1.1 Introduction

In present scenario every industry is being challenged to perform efficiently. Amid the national and international competition an organization must aim for improving its product / service, quality, increase productivity, greater responsiveness to change in market demand and to maintenance. Excellence in operations in any business is a critical drive for success. The growth and progress of a firm depend on the accomplishment of adequate results in their operations In order to achieve good results, there is a basic need to accomplish two essential circumstances, i.e. to optimum utilize the available funds for the formation of its consequences and for achievement of consequences which fulfills the desires of the customers. (Potocan, 2006)\textsuperscript{14}

1.2 Operational Efficiency: A Bird View

The word ‘Operational Efficiency ‘consist of two words ‘Operations’ and ‘Efficiency’ thus in simple words, Operational Efficiency is a measure of task or a job. It is target of delivering superiority (product/service) to customers in the most efficient behavior. Resource consumption, production, distribution and inventory management are all common aspect of operational efficiency.
1.2.1 Operations

The word ‘operations’ means work on several elements which includes transforming of resource into desired goods, services or results and create deliver value to customer. Operations includes shorts term goal whose accomplishment progresses an organization towards achieving its planned goals. Two or more connected operations constitute a process.

According to Business Dictionary Operations means work or tasks consisting of one or more constituent or subtasks performed typically in one direction. Operations transforms resources into preferred goals, services or results and creates and convey worth to customers related to any operational activity form a process. Operations means different in fields in Logistics operation is divided into four groups dispensation, assessment, transport and handling. In HR, operations are associated with job or task performed by a worker or an employee to fulfill business needs.

1.2.2 Efficiency

Every business is associated with ‘Efficiency’. The concept of efficiency pertains to the cost of input for the output produced. The term can be described in various terms. To an engineer efficiency may relate to of input/output ratio or output of a machine while for a cost accountant it refers to reduction of cost. Generally, ‘efficiency’ means capacity to receive earnings through consumer satisfaction. Thus, ‘efficiency’ means different things to different people. In other words it can also describe the extent to which time, effort and cost is well used for intended
task. It represents how well a relevant action is performed. It relates with selecting the best course of action.

Efficiency is a measure of whether the right amount of resources has been used to deliver a process, service or activity. Efficiency is not only reducing cost, increasing profit, diversifying business and fulfilling other business objective but it also includes maintaining quality, providing services and retaining customers. “Performing tasks with reasonable effort ‘doing things the right way.” (Fraser, 1994) Similarly, U.N.E.S.C.O. observed, “An ability to perform well or to achieve a result without wasted resource, effort, time or money (using the smallest quantity of resources possible). Educational efficiency can be measured in physical terms (technical efficiency) or in terms of cost (economic efficiency).” (Fraser, 1994)

Efficiency is a measure of the resource used cost to achieve stated goals.

1.2.3 Types of Business Efficiency Goal

Efficiency has widely varying meaning in different discipline

1. Efficiency in Monetary terms

Common types of goals related to money. Including

- To earn revenue
- To increase net profit
- To increase sales

2. Efficiency to increase Product and Service quality

- Increase on time delivery
- Decrease defects
• Decrease variation in product
• Decrease unused inventory

3. Efficiency in of shorting in response and production
• Decrease lead time and waiting time
• Decrease distance
• Increase uptime
• Increase customer support system
• Decrease customer problem resolution time

4. Efficiency of individual employees and department
• Employees performance
• Employee retention
• Employees satisfaction
• Performance of department

1.2.4 Difference Between Efficiency and Effectiveness
The terms ‘Efficiency’ and ‘Effectiveness’ are very much confused and are used interchangeable. In general Efficiency is a measurable concept. Efficiency is a quantitative determined by ratio of output to input. Effectiveness is a non-quantitative concept concerned with achieving objectives. Efficiency is viewed in terms of how an organization uses available resources to achieve organizational objectives. Effectiveness is ability to find those factor which help in achieving objectives.
According to Business Dictionary ‘Efficiency is the scale to which goals are achieved to the degree for which designed evils are solved’. Whereas, effectiveness is determined without reference to cost. Efficiency defines “doing the things right” whereas effectiveness means “doing the right things”. It is used to determines invested practices for the accomplishment of the business organization’s objectives and effectiveness. It is used to evaluate results and outcomes affected by the structure in the business environment.

