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CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19-22 June.

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THE USAGE OF SIX SIGMA TOOLS IN BRINGING DOWN THE DEFECTS IN THE HR PROCESSES

SREEJA K
ASST. PROFESSOR
DEPARTMENT OF MBA
PES SCHOOL OF ENGINEERING
BANGALORE

MINTU THANKACHAN
HR ADMINISTRATOR
ACCENTURE
BANGALORE

ABSTRACT

Six Sigma is not the latest buzzword in management circles. It has been here for quite a long time and companies have been raining accolades for this merit-worthy process by contributing Million Dollars as Benefits for them Eg: The Six Sigma effort at GE contributed \$700 million in corporate benefits in 1997, just two years into the program. Six Sigma seeks to improve the quality of process outputs by identifying and removing the causes of defects (errors) and minimizing variability in business processes. All HR processes are prone to producing multiple defects during delivery. Sometimes these defects remain unnoticed until they start to cause problems and when this happens they can affect the organization at a much higher level, significantly impacting areas such as finance, employee satisfaction, customer satisfaction or even the legality of the business. It is therefore a high priority to detect and minimize the number of defects produced. Achieving the Six Sigma level or 99.9997 per cent flawless transactions may not be possible in all HR processes, but by taking the Six Sigma approach defects can often be reduced substantially. The study aimed at finding out the defects in the Hr Processes by collecting data using Questionnaire & Interview to the Hr staffs of 5 hotels in Bangalore. The data obtained is quantified and analysed using weighted average and percentage methods. Then by using the Six Sigma tools like 5Why Analysis, Cause & Effect Diagram (Fish Bone Analysis) & Visual Controls we will be able to Successfully trace out the reasons for which the defect might have occurred & find out the root cause for the problems, after which these defects can be minimized by improving the Current Hr Process with the Actual Hr Process in the Hr system. The study analyzed the various types of defects that came from Hr Processes. It showed that a majority of Hr Activities carried out had some form of the defects in the Hr Process. This study intended to find out most of the defects & errors in the Hr functioning, their causes & root Problems for the occurrence of the Defects in the Hr system. After a thorough analysis of the Six Sigma tools in the Hr process, it was found that these defects could have minimized easily.

KEYWORDS

Defects, Fish bone analysis, 5 why analysis, HR practices, Six sigma tools.

INTRODUCTION

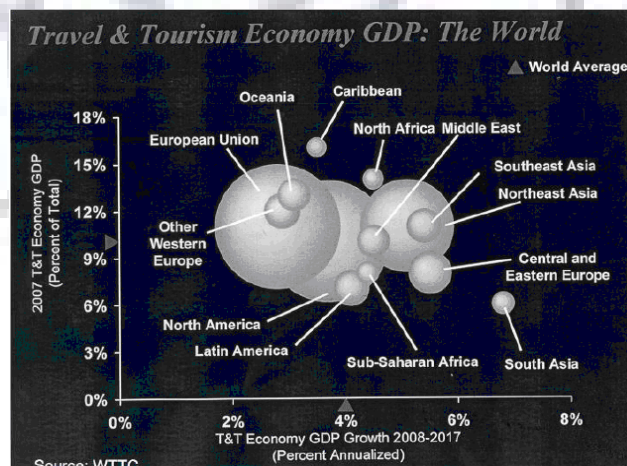
- Hospitality Industry is one of the largest Industries in the world today.
- It Contributes to 10.4% of Global GDP And US \$ 5.4 Trillion in 2007
 - Employed over 231.2 Million People in 2007
 - Accounted for 8.3% of total world employment in 2007
 - Estimated to be comprised of more than 300,000 Hotels & Restaurants

ASIA PACIFIC HOSPITALITY INDUSTRY

- Asia Pacific is the region with greatest growth potential for Hospitality industry.
- 2006- Average Tourism Growth of 707% across APAC
- Average Hospitality growth of 2.7% across Americas and 2.5% across Europe
- Total Number of Tourist Arrivals in this region was over 252 Million in 2006

UNITED KINGDOM HOSPITALITY INDUSTRY

- Hospitality Industry is probably the world s fastest growing, Employment generating profession employing 1 in 10 people world wide
- In UK alone the industry employs over 1.8million people. It is estimated that it will require 30,000-35,000 trained people at the managerial & Supervisory levels every year till 2010 to full potential.



MIDDLE EAST HOSPITALITY INDUSTRY

- UAE predicted to average of 7% P.A. of Growth
- Visitors to Dubai projected to reach 10million by 2010 & 25 million by 2029.

➤ Dubai investing \$45 Billion in Infrastructure & Hospitality Sector.

THE INDIAN HOSPITALITY INDUSTRY

This is one of the fastest growing sectors of the Indian economy. Riding on the economic growth and rising income levels that India has witnessed in recent years, the sector has emerged as one of the key sectors driving the country's economy. Rising disposable incomes and increase in double-income households have also played a part in this growth phenomenon.

Revenues of Hotel and Restaurant (H&R) industry in India during the financial year 2006-07 was INR604.32 billion, a growth of 21.27% over the previous year, primarily Driven by foreign tourist arrivals, which increased by 14.17%. Currently there are some 1,980 hotels approved and classified by the Ministry of Tourism, Government of India, with a total capacity of about 110,000 hotel rooms. With tourism industry showing excellent performance, in terms of foreign tourists arrival and demand outpacing supply, the hospitality industry, is poised to grow at a faster rate. It is estimated that over the next two years 70,000-80,000 rooms will be added across different categories throughout the country.

A FRAMEWORK FOR UNDERSTANDING SIX SIGMA

The Financial Times defines Six Sigma initiative as a "program aimed at the near elimination of defects from every product, process and transaction." which was developed by Motorola in 1986. It is basically a proven set of methods that help people in running their business or organization more efficiently and profitably (Brue, 2005).

