IMPACT OF ORGANIZATIONAL CULTURE ON QUALITY MANAGEMENT IN AUTOMOBILE INDUSTRY OF PUNE REGION

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CERTIFICATE

It is certified that work "Impact of Organizational Culture on Quality Management in Automobile Industry of Pune Region" is an original research work done by **Mr. Preetam Sushil Uplap** under my supervision for the degree of Doctor of Philosophy in Management under the Board of Management Studies to be awarded by Tilak Maharashtra Vidyapeeth, Pune. To best of my knowledge this thesis

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Mr. Preetam Sushil Uplap

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Abstract

Introduction

Being one step ahead of competitors in bringing customer satisfaction is extremely important in today's competitive world. Some of the companies that began applying quality management practices have experienced success, while others have failed. Various studies indicate that the international implementation of quality management varies in different contexts, such as industry, firm size, and country. Additionally, many other factors contribute to quality management success. Of these factors, organizational culture has been rated at the very top of the list. These findings suggest that organizational culture is a critical determinant in the success rate of quality management practices.

Whether quality management practices are based on one culture or supported by multiple cultural dimensions is a topic of ongoing debate. These practices could be viewed to have cultural elements – for example, switch in the mindset of adapters – which would support the argument that quality management is based on single quality culture. This would be appropriate for philosophies such as TQM, Lean, etc. Another study claims that there is more to quality management than various simple techniques – they find that it is a value system and an underlying foundation. The setting of the organization – in a cultural context – has a significant impact on the methods of quality management that are implemented.

Purpose of the Research Study

The research tries to understand the impact of cultural settings on quality management. To evaluate the relationship between these two factors, the culture at specific organizations needs to be assessed. This evaluation of culture in an organization will provide insight into their cultural prerequisites. It will help us understand how culture is a contributing factor in quality management.

Objectives of Research Study

1. To understand the various dimensions of organizational culture and its correlation toeach other.
2. To understand the various dimensions of quality management.
3. To understand whether organizational culture impacts the quality management.

Scope of Research Survey

The target respondents' sample, for which the results are required are all automotive industry of Pune region.

This list of companies was obtained from DIC (District Industries Centre) of Pune. The coverage of the survey excludes automotive industries outside the Pune district.

Research Design

The study has used a descriptive approach involving the quantitative aspect which helps to explore the collected data objectively. The research has used probability sampling technique called the simple random sampling; the sample size is considered as 385 which has been interviewed by the researcher to collect the data. The survey instrument has been tested for reliability and its quite good in nature and can consider the instrument robust one. The sample elements were production managers, engineering managers, QA/QC managers and CEO/GM/Directors.

Hypothesis Testing

For the current research study, the researcher has used four hypothesis which are mentioned below:

Hypothesis: 1

H0: There is no correlation between different dimensions of organizational culture.

H1: There is a correlation between different dimensions of organizational culture.

Hypothesis: 2

H0: There is no correlation between different dimensions of quality management practice from importance and practice perspective.

H1: There is a correlation between different dimensions of quality management practice from importance and practice perspective.

Hypothesis: 3

H0: There is no impact on quality management practice due to organizational culture.

H1: There is an impact on quality management practice due to organizational culture.

Hypothesis: 4

H0: There is no association between business nature of organization and winning quality award.

H1: There is an association between business nature of organization and winning quality award.

Conclusions & Recommendations

Conclusions:

Top management is aware that if everyone in the company understands its vision and mission, than only people will believe in its growth and strive to improve quality management practices. If they failed to understand the vision and mission, it would impact the quality management adversely.

Since the communication channels are established appropriately between the employee and management, the senior management and the managers want to empower them because they can efficiently perform their tasks with a quality feedback mechanism.

Organizations involved in this research study have appropriate coaching, mentoring and training programs for the development of the employees, which leads to more capable human resources or workforce.

Organizations involved in our research study were very prompt to provide necessary tools and equipment for the employees to carry out their task. Further this helps employees to be innovative in improvising the processes and the quality management practices in order to achieve the respected growth as visualize by the organization.

Organizations is consistently doing the audits, which helps them to maintain the long term relationship with the clients and since everything is audited, the things are transparent, which helps clients to cross verify and build an environment of trust with the respective organizations to do the further business in the long run.

Since organizations have well-designed evaluation techniques that help monitor the task inters of workforce intellectuality, top management is very keen on developing its intellectuality and technology from time to time.

We can also conclude that the two most critical significant factors that are goal achievement and the organization's cultural strength, are significant factors that can influence the feedback and measurement practice. However, these leadership and management practices the work environment of the organization but not prior learning and development function and the system and processes of the organization's practice are not working out to be a significant contributor. Hence, focusing on goal achievement and building up cultural strengths is essential for any organization involved in the research study.

The organizations, explicitly manufacturing units as compared to the similar service units involved in the research study, have one or more quality awards. Since they are manufacturing, the aspect of delivering the quality is more on them than other two business activities, namely assembling and services.

Recommendations:

1. The organizations from assembling and service units should focus more on quality aspects since very few companies were focusing on this issue. This will only help them to elevate their brand image and create more sustainable business and customer retention.

2. Organizations should build their competencies around culture, orientation towards customers, goal setting, and collaborative working style since these are the factors that impact the organization's various practices in some or another way. Profoundly the culture and goal setting plays a significant role in shaping up the organizations future. Hence it should be appropriately crafted.

3. The system and process that organizations have must practice what they have in place because bending the system and process of the organization may disrupt the normal or routine practice and may create an environment for the employee that might not be comfortable. We have seen in our analysis and conclusion that these organizations do bend the policies and procedures sometimes. Thus, sticking to the principal system and processes will help the organizations grow consistently and respond to change dynamically.

4. The orientation of the employees towards their customers is the key, and hence organizations should focus on building learning and development function around these aspects. The happier the client would be, the more sustainable the business would be.

5. The organization should design their mission and vision so that the employees of the organization can easily comprehend these things. This will become part of their working DNA which helps to create a competitive advantage for the organization.

6. For the success of any organization, transparent and lucid communication is the essential aspect, and hence proper communication channels must be established within the organization and should not put many constraints on information sharing.

7. From the research, we know that for the success of the organization, its employees have to be proactively involved in various activities and to do that, those employees have to be equipped with the right skills and hence the organization should invest appropriately in their respective learning and development functions.

8. Also, the organization should invest specifically in technology up-gradation if needed and leverage the data in whatever form they have; it will only help them create competitive advantage over their competitors.

Chapter-1: Introduction

1.1 Background

Being one step ahead of competitors in bringing customer satisfaction is extremely important in today's competitive world. Some of the companies that began applying quality management practices have experienced success, while others have failed. Various studies indicate that the international implementation of quality management varies in different contexts, such as industry, firm size, and country. Additionally, many other factors contribute to quality management success. Of these factors, organizational culture has been rated at the very top of the list. These findings suggest that organizational culture is a critical determinant in the success rate of quality management practices.

Whether quality management practices are based on one culture or supported by multiple cultural dimensions is a topic of ongoing debate. These practices could be viewed to have cultural elements – for example, switch in the mindset of adapters – which would support the argument that quality management is based on single quality culture. This would be appropriate for philosophies such as TQM, Lean, etc. Another study claims that there is more to quality management than various simple techniques – they find that it is a value system and an underlying foundation. The setting of the organization – in a cultural context – has a significant impact on the methods of quality management that are implemented.

With a different view, quality management could be perceived as a set of applications and techniques that each belong to different cultures in an organizational context. This suggests that some cultural characteristics can be attributed to some specific elements of quality management. Another view is that quality management is different from organizational culture and that it is possible to alter practices to better-fit the context in which they are being applied.

Various organizational cultures exist in reality in different organizational contexts. Many researchers has made an attempt to define and determine the differences between these cultures. Generalizing each culture's techniques and practices has proven difficult, as each culture has its own set of abilities and potentials. When organizations apply specific methods and practices, they

ensure that these are tailored to their specific needs. It is just as crucial for organizations to consider the right enablers for making the most out of a method or a tool.

1.2 Purpose of the Research Study

The research makes an attempt to understand the impact of cultural settings on quality management. To evaluate the relationship between these two factors, the culture at specific organizations needs to be assessed. This evaluation of culture in an organization will provide insight into their particular cultural prerequisites. It will help us understand how culture is a contributing factor in quality management.

1.3 The Indian Automotive Industry

Overview:

In India's economy automotive sector contributes heavily if you see the current scenario it contributes more than 7% of the total GDP and creates an employment for more than 32,000,000 people in various job disciplines. This is all possible because of the significant demand from the domestic market and governments various initiative for automotive sector. These actions are making India's automobile industry top competitor into the global market.

As we have seen the automobile industry across the world is undergoing medial shift and this shift is happening considering current scenario off the climate as we are facing global warming challenges and depleting resources hey auto industry is focusing on building electrical vehicles which smart artificial intelligence systems which can help to overcome traffic problems, fuel problems and majorly curbing noise and air pollution.

The Government of India has target that by 2030 all vehicles of the India will be electric vehicles; to do the same government has taken a lot of new initiative like national electric mobility mission

plan. Also, we can see on the road that hybrid vehicles are running and hence we can say that Government of India is moving towards green mobility.

