Operations Management Dr. Shady

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<u>Aya Alaa</u>

Q1: Define operation management then mention its scope?

Operation Management:

The management of systems or processes that create goods and / or provide services.

Scope of Operations Management: 1-Forecasting

- 2-Capacity planning
- **3-Scheduling**

4-Managing inventories

5-Assuring quality

6-Motivating employees

7-Diciding where to locate facilities

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And more.....

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Q2: Mention the Key Differences between production of goods and providing services?

Key Differences:

1-Customer contact.

2-Uniformity of input.

3-Labor content of jobs.

4-Uniformity of output.

5-Measurement of productivity.

6-Production and delivery.

7-Quality assurance.

8-Amount of inventories.

<u>Aya Alaa</u>

Q3: Discuss the main Responsibilities of Operation Management?

Planning:

1-Capacity.
2-Location.
3-Products and Services.
4-Make or buy.
5-Layout.
6-Projects.
7-Scheduling.

Organizing: 1-Degree of centralization. 2-process selection.

Staffing: 1-Hiring /Laying off. 2- Use of overtime.

Directing: 1-Incentive plans. 2- Issuance of work orders. 3- Job assignments.

Controlling / Improving:

Inventory.
Quality.
Costs.
Productivity.

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Q4: Define Competitiveness and how can business compete using operation?

Competitiveness:

How effectively an organization meets the wants and needs of customers relative to others that offer similar goods or services.

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Businesses compete using operations:

1-Product and service design.

2-Cost.

3-Location.

4-Quality.

5-Quick response.

6-flexibility.

7-Inventory management.

8-Supply chain management.

9-Service.

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Q5: Define Distinctive Competencies then mention their example?

Distinctive Competencies:

The special attributes or abilities that give an organization a competitive edge.

Examples:

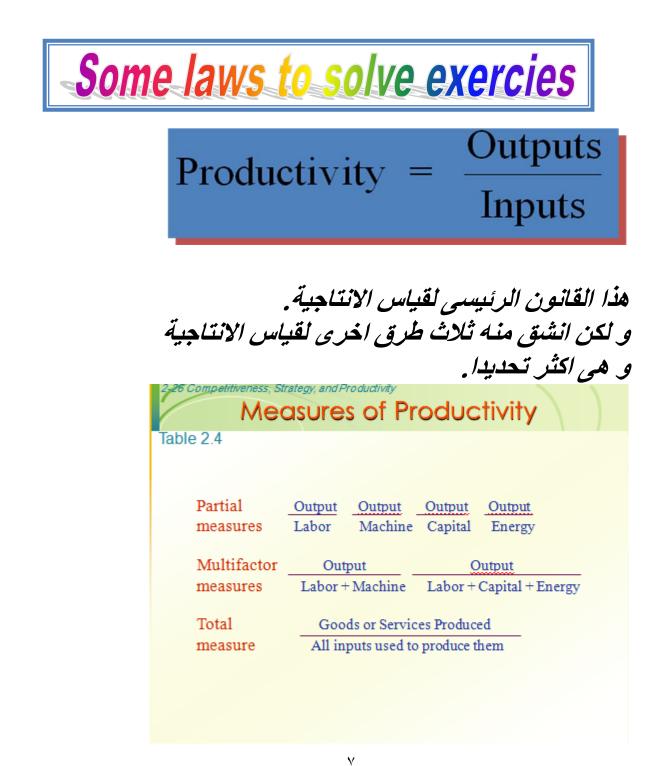
- 1- Price.
- 2- Quality.
- 3- Time.
- 4- Flexibility.
- 5- Service.
- 6- Location.

<u>Aya Alaa</u>

Q6: Define Productivity. Solve the exercise.

Productivity:

A measure of the effective use of resources, usually expressed as the ratio of output to input.



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١ - Partial جزئى : يقيس الانتاجية بالنسبة لعامل واحد من عوامل المستخدمة فى التصنيع.
٢ - Multifactor متعدد العوامل : يقيس الانتاجية بالنسبة للأكثر من عامل من العوامل المستخدمة فى التصنيع.

۳- Total جموع : يقيس الانتاجية بالنسبة لكل Total بالنسبة لكل العوامل اللى استخدمتها فى الصناعة.

Example 3

7040 Units produced Sold of \$1.10/unit Cost of labor: \$1000 Cost of materials: \$520 Cost of overhead: \$2000 What is the multifactor productivity?

To get Output = Number of units*Price of each unit

 $MFP = \underbrace{Output}_{Labor + Materials + Overhead}$ $MFP = \underbrace{(7040 \text{ units})^*(\$1.10)}_{\$1000 + \$520 + \$2000}$ MFP = 2.20

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Q7: Mention the main activities of product or service design?

The main activities are:

1- Translate customer wants and needs into product and service requirements.

2- Refine existing products and services.

3- Develop new products and services.

4- Formulate quality goals.

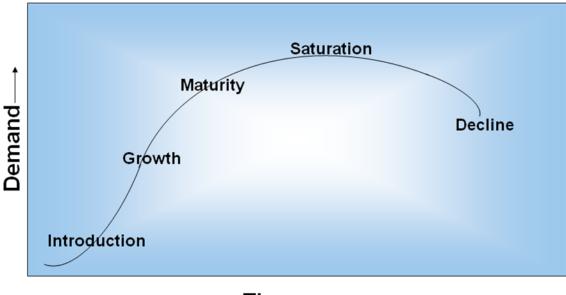
5- Formulate cost targets.

6- Construct and test prototypes.

7- Document specification.

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Q8: Illustrate life cycle of product or service design?



Time →

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<u>Aya Alaa</u>