



# MET MANAGEMENT RETROSPECT

... A Refereed Biannual Management Research Journal

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01	<b>A Study on Seven Quality Control Tools &amp; Its Effects On Productivity, Quality &amp; Cost</b> Dr. Deepak T. Khairnar, Mr. S. V. Bachhav
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06	<b>Review on Role of Management Information Systems in Decision Making</b> Mr. Nitin S Bhand, Dr. Avinash Ganbote

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न चौर हार्यम् नच राज हार्यम् ।  
न भातृभाज्यम् नच भारकरी ॥  
व्यये कृते वर्धते एव नित्यम् ।  
विद्याधनं सर्वधन प्रधानम् ॥

Knowledge can neither be stolen by a thief,  
nor snatched by king.  
It is indivisible unlike ancestral property,  
It never burdens the bearer,  
It multiplies manifold when offered to others.  
Knowledge is the supreme form of wealth.

विद्ये विना मती गेली, मती विना नीती गेली,  
नीती विना गती गेली, गती विना वित्त खचले,  
इतके अनर्थ एका अविद्येने केले  
- महात्मा ज्योतिराव फुले

Lack of knowledge leads to indiscretion;  
Indiscretion leads to lack of ethics  
Lack of ethics leads to absence of direction and momentum;  
Absence of direction and momentum results in bankruptcy;  
Such is the HAVOC caused by the lack of knowledge.  
- Mahatma Jyotiba Phule

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a complete talented professional Manager.

The editors and editorial board with great pleasure place before the readers the new issue of MET Management Retrospect, a refereed bi-annual management research journal. The research contributions by the scholars have made the journal enrich. The journal has diversified areas covered under its ambit giving maximum option for the research scholars. We thank all the authors and editors for their contribution.

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## “A Study on Seven Quality Control Tools & Its Effects On Productivity, Quality & Cost”

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### ABSTRACT

The 7 QC tools is a designation given to a fixed set of graphical techniques which helps in troubleshooting the issues related to quality. These tools are basic because they are suitable for people with little formal training in statistics and used to solve the majority of quality related issues. The 7 QC tools are Pareto Diagram, Cause & Effect Diagram, Histogram, Control Charts, Scatter Diagrams, Graphs and Check Sheets and Stratification (flow chart). Now a days because of tough competition, global market demands world class product which is a balance mixer of different global aspects such as quality, quantity, price, service etc. world class product is demand of global sustainability path for globalization with sound industrial growth which addresses important issues at the macro level such as economic efficiency, (innovation, prosperity , productivity), social equity-( poverty, community ,health & wellness, human rights) and environmental accountability –(climate change , land use and bio-diversity). Hence 7 QC tools are widely accepted to be a key factor in making organization to produce cost effective product with desired level of quality and productivity.

**Keywords:** 7 QC, Globalization, global sustainability, economic efficiency, productivity.

### INTRODUCTION

The 7 QC Tools are simple statistical tools used for problem solving. These tools were either developed in Japan by the Quality Gurus such as Deming, Juran, Kaoru Ishikawa. Kaoru Ishikawa has stated that these 7 tools can be used to solve 95 percent of all problems. These tools have been the foundation of Japan's astonishing industrial resurgence after the Second World War. Seven QC tools used are Pareto Diagram, Cause & Effect Diagram, Histogram, Control Charts, Scatter Diagrams, Graphs and Check Sheets are very important for solving quality problems. All these tools are widely used at manufacturing field to monitor the overall operation and continuous process improvement. These tools are used

to find out root causes and eliminates them, thus the manufacturing process can be improved. Seven QC tools are fundamental instruments to improve the quality of the product. They are used to analyze the production process, identify the major problems, control fluctuations of product quality, and provide solutions to avoid future defects. Statistical literacy is necessary to effectively use the seven QC tools. These tools use statistical techniques and knowledge to accumulate data and analyze them. Seven QC tools are utilized to organize the collected data in a way that is easy to understand and analyze.

### **Quality**

In manufacturing, a measure of excellence or a state of being free from defects, deficiencies and significant variations. It is brought about by strict and consistent commitment to certain standards that achieve uniformity of a product in order to satisfy specific customer requirements. ISO 8402-1986 standard defines quality as "the totality of features and characteristics of a product or service that bears its ability to satisfy stated or implied needs."

### **Quality Assurance**

Quality Assurance is defined as "All the planned and systematic activities implemented within the quality system that can be demonstrated to provide confidence that a product or service will full-fill requirements for quality". Quality Assurance is fundamentally focused on planning and documenting those processes to assure quality including things such as quality plans and inspection and test plans.

### **Quality Control:**

Quality Control is defined as "The operational techniques and activities used to fulfill requirements for quality". Quality Control on the other hand is the physical verification that the product conforms to these planned arrangements by inspection, measurement etc. Quality Control just measures and determines the quality level of products or services. It is a process itself.

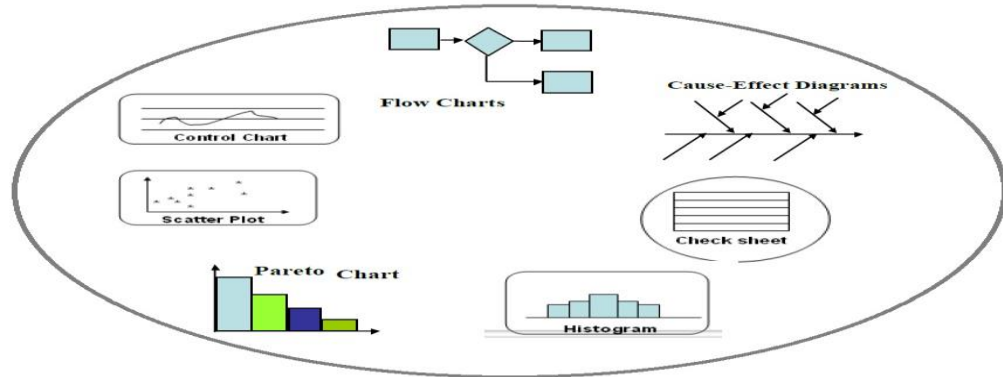


Fig.No-1

## OBJECTIVES

1. To study the Seven Quality Control tools.
2. To find out the importance & scope of Seven Quality Control tools.

## METHODOLOGY OF STUDY

The study focuses on extensive study of Secondary data collected from various books, National & international Journals, publications from various websites which focused on 7 Quality Control tools and its importance to the organization to produce the world class product to maintain the globalization sustainability in current scenario.

## IMPORTANCE OF QUALITY CONTROL TOOL

- 1. Encourages quality consciousness:** The most important advantage derived by introducing quality control is that it develops and encourages quality consciousness among the workers in the factory which is greatly helpful in achieving desired level of quality in the product.
- 2. Satisfaction of consumers:** Consumers are greatly benefited as they get better quality products on account of quality control. It gives them satisfaction.
- 3. Reduction in production cost:** By undertaking effective inspection and control over production processes and operations, production costs are considerably reduced. Quality control further checks the production of inferior products and wastages thereby bringing down the cost of production considerably.
- 4. Effective utilisation of resources:** Quality control ensures maximum utilisation of available resources thereby minimising wastage and inefficiency of every kind.

**5. Reduction in inspection costs:** Quality control brings about economies in inspection and considerably reduces cost of inspection.

**6. Increased goodwill:** By producing better quality products and satisfying customer's needs, quality control raises the goodwill of the concern in the minds of people. A reputed concern can easily raise finances from the market.

**7. Higher morale of employees:** An effective system of quality control is greatly helpful in increasing the morale of employees, and they feel that they are working in the concern producing better and higher quality products.

**8. Improved techniques and methods of production:** By supplying technical and engineering data for the product and manufacturing processes, improved methods and designs of production are ensured by quality control.

### **SCOPE OF 7QC TOOL**

The 7 Quality Control tools are used to identify, analyze and control the major problems exist in an organization. Which help organization to reduce or eliminate the waste of scrap. Also 7 Quality Control tools are used to Create SOP (Standard Operating Procedure) for kaizen improvement and it can be implement in the Small and Medium scale industry. Seven QC tools are utilized to organize the collected data in a way that is easy to understand and analyze. Moreover, from using the seven QC tools, any specific problems in a process are identified. This helps any organization to achieve the highest productivity along with the cost efficient product by maintaining desired quality.

### **SEVEN QUALITY CONTROL TOOLS**

The 7 QC tools are engineering quality tools. These tools are easy to learn and handle. Moreover, they are used to analyze the solution to an existing problem. They defined the 7 QC tools are the basic for all other tools. The descriptions of 7 QC tool as below.

**1. Fishbone Diagram:** It is also called as Cause-and-Effect Diagram or Ishikawa Diagram.

The fishbone diagram identifies many possible causes for an effect or problem. It can be used to structure a brainstorming session. It immediately sorts ideas into useful categories.

**A Fishbone Diagram is used:**

- When identifying possible causes for problems.



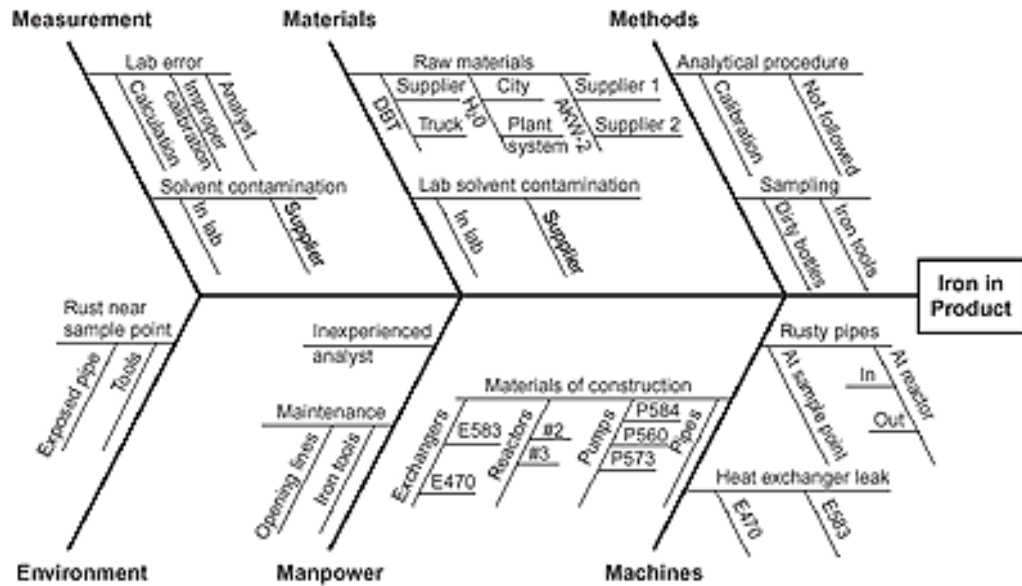
- Especially when a team's thinking tends to fall into ruts.

**The Fishbone Diagram Procedure is as follows:**

1. Agree on a problem statement (effect). Write it at the center right of the flipchart or whiteboard. Draw a box around it and draw a horizontal arrow running to it.
2. Brainstorm the major categories of causes of the problem.
  - o Methods
  - o Machines (equipment)
  - o People (manpower)
  - o Materials
  - o Measurement
  - o Environment
3. Write the categories of causes as branches from the main arrow.
4. Brainstorm all the possible causes of the problem. Ask: "Why does this happen?" As each idea is given, the facilitator writes it as a branch from the appropriate category. Causes can be written in several places if they relate to several categories.
5. Again ask "why does this happen?" about each cause. Write sub-causes branching off the causes. Continue to ask "Why?" and generate deeper levels of causes. Layers of branches indicate causal relationships.
6. When the group runs out of ideas, focus attention to places on the chart where ideas are few.

**Example:**

This fishbone diagram was drawn by a manufacturing team to try to understand the source of periodic iron contamination. The team used the six generic headings to prompt ideas. Layers of branches show thorough thinking about the causes of the problem.



**Fig.No-2**

Under the heading “Machines,” the idea “materials of construction” shows four kinds of equipment and then several specific machine numbers. Note that some ideas appear in two different places. “Calibration” shows up under “Methods” as a factor in the analytical procedure, and also under “Measurement” as a cause of lab error. “Iron tools” can be considered a “Methods” problem when taking samples or a “Manpower” problem with maintenance personnel.

**2. Check Sheet:** It is also called as defect concentration diagram

A check sheet is a structured, prepared form for collecting and analysing data. This is a generic tool that can be adapted for a wide variety of purposes.

**A Check Sheet is used:**

- When data can be observed and collected repeatedly by the same person or at the same location.
- When collecting data on the frequency or patterns of events, problems, defects, defect location, defect causes, etc.
- When collecting data from a production process.

**A Check Sheet Procedure is as follows:**

1. Decide what event or problem will be observed. Develop operational definitions.

2. Decide when data will be collected and for how long.
3. Design the form. Set it up so that data can be recorded simply by making check marks or Xs or similar symbols and so that data do not have to be recopied for analysis.
4. Label all spaces on the form.
5. Test the check sheet for a short trial period to be sure it collects the appropriate data and is easy to use.
6. Each time the targeted event or problem occurs, record data on the check sheet.

### Example:

The figure below shows a check sheet used to collect data on telephone interruptions. The tick marks were added as data was collected over several weeks.

**Telephone Interruptions**

Reason	Day					Total
	Mon	Tues	Wed	Thurs	Fri	
Wrong number	+++			+++	+++	20
Info request						10
Boss	+++		+++			19
Total	12	6	10	8	13	49

**Table No-1**

### 3. Control Chart: It is also called as Statistical process control

The control chart is a graph used to study how a process changes over time. Data are plotted in time order. A control chart always has a central line for the average, an upper line for the upper control limit and a lower line for the lower control limit. These lines are determined from historical data. By comparing current data to these lines, you can draw conclusions about whether the process variation is consistent (in control) or is unpredictable (out of control, affected by special causes of variation). Control charts for variable data are used in pairs. The top chart monitors the average, or the centering of the distribution of data from the process. The bottom chart monitors the range, or the width of the distribution. If your data were shots in target practice, the average is where the shots are clustering, and the range is how tightly they are clustered. Control charts for attribute data are used singly.

**Control Chart is used:**

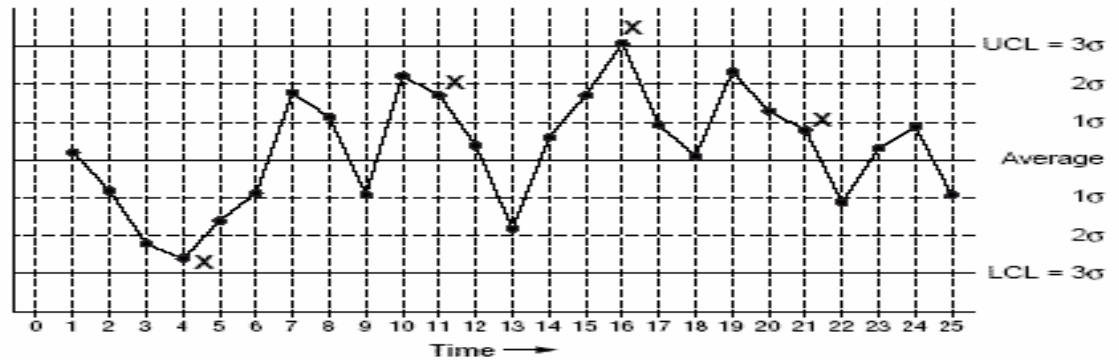
- When controlling ongoing processes by finding and correcting problems as they occur.
- When predicting the expected range of outcomes from a process.
- When determining whether a process is stable (in statistical control).
- When analyzing patterns of process variation from special causes (non-routine events) or common causes (built into the process).
- When determining whether your quality improvement project should aim to prevent specific problems or to make fundamental changes to the process.

**The Control Chart Basic Procedure is as follows:**

1. Choose the appropriate control chart for your data.
2. Determine the appropriate time period for collecting and plotting data.
3. Collect data, construct your chart and analyze the data.
4. Look for “out-of-control signals” on the control chart. When one is identified, mark it on the chart and investigate the cause. Document how you investigated, what you learned, the cause and how it was corrected.

**Out-of-control signals**

- A single point outside the control limits. In chart.no- 1, point sixteen is above the UCL (upper control limit).
- Two out of three successive points are on the same side of the centerline and farther than  $2\sigma$  from it. In chart.no- 1, point 4 sends that signal.
- Four out of five successive points are on the same side of the centerline and farther than  $1\sigma$  from it. In chart.no- 1, point 11 sends that signal.
- A run of eight in a row are on the same side of the centerline. Or 10 out of 11, 12 out of 14 or 16 out of 20. In chart.no- 1, point 21 is eighth in a row above the centerline.
- Obvious consistent or persistent patterns that suggest something unusual about your data and your process.



**Chart.no- 1**

5. Continue to plot data as they are generated. As each new data point is plotted, check for new out-of-control signals.
6. When you start a new control chart, the process may be out of control. If so, the control limits calculated from the first 20 points are conditional limits. When you have at least 20 sequential points from a period when the process is operating in control, recalculate control limits.

#### **4. Histogram:**

A frequency distribution shows how often each different value in a set of data occurs. A histogram is the most commonly used graph to show frequency distributions. It looks very much like a bar chart, but there are important differences between them.