On the same line many states of India adopting different initiatives to promote electrical vehicles and Karnataka is one of the first state who has launched a policy about electrical vehicles and energy storage policy. There are also other states such as Maharashtra, Andhra Pradesh, among many who has revealed many more electrical vehicle policies to support the green mobility initiative.

NITI aayog is taking lot of interest in giving the model concession agreement which focus on public private partnership through which government can build the electric vehicle infrastructure. To accelerate the same the Government of India through ministry of power establish the electricity act 2003.

The Step launched the National Electric Mobility Plan to address their ultimate target of 30% plus EVs by 2030. New car recycling (REC) programmes have a responsibility to help protect the ecosystem on our world. This is being undertaken to resolve the present crisis. Tax incentives or provisions can be placed in place in order to persuade people to abide by the policy about lower taxes and benefits provided to customers.

In India, the CMVR-TSC, AISC and BIS set and recommend requirements for the automotive industry. Through becoming active in efforts of establishing standards on safety, pollution, noise, fuels, energy usage and alternatively fuelled vehicles. BIS is currently a founding member of the International Organization for Standardization (ISO) (ISO). In the ISO, IEC and WSSN, India represents (WSSN).

India's automotive industry has become a fast-growing sector in just a few years. As compared to FY16, India's annual production of total vehicles increased by 14.8 percent. In coming years, there will be 350 cars for every thousand people in India. On the other hand, the population of vehicles in India is projected to grow from 152.7 million in April 2018 to 404 million by 2028. The number of vehicles rises by 24.37 million per year and at the same time by 2028. This figure is much smaller than the global average vehicle penetration. India is among the world's largest producers of automobiles, trucks and two-wheelers. India is expected to be the third largest car market in the world, after China and USA by 2030.

Nearly 14 percent of new vehicles manufactured in India are exported. Despite a decrease of 4.5 percent in FY17, it increased by over 16 percent in FY18. In the last two decades, India has risen to the status of an automotive exporter.

There is over 80 percent market share of two-wheelers in India's automotive industry. As well as the rise of middle-class and youth population. Next, commercial vehicles make 14 percent of the total market share. India will benefit from low car penetration, increasing urbanisation, growing incomes and rising consumption.

Major companies like Maruti Suzuki, Hyundai, M&M, Tata Motors, Ashok Leyland, Hero MotoCorp, HMSI, TVS, Bajaj Auto and Piaggio have played an important role in the growth and evolution of the Indian automotive industry because of their vehicle deals and customer services.

The emissions from transport sector constitutes 11% of India's carbon emission. As of 2018, 14 of the world's top 20 most polluted cities are located in India. It is clear then that India is making progress in reducing vehicle emissions through the Bharat Stage VI in 2020. Along with fuel standards increasing along with Indian auto industry, there will be exponential demand for hybrid vehicles in India. These requirements are based on a Corporate Average Fuel Efficiency (CAFE) framework and aims at reducing petroleum consumption of passenger vehicles by 24% by 2018 from their present level. According to a survey, about 87% of Indian motorists are in favour of an EV (electric vehicle) in order to minimise air pollution.

The next generation information communication technology (ICT) plays an important role in overall transport infrastructure (ITS). ITS is in its early stages of use in India. ICT innovations have been only implemented into toll collection systems for public transport and parking management in cities.

In 30 years India's automotive industry is expected to become one of the top three car manufacturing countries in the world. We think that India could overtake Europe by 202 and USA by 2035. Still, the key issues of India's industry will be to resolve the obstacles of growing the use of greener and cleaner technology, making fuel-efficient cars, affordability, and access to good infrastructure, Indian news agencies said.

India should make an important preparation for environment related emergencies. There are problems like renewable technologies and safe levels of pollution. Policies must be taken into

account both during the development of a company and during maintenance period. Government of India (GOI) earned FDI of about US$ 16.7 billion in the sector between April 2000 and March 2017.

Growth Drivers of Industry:

There are various key factors that have caused the development of Indian car industry. These are:

1. Government regulations have given India with a competitive edge. The Reserve Bank of India (RBI) requires 100% foreign investments and there are no limits on their movement. Attractive tax policies are in place to promote the development of car industry.

2. At the present moment, Indian population is 102 vehicles on every thousand inhabitants. It can go beyond 300 in the next 10 years. Most of the mobility demand in India is met by public transport and non-motorized modes (walking and cycling). India's per capita income rose at 7.6% during FY 18 from Rs. 1,03,870 (1265 Euro) in FY 17. Thanks to rising profits, local consumers are finding it easier to own cars.

3. There is a large proportion of youth in the Indian population, with more than 65% under the age of 35. A young population continues to have a higher proportion of car ownership.

4. In this way, cheaper loans can be given to buying new car by nationalised banks and scheduled banks. Seventy-five percent of new vehicle transactions are processed with bank loans in India. This illustrates the different way of doing buying in the industry.

5. A variety of governmental and private projects have been made for research and development. These will assist India's automotive industry to develop. The Government formed the Automotive Component Manufacturers Association of India (ACMA) to develop and encourage the automobile component industry in India. This body is linked to the technical advances in the industry and their importance. ACMA is committed to looking into the growth of trade in Australia and beyond the borders of the region. On the part of the private investors, there are proven business research and development undertakings. Another example is the Mahindra and Mahindra research centre based in India for improved electric vehicles.

6. The future of the car industry in India is bright because there will be peace in India. However, this depends on economic conditions of the country and currency inflations.

Economic stability and low inflation would increase incomes of the majority of Indians and increase the amount of automobiles purchased in the country.

1.4 Problem Statement

Quality management has had little interest in the sense and culture of organisations. Most of the literature concerns organisational performance problems in this field.

Although several studies were conducted on organisational culture, there is not a direct connection between organisational culture and quality management. Research on the relationship between these two things has yet to be accomplished.

Academics in this area assume that the two dimensions of the dilemma would have a positive impact on each other. There is no research into correlating corporate culture with quality control.

Organizations should start working successfully to achieve higher and better performance. However, when a strategic business plan is implemented correctly, a business strategy will succeed.

Organizational culture can have a considerable effect on the performance of the company. This illustrates the growth of organisations to be successful in their mandate in the short, medium, and long term. Productivity is achieving the goods and services at the lowest possible cost and with the least amount of time.

Productivity of work is linked to quality of work, consumer needs, and industrial relations. This suggests that productivity, good management and willingness to work are all associated. Productivity is a direct result of a healthy working environment.

1.5 Base Papers Gaps

1. There are so many studies that illustrate the benefits of QM activities. There will be a significant correlation between Organizational Culture and Quality management (According to Patyal and Koilakuntla 2017).

2. To truly understand how QM practises affect performance, there is a need to be familiar with the organisational context in which these practises are being implemented. Thus, OC is certainly a vital element in adopting QM activities (According to Gambi 2015).

1.6 Objectives of Research Study

1. To understand the various dimensions of organizational culture and its correlation to each other.

2. To understand the various dimensions of quality management.

3. To understand whether organizational culture impacts the quality management.

Chapter-2: Review of Literature

This study provides explores the definition of culture and attempts to lay out a perimeter for assessing organizational cultures. Furthermore, the study examines the significance of empowerment for sufficient and appropriate quality management. This research focuses on providing different practices with respect to managing the quality and thereby managing the processes and the interventions. Finally, the chapter covers theories on the impacts of organizational culture on quality management practices.

2.1 The Organizational Culture

The culture of any organization is generally defined as the standards which has been followed by all the stakeholders of the organization in an working environment[1]. Standards of these kind play a large role in how members work towards achieving a goal within an organization. It also speaks to the kind of communication and interaction that takes place between members of the organization and the stakeholders[2].

The DNA which separates one organization from another one is because of the culture of that organization and when we see the culture it points to the value system what organization believes and their behavior from the Internet external viewpoints of the organization[3].

Organizational culture can be defined as a system of cultural values that subliminally drives people towards making certain decisions in the organization. Lot of time the members of the organization use the term culture of the organization or the corporate culture interchangeably[4].

Organizational cultures are put to use by business managers to differentiate one organization from another. The best example here is to discuss about the organizations like apple or IBM or HP which are into the similar line of business but have very different unique cultures from one another[6]. For example, Apple places a greater emphasis on simple, elegant, and innovative products[7], whereas HP focuses on the autonomy and creativity of employees[4], and IBM on the loyalty and motivation of employees from a long term perspective[8].

Taking charge of human resources is a major issue in leadership in the organizational culture[9]. It has been pointed out that organizational culture works as a connection between the hardware (non-human resources) and the software (human resources) within an organization so as to excel in collaboration and achievement. Organizational culture is strongly correlated to corporate leadership and governance[10].

2.2 What Makes the Culture of An Organization

The culture of an organization has been built from so many different things, one of them being the core values of the company's founders[6]. It has been mentioned in research that learning experiences of group members is a source of organizational culture as well, and is also parallel with new opinions and views on the company's people[11].

Founders of an organization are crucial contributors to the establishment of a new culture in an organization[12]. The culture impacts the execution of business strategies and operational assumptions. A recent study proposed that said assumptions of founders may come from personal experience and cultural history[13].

Founders may be liable for imposing their personal experiences and cultures on the employees and partners in the organization[14]. For example, in the organization like apple its founder Steve Jobs use to force his experiences, decisions on his employees which they are bound to follow. His values largely contributed to the creation of a functional and fecund culture and the company[15].

