PROJECT REPORT

ON

"ANALYSIS OF THE QUALITY PROCEDURES AT M/S WHEELS INDIA LTD."

SUBMITTED BY

UNDER SUPERVISION OF:

Submitted in partial fulfillment of the requirements for qualifying Master of Business Administration (OPERATION)

NEW DELHI

"ANALYSIS OF THE QUALITY PROCEDURES AT M/S WHEELS INDIA LTD."

Under Supervision of :

Submitted By:

Name :

Programme Code :

Enrollment No. :

Name of the Study Centre :

Study Centre Code :

CERTIFICATE OF ORIGINALITY

This is to certify that the project titled **"ANALYSIS OF THE QUALITY PROCEDURES AT M/S WHEELS INDIA LTD."** is an original work of the Student and is being submitted in partial fulfillment for the award of the **"MASTER OF BUSINESS ADMINISTRATION (OPERATION)".** This report has not been submitted earlier either to this University or to any other University/Institution for the fulfillment of the requirement of a course of study.

Signature of Supervisor

Place: New Delhi

Date : _____

Signature of Student

Place: New Delhi

Date : _____

ACKNOWLEDGEMENT

With Candor and Pleasure I take opportunity to express my sincere thanks and obligation to my esteemed guide **……..** It is because of his indispensable and mature guidance and co-operation without which it would not have been possible for me to complete my project.

Finally, I gratefully acknowledge the support, encouragement & patience of my family, and as always, nothing in my life would be possible without God, Thank You!

NAME

ROLL NO

DECLARATION

I hereby declare that this project work titled **"ANALYSIS OF THE QUALITY PROCEDURES AT M/S WHEELS INDIA LTD."** is my original work and no part of it has been submitted for any other degree purpose or published in any other from till date.

NAME

ROLL NO

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"ANALYSIS OF THE QUALITY PROCEDURES AT M/S WHEELS INDIA LTD."

CHAPTER -1

INTRODUCTION TO TOPIC

ESTABLISHING A QUALITY PROCEDURE:

Improving quality (reducing bad quality and improving work processes) in a company requires reflection by both the management and all the employees in order to define the reachable goals in terms of quality that can be accepted by everyone.

A "**quality policy**" is the general directives and goals in terms of quality that are laid out by a company's management and formalized in a written document. The quality policy defines the directives and stakes persued in terms of beneficiary satisfaction.

The term "**quality procedure**" refers to the approach and operational organization used to achieve the goals set by the quality policy.

Most importantly, an inventory of the company must be taken that can be used to outline its organization and which clarifies the company's project:

- The company's general goals
- The general organization and responsibilities: who does what?

At this stage, a new structuring that takes into account the quality organization can be defined. This "*organizational shake-up*" allows companies to redefine their core business and goals and constitutes a means by which to soften résistance to change. Insofar as the goal of quality is beneficiary satisfaction, it is essential to properly define the beneficiaries.

Because implementing a quality procedure often requires organizational changes, it must start off by involving the highest level of the hierarchy. Writing a commitment letter that is signed by management sets the procedure in stone and legitimizes a quality manager when operational changes are implemented.

A quality procedure hinges on successive action plans that allow a company to pinpoint and formalize short-term goals and the means by which to meet them. Instituting a quality procedure above all involves establishing a new spirit that is shared by everyone in the company. Therefore, a successful project depends largely on the communication surrounding its implementation. So, a **communication campaign** will allow employees to learn about the action that has been taken and find their place in the company's project.

CONCEPTUALIZATION

Human resource is the most important factor for any organization and success of any Organization is depending upon its resource .If human resource of organization is not happy with the organization. It will adversely affect the organization.

The higher degree of commitment toward work will improve productivity and will decrease rejection cause due to human factor.

So to make the people happy is the responsibility of the organization. So this study is helpful to measure the level of commitment toward work and to know the factor affecting the commitment level. Today, quality management has become one of the important forces leading to organizational growth and a company’s success in national and international markets.

To be successful in the marketplace, each part of the organization must work properly together towards the same goals, recognizing that each person and each activity affects and in turn is affected by others. To improve competitiveness, organizations are looking for a higher level of effectiveness across all functions and processes and are choosing TQM as a strategy to stay in business. The increased awareness of senior executives, who have recognized that quality is an important strategic issue, is reflected as an important focus for all levels of the organization. This requires defining and implementing several factors (identified as critical factors in this paper).

Many companies are frustrated in their effort to improve quality through TQM because these companies have exclusively focused on financial measures instead of quality measures. Other studies, in the recent past also observed the failure of TQM. These failures are due to the too much- too soon effort without proper foundation and focus. Manufacturing firms, therefore, need to understand the TQM CSFs for the successful implementation of TQM. Therefore, there is a pressing need to establish TQM CSFs for manufacturing firms. This paper examines the TQM frameworks developed by scholars and businesses and develops the TQM CSFs for manufacturing firms.

QUALITY:-

1. Quality means fitness for use.

2. Quality means productivity, competitive cost, and timely delivery, total customer satisfaction.

3. Quality means conformance to specification and standard.

4. Conformance to requirements.

5. Quality is what the customer says

6. Quality means getting everyone to do what they have agreed to do and to do it right the first time and every time.

TOTAL QUALITY:-

It means all the people of the organization are committed to product quality by doing right things right, first time, every time by employing organization resource to provide value to customer.

TOTAL QUALITY MANAGEMENT: -

It is the process designed to focus external/internal customer expectation preventing problems building, commitment to quality in the workforce and promoting to open decision making.

TOTAL:

Everyone associated with the company is involved in continuous improvement, in all functional area, at all level.

QUALITY:

Customer express and implied requirement is met fully.

MANAGEMENT:

- Executive are fully committed.
- Decision in a planned way.
- To maintain existing lever of quality.
- To improve existing lever of quality.
- Effective utilization of resource.

PRINCIPLES OF TQM:-

1. Delight the customer

2. Management by fact

3. People based management

4. Continuous improvement

5. Strong leadership

6. Quality system measure& record

7. Team work, Team accountable, correct problem

8. People oriented technology, speed.

FOUR C'S OF TQM

1. Commitment 2. Competence

3. Communication 4. Continuous improvement

FACTOR AFFECTED THE COMMITMENT OF THE EMPLOYEES:-

- General worker attitude toward the company.
- General worker attitude toward the supervisor.
- Lever of satisfaction toward job standard.
- The lever of consideration the supervisor shows to his subordination.
- The workload & work pressure level.
- The treatment of individual by the management.
- The lever of worker's satisfaction with the salaries.
- The level of worker pride in the company and its activity
- Worker reaction to the formal communication network in the organization.
- Intrinsic job satisfaction level of the worker.
- Worker attitude toward the fellow worker.

OPERATIONS MANAGEMENT:

Operations management focuses on carefully managing the processes to produce and distribute products and services. Major, overall activities often include product creation, development, production and distribution. (These activities are also associated with Product and Service Management.) Related activities include managing purchases, inventory control, quality control, storage, logistics and evaluations of processes. A great deal of focus is on efficiency and effectiveness of processes. Therefore, operations management often includes substantial measurement and analysis of internal processes. Ultimately, the nature of how operations management is carried out in an organization depends very much on the nature of the products or services in the organization, for example, on retail, manufacturing or wholesale.

Companies spend millions wringing every bit of inefficiency from supply chains. But, there is a hidden trove of efficiency and value that leading companies are just beginning to consider. Supply chain migration from lean and functional to agile and customized. Improving supply-chain management to gain a competitive edge. A misaligned supply chain can lead to higher costs, lower quality and poor customer service. An Investigative Study in Small and Medium Enterprises. It appears that the notions on supply chain management may only be indirectly associated with the issues surrounding consumer behaviors toward maintaining and/or otherwise pushing customer satisfaction. The forces of globalization and ever flattening world are exerting renewed pressure on global supply chains. It is time that organizations counter supply chain disruptions by building solid 'sense and respond' capabilities. Four cardinal principles for maximizing payback from supply chain technology investments. This paper examines the impact of e-business on

supply chain integration on four critical impacts of e-business on supply chain integration on four critical dimensions.

The complexities of getting material ordered, manufactured and delivered overload most supply chain management (SCM) systems. Eradicating the "high-inventory-poor-service-level" problem. Unlocking Value from E-Supply Management. Despite the "e," e-supply management is about much more than technology. Five steps can help businesses make the most of their efforts. A few farsighted finance executives are managing their supply chain as a virtual corporation, finding innovative ways to reduce costs and increase earnings. Flow Manufacturing is Essential to Competitive Supply Chain Management. Many companies are not aware of how their supply chains are performing or even what supply chain they're in. Specific assessment criteria based on the Six Levels of Supply Chain Excellence and a strategic assessment methodology can help them determine how their supply chain is performing and thus plot a course for improvement. Major shifts in global business conditions are radically altering input costs and risk. In response, companies must realign their supply chains, including: rethinking product formulation and packaging, restructuring the supply chain network and footprint, and realigning the role of suppliers and third parties. Now that Supply Chain Management has entered the consciousness of manufacturing managers, we are experiencing the inevitable rush to apply a software solution to implementation of a fully integrated chain of activities from the top to the bottom of the materials flow. But supply chain management is much more than software

Focus of the problem:

The main emphasis will be on to find out quality employee's commitment towards their work as a result of total quality implementation.

Review of Existing literature:

Many people have work on this topic. They sum up various finding. They found that apply TQM has directly increased their morale; increase the satisfaction level and commitment towards their work. These are the finding of various researchers.

Several articles have been published in different journals, magazines and newspaper such as HARVARD BUSINESS REVIEW, THE ECONOMIC TIMES, VIKALPA etc.

But the effect of TQM on employees commitment in the company has so far not undertaken. This project has been done first time in the company.

LIMITATION

- Employees of the organization may hide the fact.
- The management did not agree to disclose all the confidential data.

Number of respondents are very less, so clear conclusion can't be drawn

Quality Management:

A quality procedure is the most important factor for any organization and success of any Organization is depending upon its resource. If human resource of organization is not happy with the organization. It will adversely affect the organization.

The higher degree of commitment toward work will improve productivity and will decrease rejection cause due to human factor.

So to make the people happy is the responsibility of the organization. So this study is helpful to measure the level of commitment toward work and to know the factor affecting the commitment level .

UNDERSTANDING TOTAL QUALITY MANAGEMENT (TQM)

Origins of TQM

Total quality management has evolved from the quality assurance methods that were first developed around the time of the First World War. The war effort led to large scale manufacturing efforts that often produced poor quality. To help to correct this, quality inspectors were introduced on the production line to ensure that the level of failures due to quality was minimized.

After the First World War, quality inspection became more common place in manufacturing environments and this led to the introduction of Statistical Quality Control (SQC), a theory developed by Dr. W. Edwards Deming. This quality method provided a statistical method of quality based on sampling. Where it was not possible to inspect every item, a sample was tested for quality. The theory of SQC was based on the notion that a variation in the production process leads to variation in the end product. If the variation in the process could be removed this would lead to a higher level of quality in the end product.

After World War Two, the industrial manufacturers in Japan produced poor quality items. In a response to this, the Japanese Union of Scientists and Engineers invited Dr. Deming to train engineers in quality processes. By the 1950's quality control was an integral part

of Japanese manufacturing and was adopted by all levels of workers within an organization.

By the 1970's the notion of total quality was being discussed. This was seen as company-wide quality control that involves all employees from top management to the workers, in quality control. In the next decade more non-Japanese companies were introducing quality management procedures that based on the results seen in Japan. The new wave of quality control became known as Total Quality Management, which was used to describe the many quality-focused strategies and techniques that became the center of focus for the quality movement.