#### **Histogram is used:**

- When the data are numerical.
- When you want to see the shape of the data's distribution, especially when determining whether the output of a process is distributed approximately normally.
- When analyzing whether a process can meet the customer's requirements.
- When analyzing what the output from a supplier's process looks like.
- When seeing whether a process change has occurred from one time period to another.
- When determining whether the outputs of two or more processes are different.
- When you wish to communicate the distribution of data quickly and easily to others.

#### **Histogram Construction is as follows:**

1. Collect at least 50 consecutive data points from a process.

2. Use the histogram worksheet to set up the histogram. It will help you determine the number of bars, the range of numbers that go into each bar and the labels for the bar edges.
3. Draw x- and y-axes on graph paper. Mark and label the y-axis for counting data values. Mark and label the x-axis from the worksheet. The spaces between these numbers will be the bars of the histogram. Do not allow for spaces between bars.
4. For each data point, mark off one count above the appropriate bar with an X or by shading that portion of the bar.

**Analysis of Histogram is as follows:**

- Before drawing any conclusions from your histogram, satisfy yourself that the process was operating normally during the time period being studied. If any unusual events affected the process during the time period of the histogram, your analysis of the histogram shape probably cannot be generalized to all time periods.
- Analyze the meaning of your histogram's shape.

**5. Pareto Chart:** It is also called as Pareto diagram or Pareto analysis Variation.

A Pareto chart is a bar graph. The lengths of the bars represent frequency or cost (time or money), and are arranged with longest bars on the left and the shortest to the right. In this way the chart visually depicts which situations are more significant.

**A Pareto Chart is used:**

- When analyzing data about the frequency of problems or causes in a process.
- When there are many problems or causes and you want to focus on the most significant.
- When analyzing broad causes by looking at their specific components.
- When communicating with others about your data.

**A Pareto Chart Procedure is as follows:**

1. Decide what categories you will use to group items.
2. Decide what measurement is appropriate. Common measurements are frequency, quantity, cost and time.
3. Decide what period of time the Pareto chart will cover: One work cycle? One full day? A week?

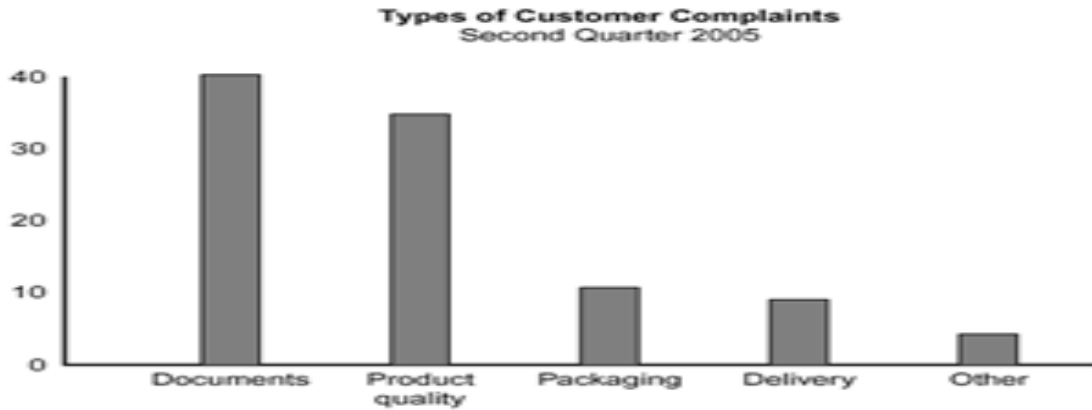
4. Collect the data, recording the category each time.
5. Subtotal the measurements for each category.
6. Determine the appropriate scale for the measurements you have collected. The maximum value will be the largest subtotal from step 5. (If you will do optional steps 8 and 9 below, the maximum value will be the sum of all subtotals from step 5.) Mark the scale on the left side of the chart.
7. Construct and label bars for each category. Place the tallest at the far left, then the next tallest to its right and so on. If there are many categories with small measurements, they can be grouped as “other.”  
Steps 8 and 9 are optional but are useful for analysis and communication.
8. Calculate the percentage for each category: the subtotal for that category divided by the total for all categories. Draw a right vertical axis and label it with percentages. Be sure the two scales match: For example, the left measurement that corresponds to one-half should be exactly opposite 50% on the right scale.
9. Calculate and draw cumulative sums: Add the subtotals for the first and second categories, and place a dot above the second bar indicating that sum. To that sum add the subtotal for the third category, and place a dot above the third bar for that new sum. Continue the process for all the bars. Connect the dots, starting at the top of the first bar. The last dot should reach 100 percent on the right scale.

**Examples:**

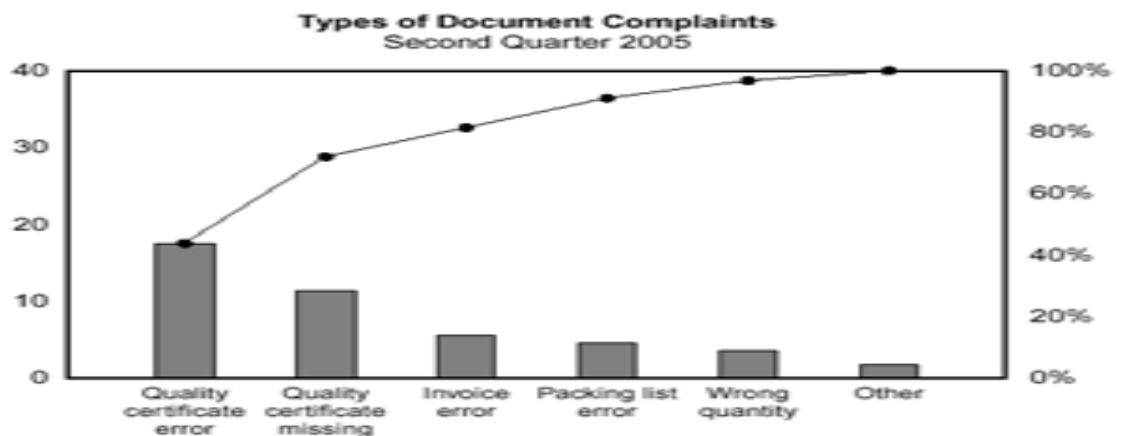
Graph.No-1 shows how many customer complaints were received in each of five categories.

Graph.No-2 takes the largest category, “documents,” from Graph.No-1, breaks it down into six categories of document-related complaints, and shows cumulative values.

If all complaints cause equal distress to the customer, working on eliminating document-related complaints would have the most impact, and of those, working on quality certificates should be most fruitful.



Graph. No-1



Graph.No-2

### 6. Scatter Diagram: It is also called as Scatter plot, X–Y graph

The scatter diagram graphs pairs of numerical data, with one variable on each axis, to look for a relationship between them. If the variables are correlated, the points will fall along a line or curve. The better the correlation, the tighter the points will hug the line.

#### A Scatter Diagram is used:

- When you have paired numerical data.
- When your dependent variable may have multiple values for each value of your independent variable.
- When trying to determine whether the two variables are related, such as...
  - When trying to identify potential root causes of problems.
  - After brainstorming causes and effects using a fishbone diagram, to determine objectively whether a particular cause and effect are related.



**A Scatter Diagram Procedure is as follows:**

1. Collect pairs of data where a relationship is suspected.
2. Draw a graph with the independent variable on the horizontal axis and the dependent variable on the vertical axis. For each pair of data, put a dot or a symbol where the x-axis value intersects the y-axis value. (If two dots fall together, put them side by side, touching, so that you can see both.)
3. Look at the pattern of points to see if a relationship is obvious. If the data clearly form a line or a curve, you may stop. The variables are correlated. You may wish to use regression or correlation analysis now. Otherwise, complete steps 4 through 7.
4. Divide points on the graph into four quadrants. If there are X points on the graph,
  - Count X/2 points from top to bottom and draw a horizontal line.
  - Count X/2 points from left to right and draw a vertical line.
  - If number of points is odd, draw the line through the middle point.
5. Count the points in each quadrant. Do not count points on a line.
6. Add the diagonally opposite quadrants. Find the smaller sum and the total of points in all quadrants.
 
$$A = \text{points in upper left} + \text{points in lower right}$$

$$B = \text{points in upper right} + \text{points in lower left}$$

$$Q = \text{the smaller of A and B}$$

$$N = A + B$$
7. Look up the limit for N on the trend test table.

- If Q is less than the limit, the two variables are related. If Q is greater than or equal to the limit, the pattern could have occurred from random chance.

**Table 5.18** Trend test table.

N	Limit	N	Limit
1-8	0	51-53	18
9-11	1	54-55	19
12-14	2	56-57	20
15-16	3	58-60	21
17-19	4	61-62	22
20-22	5	63-64	23
23-24	6	65-66	24
25-27	7	67-69	25
28-29	8	70-71	26
30-32	9	72-73	27
33-34	10	74-76	28
35-36	11	77-78	29
37-39	12	79-80	30
40-41	13	81-82	31
42-43	14	83-85	32
44-46	15	86-87	33
47-48	16	88-89	34
49-50	17	90	35

### Table.No-2

#### Example:

The ZZ-400 manufacturing team suspects a relationship between product purity (percent purity) and the amount of iron (measured in parts per million or ppm). Purity and iron are plotted against each other as a scatter diagram, as shown in the figure no-3.

There are 24 data points. Median lines are drawn so that 12 points fall on each side for both percent purity and ppm iron.

To test for a relationship, they calculate:

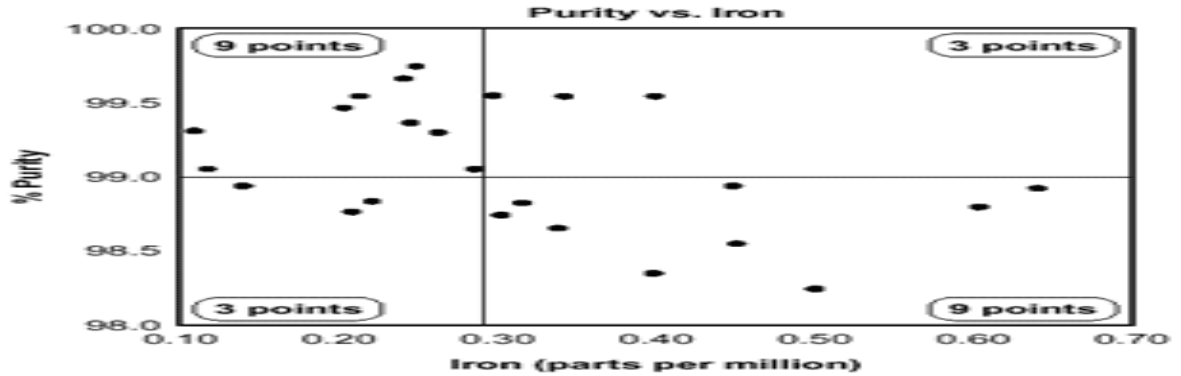
$$A = \text{points in upper left} + \text{points in lower right} = 9 + 9 = 18$$

$$B = \text{points in upper right} + \text{points in lower left} = 3 + 3 = 6$$

$$Q = \text{the smaller of } A \text{ and } B = \text{the smaller of } 18 \text{ and } 6 = 6$$

$$N = A + B = 18 + 6 = 24.$$

Then they look up the limit for N on the trend test table. For N = 24, the limit is 6. Q is equal to the limit. Therefore, the pattern could have occurred from random chance, and no relationship is demonstrated.



**Fig.No-3**

**7. Stratification:** It is also called as Flow chart.

Stratification is a technique used in combination with other data analysis tools. When data from a variety of sources or categories have been lumped together, the meaning of the data can be impossible to see. This technique separates the data so that patterns can be seen.

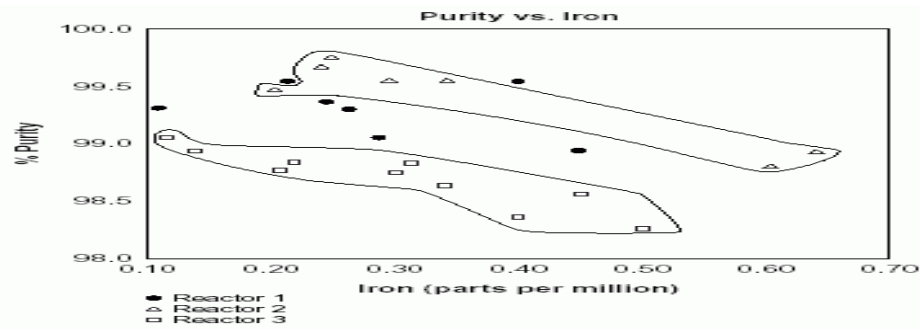
**Stratification is used:**

- Before collecting data.
- When data come from several sources or conditions, such as shifts, days of the week, suppliers or population groups.
- When data analysis may require separating different sources or conditions.

**Stratification Procedure is as follows:**

1. Before collecting data, consider which information about the sources of the data might have an effect on the results. Set up the data collection so that you collect that information as well.
2. When plotting or graphing the collected data on a scatter diagram, control chart, histogram or other analysis tool, use different marks or colors to distinguish data from various sources. Data that are distinguished in this way are said to be “stratified.”
3. Analyze the subsets of stratified data separately.

**Example:** The ZZ-400 manufacturing team drew a scatter diagram to test whether product purity and iron contamination were related, but the plot did not demonstrate a relationship. Then a team member realized that the data came from three different reactors. The team member redrew the diagram, using a different symbol for each reactor’s data:



Now patterns can be seen. The data from reactor 2 and reactor 3 are circled. Even without doing any calculations, it is clear that for those two reactors, purity decreases as iron increases. However, the data from reactor 1, the solid dots that are not circled, do not show that relationship. Something is different about reactor 1.

### CONCLUSION:

Seven QC tools are mainly concerned in making sure that several procedures and working arrangements are in place to provide for effective and efficient statistical processes, to minimize the risk of errors or weaknesses in procedures or systems or in source material. Now a day because of tough competition, global market demands world class product which is a balance mixer of different global aspects such as quality, quantity, price, service etc. So these Seven QC tools are most helpful in troubleshooting issues related to quality. All processes are affected by multiple factors and therefore statistical QC tools can be applied to any process. The continuous use of these tools upgrades the personnel characteristics of the people involved. It enhances their ability to think generate ideas, solve problem and do proper planning for time saving results in increase in productivity of product. 7 QC tools help to improve the organizations performance and the efficiency which will result in the improvement of productivity. These tools force the employee to achieve the target in particular time limit in good faith. 7 QC tools help to involvement of top level management to the employee which will increase the quality of work of the employees. This system includes whole organization and each department of the organization which is beneficial to achieve organization's vision and mission. Hence 7 QC tools are widely accepted to be a key factor in making organization to produce cost effective product with desired level of quality and productivity.

**REFERENCES:**

1. C.R. Kothari, Research Methodology; methods & Techniques, 2nd edition, New Age International (P) Ltd.
2. J M Juran and Frank Gryna, Quality Planning and Analysis ,McGraw-Hill Education (ISE Editions); 3<sup>rd</sup> edition (June 1993)
3. A V Fiegenbaum ,Total Quality Control,3 Rev Sub edition, McGraw-Hill Companies, (January 1, 1991).

**Website -**

1. [https://en.wikipedia.org/wiki/Seven\\_Basic\\_Tools](https://en.wikipedia.org/wiki/Seven_Basic_Tools)
2. <https://www.tutorialspoint.com>.

## “Green Marketing- A New Era of Marketing”

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### **Abstract**

The changing perception and attitude of the customers have enabled remarketing towards the environment for encouraging the innovation and packaging's of products to attain the sustainable development and conservation of the current market products to pursue the ecofriendliness towards the customers. Producers responded to the market by labeling N number of new products "Ecofriendly" i.e Environment Friendly by conveying that products are compostable, energy efficient or more likely biodegradable.

Additionally the boom in Green marketing has brought the new opportunities for many such companies to cobranded their products into separate product line; extol the ecofriendliness of some while ignoring the others. In spite of the fact that green marketing has the growing popularity it faced many setbacks in the late 80's because the false claims from many industries about their product and services are environment friendly. Such marketing tools will be explained as a direct result of movement in the minds of the consumers market. Result of this has impact on increasing their rate of targeting the consumers who are concerned about the environment. The effective way to sustain the customers in green marketing is that if we want the masses to buy our product, we want to focus on more the traditional marketing attributes like price, quality and services.

The paper highlights the Importance, Need, Benefits, Challenges and Strategies related to Green Marketing. It also focuses on the growing marketing popularity of green products and its eco friendliness.

**Keywords:** ecofriendly, green products, green environment, sustainable environment.

### **Introduction:-**

American Marketing Association delt with the green marketing as the marketing of the products that are presumed to be environmentally safe. This phenomenon has developed

the set of standard in the modern market. Green marketing is a way to use the environmental benefits of a product and services to promote the sales. Hence green marketing incorporates a broad range of action, including product modification, packaging product or change in the production process as well as modifying the advertising effect. This in terms would impact on the mind of the customers to buy the products which are not ecofriendly or environmentally safe.