One of the study conducted in late 2013 which come up with the highlight that Steve Jobs was the person who was able to influence the apples culture with his own thought of culture. This helped create a strong basis for culture in an organization. The culture within the organization further brought the founder's dream to actuality. It was claimed that Apple was a perfect example of how a founder's personal culture could play a role in shaping the organization's culture.

Learning experiences are the next major contributor to organizational culture, that stem from the social trends of the business environment[16]. A 2013 study claimed that certain aspects of the business climate and community are restructured by some business managers. Employees of the organization live within the community, and are able to place angles of their own culture into the organization.

One needs to understand that organization is a part of the society and the same society can influence the culture of that organization because the employees who are working in that organization are part of that society[17].

2.3 History of Organizational Culture

Organizational culture has been further interpreted in relation to business, with a strong focus on problems in the manufacturing industry[4]. A study conducted in 1982 investigated the features of the organizational culture of higher performance companies. 46 companies were characterized in the United States for the way they emphasize the culture of their organizations. Numerous scholars have published various books on the subject of organizational culture, making it a favoured topic in the field on business and leadership.

The value of organisational culture has been examined in terms of performance, with assumptions, artefacts, and values being divided into three categories. For example, work processes, office environments, and organisational structures are artefacts of culture. Values refer to the views held by people within the organisation as well as the company's business strategy[4]. All three aspects are important in establishing and maintaining a productive company culture.

Over 200 companies were studied in the United States and the results indicated that there is strong correlation between organizational culture and business performance. The study that reflected these findings was labelled a "game-changer" in the field of organizational culture. Along with the three influential papers, other literature has also played a major role in the development of organizational culture theory[4]. An in-depth analysis was provided in the context of organizational culture and performance, quoting actual examples from various companies across the world including Europe, China, the United States and more.

The organizational theory consists of organizational behaviour, specifically in various fields within the social sciences (for example, sociology, anthropology, and social psychology) during the early 1980s[18]. It was concluded that there were numerous limitations in the theoretical support given to enhance a manager's prevailing knowledge in organization culture effectiveness. Lot of other researchers have been carried out on the light of how the culture of an organization can influence the productivity of employees and the performance of an organization. The result of these different studies concluded that the culture of an organization is a a predictor of performance of an organization and also it creates competitive advantage for the organization to compete in this dynamic world.

2.4 Strong and Weak Organizational Culture

Employees' views are in accordance with that of the organization in a strong organizational culture, and therefore behave according to the organization's values[19]. Business managers present a strong organizational culture that impacts the views and productivity of employees since it drives motivation[2]. The employees and employers within such an organization share similar values with the organization, and new employees take on these values as well[20].

A study in 1990 explored the impacts of organizational culture with relation to business performance. The results from another study showed strong relationship between business performance and organizational culture[21]. Additionally, the findings of a 2014 case study reflected that strong cultures in organizations result in efficient business performance[2].

Recent and historic research both proposes that there is a almost correlation exist among culture and performance of an organization. An example of this kind of study would be one conducted in 2012 that found that organizational culture majorly impacts the organization process, employee performance, and overall productivity in the company. Another study suggested that organizational culture plays a vital role in enhancing an organization's profitability and financial stability. Lastly, another study conducted in 2013 put forth the finding that efficient organizational culture strives for an increase in business performance.

Strong organizational culture involves the crucial part of aligning the company's current vision with future direction[22]. Contrarily, management with inadequate organization cultures can lead to fragile profitability and reduced productivity[23]. In an inadequate organizational culture, members of an organization may have problems in pinning down the organization's core values and understanding the correct way of conducting business[4].

It was noted that one of the shortcomings of weak management was open communication within the organization. In this kind of organization, the employees' views and the organization's views are not in accordance with each other. The reason for this can be absence of uniform and direction from management and leaders[19]. When the culture within an organization is weak, the existence of the company is at risk because the member's views are different and may not work in parallel with the management's priority[24].

Business managers build a solid basis for organisational culture in a strong corporate culture[2]. The foundation of a culture comprises creating the working culture of organising people and defining a number of standards for companies[25].They may look at the organizational culture as a differentiating aspect between a bad organization and a good one[4].

Business managers use strong organizational culture to put in place official rules and regulations in the organization[18]. A study suggested that defining specific rules within an organization equates to creating a sufficient communication channel among everyone in the company. Business managers can sometimes put this channel to use in order to encourage open communication and help develop a collaborative culture among all members[26].

Open communication consists of much participation by all the people in the organization[27]. High levels of involvement from the employees in the organization are vital in order to encourage other employees.

Employees that are motivated might observe a feeling of ownership in the culture of the organization over the years[28]. After employees grow a sense of responsibility in their company, their dedication to the organization strikingly improves, even without supervision[29].

Trusted employees are a crucial part in maintaining sufficient organization culture and bettering performance in organizations. Pinho et al. found that employees with feelings of responsibility may notably enhance business performance and productivity. This will make it possible for business managers to focus on other issues within the company.

Organizational culture can be seen as a motivating strategy for improving performance of an organization[21]. The team attempt of managers and employees plays a major role in creating a positive working environemt[27]. Findings from a study conducted around this topic suggest that employees are strongly motivated to improve their performance in a positive workplace. The results of this study presented that trusted employees are more likely to enhance the organization's culture, their own performance along with that of the business, and overall productivity[30].

Business managers in strong organizational cultures put to use open communication in order to encourage employees, as well as to improve productivity and performance within the organization[31]. Open communication within the company involves participation on the part of employees in organizational activities. It's easy to communicate useful information among an organization's members when they participate in open communication[2].

When employees take part in the decision-making process in their company, feelings of ownership may develop[32]. In a strong organizational culture, employees are encouraged to get involved in the decision-making process by their higher ups. This involvement of employees is a very important part of improving business productivity and performance[27].

In strong organizations, employees and employers have excellent qualities in relation to work, and this contributes to performance enhancement[33]. Professional quality is consist of (1) respect for employees and managements, (2) greater than enough customer service dedication to meet organisational aims, and (3) motivation and moral commitment[34]. Once a positive connection has been established between employees and managers in the context of respect, both sides combine their individual knowledge and experiences and use them as an advantage for the company[27].

In the interest of keeping employees in the company motivated, a strong organizational culture is vital. Motivated employees are an important part of enhanced performance in companies[2]. It has been suggested that motivated employees are more likely to carry out their tasks better than employees that are not. Another study noted that such employees are better at time-management

than unmotivated employees. A third study found that motivated employees are a major driving force for the excellence of business performance and achievements of goals in general.

2.5 Effective Culture of an Organization

It is also possible for business managers to cultivate and maintain a positive organisational culture in order to boost the efficiency and performance of the organization[19]. Research has discovered that the strength of the relationship between company culture and employee productivity is high[4].

Numerous business managers have suggested that along with the above factors presenting a positive correlation, organizational culture is also a chief benefactor in the success rates of the company[4]. The world's leading business conglomerate's, culture of an organization please uh key role in running the business successfully[19]. Founders of Google and Apple displayed similar findings – organizational culture has been a major motivating force for sustainable competitive advantage[2].

Business managers that engage in positive organizational culture may work to enhance trust in the leadership[36]. Business managers use transparent and open leadership styles in such an organization culture in order to develop trust for and in the company[2]. Open leadership styles consist of compatible decision-making processes and open communication through all levels of the company.

Employees trust their business managers when they demonstrate consistent decision-making and open communication across the organisation[27].

An important responsibility for business managers to carry out in an organization with strong cultures is communicating aims and objectives to stakeholders and people within the company[2]. The likelihood of employees to completely understand these objectives in such an organization is high[12]. A study concluded that employees may engage repeatedly on value-added activities when they thoroughly comprehend the core values of the company.

2.6 Organizational Culture Effectiveness

Research into organisational culture lays a heavy emphasis on how managers may implement an effective culture to enhance productivity and performance. Managers are on board with the notion that a strong organisational culture is helpful to the business, whereas a poor culture might lead to failed enterprises[19]. The study found that successful business managers utilise company culture to ensure the work environment is operational and sustainable.

A study concluded that business managers utilize efficient organizational culture for many different reasons: (1) to form employee attitudes; (2) to enhance operational efficiency; and (3) to expand financial performance. Operational efficiency is important since it relies on organisational culture to produce new products and services while making good use of the current ones. Income, efficiency, and development are all financial goals of the business.

Strong and upbeat organisational culture is a mixture of strength and positivity. This sort of organizational cultural inspires staff to follow the company's principles[19]. For example, when it comes to shared goals and values, employees working in a healthy company culture have no problem communicating with one another[12].

Business managers may create a sufficient organizational culture in order to improve performance and productivity in the workplace[37]. A recent study concluded that managers with strong organizational cultures are easily able to adopt excellent customer service and innovative business envorinments[38]. Business managers exhibit employee-focused guidance, well-formed and developed interpersonal relationships, moral decision-making processes, and so on[32].

Business managers use strong organizational cultures to create and maintain positive work environments in the organization[33]. Strong organizational culture is an assembly of sub-organizational cultures. These entail: (1) healthy customer service; (2) employee-oriented management; (3) effective interpersonal relationships; (4) excellent leadership; and (5) ethical decision-making processes[4]. Maintaining these kinds of cultures in an organization is a critical aspect to keeping employees motivated. Managers with such strong cultures might present enhanced performance throughout the workplace[23].