Total Quality Management has many definitions. Gurus of the total quality management discipline like Deming, Juran, Crosby, Ishikawa defined the concept in different ways but still the essence and spirit remained the same. According to Deming, quality is a continuous quality improvement process towards predictable degree of uniformity and dependability. Deming also identified 14 principles of quality management to improve productivity and performance of the organization. Juran defined quality as "fitness for use." According to him, every person in the organization must be involved in the effort to make products or services that are fit for use. Crosby defines quality as conformance to requirements. His focus has been on zero defects and doing it right the first time. Ishikawa also emphasized importance of total quality control to improve organizational performance. According to him quality does not only mean the quality of product, but also of after sales service, quality of management, the company itself and the human life. Feigenbaum defined total quality as a continuous work processes, starting with customer requirements and ending with customer's satisfaction.

Definitions of quality have changed with the passage of time with changing customer's needs and requirements. But the essence has more or less been to develop an approach to problem solving, conformation to standards for customer satisfaction. With management functions getting complex, approaches to managing quality in functional areas are becoming difficult. Organizations, which have successfully use TQM principles, have customer and quality embedded in their corporate strategy. Any organization is a system of interrelated units. For TQM to succeed, all of the components within the organization must be collectively involved. Initially, organizations implemented TQM in the hope that improvement in the shop-floor activities would solve all existing productivity and quality problems.

Later, they have realized that TQM is much more than just shop-floor improvements. The definitions of quality incorporate factors like top management commitment, leadership, team work, training and development, rewards and recognition, involvement and empowerment of employees etc. These critical factors are the foundation for transformational orientation to create a sustainable improvement culture for competitive advantage on a continuous basis.

According to Selladurai Raj, TQM interventions or activities must be guided by four change principles, namely work processes, variability, analysis, and continuous improvement. Product design and production processes must be improved; variance must be controlled to ensure high quality; data must be systematically collected and analyzed in a problem-solving cycle; and commitment made to continuous learning by the employees about their work.

SELECTION AND ANALYSIS OF TQM FRAMEWORKS

An extensive literature survey has been carried out to select TQM frameworks for this study. The relevant literature has revealed that different countries have adopted similar TQM frameworks in the form of quality awards with a different title. Today, there are more than a hundred quality awards existing in different countries. However, all these quality awards are basically derived from three basic and prestigious awards: the Malcolm Baldrige National Quality Award (MBNQA), the European Quality Award (EQA) and the Deming Prize. This study, therefore, includes only these three basic awards as TQM frameworks along with other frameworks developed by scholars. Furthermore, through the study of TQM literature, eleven TQM frameworks developed by researchers have been selected. In total, fourteen important TQM frameworks viz.

The Cost of TQM:

Many companies believe that the costs of the introduction of TQM are far greater than the benefits it will produce. However research across a number of industries has costs involved in doing nothing, i.e. the direct and indirect costs of quality problems, are far greater than the costs of implementing TQM.

The American quality expert, Phil Crosby, wrote that many companies chose to pay for the poor quality in what he referred to as the "Price of Nonconformance". The costs are identified in the Prevention, Appraisal, Failure (PAF) Model.

Prevention costs are associated with the design, implementation and maintenance of the TQM system. They are planned and incurred before actual operation, and can include:

Product Requirements – The setting specifications for incoming materials, processes, finished products/services.

Quality Planning – Creation of plans for quality, reliability, operational, production and inspections.

Quality Assurance – The creation and maintenance of the quality system.

Training – The development, preparation and maintenance of processes.

Appraisal costs are associated with the vendors and customers evaluation of purchased materials and services to ensure they are within specification. They can include:

Verification – Inspection of incoming material against agreed upon specifications.

Quality Audits – Check that the quality system is functioning correctly.

Vendor Evaluation – Assessment and approval of vendors.

Failure costs can be split into those resulting from internal and external failure. Internal failure costs occur when results fail to reach quality standards and are detected before they are shipped to the customer. These can include:

Waste – Unnecessary work or holding stocks as a result of errors, poor organization or communication.

Scrap – Defective product or material that cannot be repaired, used or sold.

Rework – Correction of defective material or errors.

Failure Analysis – This is required to establish the causes of internal product failure.

External failure costs occur when the products or services fail to reach quality standards, but are not detected until after the customer receives the item. These can include:

Repairs – Servicing of returned products or at the customer site.

Warranty Claims – Items are replaced or services re-performed under warranty.

Complaints – All work and costs associated with dealing with customer's complaints.

Returns – Transportation, investigation and handling of returned items.

MODELS OF TQM:

These models are presented in brief, because many of the concepts are already discussed above and these models have put different emphasis on some of these concepts. Only where some new point is brought in the model, it is discussed in details.

1. Seven characteristics of total quality by Feigenbaum

(i) Systematic Process, extending throughout the company.

(ii) Quality process in the organization must be correctly structured. Else Everybody's job is Nobody's Job.

(iii) Total Quality improvement must take place from Marketing to After Sales Service covering all aspects of the business.

(iv) Emphasis on what buyer wants.

(v) Application of new Technologies.

(vi) Participation of ALL – not just Specialists.

(vii) Company must establish clear Customer Oriented Quality Management System, which people should understand and want to be part of.

2. The Integrated model of TQM

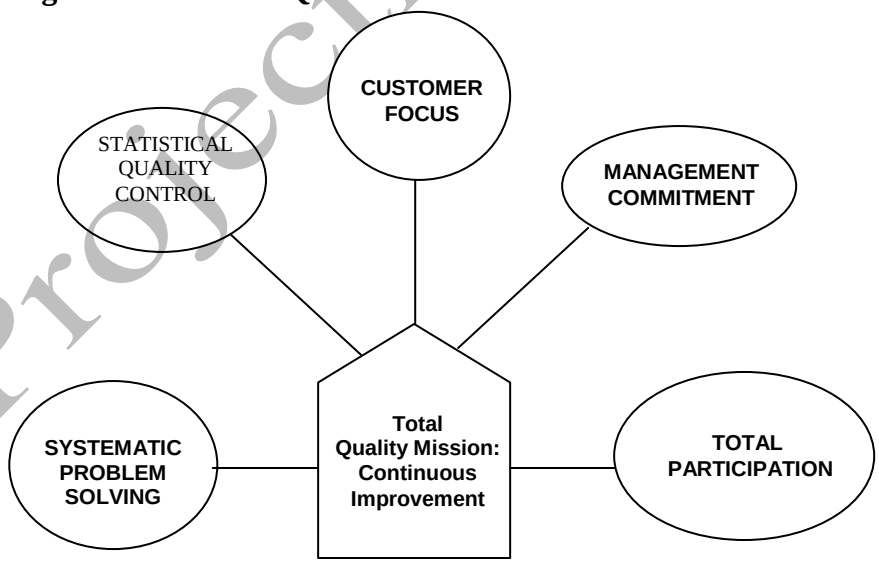


Figure 1.1 : 'The Integrated Model of TQM

In this model the Continuous Improvement is considered as the central mission of TQM.

3. The Building Blocks Model of TQM

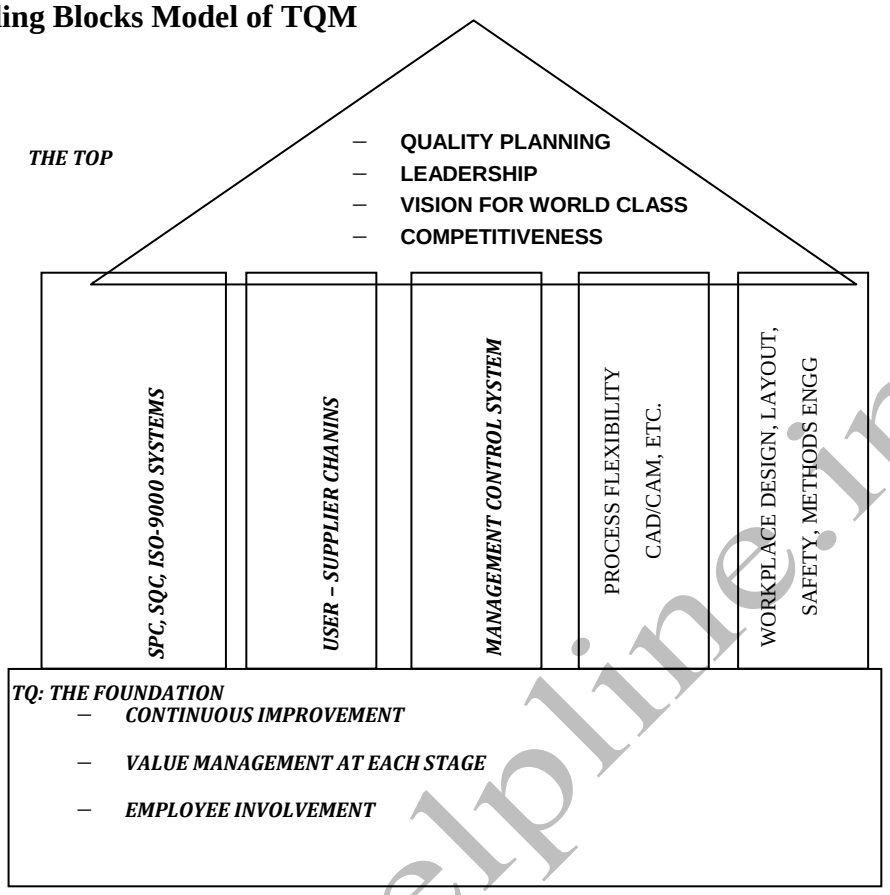


Figure 1.2: The Building Blocks Model of TQM (Zairi, 1991)

4. Oakland's Model

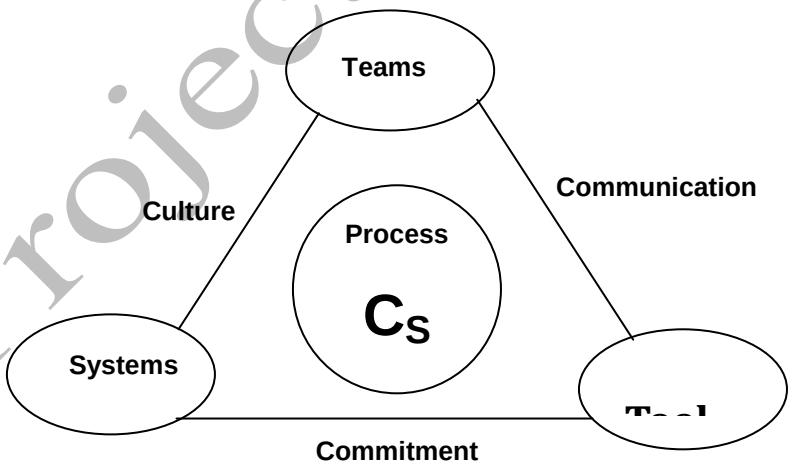


Figure 1.3: The Oakland Model on Total Quality Management

The Customer — Supplier chains, both within and outside the organization are considered as central to TQM around which the other features are interwoven.

Oakland's 13 states representing gradual progression towards implementation of TQM based culture:

(i) Understanding Quality
(ii) Commitment to Quality
(iii) Policy on Quality
(iv) Organisation for Quality
(v) Measuring Costs of Quality
(vi) Planning for Quality
(vii) Design for Quality
(viii) System for Quality
(ix) Capability for Quality
(x) Control for Quality
(xi) Team Work for Quality
(xii) Training for Quality
(xiii) Implementation of TQM

How does TQM Create an Environment that Promotes Quality?

