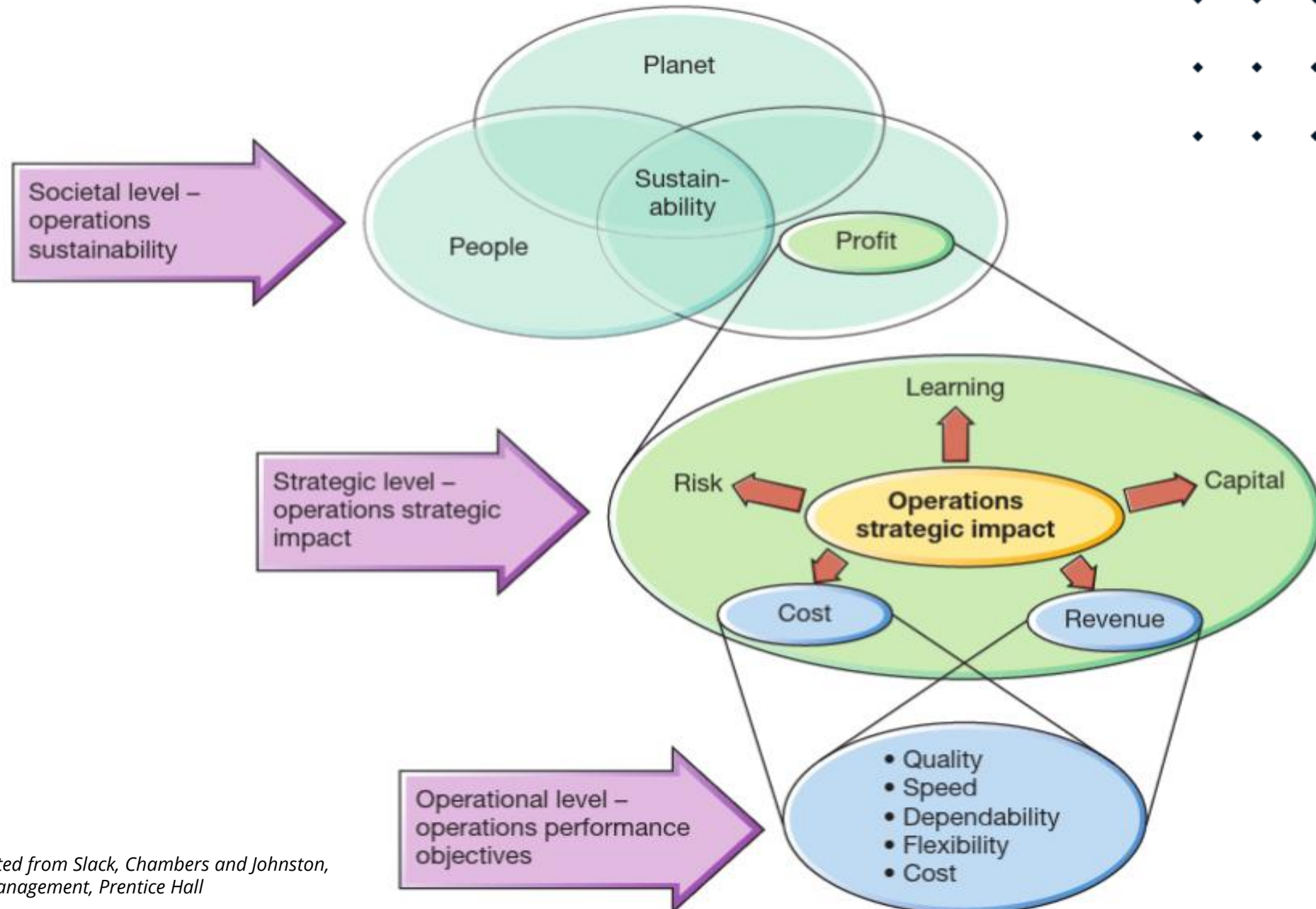
Operational Performance



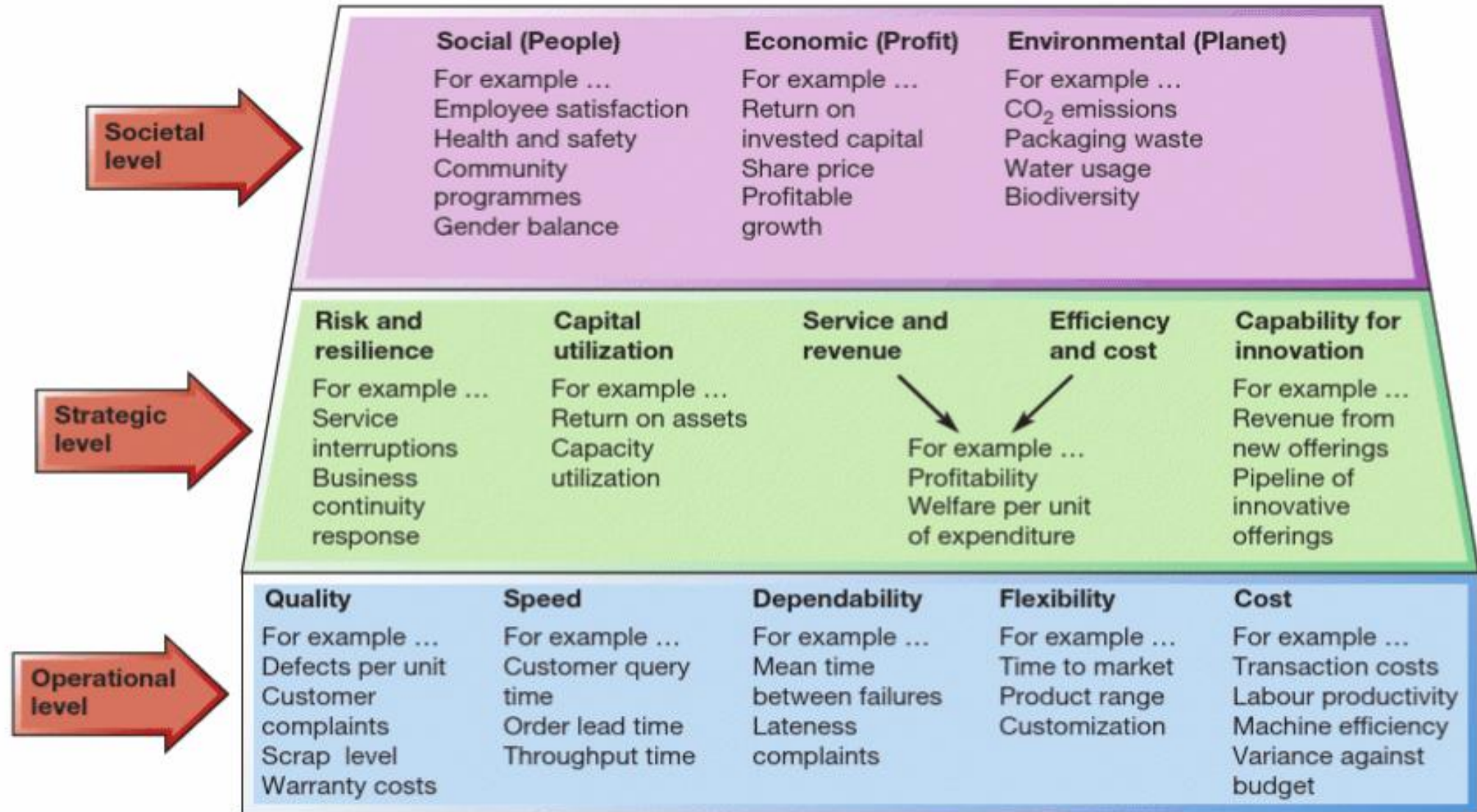
The Operations Performance Objectives



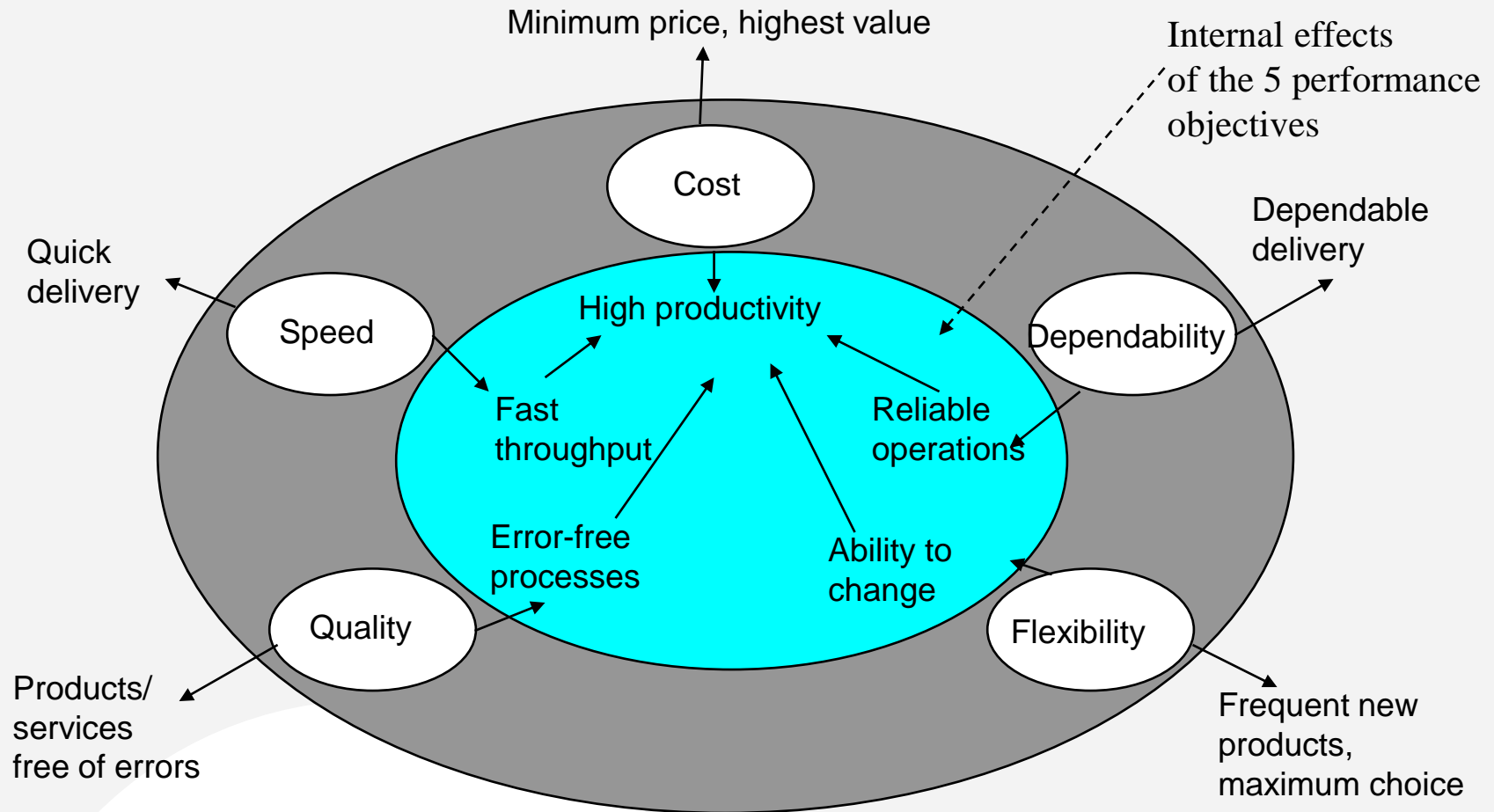
The 3 Levels of Operations Performance

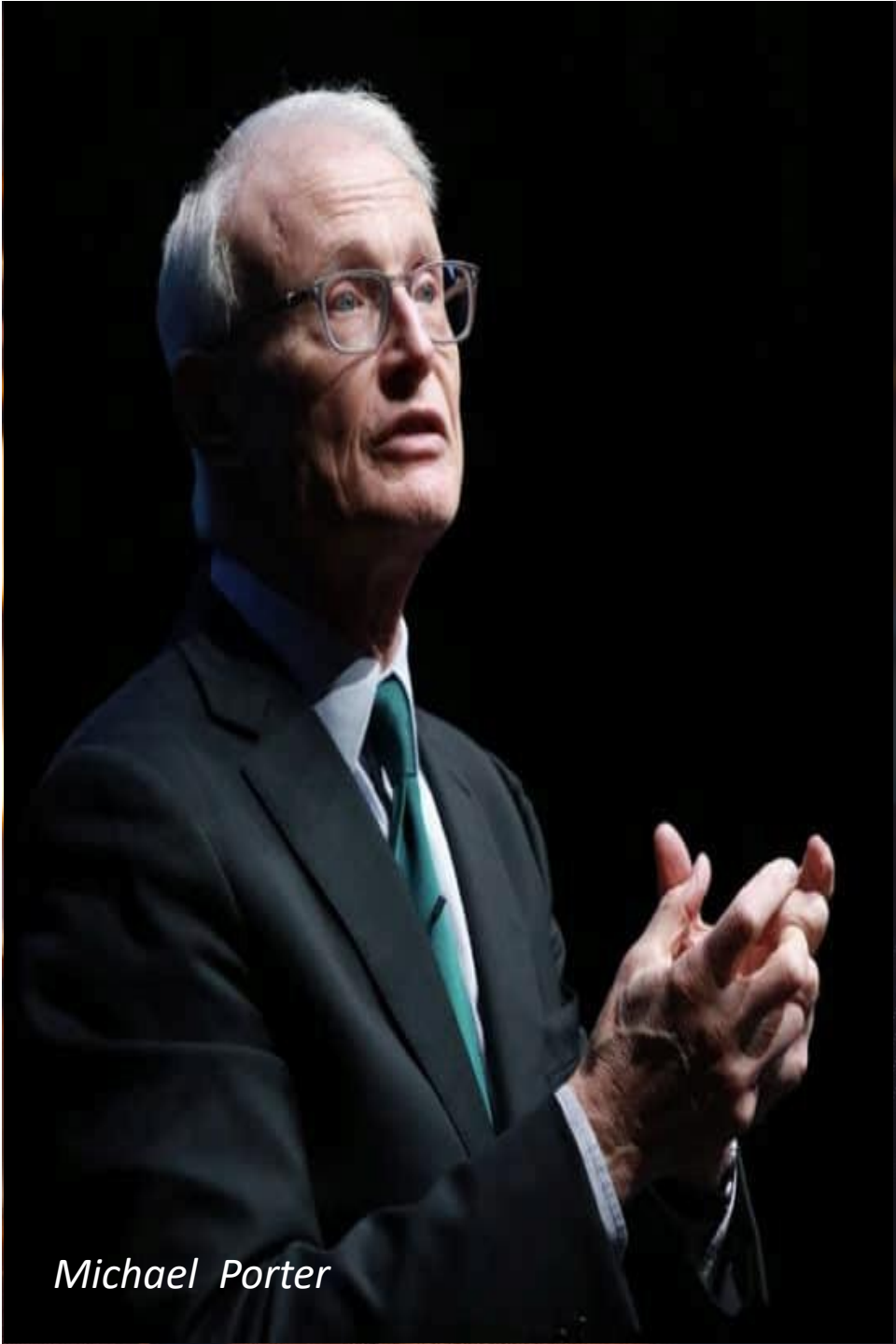


Performance Measures at Three Levels



The five operations performance objectives





Michael Porter

Operations management can contribute to competitive advantage.

Activities as the the basic units of competitive advantage.

An organization, will adopt a distinct strategic positioning; it will compete on the basis of flexibility, cost, quality, speed, diversity and variety, VALUE