In an organization with strong culture, the views and opinions of employees are well in accordance of that of the company[6]. When employees and organizations share beliefs, both parties can enhance their performance in the company and make certain that objectives are met[18]. Research in this area has concluded that shared values and common purpose are a part of strong organizational culture as they help develop a sense of teamwork in the organization[19].

Members of a company utilize strong cultures to establish teamwork and encourage sharing[40]. A study found that managers that put to use such cultures promote teamwork among employees, which benefits the entire organization. Teamwork is a vital factor when it comes to attaining goals that are in line with those of the company. In an organization with strong culture, employees and employers of all levels work together so as to enhance performance and productivity in the workplace[4]. Another study found that strong organizational culture plays a crucial role in motivating and maintaining competent employees in the workplace.

Business managers who have established a strong organisational culture place a high value on providing good customer service[41]. Outstanding customer service is typically included as part of an organization's mission statement, which is the case in the majority of cases[18].

Businesses with strong cultures in the company prioritize customer service over everything else[41]. Normally, leadership in the workplace consists of great customer service as a part of their mission statement[18]. A research study claimed that leadership must hold excellent customer service at the highest value as a source of sustainable competitive advantage. Another study discovered that employees who work in a business with a strong organisational culture are more likely to share the thoughts and beliefs of the company. As soon as employees express their opinions, they make every effort to work towards those specific objectives by providing outstanding service to their customers[4].In an organization with strong culture, customer service becomes a vital task for business managers[41].

Business managers are creating transformative leadership amid a healthy organizational culture in an effort to increase organizational performance and productivity. A study has shown that transformative leadership and organisational culture have a significant relationship. A third study found that change managers (transformational) promotes collaboration and teamwork.

When businesses encourage collaboration in the company, employees may improve shared experience and create an overall supportive environment in the company[42]. In a strong organizational culture, employees may create a friendly environment in the workplace[43]. According to the findings of a study, a positive work atmosphere is essential for motivating individuals to achieve higher levels of performance.

Earlier researches conclude that there is a positive correlation between high interpersonal relationships and organizational culture[43]. In a strong organizational culture, business managers motivate employee-focused interpersonal relationships in the organization[32]. Qualitative study results found that an effective interpersonal relationship is a crucial aspect to enhancing employee satisfaction in the workplace[44].

In organizations with strong cultures, managers usually address the passions and interests of employees. Managers that understand the part their company plays might utilize this approach with their employees[4]. A study found that when strong there are strong interpersonal relationships in the workplace, employees may be able to communicate better and voice their opinions openly with their managers.

Whenever business managers present their staff with a plethora of possibilities. Alternatively, they could encourage staff to express their thoughts freely and without reservation.[43]

The implementation of a "open-door" policy fosters excellent interpersonal engagement with employees in an effort to generate a high level of trust in the organization's management[34]. It has been shown that when employees feel content in their jobs, they perform better in terms of ownership and responsibility[18]. According to the findings of a recent study, this sense of responsibility has a significant impact in the involvement of employees in the workplace as well as the improvement of their performance. In another study, researchers found that raising employee engagement and performance is a critical component of increasing organisational performance and productivity.

2.7 Understanding the Culture from Quality Perspective

Much literature exists around the subject on the stress that is caused as a result of unsuccessful initiatives in organizational cultures. One of these studies found that this non-fulfilment may be due to the lack of sufficient understanding behind existing cultural values in the workplace. Thoroughly comprehending the importance of existing cultural values is necessary for implementing quality practices[45]. In addition, there have been numerous similarities noted between culture of an organization and managing the operations within the organization.

According to Nahm, people's beliefs have an indirect impact on existing habits and, as a result, on the performance of manufacturing operations.

Studies have concluded that value systems have major effects on people's actions and behaviours[46]. There are numerous reasons for this, but presently, one particular justification has been majorly welcomed. A group's unique learned methods of dealing with external and internal difficulties are referred to as its culture. They've shown their value and are now passed on to new members as the proper way to think, feel, and see the difficulties.

Researchers have discovered that the concept may be broken down into three distinct parts. The primary consideration is the organization's visible elements, including the physical characteristics of a business with its hardware, office design, and audio characteristics. Even though, this factor makes it possible for external audience to observe what goes on internally, it may not be possible to completely understand the reasons behind certain decisions. This makes it hard to analyse a culture based on the highest factor only. The second factor highlights cultural values within the workplace. Values provide insight, and most companies are most likely aware of this. This factor involves different parts such as company philosophy, norms, and justifications. The last factor is on the basis of assumptions. Most assumptions lie deep within the organization – too deep for people to see an alternative for. For this reason, it may be hard to analyse and critique these assumptions since most people are unlikely to understand the assumptions themselves. Another study shows that people don't have to share the same method of thinking, but they must still share underlying values..

Edgar Schein's Model Of Organizational Culture

ARTIFACTS & CREATIONS
- Technology & Art
- Visible & Audible Behavior Patterns

VALUES
"debatable, overt, espoused" values

BASIC ASSUMPTIONS
- Relationship to environment
- Nature of reality, time & space
- Nature of human nature activity & relationships

Visible but often not decipherable

Greater level of awareness

Taken for granted, invisible & pre-conscious

Illustrative Quotes

"To stay at the level of artifacts or values is to deal with the manifestations of culture, but not with the cultural essence."

"necessary to infer them by interviewing key members of the organization or to content analyze artifacts such as documents and charters"

"as a certain motivational and cognitive processes are repeated and continue to work, the become unconscious"

"Business should be profitable"

Figure 1. Model of organizational culture, developed by Schein (1984).

One might say that culture is defined in numerous ways, depending on who you ask. (as seen in figure 2[48]) National and industry cultures can effect organizational culture. National culture effects the way people perceive the world, and depicts the cultural mental programming that nationals usually have in common[49]. Understand how national culture is defined it has been broadly classified into foreparts first part talks about the belief that one has that power has been unequally divided among the organization or among the countries, secondly talks about how different cultures respond to the uncertainties, it talks about the goal one has four individual what is the goal for the group and the 4th part talks about how the rule has been distributed among the men and women's. A second study identified the issue with multinational organizations, as the company culture must to either adapt to local settings or try to change it.

Within a workplace, there are numerous subcultures can be found. An organisational culture is a culture that is shared by the entire enterprise. While it is intended to be uniform throughout the workplace, it is possible that it varies from department to department as a result of organisational

structure[48]. A study claimed that businesses with functional or divisional structures may house multiple cultures, given they are inclusive of geographical subgroups. Background in terms of career can have an impact on the culture and thus the company may have different cultures such as engineering, marketing, labour, and others all within the same organisation.

National Culture

Industry Culture

Organizational Culture

Subcultures
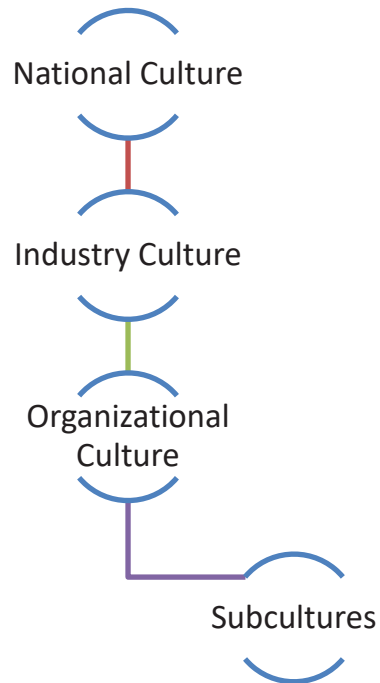
Figure 2. Different cultural populations and their impact on organizational culture, freely interpreted from Liker and Hoseus (2008).

Empowerment

Due to the increased pressure in organizations, a company has to perform wisely and carefully[50]. Raised competition makes it harder to spend sufficient amounts of time understanding the results beyond one month. A study found that the way to resolve this issue is easier than thought – it is within the people who actually carry out the tasks and observe the issues on a regular basis. Ideas that stem from people within the company hold a lot more value than managers think. Operators are usually told to simply follow instructions and not think at all. According to this study, the

creation of ideas should be made a part of everyone's work, irrespective of their duties and responsibilities. In order to put this process to use, employers and employees must feel empowered.

Employee empowerment is a well-known idea in a wide range of organisations. A study suggested that empowerment leads to sufficient, creative, and transformational workplaces that are necessary in ever rising global markets with fast changes in technology. According to one study, management theorists have viewed empowerment as a collection of strategies, with little consideration paid to the concept's true grounding in psychological literature and reasoning. An often-held belief is that empowerment is synonymous with top-down distribution of power to subordinates, and that no additional action is required[51]. This concept has been referred to as "mechanistic" by some authors. On the other hand, psychology literature has a strong relationship with the views that are internal to power and control on an individual level, and are utilized as motivational factors[52], This approach has been labelled the "organic" approach by the same authors. These authors have suggested that these concepts must be implemented so as to develop sufficient amounts of empowerment within the workplace.