TQM is more than just a philosophy. In addition to proposing new theories about the workplace, it advocates specific changes that managers need to make if they want to improve the system. These changes are best described in Deming's "14 Points," which are condensed under the four categories below:

- Customer Relationships: Customers can be either internal or external to an organization. Just as a customer is the person buying a product in a store, an employee is the customer of management. Managers need to realize that quality work will not be done unless they provide employees with quality products to work with (Blankstein 1992).

- Employee Empowerment: TQM starts at the top but should permeate the workplace the fact is that it will fail without employee involvement. Since workers know more

about their jobs than management does, their input is vital to improving the system. It is a manager's responsibility to continuously train employees in the methods of TQM, involve them in management decisions, listen to their suggestions for system changes, and work towards implementing those changes (Schmoker 1992).

- Continual Gathering and Use of Statistical Data: Most companies monitor the quality of their products by doing mass inspections that determine how many low-quality items are being produced, but Deming calls for monitoring of the production process by continually gathering statistical data so that problems can be identified as they are happening instead of when it is too late to solve them. When problems are identified, they should be the focus of discussion, and the groups discussing them should rely on the data to institute change instead of randomly assigning blame to individuals or departments (Deming).
- Create an Environment that Promotes Unity and Change: People need to feel comfortable discussing problems and suggesting solutions. Managers need to work at breaking down barriers between departments so that interactive discussion can take place. Fear must be eliminated. Also, managers are urged to do away with slogans, quotas, goals, and objectives since they encourage competition between workers and put the focus on individual results rather than process (Deming).

THE TQM VISION:

The quality cycle begins and ends with the user. It starts when the user's need is analyzed to design a product. During the development & manufacture of that product, various departments and sections of the company make their contributions in building quality into it. The cycle ends with the user because the final proof of the product quality comes during its use by the user, whose "delight" is the ultimate aim of this concept. Quality is

no longer the exclusive domain of the inspectors, manufacturers and pharmacists. Even Sales personnel have their role to play in the achievement of the primary objective of quality.

Quality Management, as does any management process, has three main components:

1. Quality Planning - Designing the desired & deliverable quality standards.
2. Quality Implementation.
3. Quality Monitoring & control.

It is imperative that TQM efforts should be properly organized to co-ordinate the various contributing aspects of quality. As such we need to know the basic ideas behind TQM. Organizations are made up of a complex system of customers and suppliers. People pay attention to who supplies them; with what they need to do their job and who the customer is for what they produce. When everybody becomes concerned about meeting their customers' requirements, quality will be there, without doubt. In meeting customer expectations the focus must be on the process, not just on the results. To improve a process it is important to look at the socio-cultural issues of organization to create a healthy, open atmosphere in which people are willing to open up and do some introspection on their processes. And this is something the management must be able to facilitate.

In contrast to traditionally managed organization, TQ managed organizations believe that, though there is no complaint from the customers, there is always scope for improvement. Everybody in the organization is trained to plan & participate in groups. Meetings & Brain storming sessions become primary vehicles for planning & creative problem solving. Each member in the team is recognized & rewarded. Errors and problems are viewed as opportunities for learning rather than blunders to be punished.

In the recent past, TQM got its formal recognition by way of ISO 9000. In order that organizations may successfully compete with world-class leaders, it is imperative to look at and be prepared for quality way beyond the popular ISO 9000.

In the context of the Indian organization, the common perception held is that quality improvement is uneconomical since it increases cost and investment, thereby decreasing productivity. Traditional Indian managers are not prepared for intense global competition where quality, cost, and sticking to the deadlines and customer satisfaction are of paramount importance. They are not prepared to shed the belief that they can get business by cornering licenses, influencing the bureaucrats.

Domestic managers are unaware of the momentous changes taking place. Ironically even today most Indian managers rely more on market gossip and collecting random data than paying an accredited agency for factual information.

Indian companies should wake up to the realities and try to build up an organization where information flows freely; employees are empowered with decision-making and problem solving, where teamwork is awarded and encouraged. Our executives have to learn how to become successful quality managers, so that they can become global managers and this primarily means change in their mindset.

Sustainable Development of TQM:

Sustainability is defined as 'the ability of an organization to adapt to change in the business environment to capture contemporary best practice methods and to achieve and maintain superior competitive performance' describes sustainability as the development that meets present needs without compromising the ability of future generations to meet

their own needs. Without sustainability, there is little benefit to be gained from TQM. Ahmed *et al*. (2002) reported that many organizations jumped on the TQM bandwagon thinking that if they copy the tools and techniques, they will reap the benefits of TQM. The findings of their study suggested that the social systems cannot be ignored; rather both social and technical systems need to be developed simultaneously for sustainability of TQM. The following symptoms for TQM process not working.

- The results are not visible;
- Top management commitment is not seen and is not felt;
- Middle management does not know precisely what is expected of them in relation to the TQM process;
- Low degree of employee involvement; and
- The organization changes priorities often and as a result quality decreases.

In the present context, there is a need to develop a TQM sustainability methodology that clearly defines the steps to be taken by the organizations for effective long term implementation of TQM. This is attempted in the present study by using Deming's Plan-Do-Study-Act (PDSA) cycle. This approach is unique and can be customized to suit the requirements of individual user as explained in the methodology section.

PDSA Cycle for Sustainable Development Of TQM:

The Deming's PDSA cycle is a well-known model for continual process improvement. It teaches organizations to plan an action, do it, study to see how it conforms to the plan and act on what has been learned.

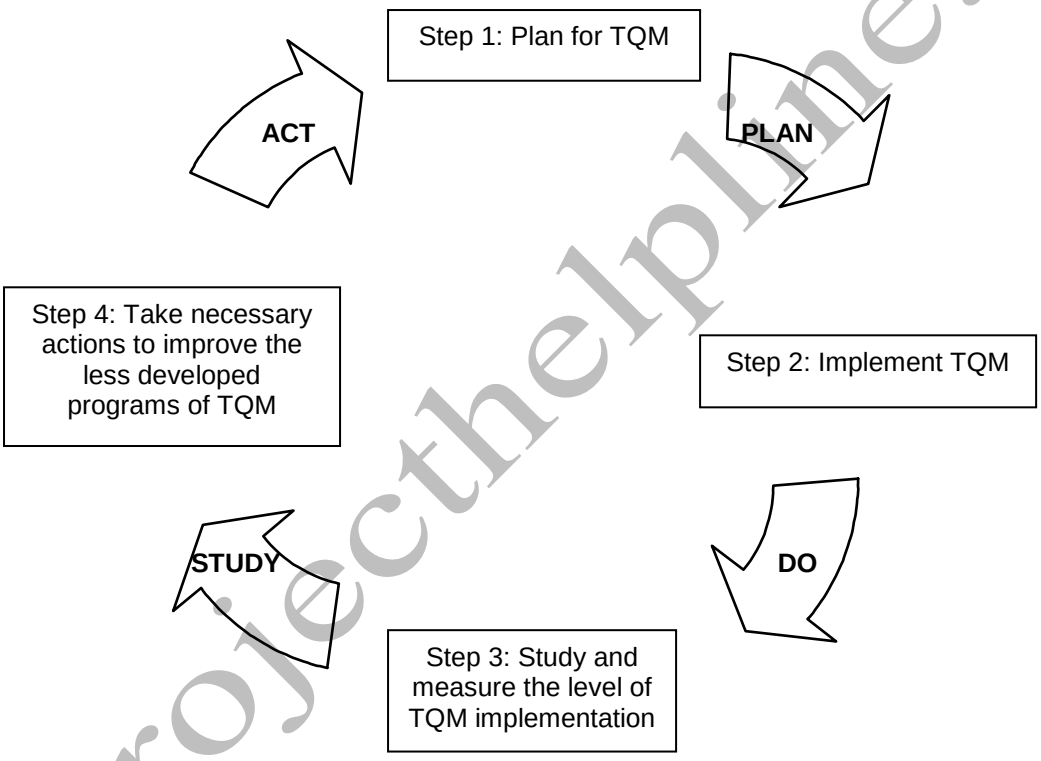
The terms are defined below.

Step 1: Plan Recognize an opportunity, and plan the change.

Step 2:	Do	implement the change.
Step 3:	Study	Review the implementation, analyze the results and identify learnings.
Step 4:	Act	Take action based on what you learned in the step 3. If the change was successful, incorporate the learnings from the test into wider changes. If not, go through the cycle again.

The PDSA cycle for sustainable development of TQM shown in Fig. 1 is made up of four steps.

Fig 1. PDSA Cycle for sustainable development of TQM



TQM TECHNIQUES:

Benchmarking: For many companies benchmarking has become a component of their TQM Programme.

In most developing countries like India, until recently almost all the industries had a few number of products and services, which differed markedly in their utilitarian

characteristics. However, such a situation is hardly sustainable with increasing competition from foreign goods and services. In such a situation, competing firms have to continuously improve.

The benchmarking approach not only provides a comparative profile, but also helps the management to identify innovative products and services."Benchmarking is a continuous process of measuring one's products, services & practices against toughest competitors". It will search for the best practices in the industry, which will lead to superior quality goods. With the growing emphasis on quality, it has got great significance in the present competitive world.

If best practices are followed, customer requirements can easily be met, leading to increasing profitability of the company. But the employees resist change in the beginning because they are habituated to old processes. Efforts to change mindset of employees must vigorously continue till desired effect is achieved.

Business Process Reengineering:

Business Process Reengineering generally redesigns processes & the organization that performs them in order to reduce the number of boundaries crossed. Each time a process crosses an organizational boundary, opportunities for errors arise. Business Process Reengineering is the fundamental rethinking and radical redesign of Business Processes to achieve dramatic improvements in critical contemporary measures of performance, such as cost, quality, service and speed.

Precautions:

Wherever the responsibility of quality management is to be delegated to different

departments, it should be done with many precautionary measures, thereby ensuring monitoring & control is in the hands of quality management people. The hierarchy structure of quality management should be kept to as few levels as possible and the span of control should be as broad as possible.

As the traditional organizations are unable to meet the present challenges, there is every need for new techniques & philosophies with which organizations can survive and thrive under grueling competition. To retain their competitive edge, company should change their traditional ways of working, to read their customer's mind. No organization can afford to overlook customer, competition & change, the three vital forces of today's competitive environment. TQM is an important milestone in the ongoing evolution of the field of management.

QUALITY MEASUREMENT TECHNIQUES:

Quality measurement technique is based on a set of activities, used on an ongoing and continual basis, to measure performance in terms of meeting identified customer needs and satisfiers. Quality measurement is concerned with the perception of customers and levels of satisfaction and how to use those measurements in the design of a product or service and/or to track the achievement of activity goals.

Purpose

The purpose of quality measurement technique is to identify the indicators needed to measure customers' perceptions of the enterprise, in terms of quality or performance and to establish a measurement process that is consistent with measuring objectives, targets, and goals set out in the reinvented value stream or redesigned process.

Benefits

The benefit of using quality measurement technique is that it establishes a framework for quality measurement and continuous improvement and provides a reliable and objective basis for decision making based on objective analysis of performance. Six Sigma is a business management strategy originally developed by Motorola, USA in 1986.[1][2] As of 2010, it is widely used in many sectors of industry.

Six Sigma seeks to improve the quality of process outputs by identifying and removing the causes of defects (errors) and minimizing variability in manufacturing and business processes. It uses a set of quality management methods, including statistical methods, and creates a special infrastructure of people within the organization ("Black Belts", "Green Belts", etc.) who are experts in these methods. Each Six Sigma project carried out within an organization follows a defined sequence of steps and has quantified financial targets (cost reduction and/or profit increase).

The term Six Sigma originated from terminology associated with manufacturing, specifically terms associated with statistical modeling of manufacturing processes. The maturity of a manufacturing process can be described by a sigma rating indicating its yield, or the percentage of defect-free products it creates. A six sigma process is one in which 99.99966% of the products manufactured are statistically expected to be free of defects (3.4 defects per million). Motorola set a goal of "six sigma" for all of its manufacturing operations, and this goal became a byword for the management and engineering practices used to achieve it.