Operational Strategy



» Strategy | Tactics | Operations

• **Strategy** defines your **long-term goals** and how you're planning to achieve them. Your strategy gives you the path you need toward achieving your **organization's mission**.

• **Tactics** are much **more concrete** and are often oriented toward **smaller steps** and a **shorter time** frame along the way. They're also called "initiatives."

» **Operations** - actions and decisions made by managers and members of a business that affect the production, distribution, service, management, needed for a company to function – this **requires the use of resources and assets**.

Bearing This in Mind...

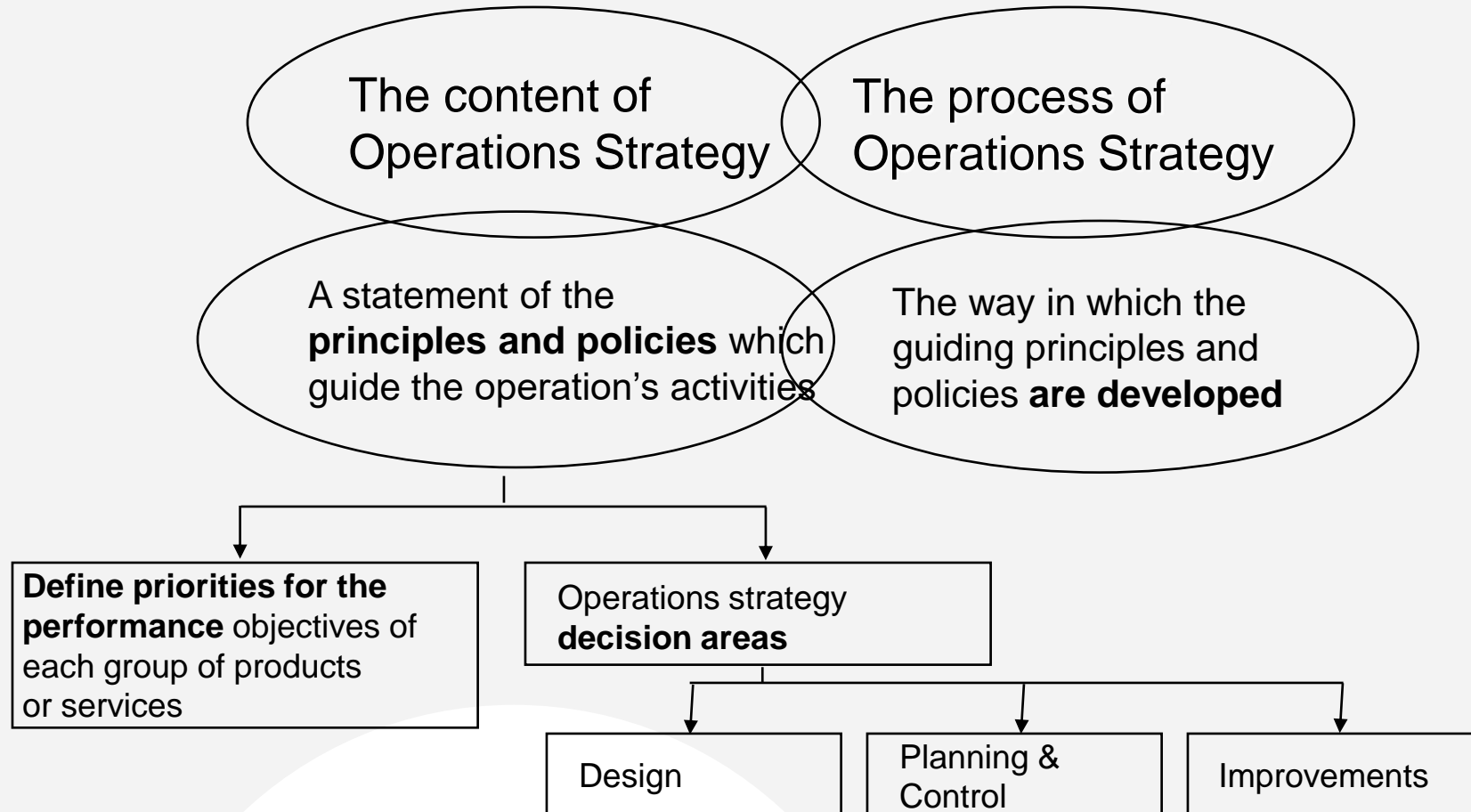
“Strategy is like teenage sex: everyone talks about it, nobody really knows how to do it, everyone thinks everyone else is doing it, so everyone claims they are doing it”

Jack Welch, the legendary CEO of the General Electric Company (GEC)

Operational Strategy

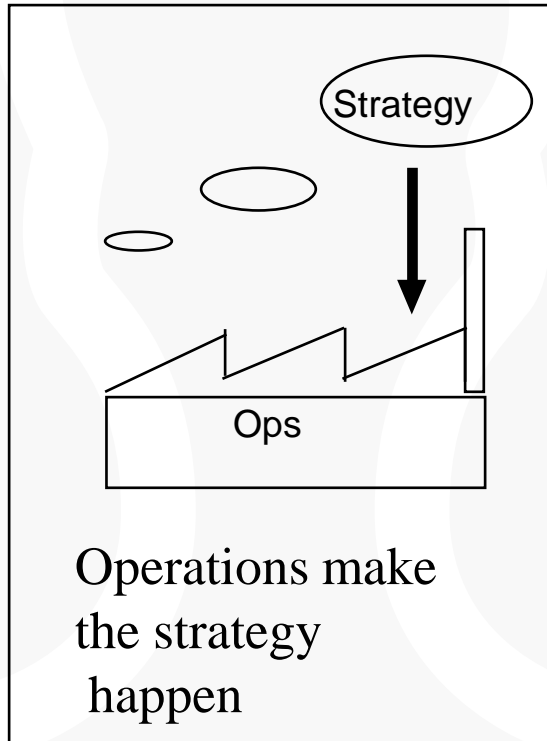
The choices or decisions involved are concerned less with individual day-to-day, **tactical activities** and more with the **whole transformation system** that is part of the organization.