HISTORY: In 1980s, Bob Galvin the CEO of Motorola was trying to improve the manufacturing Process. The Senior Sales Vice President Art Sundry at Motorola found that their quality is extremely bad. They both decided to improve the quality. Quality Engineer Bill Smith at Motorola in 1986 invented Six Sigma. It was applied to all business processes. In 1988 Motorola Won the Malcolm Baldrige Quality Award, as a result other organizations were also interested to learn Six Sigma. Motorola leaders started teaching Six Sigma to other organizations. Initially Six Sigma was invented to improve the product quality by reducing the defects, but later Motorola reinvented it. The new Six Sigma is beyond defects, it focuses on strategy execution. It became a management system to run the business. It was invented for an improvement in manufacturing industry but now it is applied in almost every industry i.e. Financial Services, Health care and Hospitality. Originally Six Sigma was introduced in United States but now it is in applied in many countries around the world.

SIX SIGMA TOOLS

5 WHY ANALYSIS

The 5-Why analysis method is used to move past symptoms and understand the true root cause of a problem. It is said that only by asking "Why?" five times, successively, you can delve into a problem deeply enough to understand the ultimate root cause. By the time you get to the 4th or 5th why, you will likely be looking squarely at management practices. This methodology is closely related to the Cause & Effect (Fishbone) diagram, and can be used to complement the analysis necessary to complete a Cause & Effect diagram.

BENEFITS OF THE 5 WHYS

- It helps to quickly identify the root cause of a problem.
- It helps determine the relationship between different root causes of a problem.
- It can be learned quickly and doesn't require statistical analysis to be used.

WHEN IS 5 WHYS MOST USEFUL?

- When problems involve human factors or interactions.
- In all types of business situations whether solving a lean manufacturing or for any other business problem.

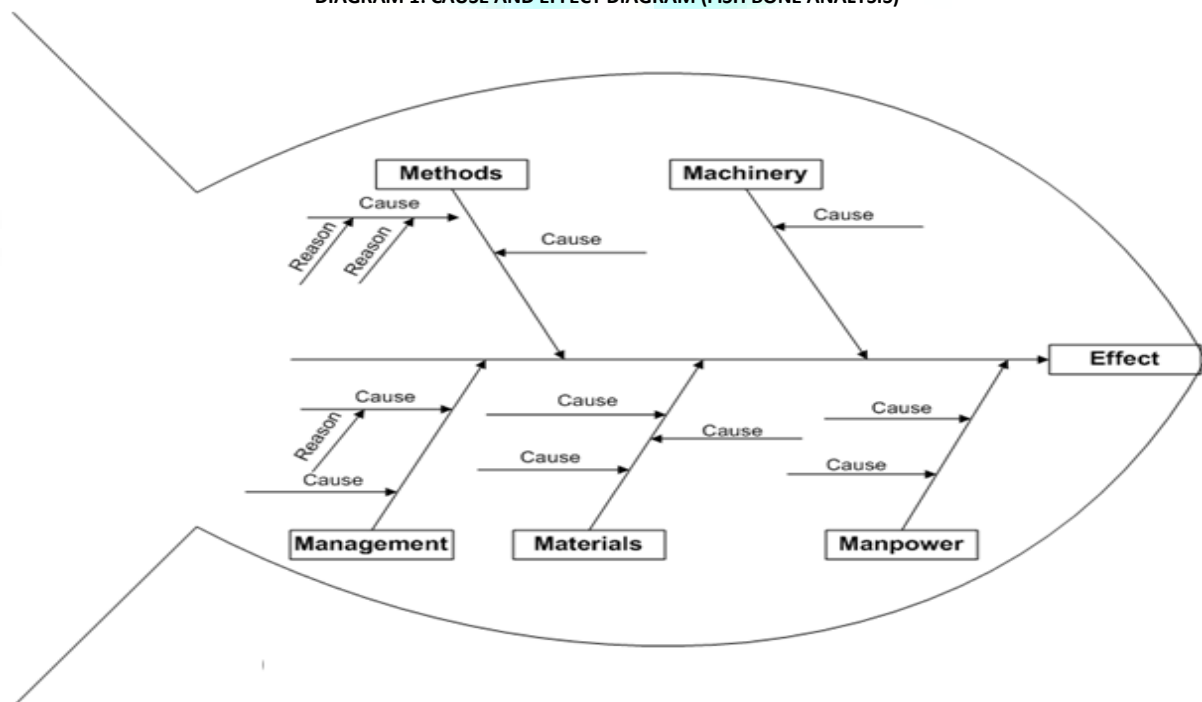
The 5 Whys is a technique used in the Analyze phase of the Six Sigma DMAIC methodology. The 5 Whys is a great Six Sigma tool that doesn't involve a statistical hypothesis and in many cases can be completed without a data collection plan.

By repeatedly asking the question "Why" (five is a good rule of thumb), you can peel away the layers of symptoms which can lead to the root cause of a problem. Very often the ostensible reason for a problem will lead you to another question. Although this technique is called "5 Whys," you may find that you will need to ask the question fewer or more times than five before you find the issue related to a problem.

4 WHY'S AND THE FISH BONE ANALYSIS

The 5 Whys can be used individually or as a part of the fishbone (also known as the cause and effect or Ishikawa) diagram. The fishbone diagram helps you explore all potential or real causes that result in a single defect or failure. Once all inputs are established on the fishbone, you can use the 5 Whys technique to drill down to the root causes.