CHAPTER -2

COMPANY OVERVIEW

Wheels India is promoted by the TVS Group and was started in the early 60's to manufacture automobile wheels. Products manufacturing and supplying of wheels for heavy vehicles like trucks, buses, trailers, wheels for light vehicles like cars, mini vans, wheels. Today, Wheels India has grown as a leading manufacturer of steel wheels for passenger cars, utility vehicles, trucks, buses, agricultural tractors and construction equipment in India. The company supplies 2/3rd of the domestic market requirement and exports 18% of the turnover to North America, Europe, Asia Pacific and South Africa.

The company also has a technical-financial collaboration with Titan Europe

Wheels India designs and manufactures wheels for the specific requirements of the customer. Our activities are driven by the following objectives:

- Maintain leadership in the domestic market and presence in export markets.
- Ensure customer satisfaction through timely delivery of quality products and services, at competitive prices.
- Continuously improve & innovative product design, process technology and work environment to offer better products.
- Bring about involvement of all employees in achieving the above objectives.

Plants	**Annual Capacity**	**Manpower**

Padi, **Pune**, **Rampur**, **Bawal**, **Sriperumbudur and Pant agar**	10 million wheels	1, 930

Headquarters of Rampur district is Rampur Rown and it is a part of Moradabad division. It is bounded by District Udham Singh Nagar in North side, Moradabad in West side, Bareilly in East side and Badaun in South side. The district occupies an area of 2,367 km².

Wheels India has the ability to design the complete range of steel-wheels to suit customer requirements, incorporating necessary styling and performance characteristics.

PRODUCT:

- **Wheels for Heavy Vehicles**

  (Trucks, Buses, Light Commercial Vehicles, Trailers, Tippers etc.)
- **Wheels for Light Vehicles**

  (Passenger Cars, Mini Vans, SUV's & MUV's)
- **Wheels for Agricultural Applications**

  (Tractors, Combines, Farm Equipments etc.)
- **Wheels for Off-Road Construction Equipments**
- **Wire Wheels**

  (For Contemporary & Classic Cars, MUV's & SUV's)
- **Air Suspension**

AWARDS

All India Organization of Employers' (AIOE), an allied body of Federation of Indian Chambers of Commerce and Industry (FICCI) Award for Outstanding Industrial Relations: 2010-11


All India Organisation of Employers

A I O E

AIOE AWARD
FOR
OUTSTANDING ACHIEVEMENT
IN INDUSTRIAL RELATIONS
2010-2011

Wheels India Limited

WHEELS INDIA POLICY AND EQUAL OPPORTUNITIES

- The Company believes that human resources which manage the other resources have infinite potential and therefore, their development is the key to Organizational effectiveness. We firmly believe in integrating the HR with the business operations and to contribute significantly towards achieving the business objectives, growth and development of the Organization and employees.
- Wheels India provides equal opportunity to its employees and all qualified applicants for employment, without regard to their religion, race, caste, colour, marital status, sex, age etc, and decisions are based solely on merit.
- Employees in Wheels India are treated with dignity and respect and in accordance with the Company's policy to maintain a work environment free from discrimination and abusive behavior, including gender based ones, in any form or manner whatsoever.
- Minimum Age for recruitment: Candidates should have completed 18 years of age as on the date of application.

- Wheels India has adopted the Confederation of Indian Industry's (CII) Code of Conduct for Affirmative Action. Accordingly, we encourage candidates belonging to Scheduled Caste and Scheduled Tribe to apply and provide them equal opportunity either for employment and / or for institutional training as part of their educational curriculum.
- We have, nearly for five decades, consistently maintained a peaceful and harmonious relationship with the trade union and the employees, based on mutual trust & confidence, respect and concern for values. We nurture leadership with one internal trade union.
- We adhere to statutes and maintain rapport with Government / external Agencies and contribute to maintaining peaceful industrial relations.

SWOT ANALYSIS:

Strengths

A firm's strengths are its resources and capabilities that can be used as a basis for developing a competitive advantage. Examples of such strengths include:

- Patents
- Strong brand names
- Good reputation among customers
- Cost advantages from proprietary know-how
- Exclusive access to high grade natural resources
- Favorable access to distribution networks

Weaknesses

The absence of certain strengths may be viewed as a weakness. For example, each of the following may be considered weaknesses:

- Lack of patent protection
- A weak brand name
- Poor reputation among customers
- High cost structure
- Lack of access to the best natural resources
- Lack of access to key distribution channels

In some cases, a weakness may be the flip side of strength. Take the case in which a firm has a large amount of manufacturing capacity. While this capacity may be considered a strength that competitors do not share, it also may be a considered a weakness if the large investment in manufacturing capacity prevents the firm from reacting quickly to changes in the strategic environment.

Opportunities

The external environmental analysis may reveal certain new opportunities for profit and growth. Some examples of such opportunities include:

- An unfulfilled customer need
- Arrival of new technologies
- Loosening of regulations
- Removal of international trade barriers

Threats

Changes in the external environmental also may present threats to the firm. Some examples of such threats include:

- Shifts in consumer tastes away from the firm's products
- Emergence of substitute products
- New regulations
- Increased trade barriers

CHAPTER -3

REVIEW OF LITERATURE

The literature for review to be collected from secondary sources such as magazines, articles, reports, budgets, news paper etc to highlight the problems and findings of the study done by many research and business professionals to understand the significance of the Quality process of the companies. The objectives of the proposed topic have to be formulated based on the previous study by the many research professionals. Approximately ten to fifteen reviews has to be collected and presented in my project report.

Quality is never an accident. It is always the result of high intentions, sincere efforts, intelligent direction and skillful execution. It is an attribute or characteristic whose dictionary meaning is the degree of goodness or worth of a person, place or thing.

In determining the quality of a product, the customer's expectations about the product will be given the top most priority. In the present scenario, customer delight is the need of the hour in order to survive the cutthroat competition.

There are different approaches through which the concept of quality can be under stood. According to the product-based approach, quality is an attribute, which can be measured quantitatively. The manufacturing based approach on the other hand, uses universal definition of conformance to requirements. The value-based approach says that the consumer purchase decision is based on consistent quality at an affordable price.

W. Edwards Deming defines quality as: "Pride in Workmanship" Dr. J. Juran defines quality as: "those product features which meet the needs of customers and thereby provide product satisfaction." or "freedom from deficiencies." Kaoru Ishikawa defines quality as: "total quality control, Japanese style, is a thought revolution in management." Gary Griffith, in his book "The Quality Technician's Handbook," defines quality as: "the totality of features and characteristics of a product or service that bear on its ability to satisfy given needs."

Total Quality Management (TQM)

Total Quality Management is a management approach that originated in the 1950's and has steadily become more popular since the early 1980's. Total Quality is a description of the culture, attitude and organization of a company that strives to provide customers with products and services that satisfy their needs. The culture requires quality in all aspects of the company's operations, with processes being done right the first time and defects and waste eradicated from operations. Total Quality Management, TQM, is a method by which management and employees can become involved in the continuous improvement of the production of goods and services. It is a combination of quality and management tools aimed at increasing business and reducing losses due to wasteful practices. Some of the companies, which have implemented TQM, include Ford Motor Company, Phillips Semiconductor, SGL Carbon, Motorola and Toyota Motor Company.

Although no two businesses use TQM in exactly the same way, its theory rests on two basic tenets. The first and most important is that customers are vital to the operation of the organization. Without customers, there is no business, and without business, there is

no organization. Consequently, it should be the primary aim of any group to keep customers satisfied by providing them with quality products (Deming 1986).

These ideas are not foreign to most organizations. What makes TQM unique is its call for a restructuring of management methods to create that quality. TQM proponents urge organizations to turn nearsighted, top-down management "on its head" by involving both customers and employees in decisions. This second tenet, that management needs to listen to nontraditional sources of information in order to institute quality, is based on the belief that people want to do quality work and that they would do it if managers would listen to them and create a workplace based on their ideas (**Deming).**

Managers, in the TQM view, need to become leaders who "not only work in the system but also on the system" (**Rocheleau 1991).** A company will see continuous improvement in products only when managers realize all systems consist of interdependent parts and work to aim all those parts toward a vision of quality. This type of leadership is needed to ensure that product quality improves constantly and forever and truly satisfies the customers (Deming).

Some useful messages from results of TQM implementations:

- if you want to be a first-rate company, don't focus on the second-rate companies who can't handle TQM, look at the world-class companies that have adopted it
- the most effective way to spend TQM introduction funds is by training top management, people involved in new product development, and people involved with customers

- It’s much easier to introduce EDM/PDM in a company with a TQM culture than in one without TQM. People in companies that have implemented TQM are more likely to have the basic understanding necessary for implementing EDM/PDM. For example, they are more likely to view EDM/PDM as an information and workflow management system supporting the entire product life cycle then as a departmental solution for the management of CAD data

Important aspects of TQM include customer-driven quality, top management leadership and commitment, continuous improvement, fast response, actions based on facts, employee participation, and a TQM culture.

Customer-driven quality

TQM has a customer-first orientation. The customer, not internal activities and constraints, comes first. Customer satisfaction is seen as the company's highest priority. The company believes it will only be successful if customers are satisfied. The TQM Company is sensitive to customer requirements and responds rapidly to them. In the TQM context, `being sensitive to customer requirements' goes beyond defect and error reduction, and merely meeting specifications or reducing customer complaints. The concept of requirements is expanded to take in not only product and service attributes that meet basic requirements, but also those that enhance and differentiate them for competitive advantage.

Each part of the company is involved in Total Quality, operating as a customer to some functions and as a supplier to others. The Engineering Department is a supplier to downstream functions such as Manufacturing and Field Service, and has to treat these

internal customers with the same sensitivity and responsiveness as it would external customers.

TQM leadership from top management

TQM is a way of life for a company. It has to be introduced and led by top management. This is a key point. Attempts to implement TQM often fail because top management doesn't lead and get committed - instead it delegates and pays lip service. Commitment and personal involvement is required from top management in creating and deploying clear quality values and goals consistent with the objectives of the company, and in creating and deploying well defined systems, methods and performance measures for achieving those goals. These systems and methods guide all quality activities and encourage participation by all employees. The development and use of performance indicators is linked, directly or indirectly, to customer requirements and satisfaction, and to management and employee remuneration.

Continuous improvement

Continuous improvement of all operations and activities is at the heart of TQM. Once it is recognized that customer satisfaction can only be obtained by providing a high-quality product, continuous improvement of the quality of the product is seen as the only way to maintain a high level of customer satisfaction. As well as recognizing the link between product quality and customer satisfaction, TQM also recognizes that product quality is the result of process quality. As a result, there is a focus on continuous improvement of the company's processes. This will lead to an improvement in process quality. In turn this will lead to an improvement in product quality, and to an increase in customer satisfaction. Improvement cycles are encouraged for all the company's activities such as product development, use of EDM/PDM, and the way customer relationships are managed. This implies that all activities include measurement and monitoring of cycle time and responsiveness as a basis for seeking opportunities for improvement.

Elimination of waste is a major component of the continuous improvement approach. There is also a strong emphasis on prevention rather than detection, and an emphasis on quality at the design stage. The customer-driven approach helps to prevent errors and achieve defect-free production. When problems do occur within the product development process, they are generally discovered and resolved before they can get to the next internal customer.