It is said that the empowering process begins at the top of the organisational structure, according to the mechanistic perspective. Managers empower their staff by making information available, drafting an organisational blueprint, training those who work for them, and stressing collaboration over delegating[53]. Information sharing is crucial because it enhances trust among employees and their higher ups. When employees comprehend the problems and possibilities that the company is facing, it creates a sense of responsibility. At the same time, information will warrant ownership and initiative[53]. In addition, a study suggests that at the start of the empowerment process when the company moves from bureaucratic to hierarchal, an adequate structure and sufficient leadership is required to pave the way. Goal setting, delegation of tasks, and incentive systems are structural aspects that smooth out the understanding that employees can use to make their own choices.

A few authors have argued that encouraging creativity through awards, and improving employee self-esteem through the award system, helps employees succeed. One final thing to mention is that cooperation is a valuable component in employee empowerment since it decreases the top-down delegation process in the workplace[53]. A second study suggested that it may be possible to motivate people within the workplace with the use of incentives and rewards. Their statements stem from the view that people usually feel the need to correct things and do not necessarily have an issue

with voicing their opinions, even for no cost. People are normally excited to offer help and are glad when their views are taken into consideration for the betterment of the organization. Thus, simply acknowledging their ideas is all it takes. Often, and error is made by the organization with regards to offering incentives for ideas. As it is difficult to put a price on the opinions people bring to the table, it might be viewed as unethical, and may lead to theft of ideas in an attempt to save movey[50]. It is much wiser to give rewards throughout the workplace so as to create a collaborative coordinated working environment overall.

Currently available literature on empowerment primarily emphasises participative management practises such as quality circles and subordinates establishing objectives in order to share power, according to a research. Employee engagement is typically regarded as a kind of empowerment; however, this is not always the case in practise. A participation programme is a well-defined structure that empowers employees by distributing duties and exercising official control over the programme. Employees must, however, have a high sense of self-efficacy in order for the empowerment process to be successful[52].

A study asserts that mechanical techniques are not enough to empower firms. This assertion says that managers don't empower their employees, but rather empower employees within the firm. Those who are empowered in a workplace are motivated to selecting their own responsibilities. They perceive a sense of ownership while carrying out their tasks, feel that their choices have strong effects on the organization, and have faith that their opinions are being heard. This study puts forth three barriers in bureaucratic culture, which is (1) multi-layered, hierarchal organization that is driven to sustaining present culture, and status quo; (2) multi-level conflict that appears when various departments sub-optimize their performance; and (3) personal time bounds that prevents empowerment. Those who perform under pressure have issues in considering creativity and innovation. In periods of layoffs and cost-cutting, emploees may sometimes carry out double their tasks and can be harmful for the empowerment.

An organization must put together the two views (mechanistic and organic) in order to create and maintain empowerment throughout the workplace. To make the implementation of the system easier within the workplace, empowerment of employees must come from within. Managers are only able to develop empowerment among employees only if they are empowered themselves[54].

Thus, higher leaders must consider their own views and feelings so as to set an example of everyone else in the organization.

2.8 Practices involved into Managing Quality

A research study defines quality management as a technique to achieving and sustaining high quality productivity. This idea can be further broken down into its principles, practices, and techniques. Another study asserted that quality management is founded on three fundamental principles: a customer-centric approach, constant upgradations, and collaborative efforts.. See figure 3.

Principles
Eg. Continuous Improvement

Practices
Eg. Process Management

Techniques
Eg. Statistical Process Control, Pareto Analysis
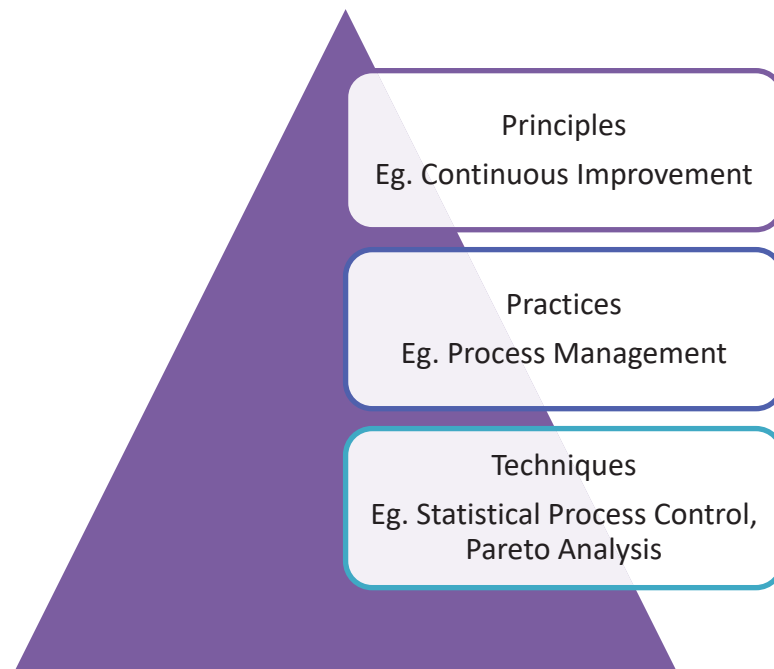
Figure 3. Image showing varying quality management levels

There have been numerous attempts to categorise quality management approaches. In literature there were many outlines[55]. Some study, for instance, underlines the Malcom Balridge National

Quality Award [56]. While they use different titles for their methods, one study found parallels between the two. The categorisation given above is used in this investigation. It splits quality management down into seven aspects: (1) top management support; (2) relationships with customers.; (3) relationships with vendors; (4) management of the employees; (5) quality information; These variables are further divided into two (1) infrastructure and (2) fundamental practises for quality management[56]. Practices of quality management are considered as problematic and organised processes and the quality infrastructure is viewed as smooth and culturally oriented.

Table 1. Elaboration on various quality management practices

Management Practices for Infrastructure Quality	Description
CEO and Executive Board support	Quality is held in high regard; the board members are judged on it; they engage in quality development activities; and they devise plans and objectives for quality.
Managing Relationships with Customers	It is important to measure customer demands and expectations, as well as include customers in quality improvement. One should also be able
Managing Relationships with Suppliers	Consider getting input from a limited group of suppliers, and be sure to make them a part of the manufacturing process. Base your assessments of suppliers on their performance, and make sure to educate and provide them with technical support.
Managing Employees	Recognize and reward employees for their contributions to quality; foster teamwork; give training; and involve employees in quality decision-making processes.
Quality Management Principles and Practices	
Managing Quality Information	Collect quality defect data as soon as possible; use the data to help the management and workers identify quality improvements.
Product/Service Design	Thorough review prior to production; collaboration among multiple departments; simplification of design; design for manufacturability are all recommended.
Process Management	Use statistical process control (SPC); build error-proof procedures; perform preventive maintenance; keep the work floor clean; and establish meeting schedules.

A study suggested that practices are recommended for analysis, because principles can be extensive, and techniques too narrow. Comparing various quality tools is not a good enough option since many techniques may match the same quality practices. An organization can be a part of the Statistic Process Control (SPC). This technique holds up the process management practice, even though others might utilize process data collection and have similar practices. Quality management procedures are things that managers work with to define tangible targets[58].

Numerous research have attempted to define which quality management techniques have had the most impact. A study in the literature indicated that previous writings on quality management strategies placed emphasis on the role of infrastructure. Quality management was deemed to have shifted its emphasis from tools and processes to soft factors (culture and mind set). An additional investigation indicated that corporate culture and quality management systems affect operational productivity. While they admit that basic processes are less affected, they contend that This notion was confirmed by a third study that contended that leadership, human resource management, and customer focus are highly related to the performance of an organisation.

A study stresses the importance of both types of practises and the STS, where a company sees the interacting subsystems as an open system: (1) a technological subsystem; and (2) a social subsystem. The STS presents a compelling argument for why both procedures are necessary for a successful performance. As a result, fundamental quality practises are split up between the technological subsystem and the infrastructural quality practises belong to the social subsystem. According to the STS theory, infrastructure quality management practises and core quality management practises must be in place for quality improvement to be successful. A further source of information supports the importance of applying both social and technical components to promote the success of the organisation.

These studies demonstrate the significance of both forms of quality management systems, as well as the necessity of using both types in the management of process quality. One research holds a point of view that is diametrically opposed to the majority. According to the findings of this study, the core quality management procedures are supported by the infrastructure quality management practises, with the operational performance being impacted as a result of these practises. They claim that process management and product design are making significant contributions to the

overall quality performance of the organisation. However, according to the findings of the study mentioned above, other behaviours are in support of them. Furthermore, the Lean method has been adopted from Toyota's production system, and it emphasises the need of having a supporting culture, as well as the importance of using tools and procedures[59].

Another research brings attention to the fact that employees that work in successful plants in Japan utilize sufficient tools and perform in accordance with them. It has also been observed that productivity extends beyond application of the tools and techniques of Lean Manufacturing. This kind of system promotes employee involvement. This article outlines Lean as a system for continuously improving employee performance by including the employee's own effort, which it achieves through more than just tools.

2.9 Practices and Performances for Infrastructure Quality

Numerous amounts of literature highlight the significance of leadership commitment when involving quality management practices. One such study even puts forth that this is the factor which is considered the most important one for quality development. Additional research has revealed that management support is critical in the execution of other quality practises. This is in accordance with previous findings. Managers can establish an environment in which excellent performance is recognised and rewarded by promoting quality management[60].