#### **Why to Go Green "Marketing":-**

The growing impact of pollution on the lives of people and effectively on the world has alarmed the environment to sustain the available resources in the most effective way. As resources are limited and human wants are never ending, it is vital to the marketers to utilize the resources efficiently and effectively to curtail the waste as well as to achieve the organizations objectives. Thus, green marketing is inevitable.

As a result of which, green marketing has emerged as boon which speaks for the growing market for sustainable and socially, environmentally responsible products and services. It has provided the awareness to people of all over the world to protect the environment to be accustomed the sustainable development of the ecofriendly product and services. The evidence shows that consumers have changed their pattern of behavior towards green and safe environment. So, green marketing has emerged as a new trend in the minds of customer market to protect the environment.

#### **Need of Green Marketing:-**

Globalization has provided the vast market with many tools and techniques to buy the products and consume them across the globe. And marketers have reached in every nook and corner as well with the help of internet and social media to serve the customers. Issues like global warming and depletion of ozone umbrella are the main healthy survival. Each and every customer is interested into healthy living quality life and vigor and so would incorporate the fact that environment needs to be protected. Financial gain and economic profit is the only aim of any business organization. Businesses in the Asian continents are fetching the need of green marketing from the native continents but still it has the wide gap between their understanding and implementation of the fact.

**Benefits of Green Marketing:-**

Green marketing has given the competitive advantage to the companies who have developed and implemented new and improved process of ecofriendly and environmentally safe manufacturing of products and services over the companies which are not concerned about environment. Thus customer prefers to purchase the eco friendly consumable commodities.

**Transformation into Green Marketing:-**

To sustain in market and to retain the customers, marketers should go for the transformation into green marketing;

- Corporate Social Responsibility (CSR)
- Corporate Governance
- Competitive Advantage
- Opportunities
- Cost Profit issues
- Competitive Pressure

**Marketing Mix in Green Marketing:-**

Depending on the organizational environment, structure and culture it has its own sets of marketing mix i.e 4 P's and 7 P's. The 4 P's are the traditional and essential marketing mix for any organization. And the main challenge before the marketers is to apply the 4 P's in most effective and innovative manner.

**1. Product:** The manufacturer should offer the ecofriendly and environmentally safe products which should not contaminate the environment but should protect it and even liquidate existing environmental damages.

**2. Price:**

Price has always been the matter of concern and the critical factors of green marketing mix. Prices for such eco friendly and green products may be on the higher side than the conventional substitute commodities. More consumers will be prepaid to pay an additional value if there is a extra value to the products. The value may be because of improved taste, performance, visual appeal, design or function. Considering all the facts green marketing should change the premium pricing.



**3. Place:**

Distribution channel is of utter importance, manufacturer should mainly focus on ecological packaging. Products like vegetables from local regional farms is more or less easy to be marketed as 'green' than the products which are being imported.

**4. Promotion:**

There should be main focus on green advertising;

- Addressing the relationship between a product services and the biophysical environment should be conveyed through Ads.
- Ads that inspire green lifestyle by highlighting a product and service.
- Focusing mainly on those ads that present the corporate image of an organization environmentally responsible.

**Strategies:-**

The green marketing strategies for marketing the commodities are;

1. Outlining the strategies to develop a transit marketing plan with regards to 4 P's.
2. Focusing more on consumerism.
3. If required De marketing would play an important role.
4. Marketing Audit (consisting of internal and external situational analysis).
5. Implementation of suitable marketing strategies.
6. Planning the result oriented evolution.

**Challenges in Green Marketing:-**

- Creating awareness regarding Green Marketing and its usability among the major chunk.
- Green products postulate the renewable and recyclable materials which are on the high cost side.
- Requirement of modern technology for R & D needs huge investment,
- Installation of water treatment technology which is too costly.
- The major chunks of consumers are not willing to pay a premium price for green products.

**Instance of environmentally beneficial products and services:-**

- Shade grown coffee beans with eco friendly packaging.
- Harvesting wood from sustainable forests.

- Cereals sold without excess packaging.
- Cleaning provisions that don't cause damages to the humans and environment.
- Obtaining energy from renewable resources like Solar Systems and Windmills.
- Energy efficient Cars
- Paper containing post consumer wastepaper.

**Conclusion:**

Green Marketing is slowly being introduced through the globe due to its concern towards the environment and its benefits derive by the stakeholders. Green Marketing is increasing as the awareness is created and people are adapting it. There are also some challenges towards it but with systematic analyses people are developing the strategies to incorporate it and take a step towards the Green Globe.

**References:**

- B.Chitra, "A Study on Evolution of Green Products and Green Marketing", *Journal of Research in Business and Management Volume 3 ~ Issue 5(2015) pp: 35-38*
- Ameet Sao, "Research Paper on Green Marketing", *IOSR Journal of Business and Management, e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 16, Issue 5. Ver. 1 (May. 2014), PP 52-57*
- Philip Kotler, Kevin Lane Keller, "Marketing Management", 14<sup>th</sup> Edition, Pearson.
- [www.google.co.in](http://www.google.co.in)

## “Service Management –A Growing Field of Interest among Young Entrepreneurs”

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### **Abstract**

Entrepreneurship is the need and boon for our Indian economy. In today's developing and challenging scenario we need to focus and highlight this field of study among young and dynamic youth of India. In this research paper we have tried to bring into notice the developing concerns in service industry and why our young entrepreneurs should select it as a career option. Women entrepreneurs are also coming up in huge numbers and equally talented, competitive enough to face the real challenges in this world of technology. Every day we have to face different challenges in service industry like people management, resource management, time management and customer satisfaction to an extent. Service industry mainly includes people. It also involves the provision of services to businesses as well as final consumers. Therefore, include accounting, tradesman ship (like mechanic or plumber services), computer services, restaurants, tourism, etc. Service Management is a customer-focused approach to delivering information technology.

Service Management focuses on providing value to the customer and also on the customer relationship. The goal of service management is to maximize service supply chains as they are typically more complex than the supply chain of finished goods. The purpose of service management is to reduce high costs by integrating products and services and also keeping their inventory levels smaller. Numerous resources are available to help youth get a sense of their interest and skills as well as gain employment experience and learn about employment opportunities. Finding a job can be a challenge for youth. They must determine what careers are available, what their interests are, and what skills they have or need to develop. Today the youth has understood the benefits and growing capacity of service industry.

**Keywords :** Service Management, Entrepreneurs

## I. Introduction:

The word **entrepreneur** originates from the French word, *entreprendre*, which means "to undertake." In a business context, it means to start a business. The Merriam-Webster Dictionary presents the **definition** of an **entrepreneur** as "one who organizes, manages, and assumes the risks of a business or enterprise".

The capacity and willingness to develop organize and manage a business venture along with any of its risks in order to make a profit. Entrepreneurial spirit is characterized by innovation and risk-taking, and is an essential part of a nation's ability to succeed in an ever changing and increasingly competitive global marketplace.

Entrepreneurship can be scary because there is no guarantee that the business will work, and the entrepreneur may end up losing money for the first few years. The entrepreneur is commonly seen as a business leader and innovator of new ideas and business processes. Entrepreneurs tend to be good at perceiving new business opportunities and they often exhibit positive biases in their perception. An entrepreneur is typically in control of a commercial undertaking, directing the factors of production—the human, financial and material resources—that are required to exploit a business opportunity. Entrepreneurs tend to be good at perceiving new business opportunities and they often exhibit positive biases in their perception (i.e., a bias towards finding new possibilities and seeing unmet market needs) and a pro-risk-taking attitude that makes them more likely to exploit the opportunity. Recent advances stress the fundamentally uncertain nature of the entrepreneurial process, because although opportunities exist their existence cannot be discovered or identified prior to their actualization into profits. Service Management practice explores all avenues of post-sales service and support, whether out in the field or in the repair depot. The practice also conducts research on the strategic plans around service business growth, specifically tied to service lifecycle management. Topics include Internet of Things, Service Strategy and Service Lifecycle. Medical and health services managers also called *healthcare executives* or *healthcare administrators*, plan, direct, and coordinate medical and health services. They might manage an entire facility, a specific clinical area or department, or a medical practice for a group of physicians. Medical and health services managers must direct changes that conform to changes in healthcare laws, regulations, and technology.

**What is HumanService?**

Human Services is broadly defined, uniquely approaching the objective of meeting human needs through an interdisciplinary knowledge base, focusing on prevention as well as remediation of problems, and maintaining a commitment to improving the overall quality of life of service populations. The Human Services profession is one which promotes improved service delivery systems by addressing not only the quality of direct services, but also by seeking to improve accessibility, accountability, and coordination among professionals and agencies in service delivery.

**Human Services Professionals means:**

"Human services professional" is a generic term for people who hold professional and paraprofessional jobs in such diverse settings as group homes and halfway houses; correctional, intellectual disability, and community mental health centers; family, child, and youth service agencies, and programs concerned with alcoholism, drug abuse, family violence, and aging. Depending on the employment setting and the kinds of clients served there, job titles and duties vary a great deal. A strong desire to help others is an important consideration for a job as a human services worker. Individuals who show patience, understanding, and caring in their dealings with others are highly valued by employers. Other important personal traits include communication skills, a strong sense of responsibility, and the ability to manage time effectively.

**Growth in service industry:**

The three industries within the services division that experienced the most growth in the last decade have been (1) business services, (2) health care, and (3) social services. The business services areas in which the largest numbers of jobs were gained were personnel supply and computer services. The personnel supply area includes organizations such as temporary employment agencies, traditional employment agencies, and other organizations that supply labor to other companies.

The computer services industry includes mass-produced software, custom programming, custom computer systems design, and computer leasing. The primary reason for growth in both of these areas has been changes in business processes.

The present study identifies some important elements that are associated with Total Quality Management in Services by summarizing the inferences of studies carried out by the author in the areas of Hotels, Business Schools, Hospitals and Banks. One can observe that while there are a number of similarities in the important factors, there are also sector specific factors that influence Total Service Quality from the point of view of the service provider. We use transportation services when we travel, often to and from work; when we travel away from home, we use restaurant services to feed us and hotels to put roofs over our heads. At home, we rely on services such as electricity and telephone. At work, we need postal, courier and maintenance services to keep our work places running. We use services of hairdressers to maintain our personal self-image and our employers use the services of public relations and advertising firms to maintain our corporate images. Lawyers, doctors, dentists, stockbrokers and insurance agent look after our personal and financial health.

In our leisure time we use a battery of services ranging from cinemas to swimming pools to theme parks for amusement and relaxation. And when we do buy goods such as a new car or a washing machine, we often rely on services to keep them running and repair them when they break down.

Service providers that do not provide quality service will not only be out of competition but will eventually cease to exist. For quality service to flourish, everyone in the organization must internalize the concept that quality is a journey, not a destination. Quality management is recognized as the foundation of business competitiveness and is proactively integrated with all business practices. Total Quality is a "total system approach". It works horizontally across functions and department, involves all employees from top to bottom and extends backward and forward to include the supply chain and the customer chain. Total Quality stresses learning and adaptation to continual change as keys to organizational success.

## **II. The factors influencing service area are:**

### Personal Factors

- 1) Personality
- 2) Language Proficiency
- 3) Attitude
- 4) Health

- 5) Income & Benefits

#### Operational Factors

- 1) Workload
- 2) Working Environment
- 3) Equipment & Machines:
- 4) Training:
- 5) Company Policy:
- 6) Quality Control:

#### **Service innovation:**

1. **Innovation in services, in *service products*** – new or improved service products (commodities or public services). Often this is contrasted with “technological innovation”, though service products can have technological elements. This sense of service innovation is closely related to service design and "new service development".
2. **Innovation in *service processes*** – new or improved ways of designing and producing services. This may include innovation in service delivery systems, though often this will be regarded instead as a service product innovation. Innovation of this sort may be technological, technique- or expertise-based or a matter of work organization (e.g. restructuring work between professionals and paraprofessionals).
3. **Innovation in *service firms***, organizations, and industries – organizational innovations, as well as service product and process innovations, and the management of innovation processes, within service organizations.

#### **Service design:**

Service design is the activity of planning and organizing people, infrastructure, communication and material components of a service in order to improve its quality and the interaction between the service provider and its customers. Service design may function as a way to inform changes to an existing service or create a new service entirely. The purpose of service design methodologies is to establish best practices for designing services according to both the needs of customers and the competencies and capabilities of service providers. If a successful method of service design is employed, the service will be user-

friendly and relevant to the customers, while being sustainable and competitive for the service provider.

**Developing interest among youth:** Young people have to be set on a long-term, sustainable pathway with quality, stable and sustainable employment. The involvement of a range of stakeholders in the design and delivery of youth employment measures is therefore essential. Youth employment measures should be client-centred, catering for different pathways, for example from mainstream learning to tailored, supported learning. Successful policies are innovative, introducing new ways of reaching out to their target groups. Youth work can also play an important role in preventing drop-out and in supporting reintegration. Some forms of youth work already deliver individual support on occupational orientation and counselling, tailored to the particular challenges of different young people. Such support should be linked to activities by employment services and other partners involved in supporting young people.

If you enjoy working with people you'll get a kick out of it. Good communication and presentation skills are important. Working in teams and dealing with people means you'll need to speak and listen well to others and relate to people from all walks of life. You'll also be able to pay attention to detail. If you can work out how to handle tricky situations diplomatically, you'll go a long way. Knowledge of New Zealand and local culture and heritage is a real asset. And because employers and customers are keen on people who have the X-factor, a willingness to learn and being passionate about your work is also important. With skills from this sector you can work and travel the world. You'll mix with and meet plenty of interesting people and you'll be doing work that has lots of variety. There's not much sitting around. In these jobs you're the brand, dealing directly with people. It's easy to work part time In this sector – great if you want to use it to support further study. The skills are transferable. With experience, you can walk in with your CV one day and have a job the next. It can be truly inspirational – from travel to tourism, hairdressing to hospitality, physical fitness to finance services. You're working with and talking to people about how they can achieve their aspirations and make dreams come true. And at the top end, you can earn very good money.

we need to ensure that all young people have the skills and competencies, including literacy and numeracy, to progress into tertiary education and training, and to enter and progress in the workforce.



### THE FUTURE OF THE SERVICE INDUSTRY AS CONCLUSION:

In particular, jobs in the education and health services areas are expected to grow the fastest, adding more jobs than any other area of this sector at an estimated 31.8 percent. Additionally, professional and businesses services (e.g., employment services; professional, scientific, and technical services; computer systems design; management jobs) will grow at a high rate (30.4 percent). Jobs in information will increase by an estimated 18.5 percent; this area includes jobs related to software and Internet publishing and broadcasting, and Internet service providers. Another area that will increase is leisure and hospitality, with employment growing by 17.8 percent due to an increased demand for leisure activities, accommodations, and food services. Trade, transportation, and utilities will increase by 14.1 percent in jobs related to transportation and warehousing; the retail trade; and water, sewage, and other utilities. A 12.3 percent growth is expected in employment in financial activities, with increases in jobs in real estate, finance, and insurance. Governmental service jobs should also grow at a rate of 11.8 percent, with jobs in public education and hospitals, state and local governments, and the federal government increasing in number. Finally, other non-governmental services that should increase at a predicted 15.7 percent are jobs in religious organizations, personal care services (e.g., hair stylists), and private household employment (e.g., cleaning services).

The number of jobs in the services sector has been growing in recent years, government indicate that this trend will continue. While many service sector jobs are believed to be recession-proof, only some areas of that sector are truly counter-cyclical, and some are simply noncyclical, meaning that they resist job loss during times of economic downturn. As service sector jobs increase in number, there are new concerns for managing human resources, one of which is the issue of offshoring, which is increasingly slowly.

### References

- 1.Parasuraman, A., Zeithaml, V. A. & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49(4), 41-50
- 2.<http://www.referenceforbusiness.com/management/Sc-Str/Service-Industry.html#ixzz4SKLdvtLi>.