Operational Strategy

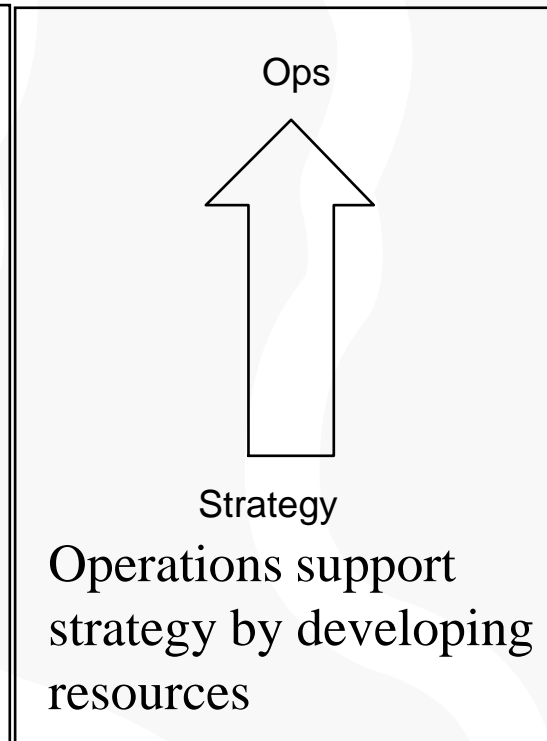




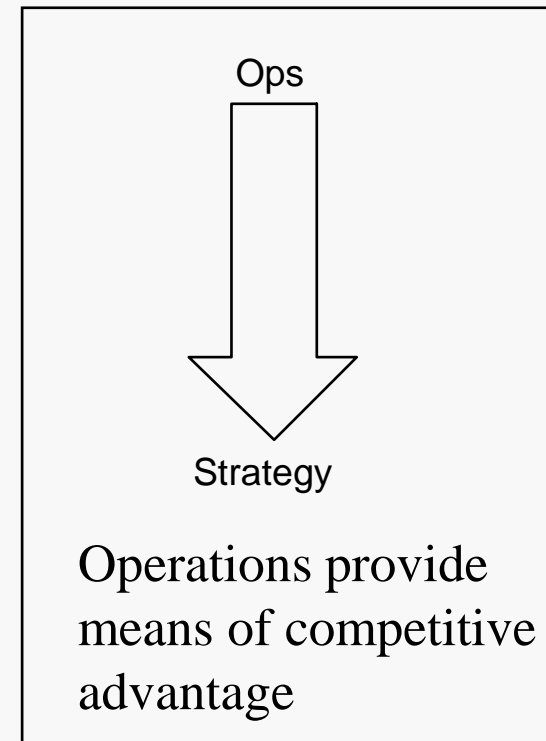
Implementation



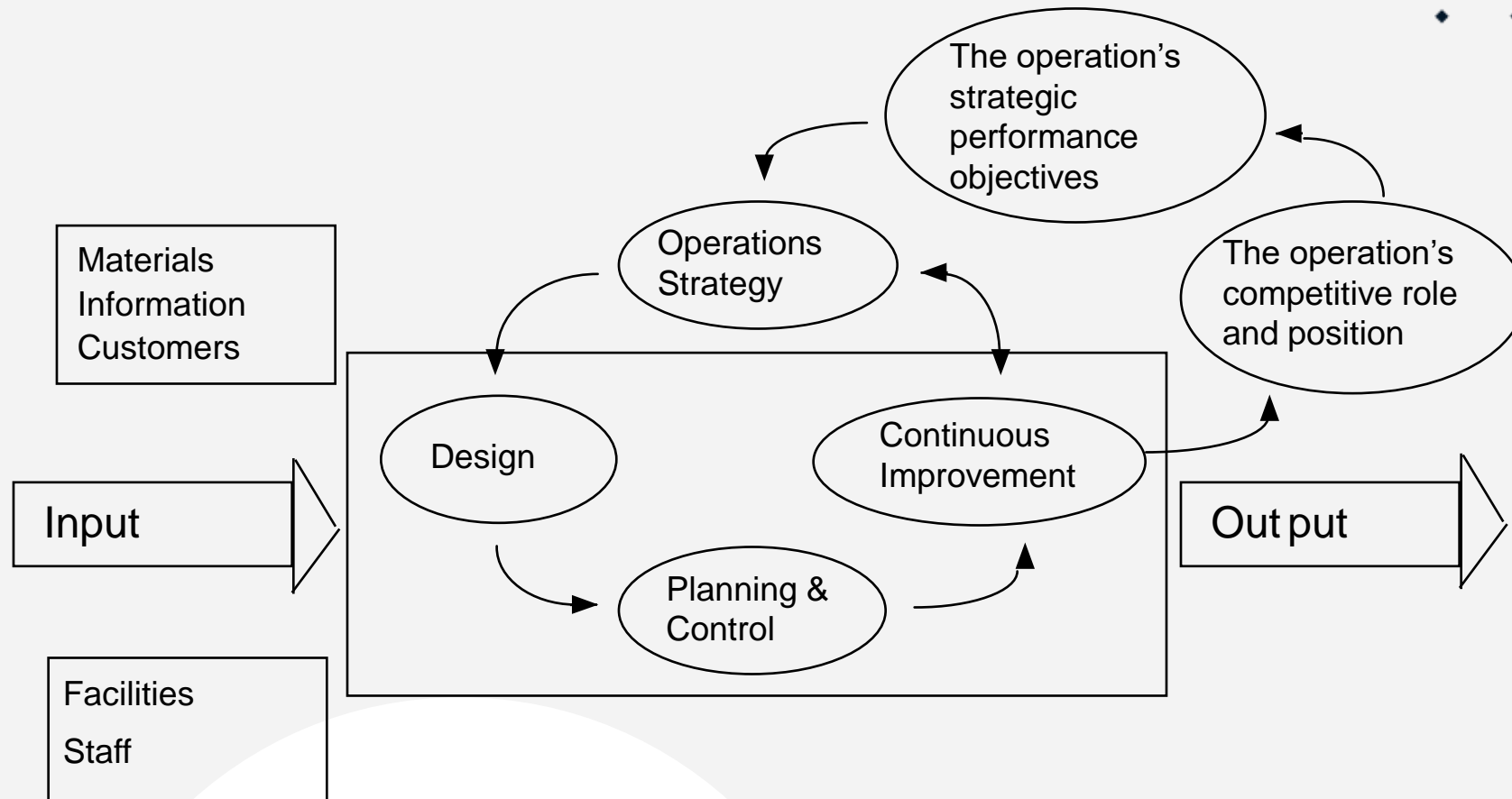
Support



Leadership



The Operations Management Model



Key Question:

How can poor operations management impact a company's results? Why....