Fast response

To achieve customer satisfaction, the company has to respond rapidly to customer needs. This implies short product and service introduction cycles. These can be achieved with customer-driven and process-oriented product development because the resulting simplicity and efficiency greatly reduce the time involved. Simplicity is gained through concurrent product and process development. Efficiencies are realized from the elimination of non-value-adding effort such as re-design. The result is a dramatic improvement in the elapsed time from product concept to first shipment.

According to Armand V. Feigenbaum in 15 JAN 2002:

Technical capability is no longer the principal competitive determinant in the computer and software industry. Technical capability is necessary but not sufficient for success. What differentiate the successful from the unsuccessful organization, today, in superior "world-class" systems of work processes that men and women throughout the organization understand, believe in and are a part of. These systems of clear work processes reduce bureaucracy and cycle times, increase responsiveness and innovation, and lower costs thereby assuring product, market and organizational success. This is Total Quality Management: there are ten basic benchmarks underpinning the technology of

total quality management and make quality a way of totally focusing the organization on the competitive discipline of serving the customer. These benchmarks are discussed.

According to Richard Hackman , Ruth Wageman in 2002:

In recent years, total quality management (TQM) has become something of a social movement in the United States. This commentary returns to the writings of the movement's founders--W. Edwards Deming, Joseph Juran, and Kaoru Ishikawa--to assess the coherence, distinctiveness, and likely perseverance of this provocative management philosophy. We identify a number of gaps in what is known about TQM processes and outcomes and explore the congruence between TQM practices and behavioral science knowledge about motivation, learning, and change in social systems. The commentary concludes with a prognosis about the future of TQM--including some speculations about what will be needed if TQM is to take root and prosper in the years to come.

It has now been a decade since the core ideas of total quality management (TQM) set forth by W. Edwards Deming, Joseph Juran, and Kaoru Ishikawa gained significant acceptance in the U.S. management community. In that decade, TQM has become something of a social movement. It has spread from its industrial origins to health care organizations, public bureaucracies, nonprofit organizations, and educational institutions. It has become increasingly prominent in the popular press, in the portfolios of trainers and consultants, and, more recently, in the scholarly literature.(1) Institutions specifically chartered to promote TQM have been established, and a discernible TQM ideology has developed and diffused throughout the managerial community. And, in its maturity, TQM has become controversial--something who’s worth and impact people argue about.

Dr. Armand Feigenbaum is the originator of total quality control (TQC), the management approach that has profoundly influenced the competition for domestic and international markets in the United States, Japan and throughout the industrialized world.

According to Quazi, Hesan A; Padibjo, Samuel R in Number 5th, 1998:

Literature review highlights the importance of TQM for SMEs to improve their current business practices as well as quality of products and services, to ensure long-term survival. However, there are several barriers to effective implementation of TQM in such organizations, namely, the apparent lack of business experience and knowledge, and limitation of financial as well as human resources. Singaporean SMEs account for a large share of its economy, however, little has been written on how TQM has been applied in these companies in Singapore and the region. This paper reports the results of a pilot study conducted among a sample of local SMEs. The findings are compared to an earlier work done in Singapore. Furthermore, this paper reports the findings of follow-up interviews with some local SMEs regarding the perceived benefits of and barriers to ISO 9000. Based on the experience in Singapore, ISO 9000 certification has provided significant benefits for SMEs. The journey towards TQM will, however, require not only full commitment of the company management, but also a quality culture created externally by the government which is crucial to the progress beyond ISO 9000.

According to Sanjay Ahire, Robert Landeros in 2009:

Total quality management (TQM) is a revolutionary approach to effective management. The research in TQM has emerged from practical needs of organizations embracing this philosophy, and the literature is mostly conceptual and practitioner-oriented. There is a lack of sound theoretical framework classifying past efforts and guiding future research. To fill the void, a study of the published TQM literature is undertaken. A review, classification, and analysis of the research in TQM spanning the last two decades is presented. A total of 226 TQM-related articles are identified from 44 refereed management journals published from 1970 to 1993. These articles are then classified and

analyzed using the following two-dimensional scheme: (1) article orientation (conceptual, case study, empirical, analytical, simulation, and overview) and (2) article focus using the Malcolm Baldrige National Quality Award criteria. The analysis of the literature presents pertinent developments in each of the seven criteria. In addition, it provides future research directions as well as a ready reference of the TQM literature. The suggestions for research should guide future developments in the TQM field and help transform it into a formal discipline.

CHAPTER - 4

OBJECTIVES OF THE STUDY

Fixing the objective is like identifying the star. The objective decides where we want to go, what we want to achieve and what is our goal or destination.

Every study is carried out for the achievement of certain objectives.

1. To study the Quality Control Systems as adopted by Wheels India Ltd.
2. The aim of this study is to analyze the implementation and effectiveness of Total Quality Management at Wheels India Ltd.
3. To study the different operational Techniques implemented in Wheels India Ltd and optimize it for the maximum throughput.

CHAPTER - 5

RESEARCH METHODOLOGY

Research methodology in a way is a written game plan for conducting research. Research methodology has many dimensions. It includes not only the research methods but also considers the logic behind the methods used in the context of the study and complains why only a particular method of technique has been used. The basic task of research is to generate accurate information for use in decision making. Research can be defined as the systematic and objective process of gathering, recording and analyzing data for aid in making business decisions.

As the project involves analyzing of financial structure, the research is exploratory in nature, covering financial parameters and come of the important ratios to carry out research.

The project being undertaken is exploratory research, wherein all the approaches of exploratory research are adopted.

Data Collection Approach

The base on which a study rests is the information that is embedded in it. The data for this study will be obtained as a blend of both Secondary and Primary sources.

Secondary Data

Already published data will form the starting point for the study. This includes: -

- Official Reports on related matters.
- Literature of quality management available at Wheels India Ltd.

- Books and Journals on quality process of Industries.
- Books on Quality, and Operation Management

Primary Data

Data will be collected specifically for the research needs at hand. The sources include : -

- **Interviews** of 4 Managers at Wheels India Ltd.

Questionnaires: A structured, non-disguised questionnaire will be prepared. This will then be presented to concerned people at Wheels India Ltd. 10 employees from middle and Senior Management will be contacted for the purpose of getting the required information. The information gathered would be analyzed and presented in the final report.

Limitations

- Time will be the biggest constraint but all effort will be made to get all the relevant information required for this study.
- I will have an in-depth study on all the parameter related to quality process and improvement measures adopted by Wheels India Ltd at Rampur. But the information that will be provided may not be self sufficient to project the scope and direction of future R&D in respect to other products that are being produced by Wheels India Ltd. But all effort will be made by me to present in this report the fact and figures, which will be relevant to the quality management at Wheels India Ltd

Universe

We are engaged in manufacturing and exporting a wide range of technical products that are widely used in various industrial and commercial applications. These stand high on

the parameters of quality and have been widely accredited all across the globe.

- **Number of Respondents:** 25
- **Area of study :** Quality procedures and control
- The sampling technique used was convenience sampling under this sample of respondents was chosen according to the convenience of the researcher.

STASTICAL TOOLS:

The tools used in this study were MS-EXCEL, MS-WORD. MS-EXCEL was used to prepare pie- charts and graphs. MS-WORD was used to prepare or write the whole project report.

METHOD USE TO PRESENT DATA:

Questionnaire – It consists of both open ended and close ended questions.

Data Analysis & Interpretation – Classification & tabulation transforms the raw data collected through questionnaire in to useful information by organizing and compiling the bits of data contained in each questionnaire i.e., observation and responses are converted in to understandable and orderly statistics are used to organize and analyze the data.

- Simple tabulation of data using tally marks.
- Calculating the percentage of the responses.

Formula used = (name of responses / total responses) * 100

REPORT WRITING AND PRESENTATION

Report Encompasses – Charts, diagrams

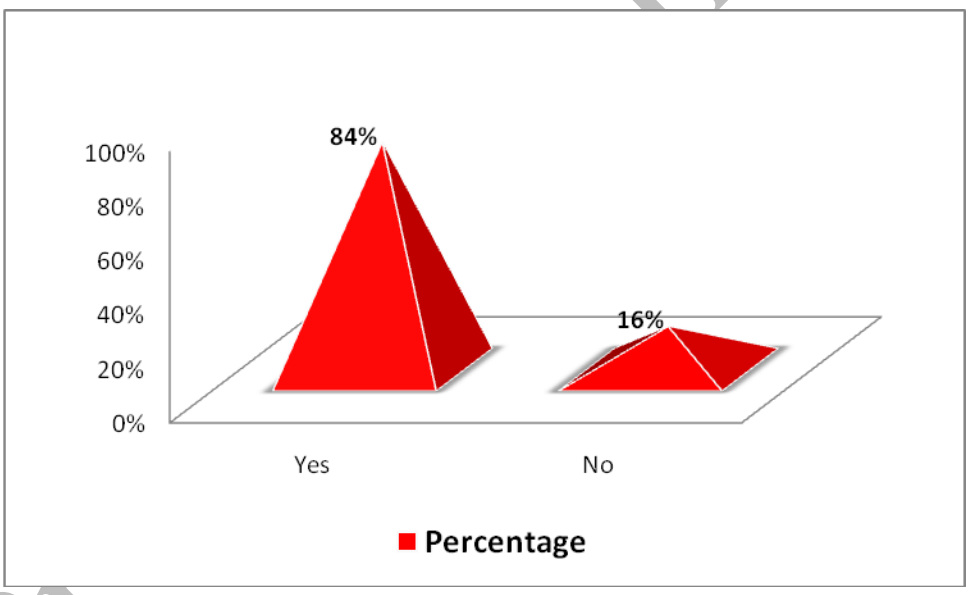
CHAPTER - 6

DATA ANALYSIS & INTERPRETATION

1. Do you think that at Wheels India Ltd. implement good and proper quality procedure?

TABLE -1

Criteria	Frequency	Percentage
Yes	21	84%
No	4	16%



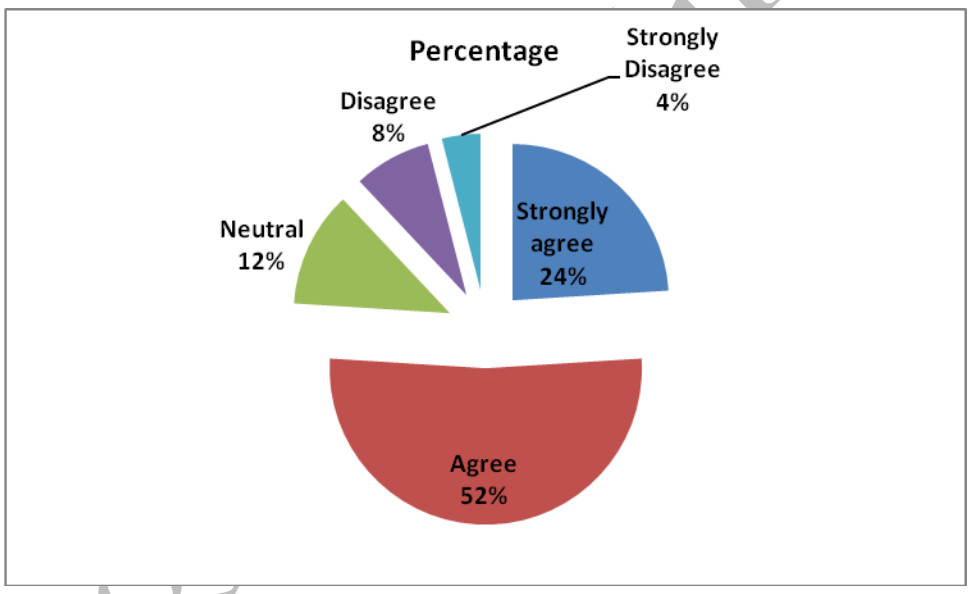
ANALYSIS & INTERPRETATION

As per shown in the above graph, 84% of respondent think that at service Wheels India Ltd. Ltd. implement good and proper quality procedure, and only 16% of respondent don't think like that.