- <http://www.itsmacademy.com/Detail.bok?no=131>
3. <http://sharepoint.microsoft.com/en-us/Pages/default.aspx>
  4. [http://en.wikipedia.org/wiki/Introduction\\_to\\_cloud\\_computing#Public\\_cloud](http://en.wikipedia.org/wiki/Introduction_to_cloud_computing#Public_cloud)
  5. [http://en.wikipedia.org/wiki/Infrastructure\\_as\\_a\\_Service#Infrastructure](http://en.wikipedia.org/wiki/Infrastructure_as_a_Service#Infrastructure)
  6. [http://en.wikipedia.org/wiki/Software\\_as\\_a\\_Service](http://en.wikipedia.org/wiki/Software_as_a_Service)
  7. <http://www.sei.cmu.edu/cmami/>
  8. [http://en.wikipedia.org/wiki/ISO/IEC\\_15504](http://en.wikipedia.org/wiki/ISO/IEC_15504)
  9. [http://en.wikipedia.org/wiki/Dr.\\_deming](http://en.wikipedia.org/wiki/Dr._deming)
  10. Office of Government Commerce, The Official Introduction to the ITIL Service Lifecycle, UK, TSO, 2007, pp. 152.
  11. Services Management textbook
  12. Abbott, A. (1988). The system of professions: An essay on the division of expert labour. Chicago: University of Chicago Press.
  13. Albrecht, K. (1992). Customer service: The only thing that matters. New York: Harper & Row.
  14. Blair, J.D., & Whitehead, C. J. (1988). Too many on the seesaw: Stakeholder diagnosis and management for hospitals. Hospital & Health Services Administration, 33(2), 153-166.
  15. Board, D. (2010). Leadership: The ghost at the trillion dollar crash? European Management Journal, 28(4), 269-277.
  16. Braithwaite, J. (2005). Invest in people, not restructuring. British Medical Journal, 331, p. 1272.
  17. Brignall, S., & Ballantine, J. (1996). Performance measurement in service businesses revisited. International Journal of Service Industry Management, 7(1), 6-31.
  18. Brinkerhoff, D. (2003). Accountability and health systems: Overview, framework, and strategies (pp. 1-27). Technical Report No. 018. Bethesda, MD : The Partners for Health Reformplus Project, Abt. Associates Inc.
  19. Brittain, B. (2012). Leadership perfected: Leading from the whole of you. Ivey Business Journal, Improving the Practice of Management, September/October 2012. Retrieved from [www.iveybusinessjournal.com](http://www.iveybusinessjournal.com)

20. Cieslak, K. & Kalling, T. (2007). Reasons behind contemporary use of budgets. Lund, Sweden.
21. Clarkson, M. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review*, 20 (1), 92-117.
22. Cokins, G. (2004). Performance management. Finding the missing pieces (to close the intelligence gap). Hoboken, NJ : John Wiley & Sons Inc.
23. Collier, P.M. (2003). Accounting for Managers: Interpreting accounting information for decision-making. Aston Business School, Aston University, Wiley.
24. Culley, S. (2014, January). Leading through engagement: Creating foundations for the Africa of tomorrow, today. *The World Financial Review*. Retrieved from <http://www.worldfinancialreview.com/?p=536>
25. Drucker, P.F. (2005). Managing oneself. *Harvard Business Review*, 83 (1), 100-109.
26. Drucker, P.F. (2009). Managing for results. Business and economics. MA : Harper Collins.
27. Gilley, A., McMillan, H.S., & Gilley, J.W. (2009). Organizational change and characteristics of leadership effectiveness. *Journal of Leadership & Organizational Studies*, 16 (1), 38-47. DOI: 10.1177/1548051809334191
28. Gray, B. (1996). Review of frame reflection. *Academy of Management Review*, 21 (2), 576-579.
29. Gurdjian, P., Halbeisen, T., & Lane, K. (2014). Why leadership-development programs fail. *McKinsey Quarterly*, 15 (1), 1-6.
30. Hope, J. & Fraser, R. (2003). Beyond budgeting. Boston, MA : Harvard Business School Press.
31. Iansiti, M., & Levien, R. (2004). Strategy as Ecology. *Harvard Business Review*, 82 (3), 68-78.
32. Jensen, M.C. (2001). Value maximization, stakeholder theory, and the corporate objective function. *European Financial Management*, 7(3), 297-317.
33. Johnson, J. D. (2013). Governing frameworks for sharing actionable knowledge. *Electronic Journal of Knowledge Management*, 11( 2), 127-138.
34. Kanter, R.M. (1977). Men and women of the corporation. New York : Basic Books.

35. Kaplan, R.S. (2008). Reaching your potential. Managing yourself. Harvard Business Review, 86 (7/8), 45-49.
36. Kaplan, R.S., & Norton, D.P. (1996). The balanced scorecard-Translating strategy into action. Boston, MA : Harvard Business School.
37. Kirman, A. (2001). Market organization and individual behaviour: Evidence from fish markets. In J.E. Rauch & A. Casella (Eds.), Networks and markets. New York: Russel Sage.
38. Kluska, K.M., Laschinger, H.K.S., & Kerr, M.S. (2004). Staff Nurse empowerment and effort-reward imbalance. Nursing Leadership, 17(1), 112-128.
39. Macdonald, K. M. (1995). The sociology of the professions. Thousand Oaks, CA : Sage.
40. Macmorrow, N. (2001). Knowledge management: An introduction. Annual Review of Information Science and Technology, 35, 381-422.
41. Malhotra, R.K., & Khanna, U. (2009). Collaborative innovation: A new dimension to innovation. Prabandhan: Indian Journal of Management, 2 (3), 19-22, 39.
42. Mard, M. J., Dunne, R.R., Osborne, E., & Rigby, J.S. (2004). Driving your company's value: Strategic benchmarking for value. USA : John Wiley & Sons, Inc.
43. Mayo, E. G. (1933). The human relations movement. Harvard Business School, Historical Collections, Baker Library, Boston, MA.
44. McGrath, R.G., & MacMillan, A.N.C. (2009). How to get unstuck. Harvard Business Review, 87 (5), 20-21.
45. McKinsey & Company. (2009). McKinsey conversations with global leaders: Dan Vasella of Novartis. The McKinsey Quarterly. Retrieved from [http://www.mckinsey.com/insights/health\\_systems\\_and\\_services/mckinsey\\_conversations\\_with\\_global\\_leaders\\_dan\\_vasella\\_of\\_novartis](http://www.mckinsey.com/insights/health_systems_and_services/mckinsey_conversations_with_global_leaders_dan_vasella_of_novartis)
46. Miles, S. (2012). Stakeholder: Essentially contested or just confused? Journal of Business Ethics, 108 (3), 285-298. DOI : 10.1007/s10551-011-1090-8
47. Mooraj, S., Oyon, D., & Hostettler, D. (1999). The balanced scorecard: A necessary good or an unnecessary evil? European Management Journal, 17(5), 481-491. DOI: 10.1016/S0263-2373(99)00034-1

48. Nohria, N., Joyce, W., & Roberson, B. (2003). What really works? *Harvard Business Review*, 81 (7), 42-52.
49. Palmer, R.G. & Short, S.D. (2010). *Health care & public policy: An Australian analysis* (4th Eds.) South Yarra, Victoria: Palgrave Macmillan.
50. Roach, S. S. (2009). *Leadership imperatives for a post-crisis world*. Madrid: Morgan Stanley.

## **“Analytical Study On Impact of Forex Fluctuations On Selected Sectors (Oil & Natural Gas, Nifty 50, Sensex, Gold and Silver)”**

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### **ABSTRACT**

The world nations are increasingly becoming more interrelated global trade, and global investment. Countries hold currencies of other countries and that a market, dealing of foreign exchange results.

Foreign exchange transactions take place whenever a country imports goods and services, people of a country undertake visits to other counties, citizens of a country remit money abroad for whatever purpose, business units set up foreign subsidiaries and so on.

A domestic weak currency will stimulate export where as domestic stronger currency can reduce export competitiveness and make imports cheaper, which can cause the trade deficit, so a currency fluctuations have direct impact on trade transaction and economy of a country.

So this study will help in analyzing the impact of forex fluctuations of currencies namely currencies namely USD, EURO, GBP & YEN on oil, natural gas, nifty 50, Sensex, gold and silver prices.

**Keywords** : Forex Fluctuations, Sectors

### **INTRODUCTION**

The world nations are increasingly becoming more interrelated global trade, and global investment. Countries hold currencies of other countries and that a market, dealing of foreign exchange results.

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deficit, so a currency fluctuations have direct impact on trade transaction and economy of a country.

## **RESEARCH METHODOLOGY**

Research methodology is the science of studying how research is done scientifically. It is logical and scientific investigation i.e. describing, explaining and justifying the method of research

Research methodology not only includes research method but also logic behind research method used in given research study.

Research methodology is design, plan, process, structure and strategy of conducting a research project. Every research project is based on certain methodology that is a way to systematically define and solve problems and attain its objectives.

## **OBJECTIVES**

1. To study and identify the fluctuations in 4 major currencies namely USD, GBP, EURO and YEN.
2. To study and analyze the impact of forex fluctuations on crude oil and natural gas prices
3. To study and analyses the impact of forex fluctuations on nifty 50, Sensex, as well as gold & silver

## **RESEARCH DESIGN:-**

The type of research design selected for this study is Analytical in nature. An Analytical research uses a set of scientific methods.

In this study “Analytical Study On Impact of Forex Fluctuations on Selected Sectors (Oil & Natural Gas, Nifty 50, Sensex, Gold & Silver)”. The four major currencies namely USD, EURO, GBP & YEN are correlated with oil, natural gas, nifty 50, Sensex, gold and silver prices on daily basis for the duration of period mentioned under study.

**SOURCES OF DATA:-** Tool of Data collection

By using secondary data as the research methodology. This study proposes a research plan for data collection and analysis of forex fluctuations on Indian Economy. The data used for supporting the analysis in this section is from a practical analytical study. The research is based on secondary data of government sites, reports and other survey reports.

The data have been collected from various sources mentioned in bibliography.

**PERIOD OF STUDY**

This study is conducted based on the basis of reliability and accessibility of data from period 2<sup>nd</sup> June 2014 to 1<sup>st</sup> July 2016

**STATISTICAL TOOLS USED:-**

The following statistical tools are used in the study for the data analysis and interpretation.

1. Scatter diagram
2. correlation

**LIMITATIONS OF THE STUDY**

1. The data used for study is from period 2<sup>nd</sup> June 2014 to 1<sup>st</sup> July 2016.
2. The data is only of common dates when market of selected sectors are open.
3. This study is only limited to the fluctuations in Indian forex market and its impact on selected sectors under study.

In this study the Indian Rupee is denominated in selected currencies i.e. USD, GBP, EURO and YEN, it is because the currency pairs are inversely related

Example:-

USD/INR is a currency pair, when USD rises the i.e. appreciated against INR, the Indian rupee decreases in the same proportion.

1USD =67 Indian Rupee.

This also means

1 Indian Rupee= $\frac{1}{67}$  USD, i.e. 0.1492

**Major Currency used in the study.**



Abbreviation	Country	Currency Name
USD	U.S	Dollar
EUR	Eurozone	Euro
JPY	Japan	Yen
GBP	Great Britain	Pound

## REVIEW OF LITERATURE

Foreign Exchange Fluctuations have always been an area look up by people from varied fields, weather literary or profession related matter. For the purpose of this paper I gone through few literary works to understand the whole concept and formulate my paper, a distinct one.

*According Jack Gordon, in his research, Fluctuating Currency Rates Affect Travel Industry*

If you run a travel business, you'll directly be impacted by fluctuating currency rates.

### Effect of Appreciation

Travelers to foreign countries have to convert funds to that particular country's currency so they can spend money at hotels, restaurants and other attractions. When the U.S. dollar appreciates against major world currencies, U.S. tourists traveling to other countries will be able to enjoy more -- the exchange rate will favor them when they exchange their dollars. You're likely to see more business as travelers take advantage of the strong dollar to visit various places for sea, sun and sand, and a host of other exotic attractions.

### Effect of Depreciation

If the U.S. dollar falls in value for an appreciable amount of time, travelers outside the country for their vacation or business will have to shell out more money in foreign countries. Foreigners will find it cheaper to travel to the U.S. and if your company is positioned to cater to this group, your business will thrive.

**A study by SunGard Data Systems** polled 275 US businesses of various sizes. It found that 59 per cent of those surveyed had seen a loss or gain of more than five per cent as a result of currency fluctuations in the previous year.

Companies with overseas branches, or those that trade internationally, are at the mercy of global currency fluctuations. As is the case with private investments, changes in conversion rates can wipe out profits or increase gains.

### **According to Joe Cahill on Business**

Declining foreign currencies are hammering U.S. companies with big international operations. Their sales abroad are worth less when translated back into dollars. And **sales volumes also can suffer** when a strong dollar makes U.S. products more expensive in foreign markets.

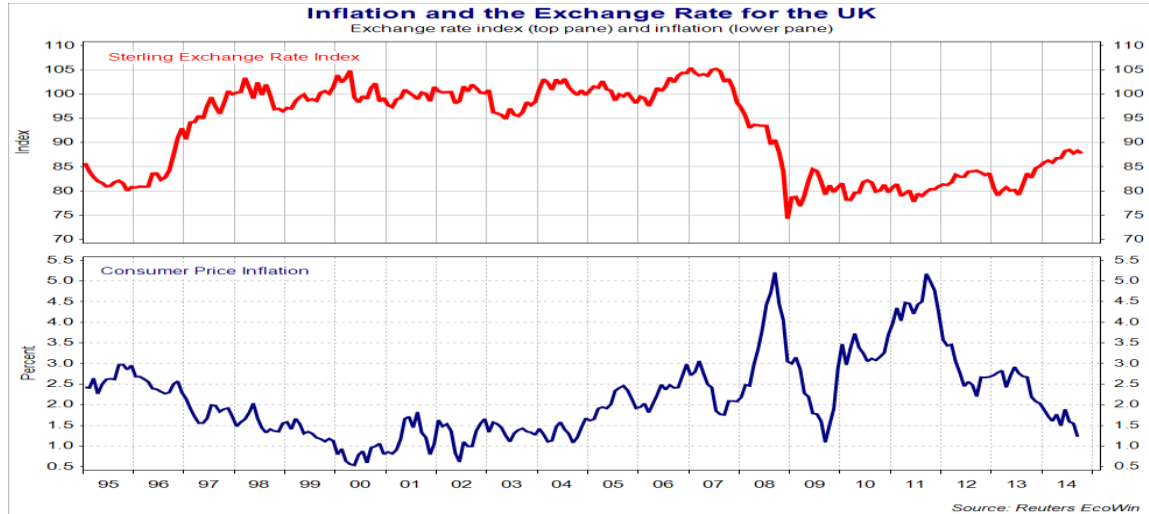
Recent earnings reports show how dramatically currency exchange rates can affect top lines. North Chicago-based Abbott **reported this week** that first-quarter revenue growth of 3 percent would have been 7 percentage points higher but for the impact of foreign exchange. McDonald's 11 percent drop in first-quarter consolidated revenue would shrink to just 1 percent in "constant currencies," the Oak Brook-based company said on April 22.

**According to intelligence reports by the Associated Chambers of Commerce and Industry of India** "Rupee appreciation makes imports cheaper and exports more expensive" sectors like petroleum and petroleum products, drugs and pharmaceuticals and engineering goods – which have import inputs of as much as 77 percent, 19 percent and 21 percent, respectively – will gain if the rupee appreciates. They would have to pay less for the imported raw materials which would increase their profit margins.

Likewise, a depreciating rupee makes exports cheaper and imports expensive. So, it is good news for industries such as IT, textiles, hotels and tourism which generate income mainly from exporting their products or services. Rupee depreciation makes Indian goods and services cheaper for overseas buyers, thus leading to increases in demand and higher revenue generation. The foreign tourists would find it cost effective to come to India, therefore increasing the business of hotel, tours and travel companies.

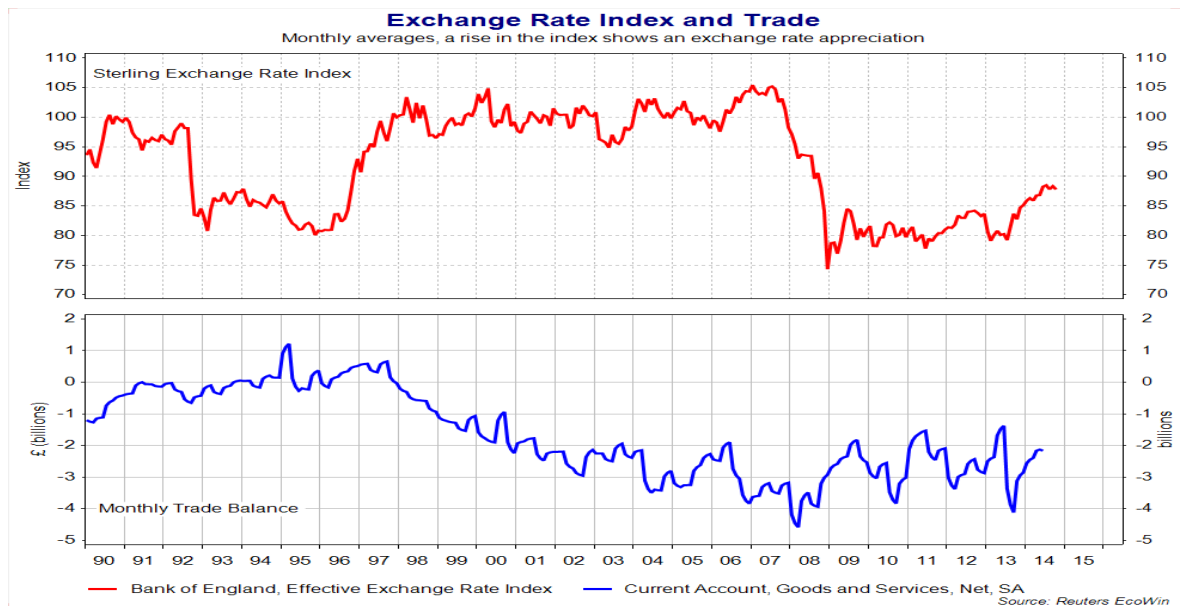
India's IT sector is dependent on foreign clients, especially the United States, for more than 70 percent of its revenue. When an IT company gets a project from a client, it pre-decides on the length of the contract and the cost of the project. The contracts with U.S. clients are usually quoted in U.S. dollar terms. So, the fluctuation in the exchange rate can bring about a considerable difference in the performance of a company.