DIAGRAM 1: CAUSE AND EFFECT DIAGRAM (FISH BONE ANALYSIS)



The cause and effect diagram is also known as fishbone diagram or an Ishikawa diagram. It was introduced by Dr Kaoru Ishikawa in 1943, while working in a quality program at Kawasaki Steel Works in Japan. Once we have a quality problem its causes must be found. Cause and effect Diagram helps to find out all the possible causes of an effect (problem). It is the first step in solving a quality problem, by listing all the possible causes.

In Six Sigma it is used in the define phase and analyze phase.

The reason that Cause and Effect Diagram is also called Fishbone Diagram is that it looks like a skeleton of a fish. The main problem is the head of the fish, the main causes are Ribs and the detailed causes are the small bones.

WHEN SHOULD A FISHBONE DIAGRAM BE USED?

Does the team...

- Need to study a problem/issue to determine the root cause?
- Want to study all the possible reasons why a process is beginning to have difficulties, problems, or breakdowns?
- Need to identify areas for data collection?
- Want to study why a process is not performing properly or producing the desired results?

HOW IS A FISHBONE DIAGRAM CONSTRUCTED?

Basic Steps:

1. Draw the fishbone diagram....
2. List the problem/issue to be studied in the "head of the fish".
3. Label each ""bone" of the "fish". The major categories typically utilized are:
 - The 4 M's:
 - Methods, Machines, Materials, Manpower
 - The 4 P's:
 - Place, Procedure, People, Policies
 - The 4 S's:
 - Surroundings, Suppliers, Systems, Skills

Note: You may use one of the four categories suggested, combine them in any fashion or make up your own. The categories are to help you organize your ideas.

4. Use an idea-generating technique (e.g., brainstorming) to identify the factors within each category that may be affecting the problem/issue and/or effect being studied. The team should ask... "What are the machines issues affecting/causing..."
5. Repeat this procedure with each factor under the category to produce sub-factors. Continue asking, "Why is this happening?" and put additional segments each factor and subsequently under each sub-factor.
6. Continue until you no longer get useful information as you ask, "Why is that happening?"
7. Analyze the results of the fishbone after team members agree that an adequate amount of detail has been provided under each major category. Do this by looking for those items that appear in more than one category. These become the 'most likely causes'.
8. For those items identified as the "most likely causes", the team should reach consensus on listing those items in priority order with the first item being the most probable" cause.

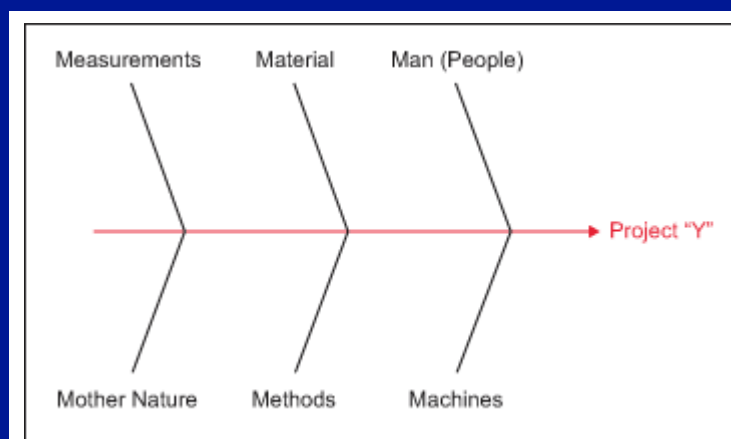
The cause-and-effect diagram or fishbone can be used to help find the root causes of defects with speed and accuracy, especially when the improvement project is in a process that the project leader has little to no experience.

CAUSE-AND-EFFECT DIAGRAM AND SIX M'S

Once the charter is complete and signed by all parties, the team transitions to the Measure phase, where the search starts for potential Xs that influence output. One of the tools is the fishbone diagram. The classic cause-and-effect fishbone has the defect at the end (the stinky head of the fish), and the bones are split up in six categories:

1. Man (People)
2. Machines
3. Material
4. Methods
5. Measurements
6. Mother Nature

Diagram 2: Fishbone with Six M's

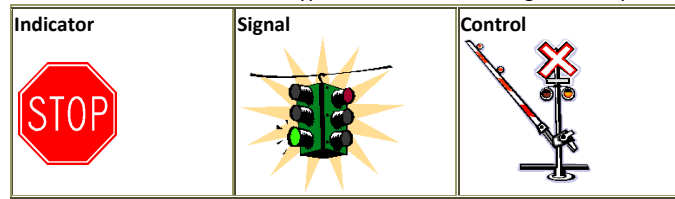


With each "bone," the team tries to find various potential Xs that influence the project Y by asking:

- "How does Man (People) negatively influence the defect?"
- "How do the Machines negatively influence the defect?"
- "How does the Material negatively influence the defect?"
- "How do the Methods negatively influence the defect?"
- "How do the Measurements negatively influence the defect?"
- "How does Mother Nature negatively influence the defect?"

VISUAL CONTROLS

Visual Control provides information to guide everyday actions. Traffic signals and signs are the most common examples. It is a powerful tool for enabling good decision-making at the micro level. The table below summarizes different types of visual control and gives examples.

**WHAT IS VISUAL CONTROL?**

Visual control methods aim to increase the efficiency and effectiveness of a process by making the steps in that process more visible. The theory behind visual control is that if something is clearly visible or in plain sight, it is easy to remember and keep at the forefront of the mind. Another aspect of visual control is that everyone is given the same visual cues and therefore is likely to have the same vantage point. There are many different techniques that are used to apply visual control in the workplace. Some companies use visual control as an organizational tool for materials. A clearly labelled storage board lets the employee know exactly where a tool belongs and what tools are missing from the display board. Another simple example of a common visual control is to have reminders posted on cubicle walls so that they remain in plain sight. Ongoing processes are commonly made visible by LED displays, colored, lights, computer images, etc. The fact is that replacing text or number with graphics makes a set of information easier to understand with only a glance, making it a more efficient way of communicating a message.