1.3 Introduction of Operational Efficiency

Operational efficiency is the foundations of all business. It is referred to how efficiently various business operations are carried out. It is comparison between inputs and output result of a company. The input applied by a company is cost, people, time and work. Output results are production, service and quality. The maximum output received from the applied inputs is the operating potency of a business organisation. Generally, it minimizes loss and maximizes capability of resources in order to maintain quality product and service to customer. It discovers losable processes and resources that drain company’s profit. It helps in design new work processes that improve quality and production. Operational efficiency has a direct impact on profit margin of a company. Operational Efficiency is a critical drive for business Excellency. It is systematic management of resource of the company to achieve maximum results. Operating efficiently means implementing system that is appropriate and cost effective. These decisions about company will
have long term effect on quality and profitability. To remain competitive a company must boost operational efficiency wherever possible. Thus,

*Operational efficiency is defined as the ratio between the input to run a business operation and output gained from the business.*

In the above definition, inputs include money, people and time and output includes money, revenue and margin.

### 1.4 Objectives of Operational Efficiency

The objective related to operational efficiency are immediate goals whose attainment brings a firm closer to its desired or long term goals. They specify a comprehensible and quantifiable outcome of a business operation or process to achieve over a given period of time. They are generally used the perspective of strategic management and operational planning.

Operational goals or objectives specify tasks that need to be incrementally fulfill in order to fulfill long term organizational goal. Operational objectives are flexible or adaptable to changing environment. There are several factors influencing the operational objectives both interior and exterior. The internal factor constitutes issues related to human resource and market. The external issues include competitor efficiency, legal and environmental changes. The main aims / objectives of operational efficiency are as follows:

1. **Cost Efficient**

   A business needs to ensure that operations are cost effective. Operational efficiency minimizes waste and maximum utilization of resources to deliver
product cost effectively. Similar type of business faces parallel cost structure but various in term of productive effectiveness and scales of creation. The lowest unit cost is in good position to compete by offering lowest prices and make highest profit margin.

2. **Quality**

Quality is one of the most important challenges faced by a business. Market is more demanding and knowledgeable. Customers are more aware to complain about the meager quality. If a company develops goodwill for soaring quality then it is able to manage a merit over its competitors. Thus, quality is one of most important objective of operational efficiency in any business organisation.

3. **Flexibility and Efficiency**

Operational Efficiency also depends how efficiently the assets of a business are being utilized. Flexibility in operations is also very important objective. Flexibility in business operations in accordance to market change and customer demand is very important.

4. **Environmental Target**

Every business has certain responsibility towards environment. A business organisation should improve the environment by way of business and expand environmental business. It should pursue energy conservation in logistics. It should aim at reducing adverse impact of its business on environment.
1.5 Importance of Operational Efficiency

The main importance of operational efficiency is explained as follows:

1. **Determination of Working Capital requirement**

   A business organisation with a better operational efficiency has to invest less in working capital because they convert raw material quickly into finished goods and sell them as earliest as possible i.e. convert stocks into sales.

2. **Cost Diminution**

   Operational efficiency helps in cost reduction. Operational efficiency describes the extent to which time, effort and cost is used to achieve goal.

3. **Strategic Assessment**

   A successful business strategy always relay on the operational efficiency of that company. Operational Efficiency is the execution of strategy.

4. **Eliminating waste**

   A key component of operational efficiency is leaned which means avoiding waste by keeping the system functional as efficiently as possible. Employees must strive to ensure that the part of the system they are responsible for not wasting resources.

1.6 Tools of Operational Efficiency

There are various tools which are used for analyzing operational efficiency of firm. “Financial Statements refers to statements that show the financial position and results of business activities at the end of the accounting period”. (Agarwal, 2013) These statements provide a summary of accounts of operations of a firm. A
complete set of financial statements are the basic tools of Operational Efficiency. “Financial Statement is a compilation of financial and accounting data, which is logically and consistently organized according to some generally, accepted accounting principle.” (Arora M. N., 2014) They help in determining the gross and net profit of the business carried on during a certain period. They also reveal the financial status at the end of that time. These statements are major tools through which an enterprises presents its financial performance and financial condition to various interested parties like shareholders, creditor, bankers, managers and investors. (Anthony, 2007) These statements present the financial effects of transactions and other events by grouping them into broad classes or elements.

Thus, “The Financial Statements provides a summary of accounts of a business enterprises , the Balance Sheet reflecting the assets, liabilities and capital as on a certain date and income statement showing the results and operations during a certain period” (Kishore, 2012) Followings are the main tools of operational efficiency:

1. **Balance Sheet**

A balance sheet is a declaration of assets, liabilities and shareholder’s equity at a specific period. It helps in determining the present position of a business organisation. It is also known as situation statement. A balance sheet is a major economic statement used by accountants and business owner in determining assets, liabilities, capital reserves and the balances of other accounts of their respective
book values. It is monitor picture of the economic position of a running business organisation at a specific time. Balance Sheet is a statement of financial position therefore it contains asset, liabilities and owner’s equity. Balance Sheet can be arranged either in horizontal account or vertical report form. Published financial statements are prepared either in horizontal account / vertical pattern.