According to Bank of England research for the UK economy suggests that 10% depreciation in the exchange rate can add up to 3% to the level of consumer prices three years after the initial change in the exchange rate. But the impact on inflation of a change in the exchange rate depends on what else is going on in the economy.



Changes in the sterling exchange rate can affect the rate of consumer price inflation

In brief, a cheaper currency provides a **competitive boost to an economy** and can lead to positive **multiplier** and **accelerator effects** within the circular flow of income and spending.

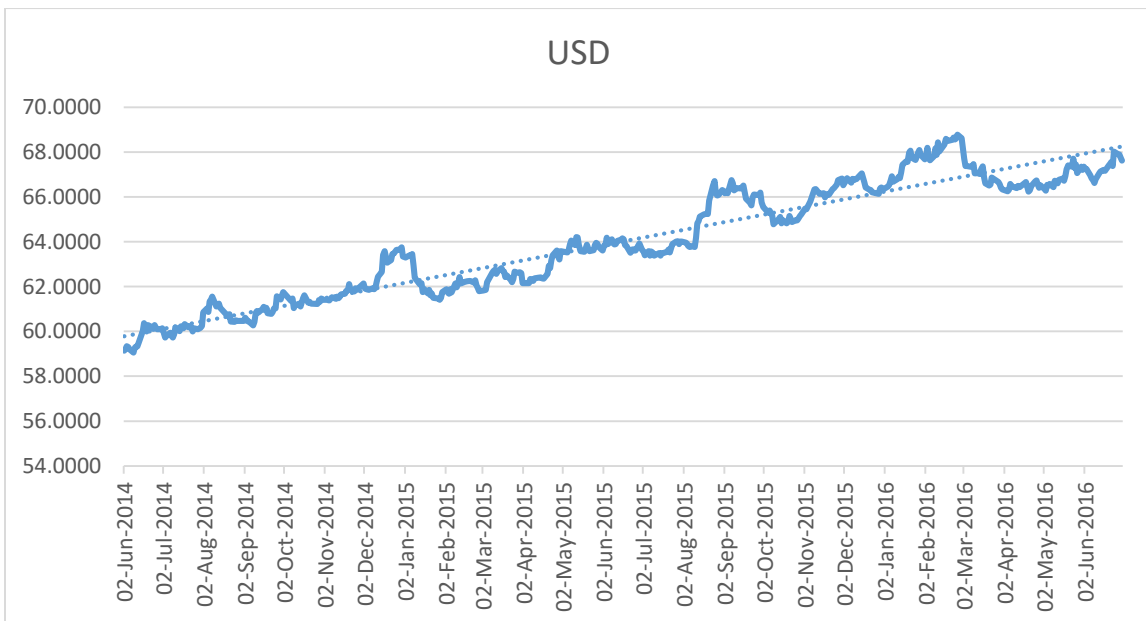


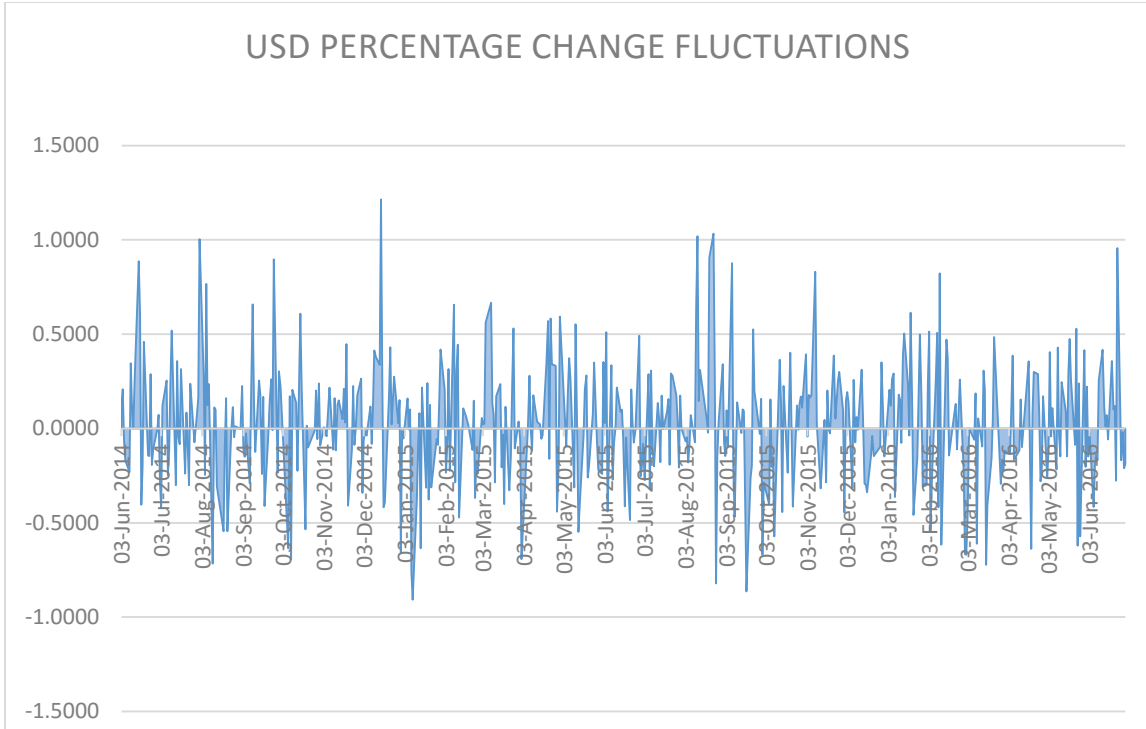
In 2015, India bought US\$390.7 billion worth of imported products down by 15.5% since 2011 and down by 15% from 2014 to 2015.

s.no	Import	Amount in USD	Percentage
1.	Oil	US \$104.7 billion	26.8
2.	Gems, precious metals	59.6 billion	15.3
3.	Electronics equipment's	35.9 billion	9.2
4.	Machinery	32.1 billion	8.2
5.	Organic chemicals	15.9 billion	4.1
6.	Iron and steel	11.7	11.7
7.	Plastics	11.3	2.9
8.	Animal/ vegetables fat and oils	10.5	2.7
9.	Fertilizers		1.9
10.	Medical, technical equipment	7.2	1.8

**DATA ANALYSIS**

**USD Fluctuations III-1**





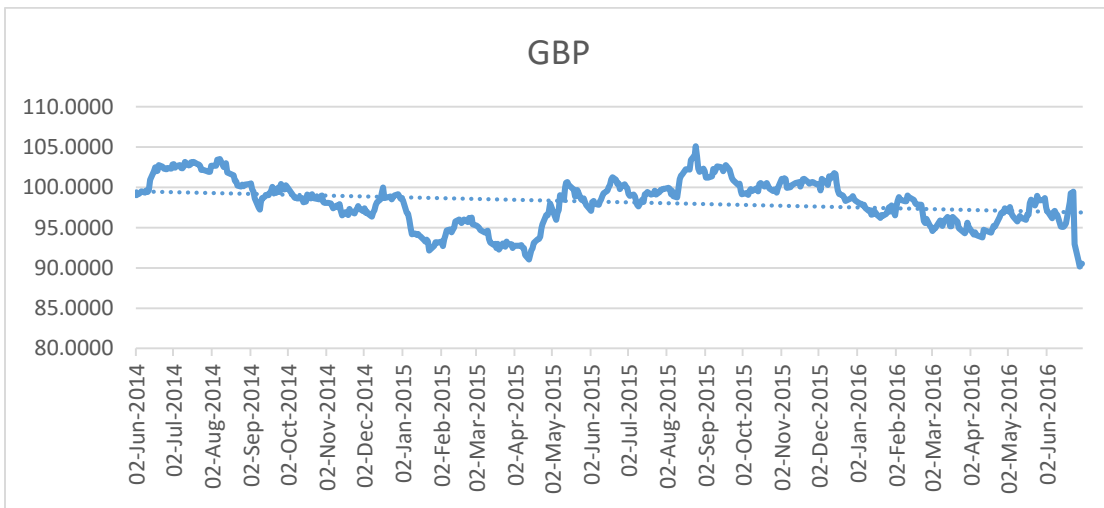
**Interpretations: -**

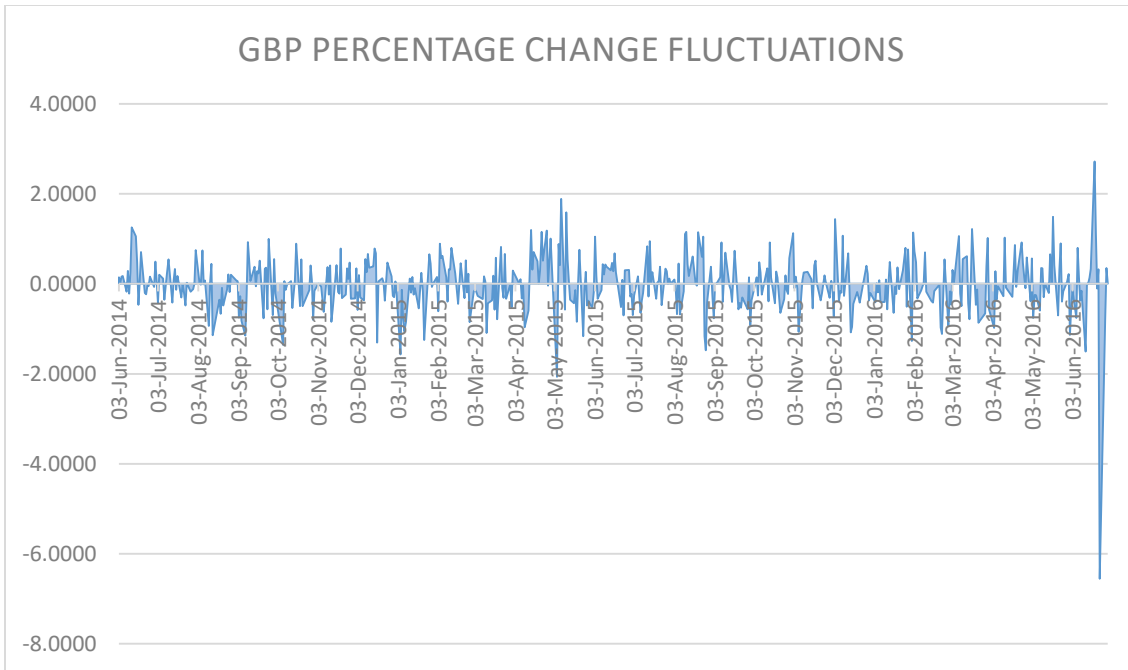
The above graph shows the fluctuations in US Dollar from period of June 2014 to June 2016.

From the above we can interpret that the USD rate growing continuously over the years i.e. USD is appreciating against Indian Rupee.

The fluctuations in USD are high and consolidated

**GBP Fluctuations III-2**





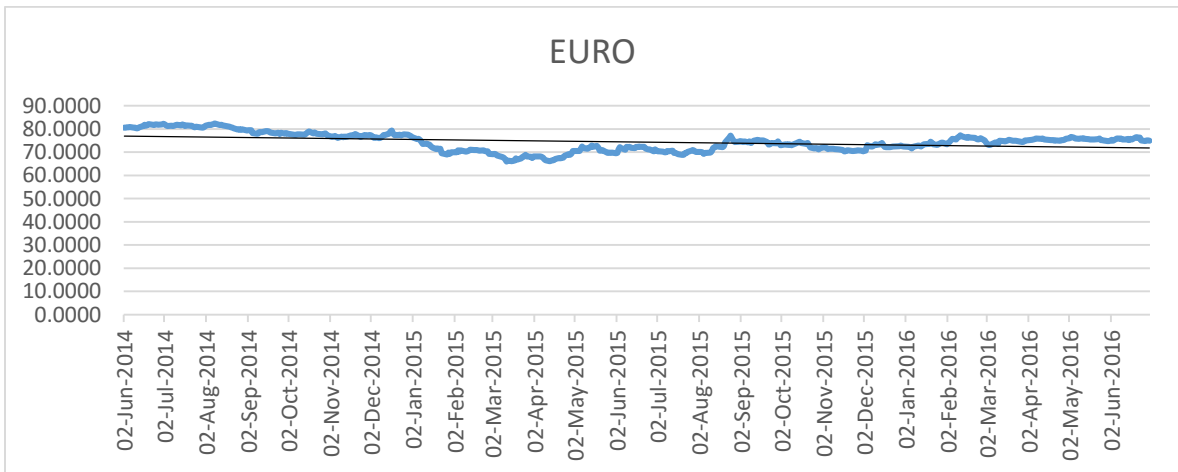
**Interpretations: -**

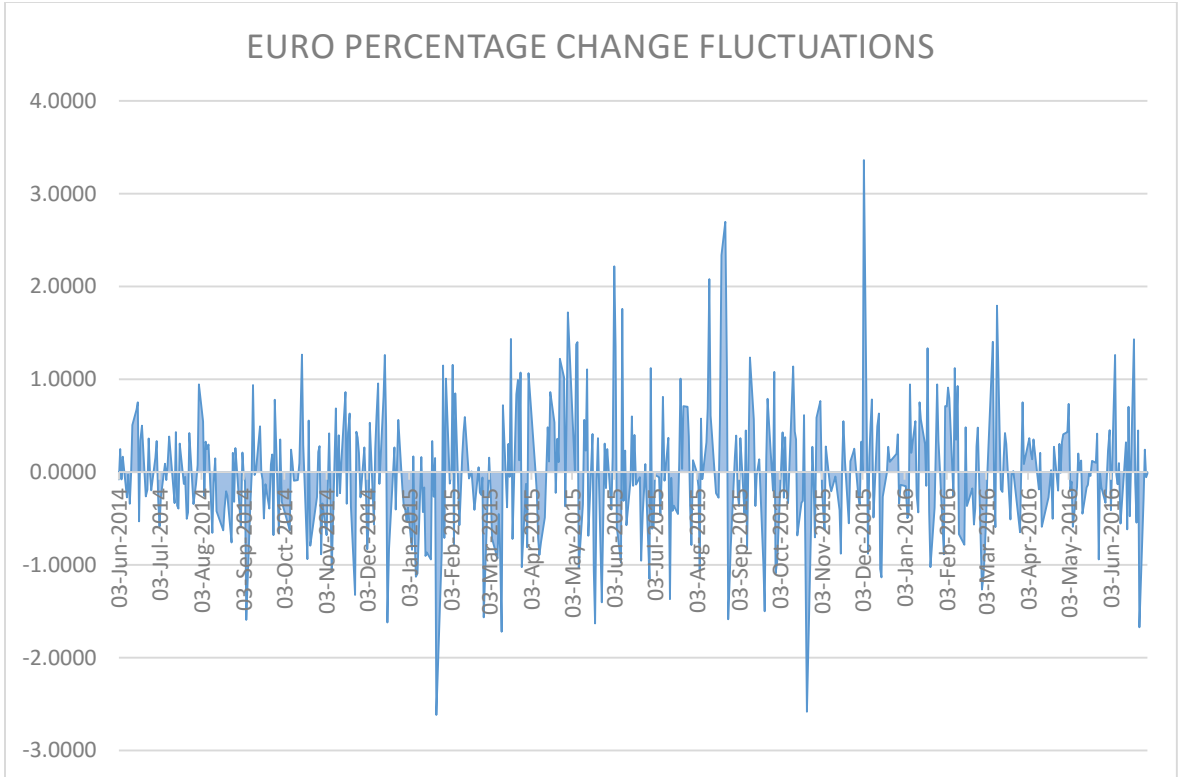
The above graph shows the fluctuations in GBP from period of June 2014 to June 2016.

From the above we can interpret that the overall trend in GBP rate decreasing continuously over the years i.e. GBP is depreciating against Indian Rupee.

The fluctuations in GBP are not high but in June 2016 there is high decline and negative fluctuation in the rate.