WHAT ARE VISUAL CONTROLS MEANT TO DO?

Visual controls are designed to make the control and management of your company as simple as possible. This entails making problems, abnormalities, or deviations from standards visible to everyone. When these deviations are visible and apparent to all, corrective action can be taken to immediately correct these problems. Visual controls are meant to display the operating or progress status of a given operation in an easy to see format. Furthermore visual controls are meant to both provide instruction and to convey information. A visual control system must have an action component associated with it in the event that the visually represented procedures are not being followed in the real production process. Therefore visual controls must also have a component where immediate feedback is provided to workers.

REVIEW OF LITERATURE

Six Sigma is an improvement methodology in the field of Total Quality Management. It aims for an error free business environment. It was originally introduced in the US by Motorola in the late 1980s. and became popular elsewhere in early 1990s. This tool became the focus of attention for CEOs and quality managers in the late 1990s, at a time when stagnancy and criticism of ISO 9000 was rising about its effectiveness with respect to making improvements in organisations. It provides more promises to management to solve deep rooted and complex performance issues of their organisations. It is, therefore, usually labelled as a tool which strives for breakthrough improvements rather than slow and simple improvements.

(Kamran Moosa and Ali Sajid, Critical analysis of Six Sigma implementation, Total Quality Management, Vol. 21, No. 7, July 2010, 745–759)

Academics have identified six concepts or constructs related to Six Sigma:

- (i) Top management leadership,
- (ii) Customer requirements,
- (iii) Focus on financial and non-financial results,
- (iv) structured method of process improvement,
- (v) Strategic process selection, and
- (vi) Full - time specialist

Six Sigma places considerable emphasis on reducing unwanted variation. In fact, the term 'Six Sigma' refers to a performance target of operating within 3.4 defects per million opportunities.

The implementation of Six Sigma improvement projects occurs through a parallel Organization that consists of improvement specialists such as 'master black belts', 'black belts' and 'green belts'.

(R. SHAH, A. CHANDRASEKARAN* and K. LINDERMAN, In pursuit of implementation patterns: the context of Lean and Six Sigma, International Journal of Production Research, Vol. 46, No. 23, 1 December 2008, 6679–6699).

By the implementation of a quality improvement program, an organization always would like to monitor its progress at every given point of time. When a six sigma quality program is used, the milestones are the sigma levels that the organization achieves. Obviously the organization aims for the six-sigma goal of 3.4 ppm. Such an organization is often called as a 'six sigma organization'. (J. RAVICHANDRAN, Six-Sigma Milestone: An Overall Sigma Level of an Organization, Total Quality Management, Vol. 17, No. 8, 973–980, October 2006).

Six Sigma reduces waste, increases customer satisfaction and improves processes with a considerable focus on financially measurable results. Six Sigma is defined as a set of methodologies and techniques used to improve quality and reduce cost utilising a structured and disciplined methodology for solving business problems. DMAIC, or Define, Measure, Analyse, Improve and Control are key processes of a standard framework for a Six Sigma project. Another popular approach associated with Six Sigma projects, DMADV or Define, Measure, Analyse, Design and Verify. While the focus of DMAIC is on eliminating waste and improving an existing process, DMADV

is primarily utilised to develop new products/services. (Erick C. Jones, Mahour Mellat Parastb_ and Stephanie G. Adams, A framework for effective Six Sigma implementation, Total Quality Management, Vol. 21, No. 4, April 2010, 415–424).

The Six Sigma management programme includes:-

- ❖ The creation of an organisational structure to support the initiative.
- ❖ Training a high proportion of staff in core competencies, including statistics, interpersonal skills, problem solving, project management etc.
- ❖ Taking a team-based project-by-project improvement approach.
- ❖ Using recognition and reward schemes that support the initiative.

(LOUISE DAVISON & KADIM AL-SHAGHANA, The Link between Six Sigma and Quality Culture – An Empirical Study, Total Quality Management Vol. 18, No. 3, 249–265, May 2007.)

Hr is an integral element of the main corporate business environment strategy, Six sigma and the hr process is fully integrated into the operational activities of the business models and plans. Six sigma has been deployed by the hr team to drive the improvement of the hr processes to achieve the strategic objectives of right people in the right place at the right time at the right cost (Wyper, Bill; Harrison, Alan., Deployment of Six Sigma methodology in Human Resource function, Total Quality Management, Jul2000, Vol. 11 Issue 4)

As Hr is playing an increasingly strategic role in achieving business goals as well as delivering key services through out the organization. These functions were the very reasons that the six sigma was developed. So Six sigma emerged as one of the best management tool that can be used to improve the quality and profitability in an organization (How Six Sigma may help Hr to improve Processes & Services, Hr Focus, Dec2007, Vol.84 Issue12, and P5-7).

Six Sigma increases Hr participation in employee, company and customer development by integrating its function into management decision, company strategy as well as employee development. For employees the quality concept opens up career option never before possible and the satisfaction of being part of a winning team (Lanyon, Sally, SIX SIGMA: NEW OPPORTUNITIES FOR HR, NEW CAREER GROWTH FOR EMPLOYEES, *Journal of Organizational Excellence*, Autumn2003, Vol. 22 Issue 4, p29-42).

Six sigma approaches helps to support a culture where all lines of communication are open, unencumbered by traditional corporate barriers. It also supports unity of direction. It is a disciplines way of thinking about quality that adapts to all functions and becomes universal. Employees everywhere speak the same language and use the same tools for the basic targets (DeFeo, Joseph A. *Employment Relations Today (Wiley)*, Summer2000, Vol. 27 Issue 2, p1-6).