2. **"A proper quality procedure made Wheels India Ltd. one of the well knowing company". Do you agree above statement?**

TABLE -2

Criteria	Frequency	Percentage
Strongly agree	6	24%
Agree	13	52%
Neutral	3	12%
Disagree	2	8%
Strongly Disagree	1	4%



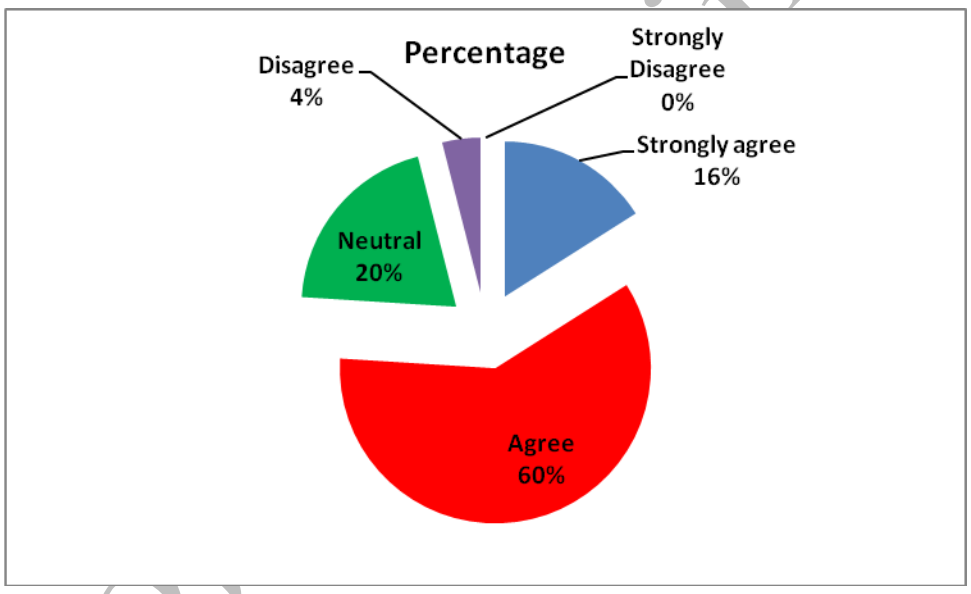
ANALYSIS & INTERPRETATION

As per shown in the above pie graph, 52% of respondent agree a proper quality procedure made Wheels India Ltd. one of the well knowing company", 24% of respondent Strongly agree, 12% of respondent Neutral, 8% of respondent Disagree and only 4% of respondent strongly Disagree.

3. Do you feel that Quality Procedures give help to good production response and increase profit in Wheels India Ltd.?

TABLE -3

Criteria	Frequency	Percentage
Strongly agree	4	16%
Agree	15	60%
Neutral	5	20%
Disagree	1	4%
Strongly Disagree	0	0%



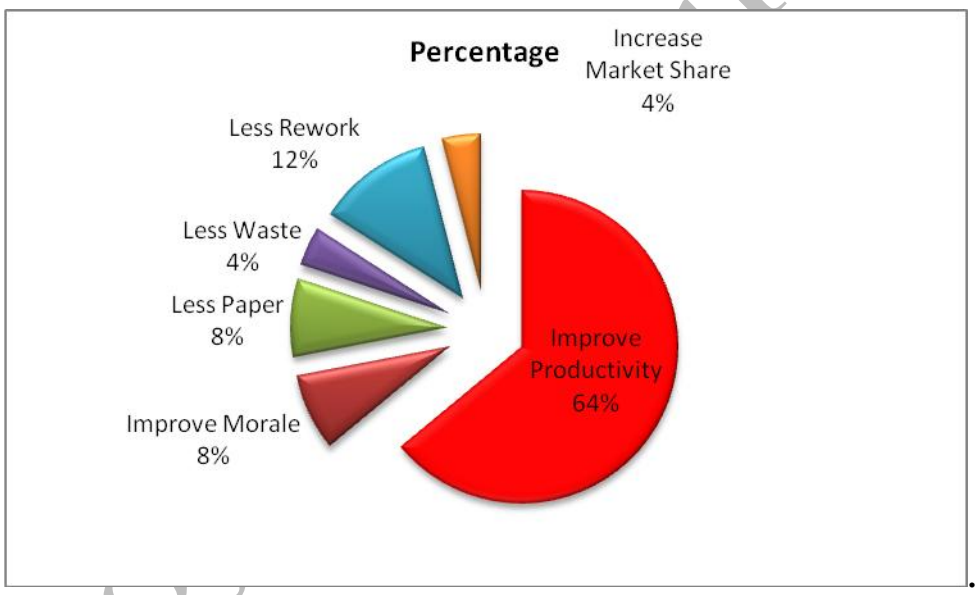
ANALYSIS & INTERPRETATION

As per shown in the above pie graph, 60% of respondent feel agree feel that Quality Procedures give help to good production response and increase profit in Wheels India Ltd., 16% of respondent Strongly agree, 20% of respondent Neutral, and 4% of respondent Disagree

4. What other benefit(s) does your organization gain with ISO/TQM?

TABLE -4

Criteria	Frequency	Percentage
Improve Productivity	16	64%
Improve Morale	2	8%
Less Paper	2	8%
Less Waste	1	4%
Less Rework	3	12%
Increase Market Share	1	4%



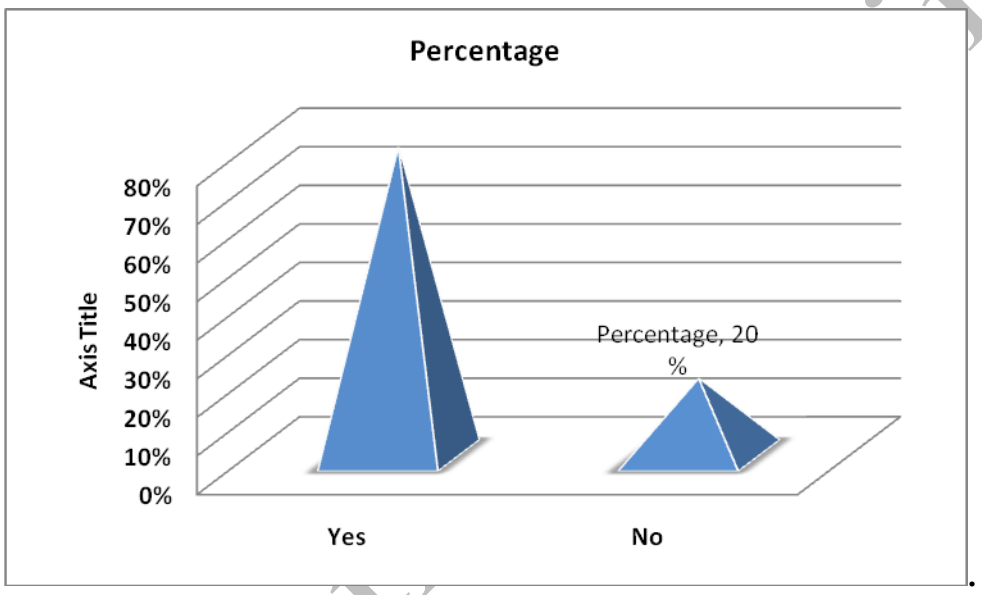
ANALYSIS & INTERPRETATION

As per shown in the above pie graph, 64% of respondent think Improve Productivity benefit organization gain with ISO/TQM, 12% of respondent think Less Rework, 8% of respondent think Improve Morale, 8% of respondent think Less Paper and other 4% respondent think Increase Market Share.

5. Does the firm's quality control manual require a specified checklist to be used to assess independence and continuance/acceptance on each assurance engagement?

TABLE -5

Criteria	Frequency	Percentage
Yes	20	80%
No	5	20%



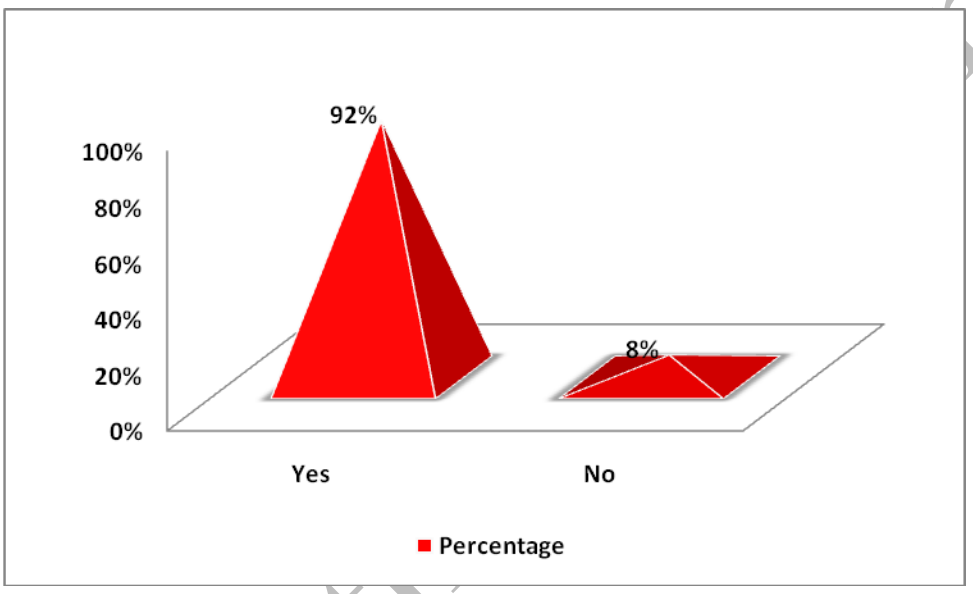
ANALYSIS & INTERPRETATION

As per shown in the above graph, 80% of respondent think that quality control manual require a specified checklist to be used to assess independence and continuance/acceptance on each assurance engagement, and 20% of respondent don't think like that.

6. Do you think that Total quality control is very essential for organization?

TABLE – 6

Criteria	Frequency	Percentage
Yes	23	92%
No	2	8%



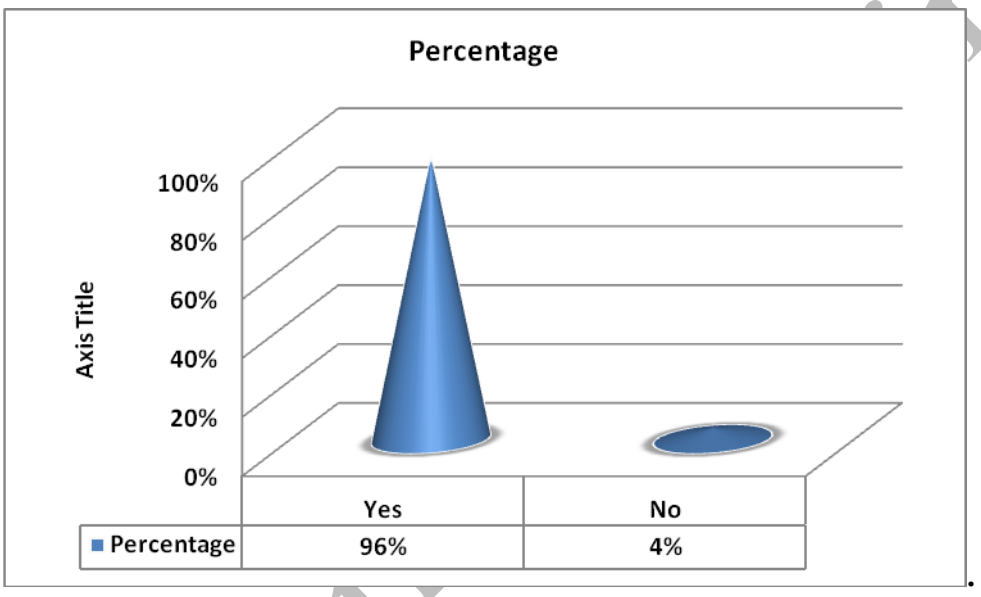
ANALYSIS & INTERPRETATION

As per shown in the above graph, 92% of respondent think that Total quality control is very essential for organization and 8% of respondent don't think like that.