**EURO Fluctuations III-3**

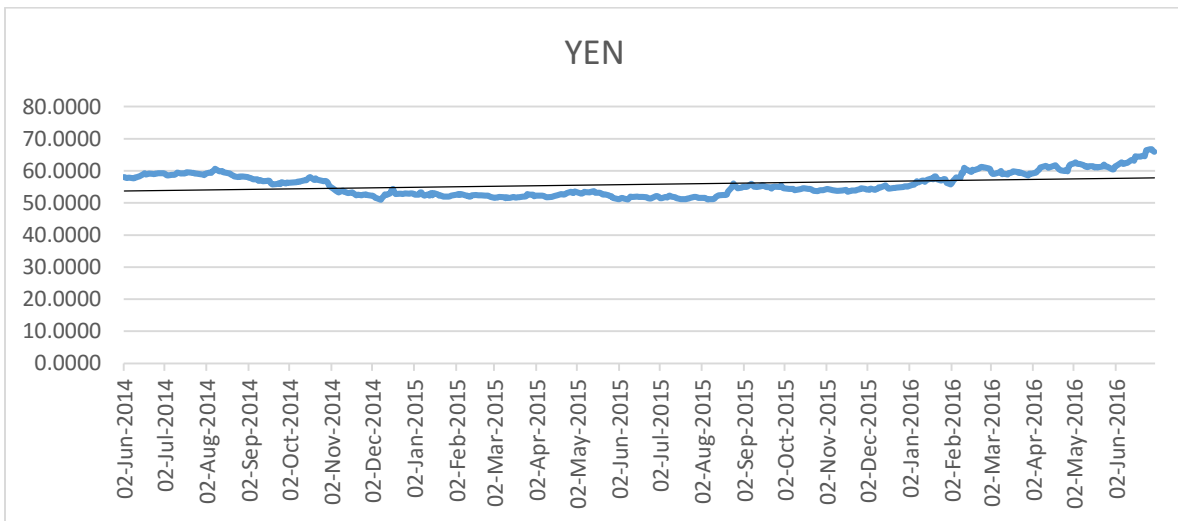


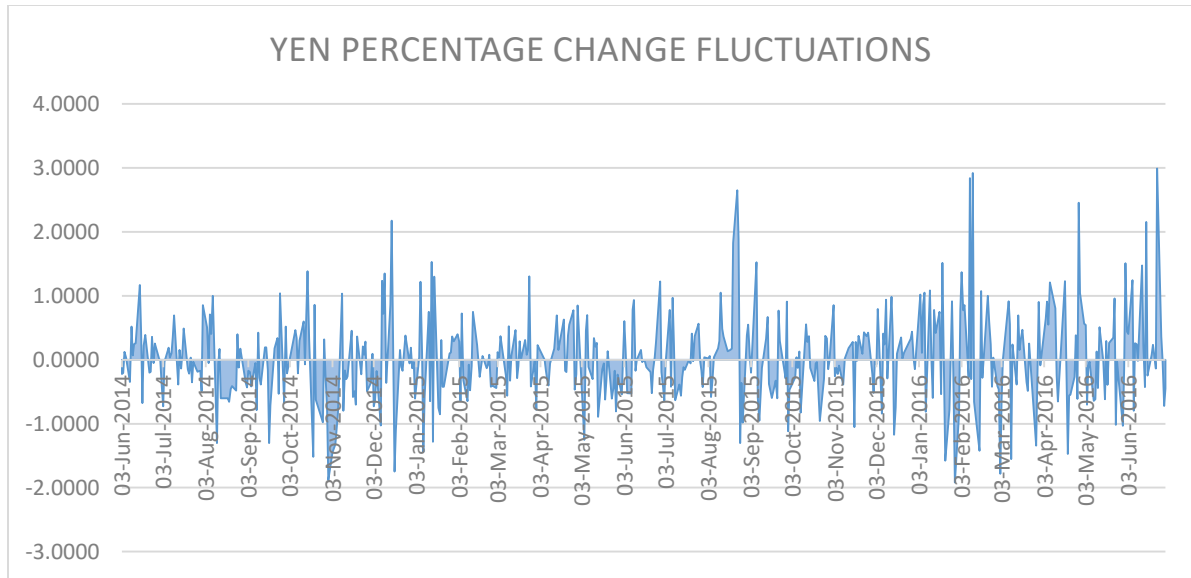


**Interpretations: -**

The above graph shows the fluctuations in EURO from period of June 2014 to June 2016. From the above we can interpret that the overall trend in EURO rate decreasing continuously over the years. The fluctuations in EURO is not much as lower variability is seen in the graph.

**YEN Fluctuations III-4**





### Interpretations: -

The above graph shows the fluctuations in YEN from period of June 2014 to June 2016.

From the above we can interpret that the overall trend in YEN rate increasing continuously over the years. The fluctuations in YEN is not much as lower variability is seen in the graph.

### CORRELATION BETWEEN THE VARIABLES

Particulars	USD	GBP	EURO	YEN
SENSEX	0.45008	0.309616	0.494637	<b>0.703066</b>
NIFTY 50	0.326672	0.375708	<b>0.577817</b>	<b>0.681596</b>
CRUDE Rs	<b>0.826275</b>	-0.42556	<b>-0.65576</b>	-0.17125
NATURAL GAS	<b>0.836048</b>	-0.36032	<b>-0.58702</b>	0.030519
GOLD	-0.416	-0.13255	<b>0.562019</b>	<b>0.546573</b>
SILVER	0.471058	-0.14332	<b>-0.6354</b>	<b>-0.56976</b>

The above table is correlation table which shows the correlation between the selected currencies i.e. USD, GBP, EURO, YEN and selected sectors namely SENSEX, NIFTY 50, CRUDE OIL, NATURAL GAS, GOLD and SILVER.



**FINDINGS AND OBSERVATION** In this study it have been found and observed that USD is continuously appreciating over the years against INR, this means the demand for the currency is increasing against supply. USD has high fluctuation over other currencies because fluctuations are high and consolidated.

In GBP the overall trend is decreasing, there are high ups and down in the currency which indicates that the currency is not stable from long term point of view, whereas the percentage change fluctuations is not much as compared to USD i.e. the fluctuations are not high.

The fluctuations in in EURO is not much i.e. the trend line is almost parallel to x axis.

This also means that the currency is stable even the percentage change fluctuations are high The Japanese YEN is stable currency like euro having but has high percentage change fluctuations.

### USD

Particulars	Correlation %	Nature of impact
CRUDE Rs	82.6275	Strong positive
NATURAL GAS	83.6048	Strong positive

From this study it had been found that the USD is having strong positive correlation with prices of crude oil and natural gas prices i.e. 82.627 % and 83.6048% respectively. This means they are related with each other in positive way i.e. if one grows the other variable will most probably grow.

### EURO

Particulars	Correlation %	Nature of impact
NIFTY 50	57.7817	Positive
CRUDE Rs	-65.576	Negative
NATURAL GAS	-58.702	Negative
GOLD	56.2019	Positive
SILVER	-63.54	Negative

From this study it have been found that EURO is having positive correlation relation with the Nifty 50 Index and Gold prices in India i.e. 57.78% and 56.20% respectively, where as having negative correlation with Crude oil (-65.57%), Natural gas (-58.70), and Silver (-63.54%).

**YEN**

<b>Particulars</b>	<b>Correlation</b>	<b>Nature of impact</b>
SENSEX	70.3066	Positive
NIFTY 50	68.1596	Positive
GOLD	54.6573	Positive
SILVER	-56.976	Negative

The Japanese Yen had strong positive correlation with SENSEX (70.33%) and NIFTY 50 (68.16%), whereas with Gold it has positive correlation (54.66%) and negative correlation with Silver (56.98%)

The GBP has least impact on selected sectors under study.

**CONCLUSION**

In this study out of four major currency namely USD, GBP, EURO and YEN, the USD is most fluctuating currency followed by EURO, YEN and GBP.

The USD and EURO has impact on crude oil and natural gas prices whereas USD has strong positive correlation and EURO has negative correlation.

YEN has positive impact on Sensex.

EURO and YEN has positive impact on NIFTY 50 but YEN has more impact on NIFTY 50 than EURO.

The EURO and YEN both has positive impact on GOLD prices, and both has negative impact on Silver prices.

In India we import crude oil and natural gas in huge quantities and mostly payments are made in USD, so USD have strong positive correlation with crude oil and natural gas.

Mostly big Japanese companies like Maruti Suzuki, Ricoh, Honda Siel Power, Hitachi Home Appliances, Sharp India and Lumax Industries, Ricoh India, all these stocks have listed on Indian exchanges and have establishments in India, so Japanese Yen fluctuations have impact on Indian Stock Market, Similarly gold is imported in India and payment is made in USD.

Hence it can be concluded that the forex rates fluctuations has either positive or negative impact on Capital Market, Bullion Market (Gold & Silver), and on Crude & Natural Gas.

**REFERENCES**

1. [www.moneycontroll.com](http://www.moneycontroll.com)
2. <http://www.equitymaster.com/>
3. [http://en.wikipedia.org/wiki/World\\_economy](http://en.wikipedia.org/wiki/World_economy)
4. <http://data.worldbank.org/indicator/BN.CAB.XOKA.CD>
5. <http://wdi.worldbank.org/table/4.17#>
6. <http://in.investing.com/commodities/silver-historical-data>
7. <http://in.investing.com/commodities/gold-historical-data>
8. [www.kotak.com](http://www.kotak.com)
9. <https://dbie.rbi.org.in/DBIE/dbie.rbi?site=home>
10. <http://smallbusiness.chron.com/fluctuating-currency-rates-affect-travel-industry-81121.html>
11. <http://www.euroinvestor.com/ei-news/2012/07/17/how-exchange-rate-fluctuations-affect-companies/19796>
12. <http://www.india-briefing.com/news/fluctuations-indias-rupee-rate-impact-5125.html/>
13. <http://www.tutor2u.net/economics/reference/exchange-rates-macroeconomic-effects-of-currency-fluctuations>
14. [http://economictimes.indiatimes.com/articleshow/52099229.cms?utm\\_source=contentofinterest&utm\\_medium=text&utm\\_campaign=cppst](http://economictimes.indiatimes.com/articleshow/52099229.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst)
15. <http://in.reuters.com/article/india-gold-imports-idINKCN1230XH>

## **“Assessment of Present Status of Management Education in Nashik District”**

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### **Abstract**

“Admission for MBA means admission for big money”, Is this true? Indian economy is creating a serious demand for high-quality managers to oversee the national’s growing business. That makes pursuing an MBA a Value added and that ensure a young star a fast return on investment. Today young star opt MBA for only High Money and High Return. Unfortunately, Indian management institute’s lack in term of the caliber of the faculty, quality of curriculum and infrastructure and placement records, research work. A few of the school, include the IIM has built up a reputation for high quality. Primary Objective of this paper is find big threats on front on management education in India and suggests remedial measures to resolve it. Paper is based on desk research and expert opinion. Paper sights above threats that only theoretical aspects are being taught in small institutes. Lack of practical knowledge, operation workouts & small duration of SIP (student internship period). Fewer opportunities for rural area candidates due to distance & high cost of education especially in good institutions. Interest of the candidates is diverted more towards only in getting the Degree and placement not in knowledge that is either only for getting promotion or only for value addition. Some times it is also seen that faculties also take less interest (especially in small institutes) in upgrading there knowledge from the current awareness etc. & share only bookish knowledge given in books. Corporate world expected dynamic output from Management institute but management institute of India base on rigid structure. This paper is going assess the present status of management education in Nashik District. Human Resource Ministry, DTE, AICTE also adopting MASS education Mantra and neglecting quality aspect in management education. We Indian recognized our self as super power in 2020. This degradation of Management education could be threat for Vision 2020.

**Key Words:** Management education, Threats , Vision 2020, Mass education.

## Introduction

“Admission for MBA means admission for big money “, is this true? Indian economy is creating a serious demand for high –quality managers to oversee the national’s growing business. That makes pursuing MBA a Value added and that ensure a young star a fast return on investment. When we talk of management education, we are basically referring to shaping up the students, aimed towards developing their competency and capability either as a manager fit to join an organization and help it to grow or as entrepreneur, to establish and grow one's own business. This capability does not come from possessing a management diploma or degree, but also requires developing in the students the will and skill to contribute for self sustenance and nation building. Today young star opt MBA for only High Money and High Return. Primary Objective of this paper is *“To assess the present status of Management Education in Nashik District.”* Paper is based on desk research and expert opinion. Presently it is seen, that there is a wide gap existing between the type of management education imparted in MBA colleges and what is there in real life management in business organizations. In order to make management education more realistic and useful for the industry, certain key areas need to be identified. It also shows that, in some ways, the industry has been evolving to cope with the changing environment A few of the school , include the IIM , IBS and some private Business schools has built up a reputation for high quality across the world. At the same time many management institute affiliated Government University, All India Council for Technical Education (AICTE) are facing serious problem.

## Research Problem:

The number of management institutes and programs has expanded quickly in response to increased demand. It would be natural to be optimistic about the future of management education based on these observations. But, there are several issues of major concern. How will we accommodate future growth in light of resource constraints and quality concerns? How do we balance global aspirations against pressing local needs? How will we assure quality, given tremendous pressures to cut costs? How will we continue to align programs and curricula with the ever-changing needs of organizations? Although there are no easy answers to these questions, the challenges embedded within them are not easy. Only

theoretical aspects are being taught in many management institutes, Lack of practical knowledge, operation workouts & small duration of SIP (student internship period).

Problems and challenges relating to curriculum, teaching, infrastructure, administration and access

Does our Indian Management education meet quality standards and global competitiveness? 60 years after independence, the Indian economy has become more mature and hence we require entrepreneurial management skills, bureaucratic management skill, and Management skill at each sector. Our management institutes have failed to meet this challenge. Keeping in mind the demand, the supply is inadequate. Management courses have become 'Academic Courses' rather than 'Professional one'. Indian management education lack in term of the caliber of the faculty, quality of curriculum and infrastructure and placement records, research work. AICTE and DTE also adopting MASS education Mantra and neglecting quality aspect in management education. There is an urgent need to restructure management education to meet quality standards and global competitiveness. Therefore there is a need to revamp our management education by considering threats for it.

#### **Literature Review:-**

Joanne B Cuilla (1985) pointed out that business schools have failed to share business ethics with their students, but most students and faculty agree that ethics are important, and business schools need to integrate ethics into their curricula.

To use the words of Bettis and Hiltt(1995), new competitive landscapes are emerging, marked by increased levels of uncertainty and ambiguity, leading to what is now known as hyper competition

(D'Aveni 1994). Management educators may be interested in accompanying these challenges to help

managers in shaping organizations in such a way as make them willing and able to respond to complex organizational challenges. In brief, it may be advantageous to expose business students and managers to complication (Cunha et. al. 2004).

The other challenges of managing businesses are created from the need to speedy decision making in resources deployed, managing diversity, searching right direction of knowledge

management for the people, timeliness of the process and innovative approaches, synchronization need of process and activities, industry life cycle effects on the firms operations, and finally social

responsibility of present generation for future generations (Barkema et. al. 2002).

R Warren and G. T. Weedale (2002) blamed business schools for negligence in historical and ethical dimensions as: corporate ethics, social responsibility of companies, disclosure, the actions of multinational companies overseas, the dilemmas of whistle-blowing, the impact of lobby groups and health and safety issues.

Marietta Del Favero (2003) recommended cognitive approaches as more valuable to understand the

social nature of governance.

Rozencher, et. al. (1994) showed his statistics that 90% of faculty spend atleast some time covering ethical issues. Most spend between one and two class hours covering ethical issues; however, about 1/4 of all respondents said they spend more than 4 hours during the course of the semester on ethical issues.

Pfeffer and Fong (2002) found that business education in teaching business is not very effective; having no correlation with career success or has little influence on management practices.

**Methodology:-** For identifying and addressing threats of management education in India –towards quality standards & global competitiveness majorly secondary data (desk research ) is used, like various research report on management education in India, Journal , article, expert opinion. For assessing Present status of Management institute mini survey was carried out by targeting on Students (40), Management Faculty (40), and Industry executive (40). Samples are selected from Nasik district. Simple random sampling technique used for selecting sample. Descriptive and explorative research design used for study.

#### **Data Analysis and Interpretation:**

##### **✓ Future global Business Scenario Vs Present status of Management institute**

a. Future global Business Scenario:

Alvin Toffler in his famous book 'Future Shock' Says " *To avoid future shock, we must create a super industrial education system and to do this, we must search for our objective methods in the future rather than the past... Education must shift into future tense.*"

American thinkers, Alvin Toffler and Peter Drucker has predicted the following changes in the socio- economic life - Manufacturing sector would lose its importance and service sector will make significant contribution in national income. There would be 'service revolution' in the world. .Knowledge and Information rather than 'capital' would be the main source of economic development. Hence there would be knowledge workers, knowledge society, knowledge executives etc. Future Careers would be:- Knowledge based , Information intensive , Highly mobile across the world , Highly rewarding , And on a fast tract .Future global business scenario will depend on unique mantra i.e. **“Think Globally”**.

**b.** Present status of Management institute: Industry-Academia-Students comparison of present status of Management institute on various quality parameters .Data analysis is done by using mean in which Quality parameters rated by given Scale [ 1.Poor , 2. Average, 3.Good, 4 best]

<b>Table 1. Assessing present status of Management Institute</b>			
<b>Management Institute Quality Parameters</b>	<b>Students Mean</b>	<b>Faculty-Mean</b>	<b>Industry-executive Mean</b>
Academic content of course taught	2.5	3.1	1.9
Educative values of summer training	2.9	3.0	1.8
Fairness in internal examination	2.9	2.9	2.0
Fairness of exam evaluation	2.5	2.5	2.1
Interaction with faculty	2.5	2.9	2.5
Interaction with administrative staff	2.9	2.9	2.4
Library facilities	2.5	2.7	2.9
Computer facilities	2.9	2.8	3.0



Industrial visit & Physical facilities	2.1	2.7	2.1
Students exposure to corporate	2.9	2.9	2.9
Guest faculty from corporate	2.9	2.0	2.5
Placement facilities by institute	2.8	2.1	2.9
Summer training by institute	2.9	2.2	2.9
Academic reputation	2.2	2.2	3
Overall assessment of Management Institute	<b>37.4/15=2.49</b> <b>Average</b>	<b>36.9/15=2.46</b> <b>Average</b>	<b>34.9/15=2.32</b> <b>Average</b>

**Table 2 .Assessment of Management Faculty**

<b>Faculty Attribute</b>	<b>Students Mean</b>	<b>Faculty Mean</b>	<b>Industry executive Mean</b>
Communication skill	2.4	2.5	2.9
Command on subject	2.4	2.6	2.7
Discipline in the class	2.9	2.6	2.8
Sincerity and commitment	2.5	2.5	2.4
Class participation	2.9	2.8	2.2
Use of modern teaching methodology	2.4	3.1	3.5
Ability to course integration	2.4	2.3	2.5
Accessibility	2.2	2.8	2.1
Correlation of present event in corporate with academics concept	2.2	2.7	2
Average scale	<b>22.3/10=2.23</b> <b>Average</b>	<b>23.9/10=2.39</b> <b>Average</b>	<b>23.1/10=2.31</b> <b>Average</b>

(Source:- Survey)

**Finding:-**

<b>Management Institute Quality Parameters</b>	<b>Students View</b>	<b>Faculty View</b>	<b>Industry Expert View</b>	<b>Overall Analysis of Management</b>
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				<b>Institute</b>
Overall assessment of Management Institute (Table.1)	37.4/15=2.49 Average	36.9/15=2.46 Average	34.9/15=2.32 Average	7.27/3= 2.42 <b>Average</b>
Overall assessment of Management Faculty (Table.2)	22.3/10=2.23 Average	23.9/10=2.39 Average	23.1/10=2.31 Average	6.93/3=2.31 <b>Average</b>

From above we can interpret that Overall assessment of Management Institute and Overall assessment of Management Faculty is average level .Present status of management institutes are not meeting quality standards and global competitiveness.