Six Sigma is a toolset, not a management system and is best used in conjunction with other more comprehensive quality standards such as the Baidrige Criteria for Performance Excellence or the European Quality Award. It is based on utilizing an extensive set of statistical and advanced mathematical tools, and a well-defined methodology that produces significant results quickly. The success of this methodology within an organization has significant momentum that can only lead to fundamental organizational cultural transformation (Lanyon, Sally. Six Sigma works too to improve Hr management processes, *Journal of Organizational Excellence*, Autumn2003, Vol. 22 Issue 4, p29-42)

The immediate goal of Six Sigma is defect reduction. Reduced defects lead to yield improvement; higher yields improve employee satisfaction. Six Sigma defect reduction is intended to lead to cost reduction. It has a process focus and aims to highlight process improvement opportunities through systematic measurement Six Sigma implementation can have negative consequences if applied in the wrong project. (Rai singhani, Mahesh S.; Ette, Hugh; Pierce, Roger; Cannon, Glory; Daripaly, Prathima, Six Sigma: Concepts, tools applications, *Industrial Management & Data Systems*, , 2005, Vol. 105 Issue 4, p491-505)

Hospitality industry is one of the industries which benefited by the adoption of Six Sigma techniques. Providing personalized services to each and every customer & employees by bending to their demands within a limited time without comprising the quality was aided by the Six Sigma metrics. The six sigma technique is adopted in every field right from maintaining full occupancy to employee development, to efficient housekeeping, ensuring a balance inventory supply and to minimize the wastage of resources. Starwood hotels were the first company to six sigma in the hospitality sector (chrnglobal.com/articles/375/1/app.)

Six Sigma tools And Methodologies can be used to manage the practical challenges of improving Hr Operations, to meet customer expectations at lower cost and with greater efficiency. Six Sigma help to pinpoint exactly what needs to be done for the process to improve, without wasting the resources, whilst at the same time offering an empirical , quantitative view of the performance of the process and highlighting improvement opportunities (Mircea Albeanu and Ian Hunter with Jo Radford, *Six Sigma in Hr Transformation*, Gower publishing limited,2010)

NEED FOR THE STUDY

- ❖ The study is needed in order to enhance the quality of service, as it helps to findout various problems related to the HR processes. It helps to reduce the time taken to carryout HR pocesses and to reduce various costs associated with it. It will also help to reduce the employee complaints and increase their satisfaction and motivation levels.

STATEMENT OF THE PROBLEM

The inefficiencies or defects in the Hr processes will ultimately result in the decrease in the level of Quality of service to employees which in turn affect the profits of any organization.

OBJECTIVES OF THE STUDY

- To find out the defects in the Hr Processes
- To trace out the reasons for which the defect might have occurred
- To find the root cause for the problems
- To help to minimize the defects occurring and try to improve the Current Processes with the help of six sigma tools.

METHODOLOGY

The research is an exploratory research, which uses six sigma tools to find out the defects in HR process and improve it.

A detailed and comprehensive literature study have been carried out to find out the tools and techniques used in Six Sigma, and to analyze the suitability of these tools and techniques for process improvement in Hospitality Industry. A list of tools and techniques has been identified, which are helpful for Six Sigma implementation in hospitality industry and used in the study. Questionnaire & interview methods are also employed to collect the necessary data. Questionnaire consists of five point scale and yes/no questions. Weighted average and percentage methods are used to collect the data obtained through questionnaires. The interview was conducted along with direct observation.

SAMPLE

The study was carried out on a sample of 62 HR staffs drawn from the Hotel Industry. The sample was drawn form five hotel groups in Bangalore.

RESULTS AND DISCUSSION

The study is conducted to find out the defects in Hr Processes & to bring down the defects in Hr functioning through the usage of Six Sigma tools. An understanding about it will help the Hr's to make rational decisions effectively & efficiently. Coming out with a Six Sigma tools is a complex process but it involves a number of tools which can be used to manage the practical challenges of improving Hr Operations.

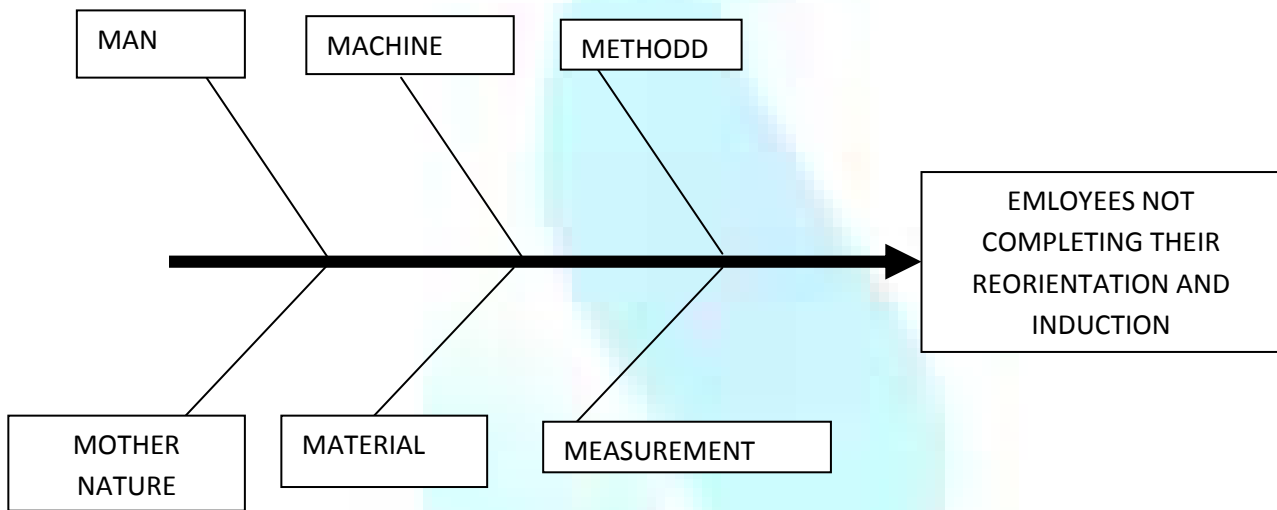
A majority of Hr Activities carried out has some form of defects in the Hr Process. This study help to find out most of the defects & errors in the Hr functioning, their causes & root Problems for the occurrence of the Defects in the Hr system. After a thorough analysis of the Six Sigma tools in the Hr process, it is found that these defects could have minimized easily.

