Productivity

One of the primary responsibilities of a manager is to achieve “productive use” of an organization’s resources. The Term Productivity is to describe this. Productivity is an Index that measures output relative to the input used to produce them productivity is defined as a measure of how well an operations system functions and indicator of the efficiency and competitiveness of a single firm or department. Productivity in economics is the ratio of what is produced to what is required to produce. Productivity is the measure on production efficiency.

Productivity model is a measurement method which is used in practice for measuring productivity. Productivity model must be able to solve the formula Output / Input when there are many different outputs and inputs. So, Productivity is usually **expressed** as the **ratio** of output to input.

Productivity= output/input

A Company can be divided into sub-processes in different ways; yet, the following five are identified as main processes, each with a logic, objectives, and theory and key figures of its own. It is important to examine each of them individually, yet, as a part of the whole, in order to be able to measure and understand them. The main processes of a company are as follows

- monetary process
- market value process
- real process
- income distribution process
- production process

Productivity is created in the real process, productivity **gains** are distributed in the income distribution process and these two processes constitute the production process. The production process and its sub-processes, the real process and income distribution process **occur simultaneously**, and only the production process is **identifiable** and measurable by the traditional accounting practices. The real process and income distribution process can be identified and measured by extra calculation, and this is why they need to be analyzed separately in order to understand the **logic** of production performance.

Real process generates the production output from input, and it can be described by means of the production function. It refers to a series of events in production in which production inputs of different quality and quantity are combined into products of different quality and quantity. Products can be physical goods, **immaterial** services and most often

combinations of both. The characteristics created into the product by the manufacturer imply surplus value to the consumer, and on the basis of the price this value is shared by the consumer and the producer in the marketplace. This is the mechanism through which **surplus** value originates to the consumer and the producer likewise. Surplus value to the producer is a result of the real process, and measured **proportionally** it means productivity.

Income distribution process of the production refers to a series of events in which the unit prices of constant-quality products and inputs alter causing a change in income distribution among those **participating** in the **exchange**. The **magnitude** of the change in income distribution is directly **proportionate** to the change in prices of the output and inputs and to their quantities. Productivity gains are distributed, for example, to customers as lower product sales prices or to staff as higher income pay. Davis has deliberated the phenomenon of productivity, measurement of productivity, distribution of productivity gains, and how to measure such gains. He refers to an article suggesting that the measurement of productivity shall be developed so that it will indicate increases or decreases in the productivity of the company and also the distribution of the 'fruits of production' among all parties at interest".

According to Davis, the price system is a mechanism through which productivity gains are distributed, and besides the business enterprise, receiving parties may consist of its customers, staff and the suppliers of production inputs. In this article, the concept of distribution of the fruits of production by Davis is simply referred to as production income distribution or shorter still as distribution.

The production process consists of the real process and the income distribution process. A result and a criterion of success of the production process is profitability. The profitability of production is the share of the real process result the producer has been able to keep to himself in the income distribution process. Factors describing the production process are the components of profitability, i.e., returns and costs. They differ from the factors of the real process in that the components of profitability are given at nominal prices whereas in the real process the factors are at periodically fixed prices.

Monetary process refers to events related to financing the business. Market value process refers to a series of events in which investors determine the market value of the company in the investment markets.

Productivity ratios:

Productivity ratios are used for planning **workforce** requirement, **scheduling** equipment, financial Analysis, and other important tasks.

Productivity has important **implications** for business organizations and for **entire** nations. For nonprofit organizations, higher productivity means lower costs. For profit-based organization, productivity is an important factor in **determining** how competitive a company is.

For a nation, the rate of productivity growth is a great importance. Productivity growth is the increase in productivity from one **period** to the next relative to the productivity in the **preceding** period. Productivity growth is a key factor in a country's rate of **inflation** and the **standard of living** of its people productivity growth is a major factor in the long period of **sustained** economic growth. Productivity increases add value to the economy while keeping inflation in check.

Productivity measures are useful on a number of levels. For an **individual** department or organization, productivity measures can be used to **track** performance. This allows managers to judge performance and to decide where improvements are needed. Productivity measures also can be used to judge the performance of an entire industry or the productivity of a country as a whole.

These are **aggregate** measures. Therefore productivity measurement serves as **scorecards** of effective use of resources. Productivity relates to competitiveness.

If two firms both have the same level of output but one requires less input because of higher productivity, that one will be able to **charge** a lower price and **consequently** increase its share of the market.

Service productivity is more **problematic** than manufacturing productivity. In many situations, ct is more difficult to measure, and thus to manage. Because it involves **intellectual** activities and a high degree of **variability** a useful measure closely related to productivity is process **yield.**

Main Factors affect productivity include standardizing, Quality differences, New workers, **safety** , **shortage** of IT , **Layoffs** , labor **turnover** **Incentives** and **rewards.**

Don't **confuse** productivity with efficiency. Efficiency is a **narrow** concept that **pertains to** getting the most out of a fixed **set** of resources. Productivity is a **broader** concept that pertains to effective use of overall resources.

According to the passage choose the best answer to the following multiple choice Questions:

1. **Which formula correctly describes productivity?**

1) $\frac{\text{Output – input}}{\text{Out put}}$ 2) $\frac{\text{output}}{\text{input}}$

3) $\frac{\text{Input}}{\text{Output}}$ 4) $\frac{\text{input – out}}{\text{input}}$

2. **If Input decrease while out puts remains constant. What will happen to productivity?**

1) It will increase
2) It will decrease
3) It will remain the same
4) It depends on which input decrease

3. **………….. Is a broader concept than ……..**

1) Productivity – efficiency
2) Productivity – scheduling
3) Efficiency – productivity
4) Efficiency – effectiveness

4. **Service productivity involves……….**

1) Intellectual activities.
2) A high degree of stability
3) A high degree of variability
4) 1, 3

5. **Aggregate measures can be used to judge the performance of……..**

1) An Individual department
2) An organization
3) An entire industry
4) A work shop