How can poor operations management impact a company's results?

Key
Question:

1. Increased Operational Costs

2. Reduced Competitiveness

3. Profit Losses

4. Customer Dissatisfaction

Planning, Control & Implementation

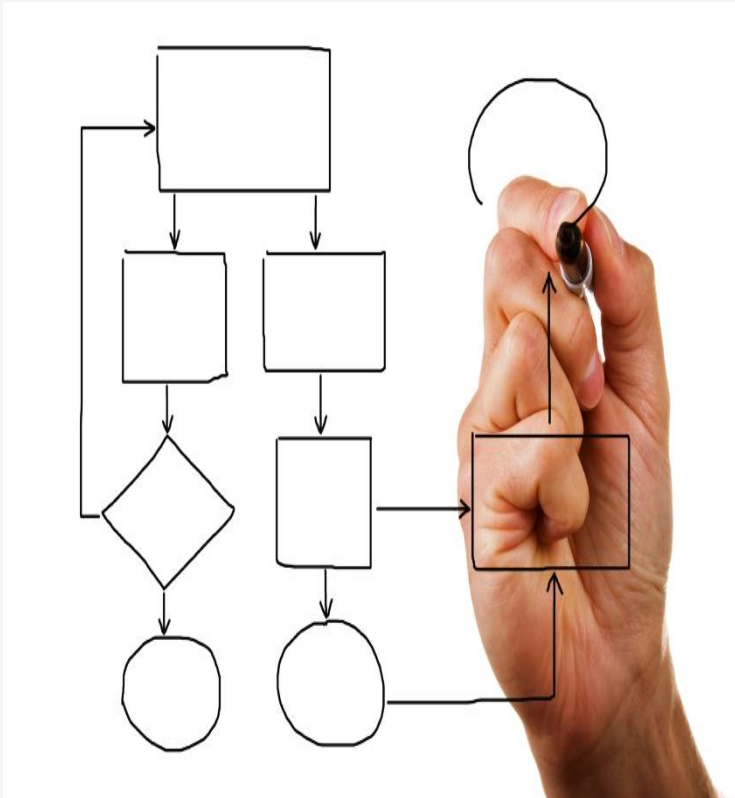


Process Analysis

Process Definition



The Process Definition



- Inputs
- Outputs
- Activities that are part of the process
- Performance indicators
- Process owner
- Activities that take place in different organization departments
- Activities that cross the organization

Planning, Control and Implementation

Plan – formalization of what is intended to happen at some time in the future

Control – is the process of coping with changes to the plan and the operation to which it relates

Implementation – involves the design, management, and control of processes in the production of goods and services.



The Process Concept



- **Process**

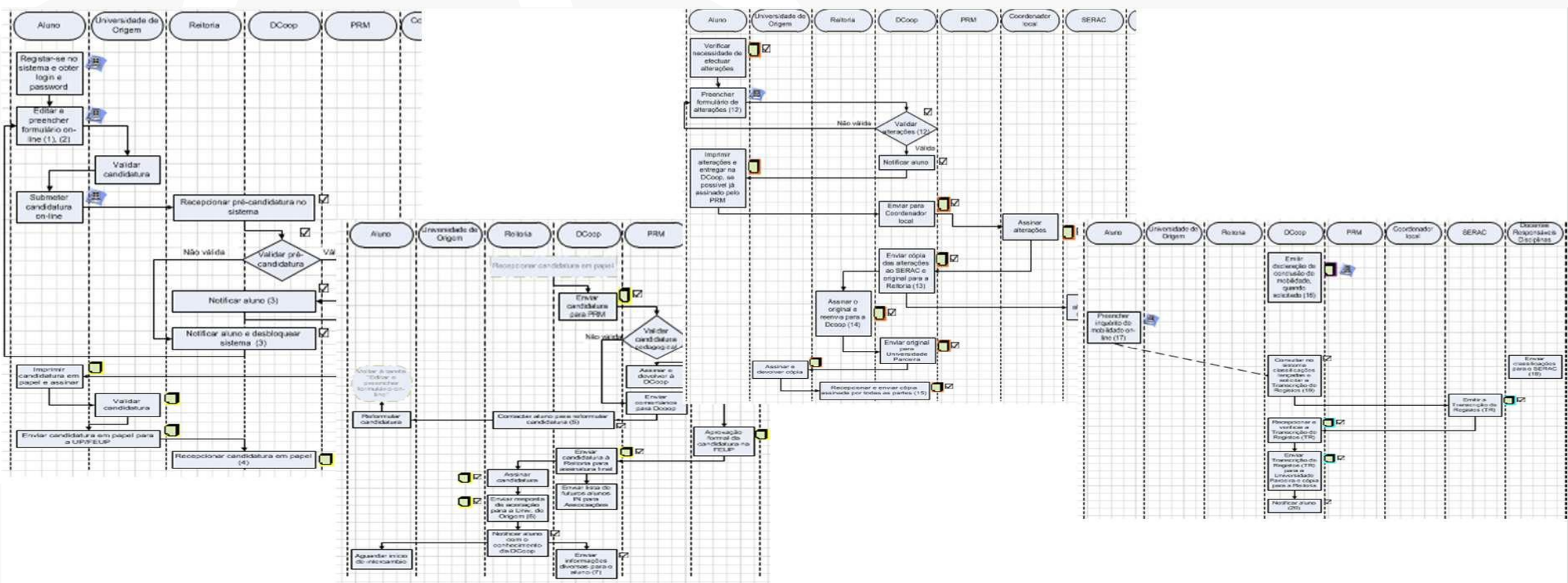
Sequence of activities that aims to achieve a specific objective, usually adding value to a customer: **internal or external**