✓ **Threats Regulatory body ( AICTE & DTE) :-**

**a. All India Council for Technical Education (AICTE):-**

The **National Knowledge Commission (NKC)** was established by the Prime Minister of India in 2005 to recommend and undertake reforms in order to make India a knowledge-based economy and society. An important constituent of the NKC's functions is professional education, particularly education in the field of management. In light of its significance, the NKC decided to form a **Working Group on Management Education**. AICTE focuses more on taking punitive measures on those activities/institutions that are not approved by the AICTE, rather than on promoting the development of the more promising programmes/institutes/managements. Norms and Standards and Accreditation criteria are there, but are not being implemented as promptly and as fully as required for maintaining and enhancing quality in the face of the rapid growth in the number of schools. Management is treated as a sub-department of engineering by AICTE – rather than recognising that management itself has its demands that require exclusive attention. Previous reports have pointed out the weaknesses of the AICTE structure and why it is unable to ensure a high standard in management education.

- Professional Staffing in the AICTE is not full-time and the existence of most staff on deputation for short durations has made the regulatory process highly rule based rather than quality based. No organisational learning is taking place and organizational memory is not accumulating.

- There is a need to create a separate independent promotional/registry institution for management education and to replace the current regulation being carried out by the All India Council for Technical Education (AICTE), which is primarily concerned with engineering education.

**b. Expert View on**

1. S.Y. Siddiqui, MEO, Maruti Suzuki India Ltd- his insightful session talking about the key areas which needs to be developed and worked upon in terms of management education. He laid emphasis on Industry exposure, learning through Live Project, Industrial mentoring, reverse mentoring and corporate governance. We should stop aping Western management education model and instead should refer to our own informative case studies.
2. Dr. Datar said that their research has identified many gaps in the current MBA programs, many of them related to 'doing' and 'being' These gaps are in: Gaining a global perspective; Developing leadership skills; integration skills; Understanding the role, responsibilities, and purpose of business; Recognizing organizational realities and the challenges of implementation; Thinking creatively and innovatively: Thinking critically and communicating clearly; and, Understanding the limits of models and markets. Dr. Datar said MBA programs should focus on these need gaps.

(HBS faculty Dr. Srikant M Datar spoke to MBAUniverse.com on the sidelines of the AIMS convention being held in the capital on August 25-27, 2010)

**Recommendation :-**

In order to make management education more realistic and useful for the industry and towards Quality standards & global competitiveness, certain key areas need to be identified. These could be:-

- a. Invite Entrepreneurs :** States invite Indian entrepreneurs to set up management institutes of excellence either on their own or in collaboration with reputable foreign universities
- b. Permit Foreign Universities:** Reputed foreign universities be permitted to set up their own campuses (with 100% equity) and offer their own degrees or with joint venture with Indian management Institutes.

**c. Invite Corporate:** The corporate private sector should be encouraged to set up institutes of Management of excellence. It would follow registration and all other criteria of governance as specified. To incentivize corporate to set up such institutes, either on their own or in collaboration with high quality foreign universities.

**d. Benchmarking Quality Management Education**

Benchmarking with the top management colleges inspires an institute to produce quality managers. Management education needs to include knowledge, skills and abilities (KSA) that are needed today and that will be needed tomorrow by the industry. The mission of management education should be to become innovative and creative. The objectives of benchmarking should be to 1. Make own students employable in industry 2. Moving the institute from academic mode to corporate mode.

To achieve these objectives the agenda should be:-

- a. To identify the industry expectations of the skill sets required of students.
- b. To identify the areas of Total Quality Management (TQM) in management education.
- C. To identify the changes required in teachers imparting management education.

**e. Professionalism in MBA/PGDM Education**

There are many reasons for the wide differences in the quality of management education in different institutes in India. The main reason is the absence of a body that can ensure that the standards set are practiced and retained by all management institutes, like AACSB in USA. We do have an apex body – the All India Council for Technical Education (AICTE), that is responsible for setting the basic framework, guidelines and standards for quality of business education, there are however many problems when it comes implementation of these standard by MBA colleges and these problems undermine the effectiveness of these standards. In order install quality in management education in India, the AICTE and MBA colleges / universities in the country should focus on the following issues:- Quality of faculty, Infrastructure development , Accountability of management institutes, Values and ethics , Role of professional bodies (AIMA, ISTD, etc) . or NKC proposes that an autonomous Standing Committee for Management Education be set up under the Independent Regulatory Authority for Higher Education.

**f. Adequacy of Qualified and Competent Faculty members, Infrastructural Facilities and Updating of Curriculum**

- The institutes running MBA/ PGDM courses must have core faculty in main areas of management. Faculty must meet at least one of the three criteria requirements, namely – consultancy experience, research experience in management or knowledge of the latest management trends in terms socio-technical systems and managerial techniques in the industry.
- Infrastructure and facilities: These must include class rooms with multimedia and projection facilities, computers and peripherals and a good library with collection of books on all management subjects.
- Updating of Curriculum: The management courses and programmes being conducted in the institutes must be in line with the current requirements of the corporate world and other organizations

**g. Reputed Management Institute like IIM, IBS** (6 month Internship to Management Institute ) :- should send their students and faculties to various management institute for 6 month internship for penetrating replica of right management institute .

**h. Establish deep partnership with business.**

India's corporations must become true partners in building the management education programs by supplying ideas, knowledge, capital, financial investment, and on-site experience for students, enabling them to learn in real-world situations. They must also understand that to build truly world-class institutions, academic institutions must have the independence to "speak truth to power" (or funders) to unlock the deep value they are able to bring to Indian society.

**Conclusion:-**

The study reveals that business organizations have been giving pressures to universities to fit their professional mode. It becomes crucial for their successful survival in creating knowledgeable people to face the challenges of the environment. The management education has to be shaped into the needs of the industries today. But in today's situation survival of business school is questionable due to lack of professionalism in its management. In the changing scenario of managing, each business has to depend on such a business school to fulfill the required management skill. The business schools those who have poor standing in case of setting right vision statement, have got drawbacks curriculum

integration process accordingly and finally, do not have exposure to effective approaches to offer the programs have been treated as inefficient institutions to the corporate leaders. Leaders of Indian management education are quickly realizing that they must look outward as they train business leaders. They can't be provincial. It will not be enough to focus on educating Indians for India. Business schools in India can design themselves as global institutions, building globally distributed educational programs and deep partnerships around the world right from the start.

### References :-

1. Bhagwati, J.; Panagariya, A.; and Srinivasan, T. N. (2004) "The Muddles Over Outsourcing." *Journal of Economic Perspectives*, Vol. 18 (4), 93-114.
2. Research Report of the National Knowledge Commission (NKC) on Working Group on Management Education, 10-18.
3. BusinessWeek.com (2006a). "China MBAs: Most Likely to Fall Short." Dec. 4, 2006.
4. BusinessWeek.com (2006b), "Africa's B-School Challenge." Nov. 2, 2006.
5. Carnevale, D. (2005) "Online Courses Continue to Grow." *Chronicle of Higher Education*. July 8, 2005 issue. Castro, C. and Garcia, N. (2003) *Community Colleges: Is There a Lesson*
6. Archarya, satya Rajan(1999). " Changing face of management education – A survey" *JIMS 8M: Journal of Indian Management and strategy*.
7. Ahmad s. Mufeed(1996). "Training methods and their effectiveness in management education ", *University News* 34(17).
8. Sarin, R.(1994). " Threats for management education", *ABHIGYAN*, Summer, 10-12.
9. Prof. Varun arya, Director Aravali Institute of management, Jodhpur: - "Sustaining Quality in Management Education" article appeared in *IndianMBA.com*.
10. Reported opinions expressed by academicians at the Roundtable discussion that appeared on *BUSINESS WEEK Online*,

11. Prof. Krishna Chaitanya.V, Dhruv College of Management, Kachiguda, Hyderabad:-"Critical Issues of Indian Management Education" article appeared in IndianMBA.com.
12. Venkatapathy, R.(2000). "Quality Testing for management school", Indian Management ,39(9).
13. Venkatapathy, R.(2001). "Quality is never an Accident", Indian Management, 40(3)
14. Batra J.L. (1998) Quoted in K. Panchal, M. Prabhakar and A. Mazumdar, The B-School Report Card,Business India, 9,2 : 58-66.
15. Johar K. L. (1998) Management Education in Changing Scenario, University News, 36,5:1-2.
16. Mark H McCormack , What they Don't Teach You at Harvard Business School , Getting ahead: 95.

## “Review on Role of Management Information Systems in Decision Making”

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### **Abstract**

Management information systems combine hardware, software and network products in an integrated solution that provides managers with data in a format suitable for analysis, monitoring, decision-making and reporting. The system collects data, stores it in a database and makes it available to users over a secure network. This paper focuses on understanding the Role of Management Information Systems in Decision Making. Researcher has reviewed the concept of MIS, the need for MIS, the advantages of MIS in an organization, the MIS model, decisions and the decision making system and majorly the role of MIS in decision making. It talks about MIS in brief considering the concept of MIS, the MIS model that is used by organizations, It then gives an overview of decisions and the decision making system which is necessary to understand the decision making process. It provides a brief understanding of why MIS improves decision making.

**Key Words** - Benefits of MIS, Decision making, MIS, MIS model, MIS concept, Need for MIS.

### **Introduction**

Management information systems can help you make valid decisions by providing accurate and up-to-date information and performing analytic functions. You have to make sure the management information system you choose can work with the information formats available in your company and has the features you need. Suitable management information systems can structure the basic data available from your company operations and records into reports to present you with guidance for your decisions. Management information systems(MIS) is an organized, diverse and automated information system that is concerned with the process of gathering ,storing and transferring relevant information to support the management operations in an organization. The data



is distributed among the various departments in an organization. The processing of data takes place in various forms such as graphs, diagrams, charts, reports to generate accurate and relevant information for the management. MIS provides central storage of all the business information. MIS is used across all levels in an organization. There are different types of management information systems. This paper focuses on decision making information system. MIS plays a vital role in not only collecting and managing information, but also representing it in various formats useful for the management to make important organizational decisions.

MIS provides faster access to the required information which helps the organization to make effective and timely decisions regarding every aspect such as investments, employments, products, etc depending upon the organization. Decision making basically refers to choosing a certain line of action from among several alternatives. It is integral management that occurs in every level of management and in every function. The effectiveness of the organization depends upon the quality of decisions that informs its operation. Decision making is a major metric to determine the organizations success or failure. This paper focuses on understanding the need, benefits, types of MIS, the MIS model, decision making system and majorly the role of MIS in decision making of the organization.

### **Need for MIS in Decision Making**

#### Information

When you base your decisions on data available from management information systems, they reflect information that comes from the operations of your company. Management information systems take data generated by the working level and organize it into useful formats. Management information systems typically contain sales figures, expenses, investments and workforce data. If you need to know how much profit your company has made each year for the past five years to make a decision, management information systems can provide accurate reports giving you that information.

### Scenarios

The capability to run scenarios is a key decision-making tool. Some management information systems have this feature built in, while others can provide the information required for running scenarios on other applications, such as spreadsheets. Your decision is influenced by what happens if you decide a certain way. What-if scenarios show you how different variables change when you make a decision. You can enter reduced staff levels or increased promotion budgets and see what happens to revenue, expenses and profit for different levels of cuts or increases. Management information systems play a critical role in making realistic scenarios possible.

### Projections

Any decisions you make result in changes in the projected company results and may require modifications to your business strategy and overall goals. Management information systems either have trend analysis built in or can provide information that lets you carry out such an analysis. Typical business strategies include projections for all fundamental operating results. A trend analysis allows you to show what these results would be in the current situation and how they will change once you have implemented the decisions you have taken. The new values form the basis of your strategic approach going forward.

### Implementation

While you make your decisions with specific goals in mind and have the documentation from management information systems and trend analysis to support your expectations, you have to track company results to make sure they develop as planned. Management information systems give you the data you need to determine whether your decisions have had the desired effect, or whether you have to take corrective action to reach your goals. If specific results are not on track, you can use management information systems to evaluate the situation and decide to take additional measures if necessary. Organizations found it difficult to manage the information as a whole, before computer technology bloomed. Developments in computer technology made it possible for the managers to easily gather, integrate, store and manage the information in the form they require depending upon their needs and timing. Information is used simultaneously by many people. The information

needs to be current, accurate, concise, timely, complete, well presented and storable. For organizational productivity, solely depending on personal computers is not reliable until it is used efficiently and effectively. Also, advanced technological systems for integrating and sorting the data can be costly unless the senior management provisions it to the staff. Thus, information systems came into picture.

Information system is a mechanism that ensures information is available to the managers as per their need and time. It provides relevant information for decision making. Management information is an important input at every level in the organization for decision making, planning, organizing, implementing, and monitoring and controlling. Managers have to assimilate masses of data, convert that data into information, form conclusions about that information and make decisions leading to the achievement of business objectives. For an organization, information is as important resource as money, machinery and manpower. It is essential for the survival of the enterprise. Hence management information system plays a major role in managing information and making it easy for the managers to collect, integrate and assign the information and ensures effective and efficient decision making.

### **MIS –Theoretical Framework**

Management information system (MIS) refers to the processing of information through computers and other intelligent devices to manage and support managerial decisions within an organization. The concept may include systems termed transaction processing system, decision support system, expert system, or executive information system. The term is often used in the academic study of businesses and has connections with other areas, such as information systems, information technology, informatics, e-commerce and computer science; as a result, the term is used interchangeably with some of these fresh cut areas.

Management information systems (plural) as an academic discipline studies people, technology, organizations, and the relationships among them. This definition relates specifically to "MIS" as a course of study in business schools. Many business schools (or colleges of business administration within universities) have an MIS department, alongside

departments of accounting, finance, management, marketing, and many award degrees (at undergraduate, master, and doctoral levels) in Management Information Systems.

Information is a set of classified and interpreted data used in decision making and it has also been defined as “some tangible or intangible entity which serves to reduce uncertainty about future state or events” . There are different levels of decision making, for which information can be described as:

- 1) source
- 2) data
- 3) inferences and predictions drawn from data
- 4) value and choices
- 5) action which involves course of action.

Management information system has a purpose to meet the general information needs of all the managers in an organization or in some subunits of the organization. A subunit can be based on functional areas or can be viewed at management levels.

Considering the definition for MIS, one of the popular definition describes management information system (MIS) as "an organizational method of providing past, present and projected information related to internal operations and external intelligence. It supports the planning, control and operation functions of an organization by furnishing uniform information in the proper time frame to assist the decision makers". The information in MIS describes the firm or one of its major systems in terms of what has happened in the past, what is happening now and what is likely to happen in the future. The information is provided in the form of reports and outputs of mathematical simulations. There are two types of reports namely, periodic and special report. All managers use the information output as they make decisions to solve the firm's problems.

A management information system has also been defined as "an integrated user machine system for providing information to support operations, management and decision making functions in an organization. The system utilizes computers, manual procedures, models for analysis, planning, control and decision making, and a database". All these definitions give a concise understanding of MIS as a whole.

## **Benefits Of MIS**

Management Information Systems (MIS) not only include software systems, but the entire set of business processes and resources that are used to pull together information from functional or tactical systems. Data is then presented in a user-friendly and timely manner so that mid and upper-level managers can use it to take the right actions. The entire system is designed so that the company will meet its strategic and tactical goals.

## **Significance**

Organizations have multiple functional systems. These usually include sales systems, call center systems, financial systems, inventory systems, logistic systems and more. MIS combines information from multiple systems. This helps management staffers better understand their own departments' contributions. In many cases, the combination of data, such as sales figures combined with available inventory, help the manager take the appropriate action in order to meet the customer's needs.

## **Function**

The primary function of MIS is to help a manager take an action, answer a question or ask the right question. The questions or actions should directly relate to tactical or strategic goals. A sales manager who uses projections from the financial systems to compare with actual sales from the sales system can better gauge whether goals will be met. If the target is not going to be met, then the manager and his group can review their past actions and make necessary changes in order to increase sales and meet goals.