2. **Profit and Loss Accounts**

The profit and loss account is an economic declaration which shows incomes, cost and expenses of a business organisation during a specific time and defines the excess of revenues over expenses (vice versa). *(Tailor, Financial Accounting, 2012)*

A Profit and Loss account shows the net resulting of business operations during an accounting period. In this account, income of a financial period is coordinated with the expenses sustained in income and the difference between incomes and expenses is termed as profit or loss. *(Anthony, 2007)* Thus, profit and loss depicts the outline of revenues, costs and net profit or loss of a business entity for a certain time. It is also called Income Statement.

3. **Cash Flow Statement**

Cash flow statement shows the movement of cash of a firm for a specific financial period showing how cash is generating and how cash was used. Thus, a cash flow statement is a statement of inflow (sources) and outflow (uses) of cash and cash equivalent in a business organisation during a period of time. *(Guthman, 2009)*

This statement reveals the net effect of operating, investing and financing activities of enterprises during a period on cash. Followings are the main components of these:
Cash does not include only cash in hand but it also comprises demand with bank;

Cash equivalent is short term highly liquid investment that readily convertible like treasury bills, commercial papers, deposits certificates; and

4. **Statement of Retained Earnings**

The term retained earnings means the accumulated excess of earnings over losses and dividends. The statement of retained earnings explains the change in a business organisation retained earnings, over the reporting period. The change is break down changes in the owners interest in organizing in the application of retained profit or surplus from one account period to next.

1.7 **Devices of Operational Efficiency**

There are various devices for determining operational efficiency of business enterprises. These devices are employed to examine horizontal and vertical relationship of different financial variables with the view to study profitability and operational efficiency of a business. There are number of devices used by a financial analyst in analyzing the operational efficiency of a business organization. Some of the operational efficiency devices are as follows:

1. **Comparative Financial Statements**

Financial statements are those statements which summaries, define and shows related accounting information for a particular years incorporating in that the variations in individual items. (*Jain D., 2013*) The statements the financial data for two or more years are shows in adjoining column to facilitate periodic
comparison. These statements are designed to disclose absolute figure. The aim of this statement is to determine the changes occurring yearly basis of each item of assets and liabilities of a business firm. (Jan R. Williams, 2004)\(^9\) These statements provide necessary information for study of financial and operational efficiency. The comparative financial statement are designed to disclose; absolute figure (in rupee amount); increase or decrease in change in absolute figures; absolute data in terms of percentage and increase or decrease in terms of percentages. (R, 2014)\(^{15}\)

**Advantages of Comparative Financial Statements**

Followings are the main advantages of comparative financial statements:

a) **Easy Evaluation:** Comparative financial statement discloses trends in sales, production cost and profits through which the financial situation, efficiency and performance of a business organisation can easily be evaluated. (Lal, 2013)\(^{11}\) Increase in profits along with increase in sales is a good sign healthy development.

b) **Comparative Evaluation:** In these statements figures of two or more periods are placed side by side; hence inter period comparison of various items become easy.

c) **Identifies Weaknesses:** With the help of comparative statements, weaknesses in the operating cycle, finance health etc can easily be identified and suitable remedial steps may be taken.
(a) **Comparative Balance Sheet**

A comparative balance sheet is the revision of the movement in the contented items, groups of items and computed items in two or more balance sheet of the similar type of business on different dates. (Mitra, 2009)\(^\text{12}\) In such balance sheet the items and figures are presented in such a way that the changes in each item between two or more dates are easily determined. This comparative study of balance sheet helps in determines financial status and operational efficiency of an enterprise.

(b) **Comparative Income Statement**

This statement reveals net profit or net loss on account of business operations in a particular time period. This statement will define the supreme figures for two or more periods, the supreme change from one period to another and, if preferred, the change in terms of percentages. (Bhatia, 2013)\(^\text{5}\) Thus, only interpretation of data included in this will be supportive in deriving consequential results.