- **Central Processes**

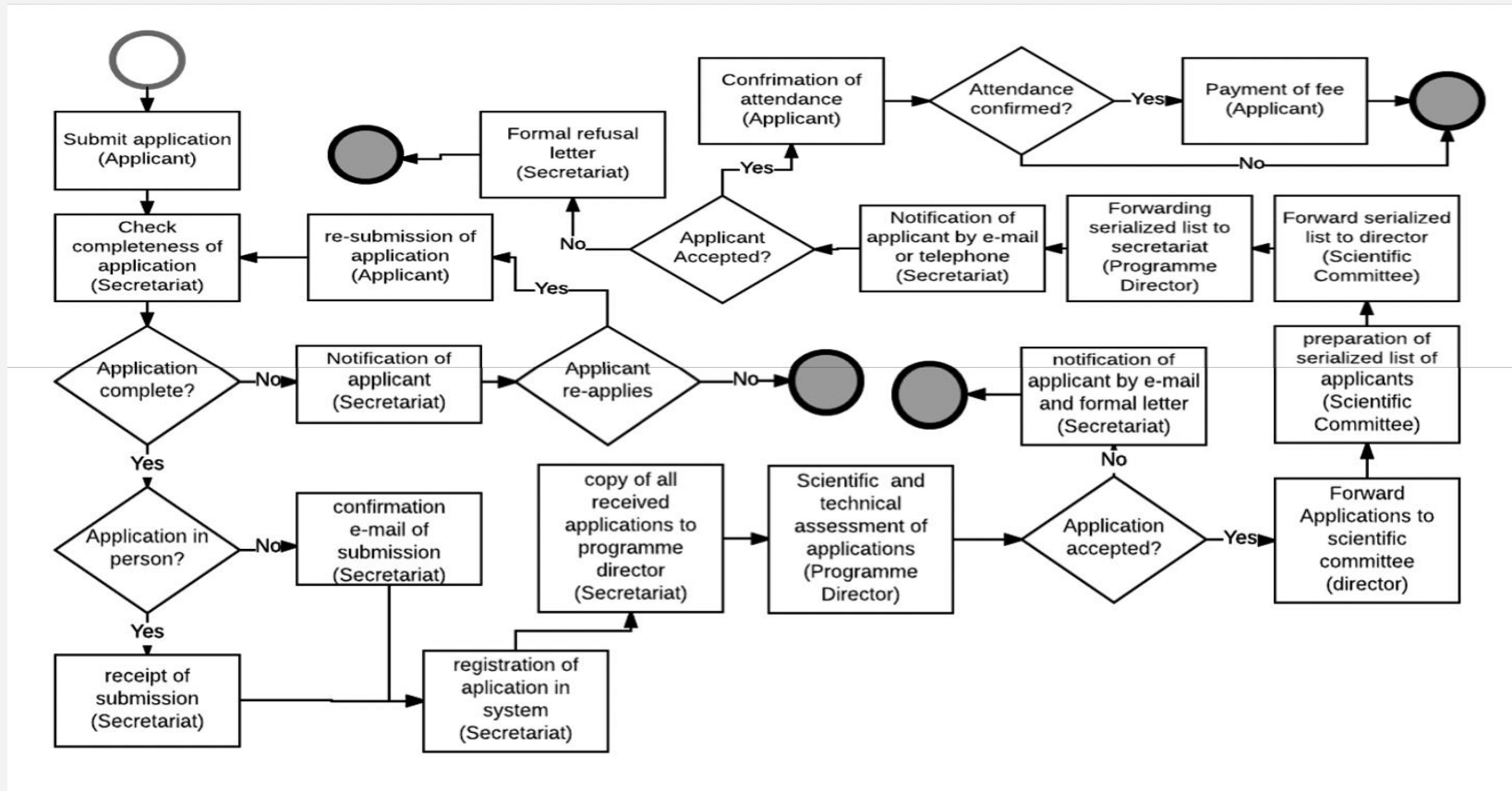
Involved in the **direct production** of the product, or service of the operation

- **Support Processes**

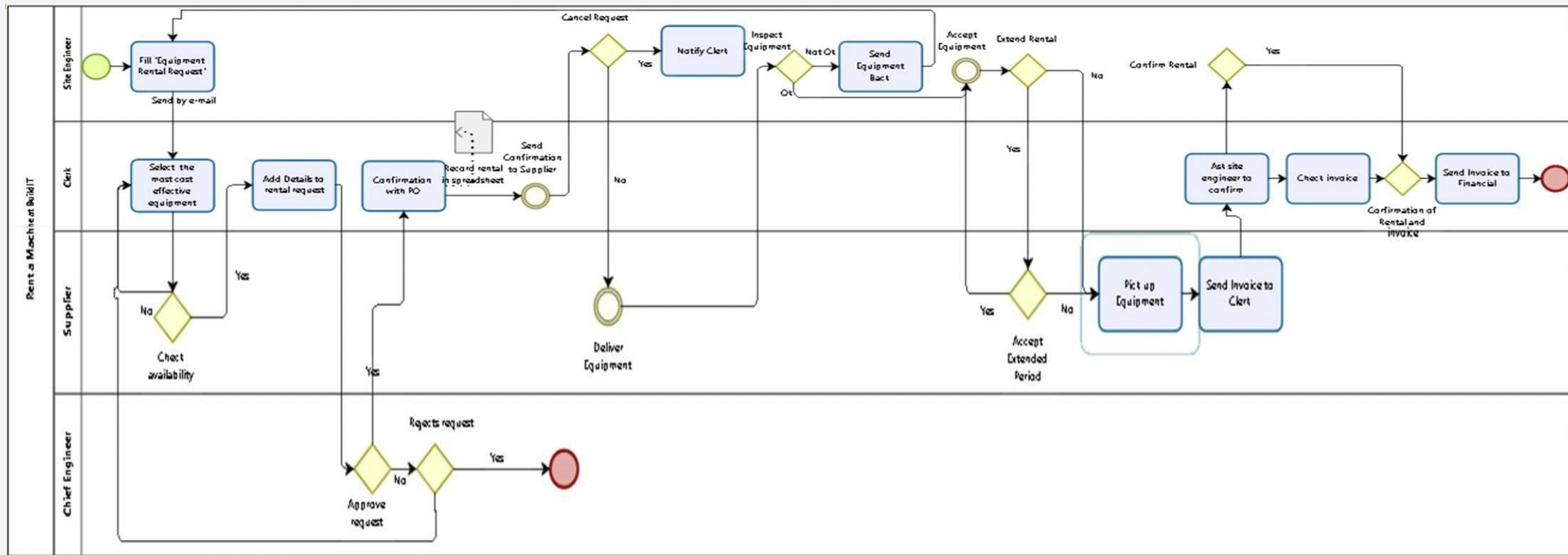
Are all processes whose sole purpose is to ensure the functioning of **key processes** and overall operations of the company - Examples – Accounting; Marketing



The **high detail** option may turn the model **too complex** so that it becomes difficult to understand.

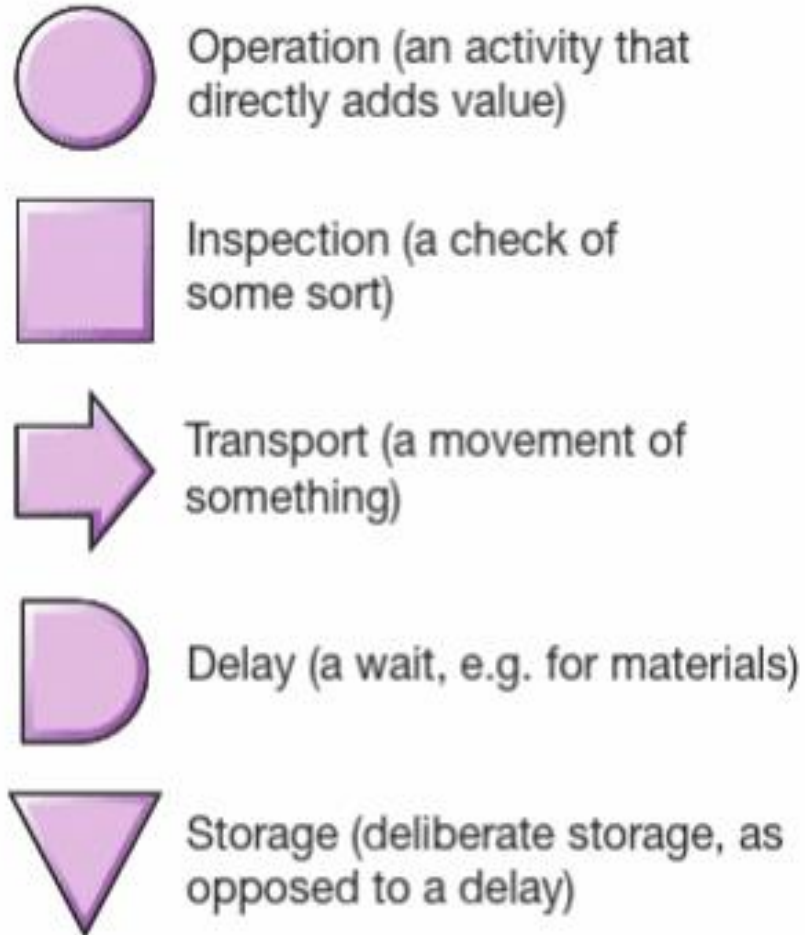


If the **low detail** and hard to read option is adopted the model will probably may omit important aspects and is difficult of the process.