## **Types**

MIS is not necessarily a specific combination of functional systems, but instead is created based upon the business need. CRM (Customer Relationship Management) systems combine data that relates directly to the customer experience. ERP (Enterprise Resource Systems) combine data used in the entire sales process. Decision Support Systems or Data Warehouse often combine summary data from multiple systems in order to show executives a snapshot view of the entire organization.

### Considerations

Prior to starting an MIS project, organizations need to carefully review the transactional systems, the business processes and the needs of management within an organization. As an MIS project grows, so does the cost of implementing a solution, managing the information processes and monitoring daily activities. The result of an MIS project must provide value back to the organization in order to be worth the cost.

### Misconceptions

Many managers mistakenly believe that, for MIS to be effective, all data from all systems must be combined. The value of MIS is based upon how much it can help managers manage. If this means bringing just the data needed from several systems and ignoring the rest for now, the end result still has worth, which is the ultimate goal of MIS.

MIS makes a major difference for the business organizations. It provides several benefits such as

- 1) effective and efficient coordination between Departments
- 2) quick and reliable referencing
- 3) access to relevant data and documents
- 4) use of less labor
- 5) improvement in organizational and departmental techniques
- 6) management of day-to-day activities
- 7) day-to-day assistance in a Department and closer contact with the rest of the world.
- 8) provides a valuable time-saving benefit to the workforce

For an organization the most important factor is to efficient and effective work in minimum amount of time. MIS supports this aspect of gaining profit and ensures that employees do not have to collect data manually for filing and analysis. Instead, that information can be entered quickly and easily into a computer program. As the data is growing, it is becoming difficult for business analysts to analyze the data, hence MIS provides a platform for building programs to access the data in response to the queries by management. With faster access to needed information, managers can make better decisions about

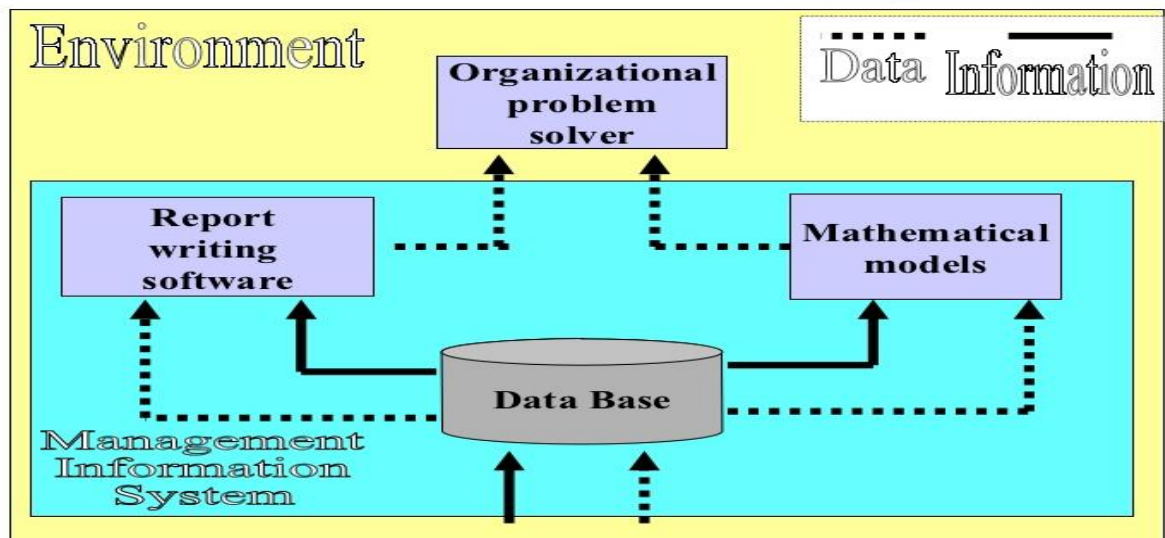
procedures, future directions, and developments by competitors, and make them more quickly.

### The MIS Model

This section describes how does a MIS model actually look like. The components of the MIS model consist of :

- 1) Database
- 2) Organizational decision maker
- 3) Report writing software
- 4) Mathematical model

The organization of these components can be referred from Figure given below.



The working of the MIS model starts with data and information coming from different sources. The data provided by accounting information system is stored in the database. The data and the information are entered from the environment. Data based information is sent to the report writing software for generating periodic and special reports , as well as to the mathematical model for simulation of the various aspects of the organization's operations. The output from the report writing software and the mathematical model is then sent to the people who are responsible for solving the problems. To solve the problem, effective decision making is required for productivity. There are decision makers

which may or may not exist in the firm's environment. The environment might consist of other organizations to which the firm has collaborated such as suppliers, to from an Inter Organizational Information System(IOS). In such case, MIS supplies information to the other member of the IOS.

### **Decisions and The Decision Making Systems**

The essence of management is making decisions. Managers are constantly required to evaluate alternatives and make decisions regarding a wide range of matters. Just as there are different managerial styles, there are different decision-making styles. Decision making involves uncertainty and risk, and decision makers have varying degrees of risk aversion. Decision making also involves qualitative and quantitative analyses, and some decision makers prefer one form of analysis over the other. Decision making can be affected not only by rational judgment, but also by nonrational factors such as the personality of the decision maker, peer pressure, the organizational situation, and others.

Management guru Peter F. Drucker, as quoted in Association Management, identified eight "critically important" decision-making practices that successful executives follow. Each:

Ask "What needs to be done?"

Ask "What is right for the enterprise?"

Develop action plans

Take responsibility for decisions

Take responsibility for communicating

Focus on opportunities rather than problems

Run productive meetings

Think and say "we" rather than "I"

Decision making systems :

This section talks about the decision making systems and its classification, and the types and nature of decisions. Decision making systems are based on the decision maker's or the

manager's knowledge about the environment. They can be classified into two types :



1) Closed Decision Making Systems If the decision maker operates in a known environment then it is called as closed decision making. The conditions for the same are as follows :

- a) The manager has a known set of decision alternatives with their outcomes fully in terms of values if implemented.
- b) The manager has a model, a method, rules where the decision alternatives can be generated, tested and ranked.
- c) The manager can choose one of the alternatives based on the goals and objectives. Example: Examination system to declare a pass and fail.

2) Open Decision Making Systems If the manager operates in an unknown environment then the decision-making is called as open decision making. The conditions for the same are as follows :

- a) The decision maker doesn't know all the decision alternatives.
- b) The outcome of the decision is also not known fully i.e. the knowledge of the outcome may be probabilistic one.
- c) No method, rule or model is available to study and finalize one decision among the set of decision alternative.
- d) It is difficult to decide objectives and goals. Therefore the decision maker reports to that decision where aspirations and desires meet. Example: Pricing a new product.

Decisions :

According to Haynes and Massie, a decision is a course of action which is consciously chosen for achieving a desired result. According to Trewatha and Newport, Decision making involves the selection of course of action from among two or more possible alternatives in order to arrive at a solution for a given problem.. Considering the classification of decisions, there are classification based on the situation and their nature. The types of decision on the basis of situation are based on the knowledge about the outcomes that are yet to take place. For a successful decision, the decision maker should be aware of the outcome that will take place once that decision is taken. In addition to that, if the decision maker has the full knowledge of the system then it is a situation of certainty.

Contrastingly, if the decision maker has partial or incomplete knowledge of the system, then it is a risk situation. Lastly, if the decision maker has no knowledge of the system then it is a situation under uncertainty.

On the basis of nature, decisions can be classified as programmed decisions and non-programmed decisions.

- 1) Programmed decision: - If a decision is based on rules, methods or some guidelines then it is called as programmed decision. The programmed decision making can
- 2) be delegated to a lower level in the management. Eg: If a stock level of an item is 200 number then a decision to raise purchase requisition for extra items in few numbers.
- 3) 2) Non-programmed decision: - A decision which cannot be made using a rule or method is called as non-programmed decisions. This decision making is non-deterministic and is handled by top management Eg. Stock level is 200.

### **Role Of MIS In Decision Making**

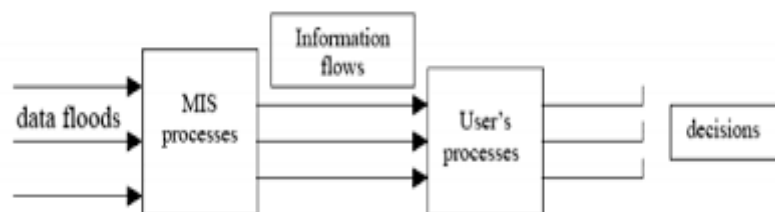
Decision-making is the process by which organizational members choose specific course of action out of several alternatives in response to opportunities and threats. The outcome of the decision making process either results in a good or a bad decision. A Good decision results in successful productivity of the organization and in the courses of actions that help an individual, group or organization to be effective, while a bad decision results in ineffective and inefficient choice of course of action thereby leading to poor or no productivity and overall loss of time, effort, finance and labour. Every organization grows, prospers or fails as a result of decisions made by its members. The success of decision-making is highly dependent partly on available information, and partly on the components of the process which are known as functions. For example, if managerial objectives are absent or unclear, probably due to inadequate information, there is no basis for a search. Without the information, the search has no meaning because there will be no alternatives to compare search results, which will thereby yield an undesired result due to random choice of a particular course of action. According to Alabi the search could be through :

- 1) Undirected viewing : There is a general exposure to information where the viewer has no specific purpose in mind and is randomly searching for information from the entire information pool.
- 2) Conditioned viewing : There is a directed exposure to information. Yet it does not involve active search to a more or less clearly identified area or type of information.
- 3) Informal search : This is a relatively limited and unstructured effort to obtain specific information for a specific purpose. The information wanted is actively sought.
- 4) Formal search : This is a deliberate effort, usually following a pre-established plan, procedure or methodology to secure specific information relating to a specific issue.

Simon (1984), a leading authority in management decision-making considers that decision making comprises four principal phases:

- 1) Intelligence- searching the environment for conditions that calls for decision making.
- 2) Design- inventing, developing and analyzing possible courses of actions. This involves processes to understand the problem, to generate solutions and testing of solutions for feasibility.
- 3) Choice- selecting an alternative or course of action from those variables.
- 4) Review- assessing and analyzing all the past choices

MIS can be viewed in another way wherein it acts a means for transformation of data, which in the decision making process is used as information. The data is flooded in the MIS process which comes out in the form of information and this information is an input to the user processes. The data is processed into information for a specific purpose and it provides several alternatives of course of action for decision making, out of which one course of action is selected which is nothing but the decision taken.



For improvement in decision making using MIS, a relevant MIS strategy should be chosen and it should be ensured that the choice made is fully compatible with the system. Thus, time and money will be saved and the probability of selecting a wrong choice will decrease. Also, the selected MIS strategy should be compatible with the decisions made. That means there should be a common point between the decisions and the MIS strategy to be used by the organization.

According to Obi (2003), MIS can monitor any disturbances in the system and hence it is useful for decision making. MIS gets the system in control by taking a particular course of action. It is also relevant in nonprogrammer decisions as it provides support by supplying information for the search, the analysis, the evaluation and the choice and implementation process of decision making.

Considering the various aspects of how MIS helps in decision making, another key factor here is selecting the individuals for decision making. MIS is a highly complex process which requires lot of caution. Thus, organizations should carefully select the individuals who will be controlling the systems. The more professional a person, the better it can handle decision making which thereby increases the probability of correct decisions and positive outcomes for the organization.

On another level, decision making also depends on the past work or historic information. This is where record keeping comes into picture. MIS plays a major role in record keeping of databases that can easily keep confidential and invaluable information. Security of information in the databases is ensured by the managers of the organization. In addition to that, databases provide a platform from where information can be retrieved. Hence, record keeping and database tools of MIS ensures that the decisions are taken viably and at the same time the businesses run smoothly without any interruption.

From the operations perspective, the operations of MIS heavily rely on systematic methods. This indicates that the decisions made by the organization are pre-planned and in order which thus encourages objectivity during decision making. Thus the systematic and orderly formula of operating is crucial and game changing for good decision making.

Jahangir adds that the principles, strategies and modes of operation in MIS can be intelligently used by macroeconomists to draw a line between good and bad decisions. Once the line is drawn, good decisions are encouraged while the bad ones are sidelined and almost discarded. As a result, this ensures positivity in terms of decisions made by organizations which consequentially improves the decision making process.

From the fundamental perspective, a good number of MIS can perform multiple tasks simultaneously. Multitasking is directly proportional to efficiency since several operations are performed simultaneously thereby increasing the efficiency. In context of decision making, it is seen that multitasking ensures that decisions are made more speedily as compared to those systems that handle one task at a time.

Despite the various advantages of MIS in decision making, there are a few challenges which need to be curbed. MIS has a dynamic nature resulting in difficulty for some organizations to keep up with the principles, strategies or even ideas. Also, MIS is non adaptable, calling for different decisions in different situations which is challenging. MIS requires expertise and is costly for some organizations. Lastly, MIS is a more of a science-oriented field while business is art-oriented. Hence for some organizations it becomes difficult for collaborating and finding a middle ground for the two. Although these challenges are not common for all organizations, there is a need to curb the challenges mentioned above.

To overcome these challenges, one of the things that an organization can adapt is a well defined decision making system which will provide a viable environment for MIS. Considering the cost, the higher management of the organization should come up with plans to manage the cost of MIS. Good decision makers should be chosen that can handle diverse decisions and can think differently and intellectually. The organizations should arrange seminars and teach the diverse and dynamic nature of MIS for better understanding, thereby helping their employees to improve their performance.

### **Conclusion**

An efficient information system creates an impact on the organization's function, performance, and productivity. Nowadays, information system and information technology

have become a vital part of any successful business and is regarded as a major functional area like any other functional areas such as marketing, finance, production and human resources, etc.

Thus, it is important to understand the functions of an information system just like any other functional area in business. A well maintained management information system supports the organization at different levels. Management Information Systems provides accurate, timely, relevant and complete information necessary to facilitate decision making in an organization. It helps in planning, control and operational functions to be carried out effectively and efficiently. It provides a wide range of decision alternatives for the decision makers, enabling them to make their choice depending on the system and the situation. It ensures that the choice results in more often, a positive outcome. These are the major reasons why MIS is chosen by renowned organizations for decision making and for management of information.

MIS with all of its advantages has a few challenges that needs to be overcome. Organizations should ensure top level management involvement for smooth functioning of the organization when it comes to MIS. Decision making inn such organizations would be faster and in line with the modern and efficient business practices. Business owners must learn to cope up with the ever changing trends in MIS and decision making, without which it will be very challenging to make positive progress in decision making. Finally, it is vital to remember that improvement in decision making is fundamentally meant to ensure customer satisfaction while businesses continue to flourish in success. The MIS strategies should be adopted as per the requirement and should aim to achieve the business goals.

### **References**

1. Amar, A.D. "Principled Versus Analytical Decision-Making: Definitive Optimization." *Mid-Atlantic Journal of Business*, June 1995, 119.
2. Crainer, Stuart. "The 75 Greatest Management Decisions Ever Made." *Management Review*, November 1998, 16.

3. Drucker, Peter F. "What Makes an Effective Executive." *Harvard Business Review*, 1 June 2004.
4. "Effective Executives Follow Eight Practices." *Association Management*, September 2004, 23.
5. Eisenhardt, Kathleen M. "Strategy as Strategic Decision Making." *Sloan Management Review*, Spring 1998, 65.
6. Ettore, Barbara. "Absolutely Great Decisions." *Management Review*, November 1998, 1.
7. Hammond, John, et al. *Smart Choices: A Practical Guide to Making Better Decisions*. Boston: Harvard Business School Press, 1999.
8. Hammond, John S., et al. "The Hidden Traps in Decision Making." *Harvard Business Review*, September-October 1998, 47.
9. Pethokoukis, James M. "All Seeing All Knowing (Creating Futures Markets to Aid in Corporate Decision Making)." *U.S. News & World Report*, 30 August 2004, 54.
10. Phillips-Wren, Gloria E., Eugene D. Hahn, and Guisseppi A. Forgionne. "A Multiple-Criteria Framework for Evaluation of Decision Support Systems." *Omega*, August 2004, 323.
11. G.Satyanarayana Reddy, Rallabandi Srinivasu, Srikanth Reddy Rikkula, Vuda Sreenivasa Rao, "Management Information System to help managers for providing decision making inan organization," in *International Journal of Reviews in Computing*,2009.
12. Gabriel, Justin Mgbechi Odinioha,Management Information Systems and Corporate Decision-Making : A literature Review,*The International Journal of Management*, Vol.2 Issue 3,July,2013.
13. Srinivas Nowduri,"Manageent information systems and business decision making: review, analysis, and recommendations",*Journal of Management and Marketing Research* .
14. [http://archive.mu.ac.in/myweb\\_test/MCA%20study%20material/M.C.A.\(Sem%20-%20III\)%20-%20Management%20Information%20System.pdf](http://archive.mu.ac.in/myweb_test/MCA%20study%20material/M.C.A.(Sem%20-%20III)%20-%20Management%20Information%20System.pdf). Pg 20-34.

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