2. **Common-size Financial Statements**

These statements shows the financial information’s in the profile of perpendicular percentage of financial statement of a business organisation. All figures are transformed to a common component by expressing them as a percentage of a key figure. (Kishore, 2012)\(^\text{10}\) The total of financial statement is reduced to 100 and each item is shown as percentage of total assets and total liabilities. These are
those statements which are designed in a way to provide time perspective to the consideration of various elements of financial position. *(Bhatia, 2013)*

### 3. Ratio Analysis

Ratio analysis is also a method of influential and shows relationship between figures drawn from financial statement. The ratio analysis is an excellent finding analysis tools for influential the financial position of a business. *(Arora M., 2012)* It presents the information from financial statement viewpoint helping to blemish that may intimidate the business organisation. For several successive years, how the position of the company’s ratio with the average of the businesses similar to their organization or within industry averages. This serves as a benchmarking exercise in making useful comparison of the company overtime. The relationship presented by ratio analysis may be of two type, associate relationship and cause/effect relationship. In accounting ratio analysis is defined as real test of earning capacity, financial accuracy and operating efficiency of business organisation. Various ratios like inventory turnover ratio, total assets turnover ratio, current asset turnover ratio and working capital turnover ratio helps in determining operating efficiency of a business organisation.

### 4. Trend Analysis

It is the method of analyzing financial potency of a firm on the basis of changes in the items of financial position of successive years in comparison to a specific date. The method of investigation is immensely helpful in making comparative study of financial statement of several years’. With help of trend analysis we can estimate
the future values and uncertain events in the past. It involves calculation of proportion change in these items for a number of consecutive years. (Vig, 2010)

It is used to manage by the two steps selection of base year and expression of the financial information. This calculation includes of dividing an item such as sales in the years after the base year by the amount of sales in the base year.

5. **Working Capital Analysis**

A business needs funds for its operational activities and invests it into the long term as well short term operations. The portion of long-term capital required for minimum stock of raw material to maintain continuity in production, minimum stock of raw material to maintain continuity in production minimum stock of finished. In order words, it is a defined proportion of capital which is needed for managing short-term or current assets. Hence, working capital is also known as ‘circulating or short term capital.

1.8 **Measuring Operational Efficiency**

Fundamental analysis is used to determine if a company is a good. With the help of data obtained from income statement and cash flow statement various ratios are calculated ratios. These ratios are used to determine a company’s work and its potential for growth.

1. **Operating Ratio**

This ratio is known as the production and administrative expenses ratio to net sales. In calculation of this ratio, non-operating cost and taxes are excluded. The
lesser ratio is a high-quality marker of operational efficiency. Operating ratio is determined by following formula:

\[
\text{Operating Ratio} = \frac{\text{Production Expenses} + \text{Administration Expenses}}{\text{Net Sales}}
\]

Where, Production Cost = cost of goods sold

Administrative Cost = general administrative and selling expenses

Net Sales = gross sales less sales discount, returns and allowances

2. **Revenue Margin Ratio**

The revenue margin is a ratio which is designed to fulfill the financial position of a business organisation. It is the ratio of profits earned to total sales receipts over some specific time period. This ratio is a measure of the amount of profit earning capacity to a business organisation from the sale of a product or service. It shows an indication of efficiency and it captures the amount of surplus generated per unit of the product or service sold. Following formula is used to calculate revenue margin ratio:

\[
\text{Net Profit Margin Ratio} = \frac{\text{Net Profit}}{\text{Revenue}}
\]

Where, net profit is (revenue - cost)
1.9 Limitations Of Operational Efficiency

Followings are the main limitations of operational efficiency:

1. **Not applicable for non-quantifiable factors**

There are many non-quantifiable factors which affects the efficiency of the firms. This factor such as manager’s skills and knowledge, support labor union, availability of naturally resources etc affects the efficiency of a firm.

2. **Applicable to repetitive operations**

This is a practical approach when applied to repetitive operation which could be systematic to highly repetitive.

3. **Effect of accounting concepts and conventions**

Various concepts and convections of accounting affects the values do assets and liabilities in the Balance Sheet. Similarly, Profit and Loss Account is also affected by these concept and convections.

4. **Effect of a personal judgments**

The financial statements are influenced to certain extent by personal judgments of accountant. For example an accountant has to make a decision about the method and rate of depreciation. There are numerous instances when an accountant has to exercise his personal judgment. Thus, the calculation of operational efficiency
depends upon the competence and integrity of those who responsible for preparing these account.

5. Ignores Human resources

No business can prosper without efficient work force. These human efforts greatly affect the operational efficiency of a firm. It is difficult to measure exact effect of human resource on operational efficiency of a firm.

6. Ignore Social Cost

Apart from earning profit a business has certain responsibilities. financial statement does not make any attempt to show.
References


6. Fraser. (1994), Quality in higher education an international perspective in Green D.