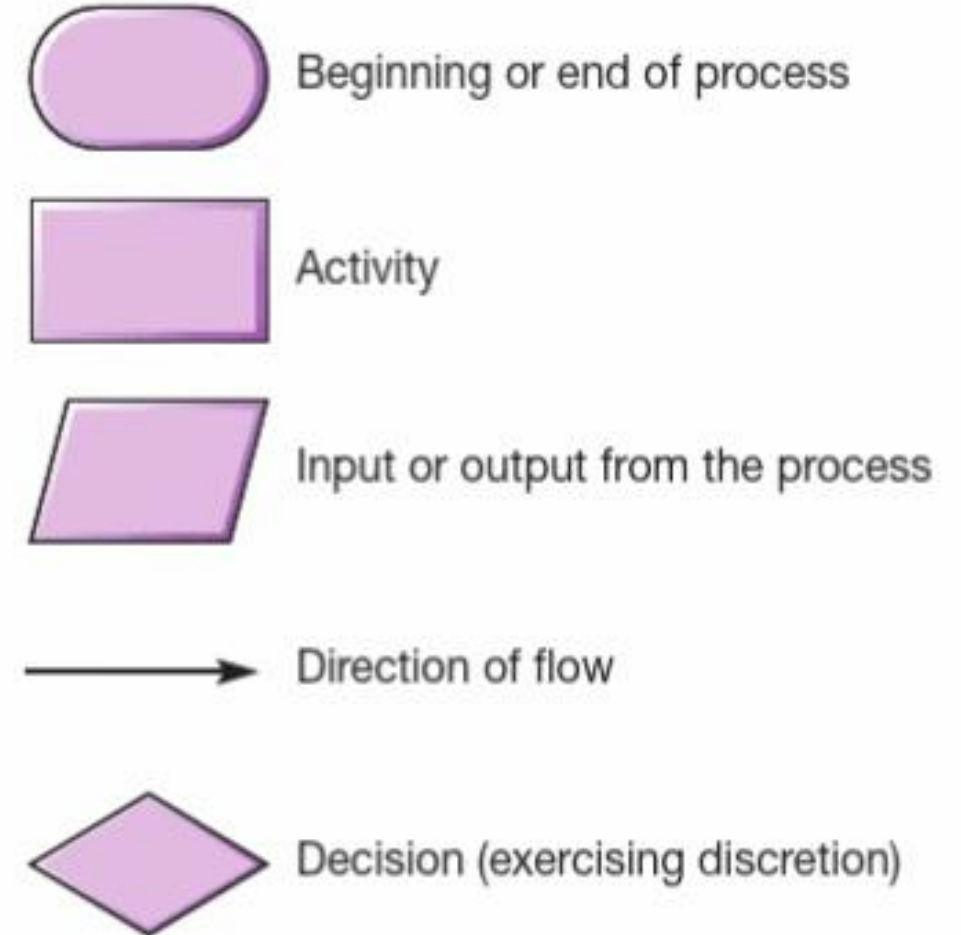


Process Mapping Symbols

Process mapping symbols derived from scientific management



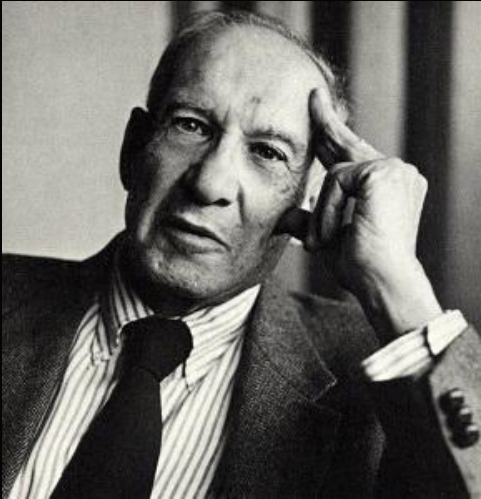
Process mapping symbols derived from system analysis



Source: Adapted from Slack, Chambers and Johnston, *Operations Management*, Prentice Hall

“Nothing is more useless than carefully doing what did not need to be done ... wise is the one that does useful things, not many things...”

Peter Drucker



Bearing this in mind

Obstacles That Emerge in Process Design

1. COMPLEXITY OF THE PROCESS

» We need a “strategy “ to cope with the conflict between representing all the relevant information while keeping the readability of the models (even when the process contains tens of tasks).



Obstacles that emerge when managers deal with process improvement

2. DISTRACTIONS

» Front line work environments are full of unnecessary distractions detracting focus from the task at hand. Removing distractions will lead to improved patient outcomes.

Top-down healthcare frameworks, however, impair our ability to do this



Operation Strategy Implementation



▪ FIVE P'S

PURPOSE

- The more clarity that exists around the ultimate goal, the more likely it is the goal will be achieved (motivation, boundaries)

POINT OF ENTRY

- Support of the organization hierarchy

PROCESS

- Managers who are engaged – putting operations strategy together

PROJECT MANAGEMENT

- Time planning, controls, communication mechanisms, reviews
- Basic disciplines of project management (should be in place)

PARTICIPATION

- Staff to participate in the implementation process is also critical

IMPLEMENTATION

» Manage Change
Activity:

Provide an example of a company/business when a new operations strategy proved to be valuable nowadays and why

Quality Management

Why does quality
matter for
businesses in
today's world?



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Contemporary Context of Quality Movement

What is Quality?

Service quality is a measure of how an organization delivers its services compared to the expectations of its customers. Customers purchase services as a response to specific needs.

Dimensions of Quality



•Performance

The primary operating characteristics of a product or service (e.g., speed, capacity, comfort).

•Features

Additional characteristics that enhance appeal or usability (e.g., GPS in a car, customization in software).

•Reliability

The probability that a product/service will perform without failure over time.

•Conformance

The degree to which a product/service meets design and operating standards or specifications.

•Durability

The product's life span before replacement or major repair is needed.

•Serviceability

The speed, courtesy, and ease of repair or customer support when issues arise.

•Aesthetics

The look, feel, sound, taste, or smell of a product—often subjective.





Organizing & Quality Activity:

Considering Heineken, Coca-cola...
which dimensions of quality are essential
to ensure the organization's
success/outcomes? Why?

