**Operations and Strategy**

**Knowledge Check**

**Weekly Learning Objectives**

* Organizational Value creation process
* Trends in globalization and deglobalization
* Mathematics of decision making
* Ethics and Social Responsibility

**Key Concepts**

1. The operations function is that part of every business organization that

 produces products or delivers services.

2. Operations consists of processes that convert inputs into outputs.

 Failure to manage these processes effectively will have a negative impact

 on the organization.

3. Organizations are systems made up of interrelated subsystems.

 Because of this, a system perspective in decision making is essential.

4. A key goal of business organization is to create value for owners

 (shareholders) by optimizing use of available financial, human, material,

 and intellectual resources.

5 All processes have assignable and unassignable causes of variation.

 Both must be recognized and managed.

6. Cross-functional alignment is the key prerequisite for success.

7. Environmental issues will increasingly impact operations decision making.

8. Ethical behavior is an integral part of good management practice.

 9. Organizational reputation is an asset. Negative externalities produced by

 a firm will destroy that value.

10. Strategy formulation is critical because strategies provide direction for

 the organization, so they can play a role in the success or failure of a

 business organization.

11. Functional strategies and supply chain strategies need to be aligned

 with the goal and strategies of the overall organization.

12. The primary business strategies are either stand-alone or combined; low

 cost, service, differentiation, and responsiveness

13. Productivity is a key factor in the cost of goods and services and in

 production location decisions.

14. All business organization have, and are part of, a supply chain that

 must be managed.

15. Managers will never have perfect information. It is too expensive and

 time consuming to do that.

16. There are three decision making environments: with certainty (typically,

 in the past), with risk, and with uncertainty.

17. The agency problem has the potential to destroy the organizational

 value.

18.The world business environment is now being transformed back to a

 single country based and away from the globalized model.

19 All processes should be modeled, simulated before they are

 implemented.

 20. Shooting from a hip is of no value.

**Key Definitions:**

1. **Fiduciary responsibility of management** is to create value for owners (shareholders).
2. **Value creation process:** a process that links the financial, risk based, return requirements to the financial outcomes resulting from the managerial decision making of an organization.
3. **Cashflow:** the only thing that matters is the free cash flow.
4. **Managerial challenge:** how to simultaneously achieve; owners’

 satisfaction, employee satisfaction, and consumer satisfaction.

1. **Globalization:** the process of offshoring production and accessing new markets for goods or services.
2. **De-globalization:** trend to operate from a single country “home base” and contraction of global supply chains.
3. **Trade agreements:** agreements aimed at reduction barriers to international trade such as tariffs and quotas between countries. These arrangements are arbitrated by the World Trade Organization.
4. **Process:** any activity or group of activities that takes one or more inputs, transforms them, and provides one or more outputs for its customers.
5. **Operations management:** the systematic design, direction, and control of processes that transform inputs into services and products for internal, as well as external customers. Operations management: the management of systems or processes that create goods and or provide services.
6. **External customers:** a customer who is either an end user or an intermediary (i.e. manufacturers, financial institutions, or retailers) buying the firms finished services or products.
7. **Internal customers:** one or more employees or processes that rely on inputs from other employees or processes in order to perform their work.
8. **External suppliers:** the businesses or individuals who provide the resources, services, products, and materials for the firm’s short-term and long term-needs.
9. **Internal suppliers:** the employees or processes that supply important information or materials to a firm’s processes.
10. **Core process:** a chain of activities that delivers value to external customers.
11. **Core competencies:** the special attributes or abilities that give an organization a competitive edge.
12. **Support process:** a process that provides vital resources and inputs to the core processes and therefore is essential to the management of the business.
13. **Productivity:** The value of outputs (services and products) produced divided by the values of input resources (wages, costs of equipment, etc.). A measure of the effective use of resources, usually expressed as the ratio of outputs to inputs.
14. **Break-even quantity:** the volume at which total revenue equal total cost.
15. **Break-even analysis:** the use of the break-even quantity; can be used to compare processes by finding the volume at which two different processes have equal total costs.
16. **Variable cost:** the portion of the total cost that varies directly with volume of output.
17. **Fixed costs:** the portion of the total cost that remains constant regardless of changes in levels of output.
18. **Sensitivity analysis:** a technique for systematically changing parameters in a model to determine the effects of such changes.
19. **Decision theory:** a general approach to decision making when the outcomes associated with alternatives are often in doubt.
20. **Payoff table:** a table that shows the amount for each alternative if each possible event occurs.
21. **Decision tree:** a systematic model of alternatives available to the decision maker, along with their possible consequences.
22. **Decision making under certainty:** when the manage knows which outcome will occur. Here the decision rule is to pick the alternative with the best payoff for the known event.
23. **Decision making under uncertainty:** Here, the manager can list the possible outcomes but cannot estimate their probabilities.
24. **Decision making under risk:** when the manager can identify potential outcomes and can estimate their probabilities.
25. **Agency problem:** making managerial decisions for personal not organizational benefit.
26. **Operations strategy:** the means by which operations implements the firm’s corporate strategy. The approach, consistent with the organizational strategy, that is used to guide the operations function.
27. **Core competencies:** the unique resources and strengths that an organization’s management considers when formulating strategy.
28. **Competitive capabilities:** the cost, quality, time, and flexibility dimensions that a process or value chain possesses and can deliver.
29. **Competitiveness:** how effectively an organization meets the wants and needs of customers relative to others that offer similar goods or services.
30. **Quality based strategy:** strategy that focuses on quality in all phases of an organization.
31. **Low cost strategies:** strategies that focus on reducing costs by focusing on low variation on product or service, standardized, continuous workflow and tight control of inventory.
32. **Time-based competition:** a strategy that focuses on the competitive priorities of delivery speed and development speed.
33. **Customization:** satisfying the unique needs of each customer by changing service or product designs.
34. **Supply chain:** a sequence of organizations-their facilities, functions, and activities-that are involved in producing and delivering a product or service.
35. **Value added:** the difference between the cost of inputs and the value or price of outputs.
36. **Model:** an abstraction of reality: a simplified representation of something.
37. **System:** a set of interrelated parts that must work together.
38. **Mass production:** system in which low skilled workers use specialized machinery to produce high volumes of standardized goods.
39. **Craft production:** System in which highly skilled workers use simple, flexible tools to produce small quantities of customized goods.
40. **Sustainability:** Using resources in ways that do not harm ecological systems that support human existence.
41. **Ethical framework:** a sequence of steps intended to guide thinking and subsequent decision or action.
42. **The “Fair Trade Certified”:** a process that guarantees to consumers that strict economic, social, and environmental criteria were met in the production and trade of an agricultural product.
43. **Outsourcing:** buying goods or services instead of producing or providing them in-house.
44. **Offshoring**: sourcing goods or services from vendors in other countries.
45. **Ethics**: In making decisions, managers must consider how their decisions will affect shareholders, management, employees, its, the community at large, and the environment.
46. **Externalities**: either benefits or costs accrued to non-participating third party. For example: pollution, traffic (negative externalities), or education (positive externalities).