TOPIC	WEIGHTED SCORE	% RATE	RESULT
SUCCESS RATE IN SOURCING THE CANDIDATES WHENEVER REQUIRED	3.83	----	GOOD
ON TIME INDUCTION & RE-ORIENTATION PROGRAMMES		75%	BAD
DELIVERY OF TRAINING WITHIN STIPULATED COST & TIME		67%	BAD
EFFECTIVENESS OF ON-TIME VERIFICATION PROCESS (delay in receiving verification reports)	2.08	75%	AVERAGE
SATISFACTION LEVEL OF PERFORMANCE APPRAISAL SYSTEM (not conducted on time)	2	67%	BELOW AVERAGE
EFFECTIVENESS IN MANAGING EMPLOYEE FACILITIES (Cafeteria system)	2.41	----	AVERAGE
RATING OF PAYROLL DEPT IN ROLLING OUT SALARIES ON TIME (trainees not getting stipend on time)	2.5	50%	AVERAGE
COMPLIANCE TO STATUTORY POLICIES		83%	GOOD
EMPLOYEE BENEFITS SCHEME (MEDI-CLAIM FACILITIES)	2.08	----	AVERAGE
SUCCESS RATE IN HANDLING EMPLOYEE GRIEVANCES & DISCIPLINARY ISSUES	4.6	----	EXCELLENT
IF EXIT FORMALITIES ARE HELPING IN REDUCING ATTRITION RATE	4.08	----	EXCELLENT

Weighted Average value >1 but < 2 is Below Average
 Weighted Average value > 2 but < 3 is Average
 Weighted Average value > 3 but < 4 is Good
 Weighted Average value > 4 but < 5 is Excellent

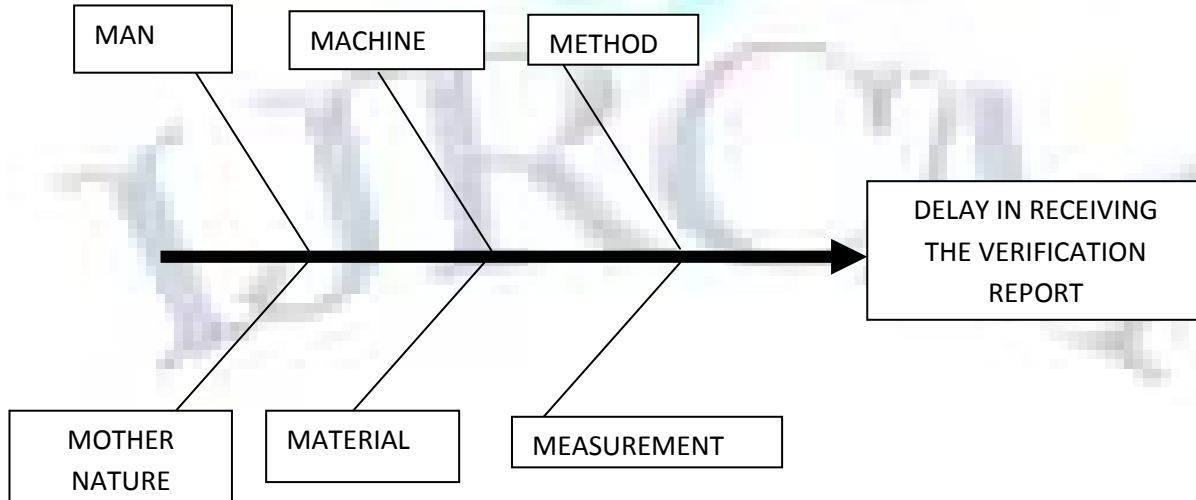
While analysing the responses it is found that 75% of the Respondents feel that their organization failed to conduct Induction & Re-Orientation Programmes on time.

DIAGRAM 3: FISH BONE ANALYSIS ON ON-TIME INDUCTION AND ORIENTATION



Man: People used to miss their induction due to manpower shortage in the department & some people did not understand the importance of Induction.
Machine: The audio were got broken & the projector was not kept properly.
Method: Induction Schedules were not sent on time, people did not use to come on time, HOD s did not come on time due to which the induction used to finish late.
Material: Some Department HOD s did not even make their induction ppt, some induction presentations were outdated.
Measurement: There were no definite parameters on which number of people completing induction was measured; induction scores were not displayed on time.