Relations with suppliers and customers outside the company are important. One of the concepts of quality management is an important aspect of customer service and is essential to underline client interactions for high quality performance[60]. Another study suggests that customer involvement has an affect on quality performance through improvement of initial design, specification and tolerances and simplification of the design process for new features. This study further stresses the importance of supplier connections and states that this practise strongly influences other practises of quality management. Therefore, the effect on quality performance was indirectly linked to inventory performance, nevertheless.

Furthermore, another study says that collaboration skills and collaborative issue solving are both vital to quality management since decentralisation increases the decision-making process.

Organizations that have established their management practise generally empower their employees and convince them to deal with difficulties themselves rather than turning to higher standards[61].

2.10   Core Quality Practice and Quality Performance Management

Quality information, product design, and process management are the three basic quality practises. Many consider them critical to achieving high performance levels, although the debate over their impact on quality remains fierce[60]. One of these studies describes a way to use control charts to increase feedback levels in production by using them as visual aids for employees on the shop floor. The procedure must also be educational about their situation and the possibility of system failures. Other quality management approaches like process management are supported by quality reporting methodologies, according to another study.

Additionally, the product design has an impact on the quality performance[55], since product design has an impact on the way the quality of customers is viewed. A recent study claims that product design has a strong positive relationship with all the important parts of quality. In such case, the weakness in design usually stems from product failure. A second study claims that successful product creation requires a collaboration across all levels of the firm. A previous investigation also mentions some important factors in product design quality, such as concurrent engineering, design for manufacturability, and durable design.

Process management has much to do with managing and perfecting the manufacturing process to ease performance even in the case of workplace variability[60]. A study noted that putting a strict structure in place for process management makes it easier to spot errors in the process when they can be corrected easily. Thus, process quality enhances with respect to reduction of scrap, rework, and production costs[45]. This claim is parallel to the requirement for preventive actions used in combination with corrective actions. Process management also consists of the documentation of process procedures, involving guidelines on handling machine operations and being available at all working stations[60]. Additionally, this study concludes that maintaining a clean workplace by applying 5S methods play a big role in good process management.

2.11 Corrective and Preventive Actions

Quality management processes emphasise process improvement. Corrective or preventive activities can help enhance the overall process. Not only are these efforts worthy of recognition, but they also necessitate a thorough investigation of the situation and/or potential problems. Problems could be avoided in the future if these activities are taken. A study concluded that an approach to issue solving consisting of both corrective and preventive activities. Manage and develop operations using this fantastic strategy. See figure 4.

How the Mill Solved Its Problems

New paper grades developed

Systems changes create time to find improvements

Anticipation

Production process changed to improve quality

Fewer problems create time to find underlying causes

Root Causes

Production process monitored for quality

Solution leads to preventive action

Prevention

Bad paper was scrapped instead of shipped

Problem arises and is fixed

Fix-As-Fail

The mill worked through the four loops, progressing from problem solving on a fix-as-fail basis to anticipating problems before they arose.

Figure 4. Problem solving loop freely interpreted from Sirkin and Stalk (1990).

The problem-solving cycle consists of four factors: fixing what's broken, preventive, discovering the root causes, and planning for potential future problems. Every organisation is tied up in the constant effort to make things better while avoiding the catastrophe of making things worse. The challenge is solved by avoiding damaging merchandise and implementing the most rudimentary problem-solving approaches. However, several studies observe that companies may become bogged down in the "fix-as-fail" problem-solving mentality, limiting their productivity gains. If an organisation is to make progress in the cycle, it must institute processes to make sure that previous issues don't happen again. Organizations see a rise in productivity when they cut scrap costs. It is vital to guarantee that manufacturing processes function smoothly and with few defects, and the researchers believe that regular maintenance might make the process more efficient[63].

There is always a cost associated with quality, whether it is internal or external failure cost as a preventive measure[64]. According to a study, investing additional resources in preventive measures minimises a company's failure costs. The third loop focuses on identifying the root causes of issues that have manifested themselves during production operations. An additional study emphasises the importance of root cause analysis and how it may be better to delegate this responsibility to operators rather than management. The fourth loop focuses on the critical aspect of anticipating challenges and analysing how they may produce competitive advantage, as well as identifying their customers' wants. Another study emphasises the significance of incorporating the client in a variety of ways throughout the company's process in order to create better products and hence a satisfied customer.

It is critical to move quickly between the various loops in order to guarantee that all personnel understand all of the actions involved. This takes time, and the entire organisation must have a good understanding of certain concepts, such as the preventative loops before moving on to the root cause loop[63].

2.12 Organizational Culture's Influence on Quality Management Practices

There is a wealth of contemporary material available on the subject of cultural influences on quality management practises. One such study asserts that quality management techniques take place in the context of their own organisations and examines how organisations implement these practises within their respective cultures. Another study asserts that a strong culture is essential to support quality practises, with Total Quality Management (TQM) serving as an example. While total quality management (TQM) is a broad concept, it must be applied in a manner that is consistent with the cultural environment in which it is being implemented[65].

It is critical to understand the values and organisational context in order to customise sufficient quality practises. One study examines the many types and levels of quality culture maturity, and it offers recommendations on when to use exploratory or exploitive methods of quality culture maturation. The strategy that an organisation takes to improve its performance is determined by whether or not it has an acknowledged quality culture that is mixed with its organisational culture. In a company where the quality culture is not being fully leveraged, quality exploitation is the most frequently used technique to get results. The effectiveness of this technique is positively related to the outcome of performance since it has a significant impact on the development of current procedures and processes. An increased emphasis on quality exploration is placed in a firm that has a strong quality culture, which runs parallel to the success of the company's operations and the development of new processes[46].

An organisation has to monitor conventional and well-known methods of quality management. However, firms must also improve their quality in today's challenging market. The inventiveness and exploration of the unknown is what establishes this. According to one study, quality management approaches must be ingrained into a supportive quality culture before they can be effective. When a company wishes to implement Total Quality Management (TQM) but does not have a supportive culture, the attempt is unlikely to be successful. In the case of a faulty product, for example, if employees do not feel empowered, they may fear that the production lines will be stopped immediately if the problem is discovered.

While numerous studies have noted that organizational culture effects quality management, some researches have presented more extensive explanations for the relationship between the two factors. One such study puts forth that group, development, and rational cultures all have positive correlations with increased levels of quality infrastructure. This could be used as a crucial piece of

advice for managers who attempt to keep quality infrastructure parallel to their existing culture. In addition, another study further analysed the relationship between the two factors, and claimed that both are aligned with TQM and Six Sigma practices. See Table 2.

The most vital cultures that can be used in order to achieve successful quality management are group cultures and rational cultures. These have respectively seven and nine links. The group culture is an important supporting culture when it is employed with an emphasis on involvement and collaboration for a widespread application of quality practises. A study noted that the group culture includes developing an environment that encourages trust and participation for better human development. This means that employees tend to participate increasingly in improvement, and that this kind of initiative should be rewarded. However, this kind of culture can only take place where there is adequate culture and training. The rational culture, on the other hand, emphasises productivity and achievement of goals, which are in line with the Lean Management way of operating, which has a clear structure that allows for easy orientation and understanding.

Cultural development appears also to be linked to one of the practises evaluated. In the development culture the emphasis is also recognised as parallel to the strategy of Six Sigma consisting of different features and special training. The hierarchical culture did not display notable connections to the quality management practices that were analysed. Thus, it is assumed as the culture with the least significance when utilizing quality initiatives. This claim is backed up by earlier research as well[66]. For instance, a study put forth a practical solution in which the various culture types are parallel to the most adequate practice.

Table 2. Cultural relationship with TQM/Six Sigma practise

	Group culture	Developmental culture	Rational culture	Hierarchical culture
Top management support	X		X	
Customer relationship	X			

Supplier relationship	X			
Workforce management	X		X	
Quality information			X	
Product/service design	X		X	
Process management	X		X	
Six Sigma role structure		X	X	
Six Sigma structured improvement procedure	X		X	
Six Sigma focus on metrics	X		X	

The above table shows a connection between rational culture and the customer relationship because control is the fundamental goal of a rational culture. This makes quality control easier and sets future goals. Due to the connection between trust and dedication to both factors, Group culture is employed to facilitate the supporter relationship. The practise of employee management suggests that employees should be encouraged. The approach is supported by the rational culture and group since they believe in training workers, involvement and incentives based on performance. As seen in the table, rational cultures coincide with TQM techniques and both rational cultures and groups coincide with product/service design and process management activities.

Six Sigma created an outline on improvement procedure and focused on metrics. According to a study, this highlights the significance of a rational culture for a company to utilize as quality management practices. The group culture is required to back up collaborative behaviour and individual enhancement at the same time. This argument is supported by a second study stating that the company requires that it has a free, independent and diverse staff to undertake creative and

efficient continuous improvement activities, while simultaneously encouraging the use of a systematic, standardised problem-solving approach to use quality tools.

As mentioned earlier, various kinds of culture result in opportunities to apply various quality management practices. For example, a company that focuses on developmental culture may be able to establish the Six Sigma culture easily as opposed to any other. Simultaneously, an organization that places a higher emphasis on goal attainment and rational culture may find it easier to apply TQM and Six Sigma practices so as to secure a smooth process of quality management practices.