7. Does your company have a system to ensure technical data is current?

TABLE -7

Criteria	Frequency	Percentage
Yes	24	96%
No	1	4%



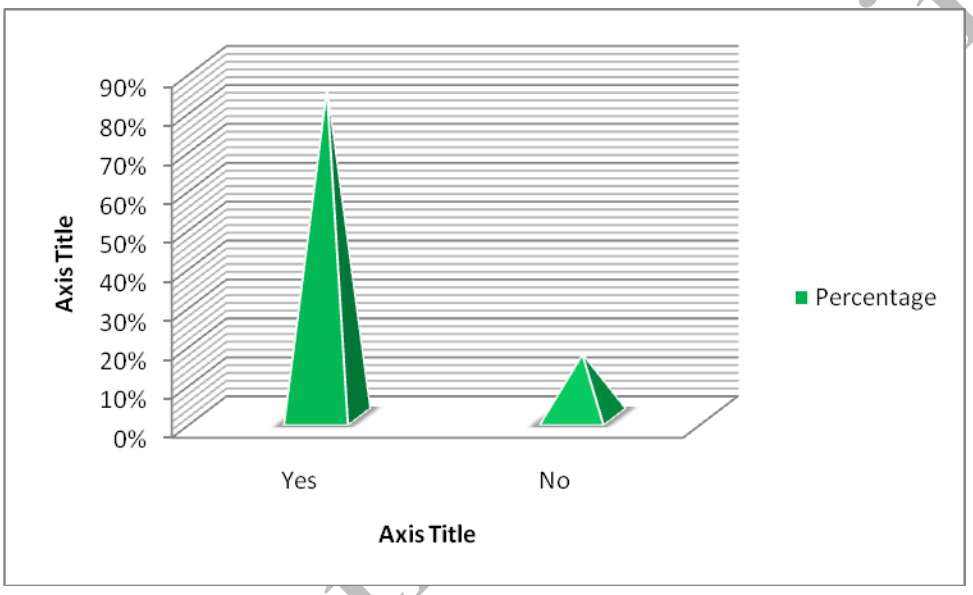
ANALYSIS & INTERPRETATION

As per shown in the above graph, 96% of respondent think that company have a system to ensure technical data is current and 4% of respondent don't think like that.

8. Do you think that technical data stored in a manner to prevent damage?

TABLE -8

Criteria	Frequency	Percentage
Yes	21	84%
No	4	16%



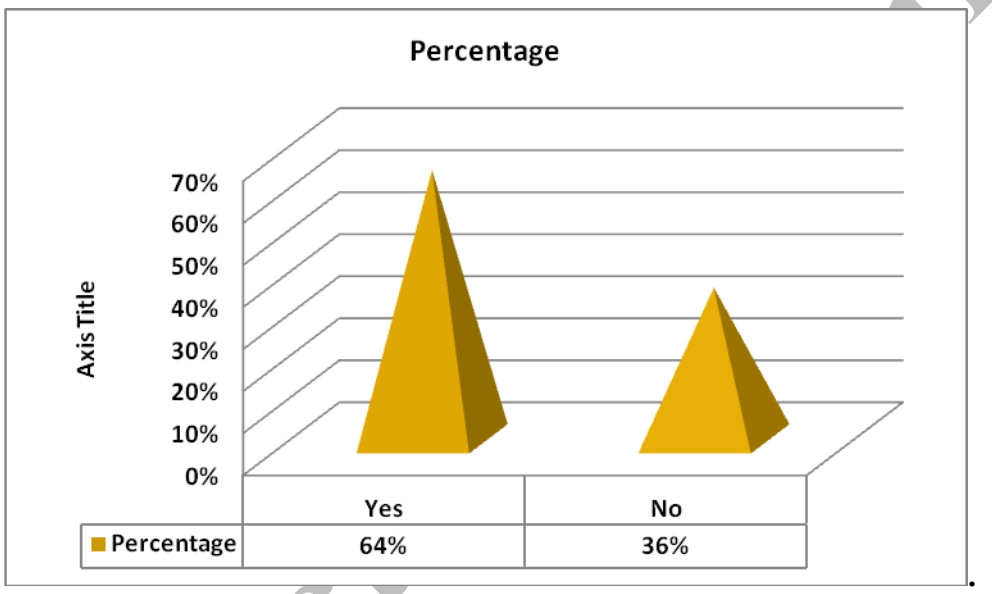
ANALYSIS & INTERPRETATION

As per shown in the above graph, 84% of respondent think that think that technical data stored in a manner to prevent damage and 16% of respondent don't think that think that technical data stored in a manner to prevent damage.

9. Does your company have a documented procedure to ensure that scrapped parts are returned to the customer or mutilated beyond repair?

TABLE – 9

Criteria	Frequency	Percentage
Yes	16	64%
No	9	36%



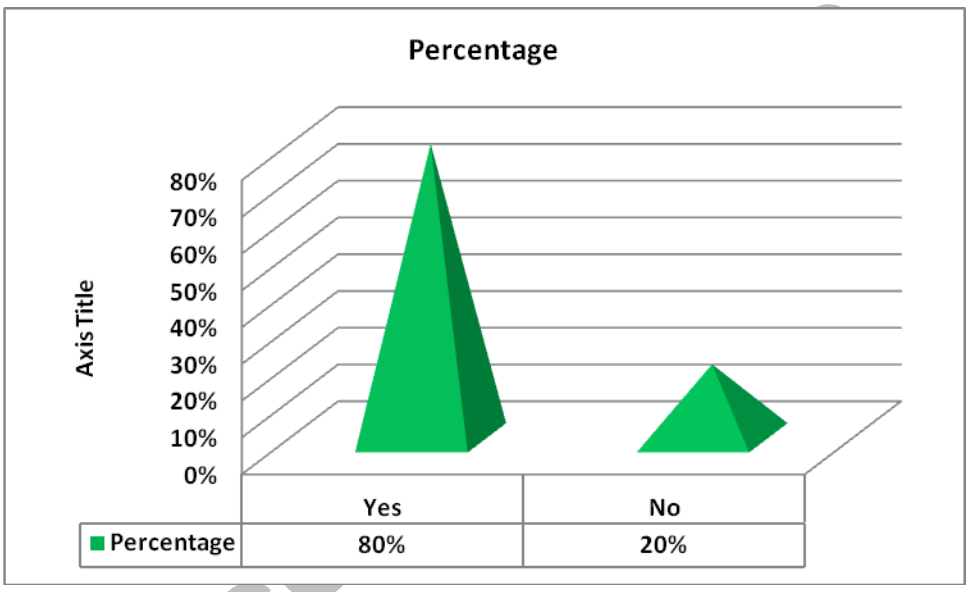
ANALYSIS & INTERPRETATION

As per shown in the above graph, 64% of respondent think that company have a documented procedure to ensure that scrapped parts are returned to the customer or mutilated beyond repair and 36% of respondent don't think like that.

10. Overall, Do you think that ISO/TQM brings positive effect to your organization?

TABLE -10

Criteria	Frequency	Percentage
Yes	20	80%
No	5	20%



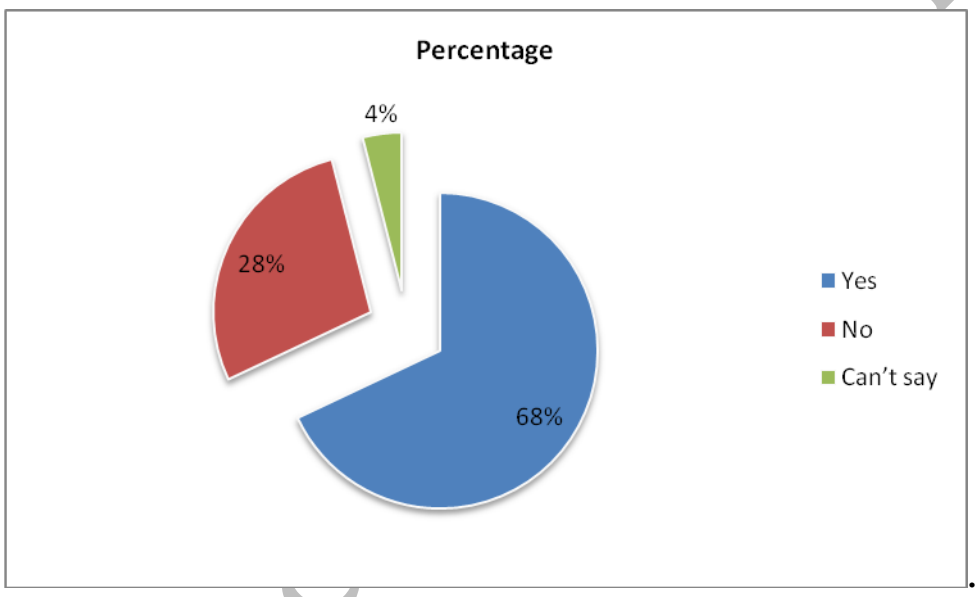
ANALYSIS & INTERPRETATION

As per shown in the above graph, 80% of respondent think that ISO/TQM brings positive effect to your organization and 20% of respondent don't think like that.

11. If the proper quality procedure is followed while accepting the row material in annual.

TABLE -11

Criteria	Frequency	Percentage
Yes	17	68%
No	7	28%
Can't say	1	4%



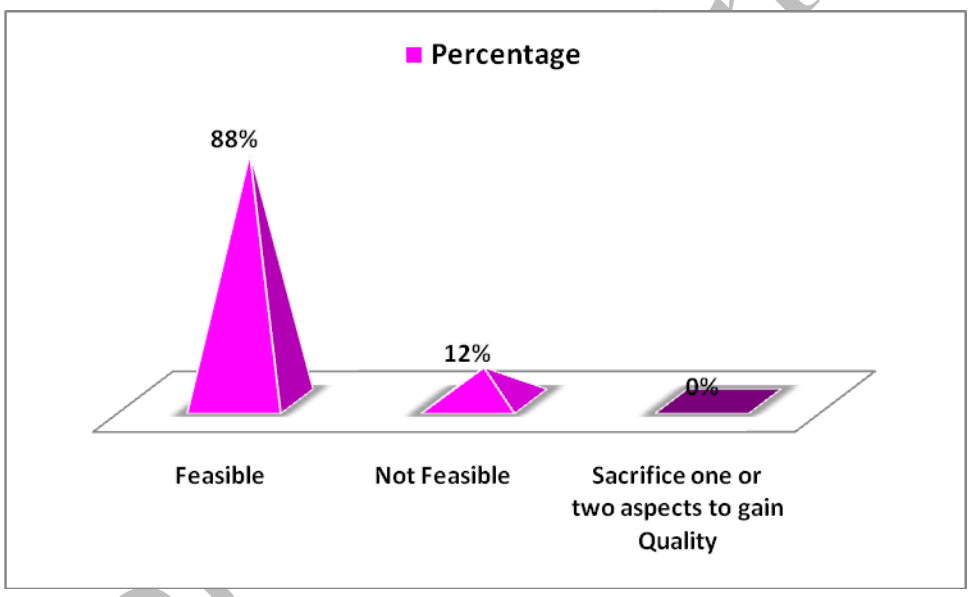
ANALYSIS & INTERPRETATION

As per shown in the above pie graph, 68% of respondent think that the proper quality procedure is followed while accepting the row material in annual, 28% of respondent don't think like that, and 4% of respondent Can't say anything.