Organizing & Quality

**Efficient
operational models
are essential for
organizational
success.**



Total Quality
Management (TQM)

Lean

Kaizen

Six Sigma

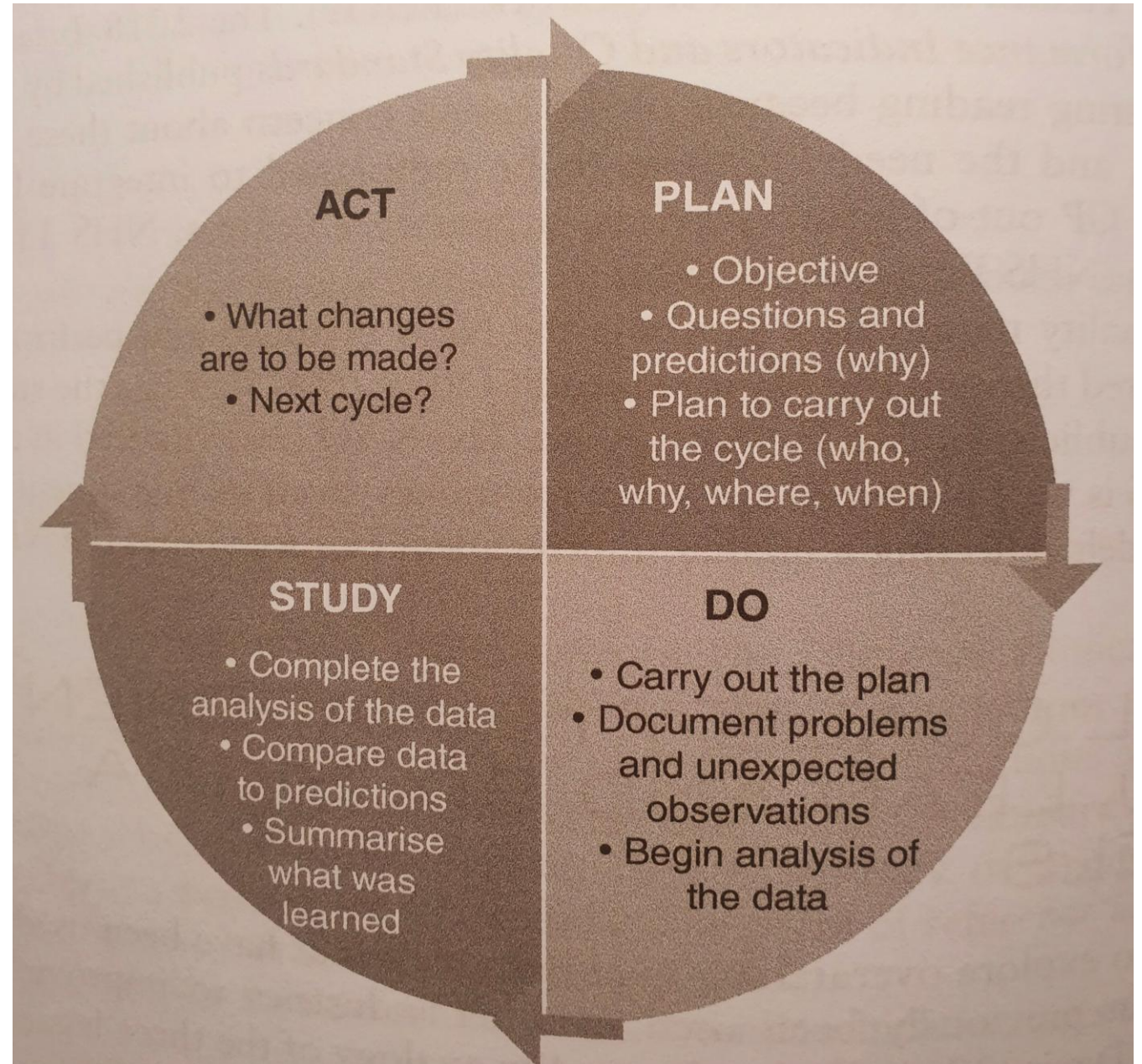


Organizing & Quality Models

Total Quality Management (TQM)

Lean

Six Sigma



Organizing & Quality Models

Total Quality
Management (TQM)

Lean

KAIZEN

Six Sigma

» The LEAN methodology involves Five Stages: The goal is to maximize value for the customer while minimizing waste.

1) **Define the population**

2) **Map the value stream** (the entire flow of a product or service from start to finish)

3) **Reduce wastage**

4) **Respond to what clients see as valuable** (What the customer is willing to pay for)

5) **Aim for perfection** (Continuously improving processes to get closer to delivering perfect value with zero waste)

Organizing &
Quality
Models

Total Quality
Management (TQM)

Lean

KAIZEN



» **The KAIZEN methodology** involves:

Continuous Improvement

Adopts an approach to improving performance which assumes many small incremental improvement steps

- Minimum financial investment
- Involvement of all employees
- Take advantage of the knowledge and experience of employees



Organizing & Quality Models



Total Quality
Management (TQM)

Lean

KAIZEN

Six Sigma

» Six Sigma is the quality model related to TQM/LEAN which aims to improve the quality of processes by **minimizing and eventually removing errors and variations.**

Organizing & Quality Models

Total Quality
Management (TQM)

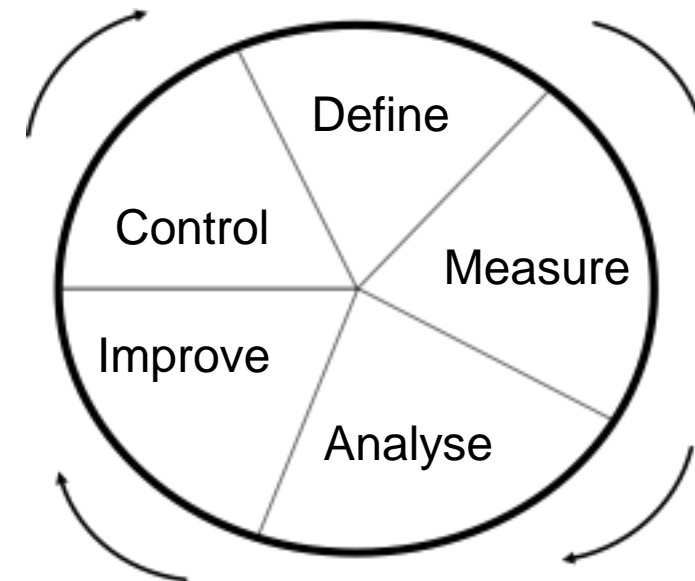
Lean

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Six Sigma



Six-Sigma Characteristics



Organizing & Quality Models

Total Quality
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Six-Sigma Characteristics

Define: Describe the problem in operational terms

Measure: Use data to refine problem and measure exactly what is happening.

Analyse: Test the hypotheses and identify the root causes.

Improve: Develop ideas to eliminate root causes (e.g., through brainstorming)

Control: Monitor and control the process to ensure that the new performance level is sustained under the modified process.



If the Operations Management Department asked for your advice on how to foster improvement in the operations of Nova SBE, what would you recommend to the Board?



QUESTIONS?