2.13 Quality Management Practices and Cultural Setting

Research supports the claim that organizational cultures must be taken into consideration when establishing quality management[67]. Furthermore, disregarding this fact results in unsuccessful quality initiatives[61]. Organizational culture may be viewed as the base for enhancing quality management practices while also being a foundation for developing performance in the workplace. See Figure 5. Additionally, it is clear that quality management practices hold the highest value in quality performance.

One study says that it is justified to believe that all quality procedures play a role in operational improvement, because infrastructure practises are essential to strong values. In doing way, humane practises are analogous to practises of difficult quality. The organisation must build an atmosphere that fosters softer systems processes, supports at the same time high levels of leadership and management of employees in order to certify process quality, quality and quality information.

Figure-5. Relations between the culture, quality and performance of the organisation.

A study claims that companies may be perceived as a Socio-Technical System in which technical and human oriented values are put together so as to ensure high quality performance. The unit under study focuses majorly on technical enhancement, and thus, place a stronger emphasis on the technical aspects of the STS. The report indicates that quality management focuses on process improvements, and human influences on the process are not touched upon. One such study focuses on the link between infrastructural quality practices and social subsystems. Since the unit has placed major emphasis on technical aspects, the core quality practices have the most impact on the unit. This idea is supported by a study which highlights the significance of having a supportive culture in addition to the tools and techniques of Lean manufacturing.

One study has said that the rational culture supports numerous quality practises, including infrastructure and core practises, and that emphasis on attaining goals is connected with having goals. The unit believes that core practises are extremely important, although some argue that rational cultures also contribute to infrastructure quality and should be given equal emphasis. The rational culture is also related to the use of Six Sigma techniques because they both help people reach their goals. A Six Sigma team has been credited with launching their company's quality

department, a unit that has the potential to benefit from the team's organisational culture. They're planning to use Six Sigma technique for all significant projects, since they want to make improvements over the long run.

Quality management procedures developed by one particular study supports all quality management procedures by rational culture, except for "supplier relationship"[45]. Thus, the department's method of implementing other practices is deeply analysed[60]. In addition, it has developed on the basis of the unit working in the future in procedures so as to match with their cultural environment.

CEO and Executive Board support

The management has embraced the unit's goal of boosting quality performance. Organizational management support is most prevalent in rational cultures, because it specifies a precise process for accomplishing goals. Lean initiatives are launched and reinforced from a central organisation, as well as from plant-level Lean experts. Setting targets for quality improvement might function as a catalyst for people to follow through. Regardless, there is a lack of support for employees to be self-empowered and self-motivated. Top management should provide a more empowering environment for everyone by fully supporting the unit. Only empowered management can achieve this[68].

A group culture typically shows a belief in empowerment and will look out for the well-being of its members; thus a unit should exploit these inclinations to help improve the practise[45].

One example of how the CIP structure could be useful is that it could be used as a foundation for top management to empower staff. Conger and Kanungo emphasise that empowering individuals is key to making the most of the human resources.

Relations with customers

A research describes customer relationship quality as taking time to completely understand what customers expect. Another study also notes the importance of incorporating customers in the quality initiative. Because of the focus on the specified method of understanding clients, the unit is aligned with the rational culture. Complaints are collected and analysed as feedback, which

comes in the form of complaint forms. Companies are adamant that clients must receive quality goods.

The unit's goal is to provide the customer with a product that is free of defects, and as a result, quality control has been implemented throughout the process flow, as well as testing the finished product. It has been noticed that it is impossible to achieve a defect rate of zero percent, and as a result, there is a significant gap between the parts that are made and the parts that are delivered. Cost failure will be caused by products that are manufactured but not delivered to the customer. With a concentration on achieving objectives, rational cultures should find it very simple to shift the emphasis away from zero product damage and toward reducing waste between the stages of manufacturing and delivery[64].

Management of the Workforce

Workforce management should include individuals in the formative stages of a project, and also recognise strong performance[69]. The unit has CIPs which allow employees to become participate in quality improvement efforts. Operators are not given opportunities to innovate, and it is believed that some of them do not like working on product innovations. A good scenario would be an increase in creativity levels for shop floor workers as they are a key component in the formula, but they are often overlooked by management. The department should energise the shop floor workers and listen to their suggestions. The CIPs may benefit from developing the group culture by practising the principles that this unit sees itself as promoting. Communication with other team levels should be made easy by making sure that the type of communication being used is appropriate.

It is in the best interests of employees and the company to use quality targets as rewards, because this drives employees to improve the company in a constant manner[45]. The unit is focused on accomplishing goals, which causes them to implement a recognition system. Employees earn bonuses for reaching their goals, which encourages them to do well and is a means of showing them they are appreciated. The other research contends that monetary incentives may not always help the firm, and that a different compensation system should be instituted. In addition, a single yearly award is granted to the finest CIP from the factory. This is a substitute for the money that

was given out as a prize. For meeting goals, awards should be distributed based on the success of the group, rather than on the achievement of individual members[50].

Because the organisation is logical and hence places greater emphasis on goal achievement, it is necessary to establish a goal-setting structure to guide employees. Because of a lack of naturally existing empowerment within the unit and on the shop floor, it can be difficult to achieve objectives within the unit and on the shop floor. It is desirable for the CIPs to be laid out in a way that fosters natural empowerment, which in turn increases the degree of productivity and goal attainment of the participants. For example, the unit suffered as a result of a significant discrepancy between the processes of manufacturing. As a result, it had been advised that manufacturing parameters such as pH value should be kept within acceptable limits to avoid contamination. Therefore, there are no specific recommendations for how to regulate such difficulties, and as a result, people act according to their own values and views rather than following established guidelines. The unit must make certain that the objectives established are attainable by employees at all levels of the organisation.

Managing Qualitative Information

The constant work of the unit has numerous bases that provide efficient information on quality. The unit's logical culture ensures the structured data collection and the process collects substantial quality data. This goes hand in hand with the assertions of a new study that provides essential information on the progress. Although there are outdated installations within the unit, the improved control software ensures better process information.

The unit has also shown that it is able to establish a unique culture by using new technologies for their developmental patterns, making them a good candidate for further investment in control software and technologies. In addition, the response to staff members is executed efficiently since the data obtained is employed to enhance the unit. This can be done by a daily morning meeting to discuss quality and other matters with shop floor management. Information about quality is not shared by all departments, thus the plant should set up channels to make sure the information is delivered to everyone.

Product/Service Design

Simple product design that's prepared thoroughly prior to manufacturing defines the qualities of the quality management practise for product design[45]. This undertaking should be completed with the help of many departments. Good communication among departments is facilitated by representatives from the unit's quality group, management team, and research department, who attend the meetings. The finished product is rather basic, but it was designed to streamline manufacturing and improve production output. The unit has also created a number of manufacturing techniques that are new to the industry.

Process Management

Management process procedures have much to do with utilising enhanced quality to the tee[45]. Much like the rest of the core quality procedures, this procedure also places an emphasis on techniques similar to companies like Just-in-Time and more. While the idea and topic of Lean is widely accepted, it has just recently been considered a topic that rolled out systematically at the unit.

The culture that is rational highlights outline and structure, so it is perceived that administering Lean tools in the unit would have shown positive outcomes.

A number of prior studies have shown the importance of implementing a preventative approach to processes and building procedures that are flawless in order to ensure uninterrupted production[62]. A study also analyses the correlation between good process management and early detection of errors. This advice supports the preceding proposal to focus on parts that are defect-free when they are produced rather than after they are delivered. It is more important to avoid poor quality than to correct it. This would increase both quality and preventative costs for the future. Analysis of current data and reasons for process performance can assist in the creation of work that is focused on preventing problems.

It is very important to engage in the process of standardisation and creation of work definitions, in order to decrease differences in production. This is supported by a recent study that claims it is

hugely crucial to keep complete track of the procedures of the entire process. As has been noted, some routines regarding work in production are not cleat. Because the most optimal technique has not yet been documented, tasks are carried out in a different way by each operator. This suggests that spontaneous actions are taken in response to difficulties in the process, resulting in a fluctuation in performance. Since operating in line with a suitable tolerance level is what most businesses strive for, the rational culture's emphasis on achieving objectives serves to support the standardisation process.

2.14 Evolution of Quality

Without the involvement of numerous different meanings to quality from different quarters, the immense work around quality management would not exist. Some of those definitions from different professional have been placed in the literature as listen below:

- Crosby defines quality as compliance to specifications.
- Quality is the ability to be put to use - Juran.
- According to Deming, quality is defined as a known degree of consistency and dependability that is inexpensive in cost and well matched to the market.
- Quality is defined as the (least) loss inflicted on society by the product from the time the product is shipped - Taguchi.
- Quality is the act of correcting and preventing loss, rather than the act of living with loss - Hoshin.
- Quality is fundamentally a method of managing an organisation, according to Feigenbaum.
- Quality is defined as the sum of all the traits and characteristics of a product, service, or process that influence its capacity to meet a specific requirement; as seen from the perspective of the customer - BS 4778.
- According to Goetsch, quality is a dynamic state linked with products, services, people, processes, and surroundings that meets or exceeds expectations.

It has been seen that quality is defined differently by different people, even the quality Gurus. However, the surest fact is that quality has changed slowly over time due to patters in customer requirements. Therefore, the definition put forth by a few scholars has been verified as the most sufficient in terms of these situations.

