**5. 1 – The role of operations management**

-Right goods/services in the right quantities at right quality in cost-effective time

-The type of product and production that should take place

**Marketing implications**

* Affect the quality & individuality of product
* Packaging
* Mass produced products – standardized
	+ Substitutes in the market
	+ Competitive prices
* Promotional strategies to gain market share from rival firms
	+ Supermarkets: increase # of distribution channels = max sales

**HR implications**

* Change in production can reduce/increase workforce
* Mass productions: uses capital-intensive technology,
* Flow Production: suffers from lack of motivation
* Cell Production: uses individual skills of people in a team
* Job Production: require more training, higher remuneration packages for specialist workers

**Finance Implications**

* Capital intensity & lean production: heavy machinery and equipment investment
	+ External sources of finance
* Mass Production: fixed investment cost can be spread over time
* Job production: firms cost go into remunerating labor with wages, salaries, etc.

**Provision of goods & services**

* Primary sector: raw materials, harvesting, mining, agriculture
* Secondary sector: natural resources 🡪 processed goods
* Tertiary sector: provision of services
* Quaternary: intellectual knowledge

**Factors of production**

* Land, labor, capital & enterprise
* Materials, manpower, money & machines

🡪 Value-added is greater than the cost of production

**Strategies & practices**

*-Sustainability:* production enables consumption of goods/services without jeopardizing needs of future generations

**Ecological Sustainability**

* It does not deplete earth’s natural resources for future generations
	+ Green Tech
* Ecological Footprint: measure resource consumption impact
	+ Recycling
	+ Conservation

**Social Sustainability**

* Society optimizes quality of life for people & their descendant
* Gender equality
* Job creation: reduce poverty, increase economic and social prosperity
* Apply CSR

**Economic sustainability**

* Meets economic needs using existing available resources
* Overuse of resources: sustain output of goods/services over time
* Maximizing profit over long time, creating jobs and wealth

**5. 2 – Production methods**

**Job Production**

* Customizing an individual product
* Has been tailor made to suit a specific purpose or customer

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| *Advantages* | *Disadvantages* |
| Quality | Time consuming: specific requirements |
| Motivation is high | Labor-intensive: expensive production methods |
| Flexibility of products design/specifications | Long working capital cycle |
| Uniqueness | Few economies of scale |
|  | Irregularity of order |

**Batch production**

* Manufacturing identical products in small groups
* Same staff & machinery for different batch
* Used when: unclear level of demand
* Estimates of sales volumes made 🡪 output adjusted accordingly

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| *Advantages* | *Disadvantages* |
| Economies of scale | High amount of stock increases production cost (ensure loss of stock) |
| Specializations of product – increases productivity & quality | Bored workforce |
| Variety of products | Inflexibility causes delays in production process |
| Reduce risks of product with limited sales potential | High production cost – reliance on machinery |

**Mass Production**

* Manufacturing of large amount of standardize products
* Capital intensive – machinery & people to carry different functions for production process 🡪 high levels of productivity
* Lcd panels, spare parts

**Flow Production**

* Continuous production process of manufacturing standardized products
* Production in a much larger scale – maximize output
* Few workers required – dependence on automated systems
* Tvs, cellphones

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| --- | --- |
| *Advantages* | *Disadvantages* |
| Capital intensive- large output | High amount of stock increases production cost (ensure loss of stock) |
| Cost effective methods of production – low average fixed cost🡪 Technical economies of scale | Low flexibility |
| Standardized quality | Huge set-up costs, running cost and replacement cost |
| Low labor costs - unskilled workers required |  |

**Cell Production**

* Set of tasks are completed by a team, splitting the production process
* Job rotation – team is multi skilled
* Independent cells but rely on each other to ensure final production target

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| *Advantages* | *Disadvantages* |
| Autonomy | Lower output |
| Responsible & accountable for their products – improve quality | Capital-intensive to install and service machinery and equipment for each cell |
| Motivation | Average fixed cost is higher |
| Specialization |  |

**Appropriate production methods**

* **Labor-intensive:** lots of people working for something
	+ Personalized service
	+ USP
* **Capital-intensive:** high proportion of capital cost (machinery)
	+ Improve levels of output & productivity
	+ Reduce avg. costs of production
	+ There must be sufficient demand for the product
	+ No USP

*Depends on:*

* Relative cost of labor and capital
* Size of the market
* Aims and objectives of organization

**5.4 – Location**

* Geographical position of a business
* Depends on: nature of the business/product/human resources

**Quantitative Reasons***:* cost of purchasing/renting a premises

* + Quantity
	+ Quality
	+ Cost of the land
		- The busier the area – the more demand, limited supplu
		- Suitable climate, areas (gas station/agriculture)
		- Adequate infrastructure (Roads)

Availability & quality of labor:

* Wages paid to workers (if they need highly skilled or not)
* Unemployment rates, abundance of labor – low cost

Proximity to market (customers)

* Bulk-increasing/weigh-gaining industries: increase in weight during production process (alcohol)
	+ Transportation costs & time: reduced
* Customers demand convenience

*To raw materials:*

* For primary and manufacturing industries
* Bulk-reducing business: size of final product is less than raw

Government:

* Offer financial incentives: grand, subsidies
* Reduce cost of production
* Low/free interest: encourage business to invest in location
* For enterprise zones: suffering high unemployment, low income

E-commerce:

* Located far from customers
* Sell online

**Qualitative Reasons**

* Familiarity with area
* Welfare of workers in local community

Management preferences

Local knowledge

* They know its location & culture
* Potential competitive advantage

Infrastructure

* Transportation – links to roads, rail, sea
* Communication – telephone lines, postal services
* Support networks – maintenance services

Government

* Increase national output
* Lower cost of production
* Improved country’s international competitiveness

🡪impact: recruitment, retention & motivation ins staff

Political

* Free from competition
* Good law, order system
* Stable exchange rate
* Low rates of taxation

Ethical issues

* Business exerts: waste, noise and pollution – out of town location
* Avoid local community complaints

Comparative shopping

**Reorganizing production**

Outsourcing: transferring internal business activities to external organization

* Reduce costs
* Increase productivity – cost advantages (higher profit)
* Business may concentrate on core activities
* Skills from others

*Limitations*

* Trust between business
* Expected standards to be met
* Careful communication required

Offshoring: relocating business functions and process overseas

* Avoid trade protectionist measured
* Cost advantages – exploitation of labor in low income countries
* Low labor costs

*Production offshoring:* manufacturing

*Service offshoring:* call centers

Insourcing: use of organizations own people & resources to accomplish certain function/task

* Improve quality
* Cost saving benefits: in-house worker is cheap
* Relocating may: damage corporate image, loose skilled workers
	+ High production cost – labor, materials, transportation
	+ **Industrial inertia:** business invest & reinvest on non-existent competitive advantage locations
* Consider: size, type, products and objectives business