DIAGRAM 4: FISH BONE ANALYSIS FOR INEFFECTIVENESS IN VERIFICATION PROCESSES

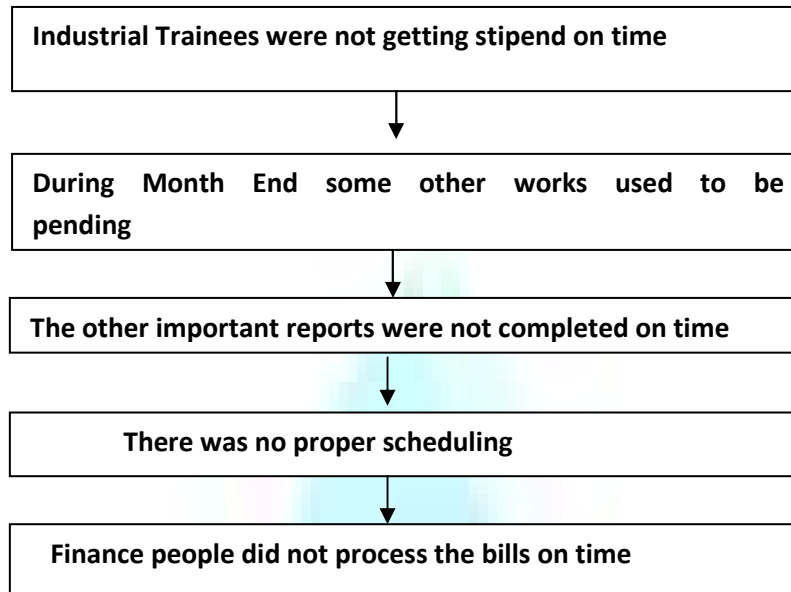


Man: Delay due to single resource involved in numerous tasks, less literate/educated staff that need continuous feedback, time taken by the staff to fill Joining & Formalities.
Machine: Single Photocopier available, insufficient stationery.
Method: 2 days for courier used to dispatch documents, post offer verification large scale scanning is not available.
Material: Delay due to long que in Photocopier, Insufficient information given in Joining & Formalities.

Measurement: Tracker maintained by Auth bridge, Tracker maintained by Hr.

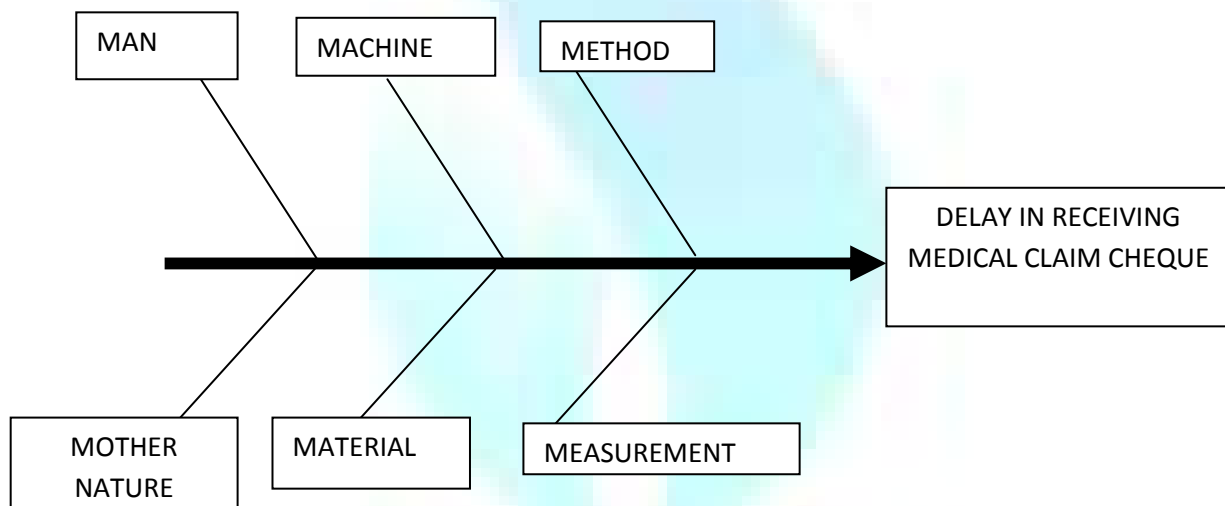
Mother Nature: Associates not responding due to operational requirements.

DIAGRAM 5: 5 WHY ANALYSIS FOR DELAYED ROLL OUT OF SALARY



ROOT CAUSE: Planning of things not done properly

DIAGRAM 6: FISH BONE ANALYSIS FOR DELAY IN RECEIVING MEDICAL CLAIM CHEQUE



Man: Frequent change of the doctor handling the unit claims, Non update of Insurance Nos. to Insurance Company, Cheque encashment delayed in unit Finance office.

Machine: Excel Sheet of nominations is sent to DHQ Hr by email, No Confirmation of coverage till unit Hr receives the medical insurance cards, Claims are sent to DHQ.

Method: Insurance No. a must for claim processal, Doctor is frequently changed in the company, on the 20th of every month the covered associates list is sent DHQ.

Material: Updated Insurance Nos. not available with Insurance Company.

Measurement: HR Register maintained, No TAT on the claim reimbursement.

Mother Nature: Doctor Visit on Saturday only, if there is any holiday; no claims are processed for that week.

AREAS FOR IMPROVEMENT USING SIX SIGMA IMPLEMENTATION TECHNIQUES & TOOLS

AREAS FOR IMPROVEMENT	AT PRESENT	USING SIX SIGMA
INDUCTION & RE-ORIENTATION PROGRAMMES	Conducted once in 70-90 Days	To be Conducted once in 35-45 Days
COST OF DELIVERY OF TRAINING	Huge	To be brought down
TIME TAKEN TO COMPLETE VERIFICATION PROCESS	2 Months	15 Days
TIME TAKEN FOR PERFORMANCE APPRAISAL SYSTEM	8 Months to 15 Months	6 Months
COST OF CAFETERIA FACILITIES	Huge Wastage	To be Brought down
TIME TAKEN FOR PAYROLL DEPT IN ROLLING OUT SALARIES TO TRAINEES	After 2 Months	On Date
TIME TAKEN FOR MEDICLAIM FACILITIES TO BE REIMBURSED	Once in 180 Days	Once in 45 Days

SUGGESTIONS & RECOMMENDATIONS

Till now, the Six Sigma team hadn't applied this concept of Six Sigma into Hr Department, at least from now on, we would like to recommend them to start implementing the Six Sigma into Hr Processes .There should be Training & Monitoring of the Hr Staffs on the adoption of the right Six Sigma Methodologies into

Hr functioning Processes. The HR staff should display these Six Sigma improvement Charts & lists of Six Sigma implementation techniques so that the whole organization knows about its effectiveness. The Managers of the department can be trained for the Six Sigma Certification by outside experts who have years of experience in Six Sigma implementation. HR Professionals with Six Sigma knowledge are absolutely an added advantage and a starting point for any organisation embarking on achieving a strategic HR role and would be a Huge success factor for the organization..