12. How far it is feasible to improve quality thereby reducing Time at minimum Cost?

TABLE -12

Criteria	Frequency	Percentage
Feasible	22	88%
Not Feasible	3	12%
Sacrifice one or two aspects to gain Quality	0	0%



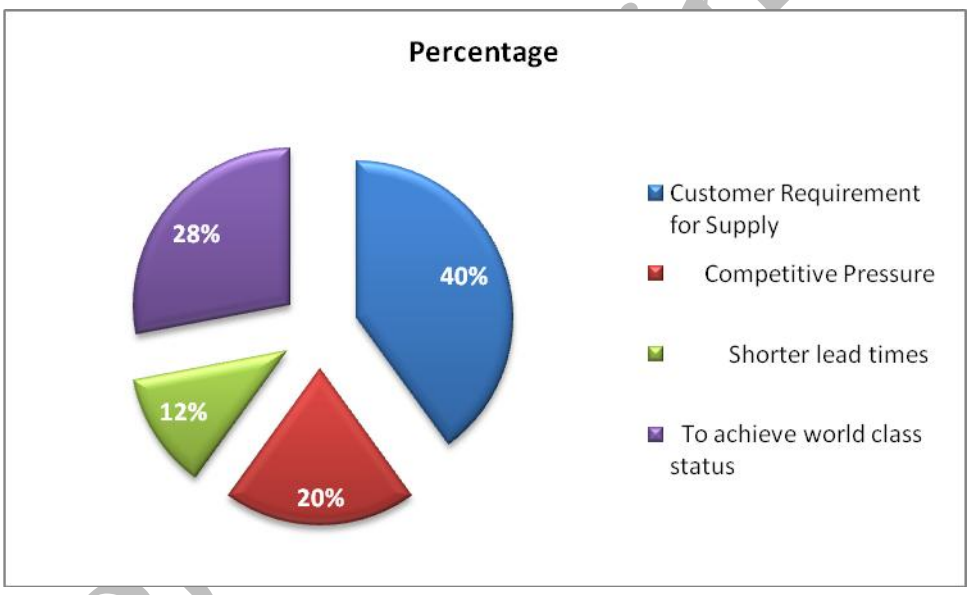
ANALYSIS & INTERPRETATION

As per shown in the above graph, 88% of respondent think feasible to improve quality thereby reducing Time at minimum Cost, 12% of respondent don't think like that.

13. What is the main Rational behind adopting TQM?

TABLE -13

Criteria	Frequency	Percentage
Customer Requirement for Supply	10	40%
Competitive Pressure	5	20%
Shorter lead times	3	12%
To achieve world class status	7	28%



ANALYSIS & INTERPRETATION

As per shown in the above pie graph, 88% of respondent think Customer Requirement for Supply is the main Rational behind adopting TQM, 28% of respondent To achieve world class status, 20% of respondent think Competitive Pressure, and 12% of respondent Shorter lead times is the main Rational behind adopting TQM.

CHAPTER – 7

FINDINGS AND RECOMMENDATION

The findings of the study of "ANALYSIS OF THE QUALITY PROCEDURES AT M/S WHEELS INDIA LTD."

1. As per the outcome of the 84% of respondent think that at M/S Wheels India Ltd. implement good and proper quality procedure, and only 16% of respondent don't think like that.

2. Finding that 52% of respondent agree a proper quality procedure made M/S Wheels India Ltd one of the well knowing company", 24% of respondent Strongly agree, 12% of respondent Neutral, 8% of respondent Disagree and only 4% of respondent strongly Disagree.

3. From the outcome 60% of respondent feel agree feel that Quality Procedures give help to good production response and increase profit in M/S Wheels India Ltd 16% of respondent Strongly agree, 20% of respondent Neutral, and 4% of respondent Disagree

4. From the outcome of the study it is evident that, 64% of respondent think Improve Productivity benefit organization gain with ISO/TQM, 12% of respondent think Less Rework, 8% of respondent think Improve Morale, 8% of respondent think Less Paper and other 4% respondent think Increase Market Share.

5. As per the outcome 80% of respondent think that Total quality control manual require a specified checklist to be used to assess independence and continuance/acceptance on each assurance engagement, and 20% of respondent don't think like that.

6. From the outcome of the study it is evident 92% of respondent think that quality control is very essential for organization and 8% of respondent don't think like that.

7. As per the outcome of the study 96% of respondent think that company have a system to ensure technical data is current and 4% of respondent don't think like that.

8. Finding that 84% of respondent think that think that technical data stored in a manner to prevent damage and 16% of respondent don't think that think that technical data stored in a manner to prevent damage.

9. As per findings that 64% of respondent think that company have a documented procedure to ensure that scrapped parts are returned to the customer or mutilated beyond repair and 36% of respondent don't think like that.

10. As per the outcome of the study, 80% of respondent think that ISO/TQM brings positive effect to your organization and 20% of respondent don't think like that.

11. 68% of respondent think that the proper quality procedure is followed while accepting the row material in annual, 28% of respondent don't think like that, and 4% of respondent can't say anything.

12. Finding that 88% of respondent think feasible to improve quality thereby reducing Time at minimum Cost, 12% of respondent don't think like that.

13. As per findings that , 88% of respondent think Customer Requirement for Supply is the main Rational behind adopting TQM, 28% of respondent To achieve world class status, 20% of respondent think Competitive Pressure, and 12% of respondent Shorter lead times is the main Rational behind adopting TQM**.**

Recommendation:

The suggestions I have given for the betterment are explained below:

- It is very important to provide the opportunity to the employees of the organization to express their ideas or whatever they want to express.
- Management should clear their vision mission and goals towards the employees in the organization.
- Management should involve the workers representatives in managerial activities so that the transparency could be maintained and through this they can win the confidence of the employees.
- Management should give due importance to mental relaxation &social cultural development of an employees who strives hard for the company.
- Reward or Praise/appreciation works as magic for an individual and motivates them for work.
- Role clarity of each position should be defined and based on that individuals can plan their work accordingly.
- Self-potential system should be encouraged.
- There are regular review and comparison of current & past performance to detect gradual deterioration in the strategy.
- Proper cooperation should be necessary in the company.

CHAPTER – 8

CONCLUSION

Quality is a measure of excellence in manufacturing. A typical quality department in manufacturing is engaged in designing inspection plans, control plans and setting up control charts. Does it ensure quality? Does it help in achieving manufacturing excellence? Does it make the company more profitable? We need to challenge each department by asking its value proposition. Quality departments must not be immune from questions such as, “How is it adding value?”

Introspection and probing value proposition leads to further questions about the purpose of a quality department. We may learn the purpose as to ensure customer satisfaction, to ensure outgoing quality or help manufacturing. However, such purposes of the quality department do not help a company. The purpose of a quality department is to ensure profit margins by reducing inefficiencies, operations errors and product defects. In addition, the purpose also must include proactively improving capability and capacity of operations through new methods, tools or skills.

Most quality departments are forced to be timid by operations people. They are told to do things such as add inspection, respond to a customer complaint or similar such requests. Quality departments are considered an unwanted cost and a burden because they add no apparent value; they are considered to be cost of doing business.

Thinking of excellence in the quality department will lead us to define our value proposition, and facilitate excellence in every department. Excellence in every department

means helping each department in defining and identifying excellence such that it contributes to the profitable growth of the organization. This must then highlight departments that are not contributing to the profitable growth, or issues adversely affecting it.

If a company has a vice president (VP) of quality, then he must advise the CEO to focus on profitable growth through positive behaviors, inspiration, synergy and demand for excellence. If this cannot be accomplished, or the vice president is not heard at the executive level, the quality department is impotent to begin with. Without such assertions, quality departments cannot add value. Leading a quality department is not a job; instead, it is the role of an evangelist and a counselor. If we cannot create a quality state of mind at the executive level, it cannot filter down to the management level.

Excellence in the quality department means establishing clear targets in terms of its contribution to profitability, reduction in cost of quality through less inspection and test, and developing new skills. The main purpose of the quality department boils down to striving for perfection in critical processes and supporting activities toward sustaining profitable growth. Such a purpose will lead to identifying activities in the quality department such as quality thinking across the corporation, establishing targets in every department for defining perfection, enabling effective processes and documentation in each department, methods of verifying performance against targets, the capability and drive to overcome problems, and the ability to assess corporate performance in achieving business objectives. These are not easy tasks, but quality folks must be willing to work smart and hard.

I have found that quality professionals see their jobs in two categories, either as a leader or as a manager. A quality leader finds opportunities to create value through his ever-changing role, while adapting to the organization's needs. The quality leader foresees problems, collaborates and addresses them proactively.

On the other hand, a quality manager passes time at work, performs routine things, and when problems occur, blames the process owner. Quality professionals at all levels must see their role as a leader driving value throughout the organization. Just like other areas in the company, every quality professional must strive for perfection, outgrow the job and create new opportunities for everyone, including oneself.

The quality profession is at a critical juncture and must be viewed for its value proposition in the globally competitive environment, and its fundamental intent for its existence.

So we can say that at M/S Wheels India Ltd we can improve the quality by further optimizing and bridging the gap between the actual and desired procedures.

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QUESTIONNAIRE

Dear respondents,

I am a student doing MBA. I am underlying a project named **"ANALYSIS OF THE QUALITY PROCEDURES AT M/S WHEELS INDIA LTD.".** So by filling this questionnaire please help me in completing my research project.

Name : **…….**

Age : **…….**

Address : **…….**

Gender : **…….**

Designation : **…….**

Contact No. : **…….**

Q1. Do you think that at Wheels India Ltd. implement good and proper quality procedure?

☐ Yes ☐ No

Q2. "A proper quality procedure made Wheels India Ltd. one of the well knowing company". Do you agree above statement?

☐ Strongly agree

☐ Agree,

☐ Neutral

☐ Disagree

☐ Strongly disagree

Q3. Do you feel that Quality Procedures give help to good production response and increase profit in Wheels India Ltd.?

- ☐ Strongly agree
- ☐ Agree,
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly disagree

Q4. What other benefit(s) does your organization gain with ISO/TQM?

- ☐ Improve Productivity
- ☐ Improve Morale
- ☐ Less Paper
- ☐ Less Waste
- ☐ Less Rework
- ☐ Increase Market Share

Q5. Does the firm's quality control manual require a specified checklist to be used to assess independence and continuance/acceptance on each assurance engagement?

☐ Yes ☐ No

Q6. Do you think that Total quality control is very essential for organization?

☐ Yes ☐ No

Q7. Does your company have a system to ensure technical data is current?

☐ Yes ☐ No

Q8. Do you think that technical data stored in a manner to prevent damage?

☐ ☐

Yes No

Q9. Does your company have a documented procedure to ensure that scrapped parts are returned to the customer or mutilated beyond repair?

☐ Yes No

Q10. Overall, Do you think that ISO/TQM brings positive effect to your organization?

☐ Yes ☐ No

Q11. If the proper quality procedure is followed while accepting the row material in annual.

☐ Yes ☐ No ☐ can't say.

Q12. How far it is feasible to improve quality thereby reducing Time at minimum Cost?

☐ Feasible

☐ Not Feasible

☐ Sacrifice one or two aspects to gain Quality

Q13.What is the main Rational behind adopting TQM?

☐ Customer Requirement for Supply

☐ Competitive Pressure

☐ Shorter lead times

☐ To achieve world class status

==========THANK YOU==========