CONCLUSION

The study was conducted to find out the defects in Hr Processes & to bring down the defects in Hr functioning through the usage of Six Sigma tools. An understanding about it will help the Hr's to make rational decisions effectively & efficiently. Coming out with a Six Sigma tools is a complex process but it involves a number of tools which can be used to manage the practical challenges of improving Hr Operations. The immediate goal of Six Sigma is defect reduction. Reduced defects lead to yield improvement; higher yields improve employee satisfaction. Six Sigma defect reduction is intended to lead to cost reduction. The study analyzed the various types of defects that came from Hr Processes. It showed that a majority of Hr Activities carried out had some form of the defects in the Hr Process. This study intended to find out most of the defects & errors in the Hr functioning, their causes & root Problems for the occurrence of the Defects in the Hr system. After a thorough analysis of the Six Sigma tools in the Hr process, it was found that these defects could have minimized easily.

SCOPE FOR FURTHER RESEARCH

The study has explored the usage of six sigma tools in improving HR processes with respect to hospitality sector. A lot of other sectors are not at all explored till now. There is a huge scope for further research as there are only few researches on the application of six sigma tools in HRM.

REFERENCES

1. Erick C. Jonesa, Mahour Mellat Parastb_ and Stephanie G. Adams, "A framework for effective Six Sigma implementation", Total Quality Management, Vol. 21, No. 4, April 2010, 415-424
2. George Bohlander, Scott Snell "Managing Human Resources" (2009), Cengage learning
3. George Eckes, "Six SIGMA for Everyone (2003)", John Wiley & Sons.
4. GEORGE ECKES, "SIX SIGMA REVOLUTION: How General Electric and Others Turned Process Into Profits", John Wiley & Sons. P New York. (2001).
5. Greg Brue , "Six SIGMA for Managers: 24 Lessons to Understand and Apply Six SIGMA Principles in Any Organization", (2005), McGraw-Hill
6. J. RAVICHANDRAN ", Six-Sigma Milestone: An Overall Sigma Level of an Organization", Total Quality Management, Vol. 17, No. 8, 973-980, October 2006.
7. J. Van iwaarden, T. Van der wiley, B. Dalez, R. Williamsy And B. Bertschy, "The Six Sigma improvement approach: a transnational comparison", International Journal of Production Research, Vol. 46, No. 23, 1 December 2008, 6739-6758
8. Kai Yang , "Design for Six SIGMA for Service", (2005), McGraw-Hill Professional Publishing
9. Kamran Moosa and Ali Sajid, "Critical analysis of Six Sigma implementation", Total Quality Management, Vol. 21, No. 7, July 2010, 745-759
10. Lanyon, Sally, SIX SIGMA: "NEW OPPORTUNITIES FOR HR, NEW CAREER GROWTH FOR EMPLOYEES", Journal of Organizational Excellence, Autumn2003, Vol. 22 Issue 4, p29-42
11. Lanyon, Sally. "Six Sigma works too to improve Hr management processes", Journal of Organizational Excellence, Autumn2003, Vol. 22 Issue 4, p29-42
12. LOUISE DAVISON & KADIM AL-SHAGHANA," The Link between Six Sigma and Quality Culture – An Empirical Study", Total Quality Management Vol. 18, No. 3, 249-265, May 2007.
13. Marcia Hagen, "The wisdom of the coach: A review of managerial coaching in the Six Sigma context", Total Quality Management Vol. 21, No. 8, August 2010, 791-798
14. Mircea Albeanu and Ian Hunter with Jo Radford, "Six Sigma in Hr Transformation ", Gower publishing limited, 2010
15. Pande, P., Neuman, R, and Cavanagg, R. (2000), "The Six Sigma way: how GE, Motorola and other top companies are honing their performance", Mc Graw-Hill, New York
16. R. SHAH, A. CHANDRASEKARAN* and K. LINDERMAN," In pursuit of implementation patterns: the context of Lean and Six Sigma", International Journal of Production Research, Vol. 46, No. 23, 1 December 2008, 6679-6699
17. Rai singhani, Mahesh S.; Ette, Hugh; Pierce, Roger; Cannon, Glory; Daripaly, Prathima, "Six Sigma: Concepts, tools applications", Industrial Management & Data Systems, , 2005, Vol. 105 Issue 4, p491-505
18. Subir Chowdhury , "Power of Six Sigma" (2001), Kaplan publishing.
19. Subir Chowdhury, "Design for Six Sigma: The Revolutionary Process for Achieving Extraordinary Profits", (2005), Kaplan publishing.
20. Sung H. Parka, Celestine A. Ntuenb and Eui H. Park," A new paradigm of Six Sigma: Knowledge-based Digital Six Sigma", Total Quality Management, Vol. 20, No. 9, September 2009, 945-952.
21. Wyper, Bill; Harrison, Alan," Deployment of Six Sigma methodology in Human Resource function", Total Quality Management, Jul2000, Vol. 11 Issue 4.

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