Dr. Walter Schewhart's statistical quality control in Bell laboratories is considered to be one of the earliest contemporary methods of quality assurance. Fredric Taylor's scientific management theory, according to a few scholars, was instrumental in the development of quality. Later on, the emphasis shifted from identifying a certain set of damages to regulating quality through defect prevention and detection. When the needs of the consumer are taken into consideration, it is possible to make further advancements in quality and manufacturing approaches.

Following that, the traditional process of analysing damages was changed with an approach that emphasised prevention from design all the way to production. Figure 6 points out the transformation of the quality concept from when it was first implied to satisfy customer needs, to the current implementation for getting it correct to begin with there on out. According to this reference, there are already some in the field that are attempting to implement additional generations of understanding quality.

Fourth Generation	• Higher levels of adaptability / Customized Products
Third Generation	• Make the appropriate decisions.
Second Generation	• Do it correctly the first time.
First Generation	• Compliance with the requirements
Foundation	• Management's Commitment to Excellence
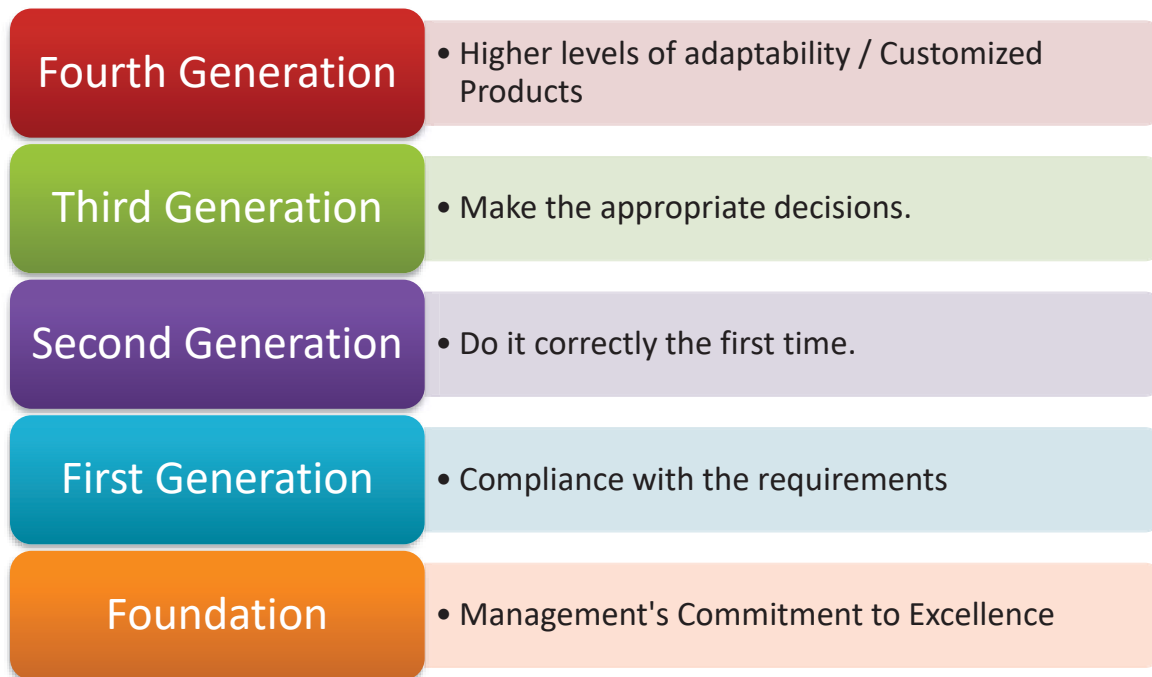
Figure-6: Evolution of Quality Concepts

Quality awareness in the third generation is concerned with the organization's needless operations. In keeping with a proposal by another author on his second-generation complete quality method, the third-generation total quality is suggested with breakthrough management. Yet another study

says that simply generating an accurate item on the first try is not enough. The fourth-generation quality idea of "delighting the customer" was further proposed to have been internalised by the MBNQA winners in their business processes.

Much literature exists on the topic of the advantages and disadvantages of this certification system. ISO 9000 is mainly about quality systems, documentation, and consistency. It was put in place to make certain utmost quality of a product. This fact makes room for some misinformation and misconception. In reality, it was created to ensure customer satisfaction when it came to quality standards with the suppliers, as opposed to actually meeting the needs of the suppliers. It does not control the quality of the service or product that the customer may receive with the help of a contract for purchasing. One study noted that it is only a measure of the capability on the supplier's end to meet standards that have been set internationally.

Some literature suggested downgrading the certification system to simply a document providing an outline for the meaning of a minimal process of quality. A point to note is that the entire infrastructure that is presently supporting this system should no longer be kept in place.

Preparing and outlining a plan for the system would begin with leadership levels of the organisation taking ownership and analysing the current system. This has to be followed through by creating and outline for responsibility and authority for all working parts of the company.

It involved recording all aspects of the manufacturing process and procedures utilised by suppliers to the finished product where any wasted tasks would be handled. One study puts forth that the average standard is not the same for everyone. On the other hand, the standard allows companies to lay out the needs required for their operation. The certification to ISO 9000 is a result of the customer link. This fact has been supported by much other literature and many surveys. The second reason is marketing edge that the standard gives.

One of the important aspects that contribute to unsuccessful results with this certification system in the organisation is a result of the little amounts of involvement on the side of the employees in terms of implementation and installation processes, the price of operating and keeping it maintained, the bureaucracy that is associated, and lastly, the registrations.

ISO 9001 mandates 20 clauses that outline how to establish and operate a high-quality management system. They consist of:

1. The management of the organisation
2. Contractual evaluation
3. Quality management system
4. Control over the design
5. Purchases are made with the use of document control.
6. The product was provided by the purchaser.
7. Identification of the product
8. Control of the process
9. Inspection and testing.
10. Equipment for inspection, measurement, and testing.
11. The current status of inspection and testing.
12. Control of nonconforming products.
13. Corrective action is required.
14. Handling, storing, packaging, and shipping are all included.
15. Records of high quality.
16. Internal quality audits are performed.
17. Training & Servicing.
18. Statistical approaches.

In the future, the significance of having a certified quality system standard may lower as an increasing amount of firms gain acknowledgement. Less number of customer would want to pay a high price for products simply since they are ISO 9000 registered.

2.15 Total Quality Management (TQM)

According to the findings of a review of the literature on total quality management, TQM is defined differently by different persons. According to one study, there are no new aspects to whole quality management. TQM was viewed as an overblown version of an old style of thinking that had just been given a new name and a few new procedures. Some people believe that total quality management (TQM) is a procedure that has no end objective because the process of improvement is never-ending. An investigation found that it is predominantly composed of tools for reducing

variance and a humanistic view of employees, similar to McGregor's theory Y, with the goal of serving customers' requirements as its primary focus. According to another study, the utilisation of statistics and the empowerment of people are the keys to achieving success in total quality management. a third study emphasises the importance of employee participation and empowerment through small group activities in order to modify an organization's traditional culture Higher degrees of empowerment in total quality management (TQM) are connected with higher levels of work satisfaction.

Numerous authors, including quality professionals and non-experts, have emphasised that there are many different definitions of quality. Some studies employ more particular approaches, such as establishing the meaning of terms such as "quality" and "full quality management," rather than general ones. According to one source, quality is defined as "fulfilling the (agreed) needs of the customer, both formal and informal, at the lowest possible cost, the first time, every time."

The term "total" refers to involving all levels of employees from all divisions within an organisation. The final step is to add the word "management" to the definition of comprehensive quality, which translates into the ownership of each and every individual to manage their own job - managers and employees equally.

The administration of TQM, according to one study, makes it necessary for an organisation to make extensive use of its resources (including capital, time, and manpower). This necessitates the use of targeted management because significant benefits may not manifest themselves immediately and may take additional time and years to manifest themselves fully. Moreover, according to the findings of another study, the topic and breadth of TQM as advocated by non-Japanese firms are comparable to Japanese organization-wide control. It has been discovered that the establishment of total quality can only be achieved if the ultimate level of quality function development (QFD) has altered the view of the client.

In Ireland's manufacturing industry, the TQM process is divided into seven steps, which corresponds to the number of stages listed in the statement. It's possible that some poor performance and failed attempts at administering the TQM process were the root causes of this, in addition to the failure to achieve long-term benefits rather than short-term gains in the short run. Typically, an organisation at a lower stage of the quality process produces results that are more negative than those produced by an organisation at a higher step of the quality process.

In order to develop quality management process approaches, it was necessary to conduct an investigation into what quality actually meant. It was decided to undertake study in this manner by re-examining the numerous claims made by high-calibre professionals.

It has been observed that the number of components and concepts that contribute to the overall quality varies from one individual to the next. Despite this, there are a number of factors that remain constant. Later investigations discovered that there were additional factors that contributed to the improvement of overall quality as well. These are grouped together with technology aspects and lean manufacturing.

When 50 quality management procedures were subjected to exploratory factor analysis, researchers discovered eight critical components that can assist quality experts in rebuilding their organisations. When the 7th component is combined with the 5th component of another study, the result can be interpreted as a technological element.

One author mentioned that exploratory factor analysis was used to keep a collection of 50 quality management techniques and identified eight valuable characteristics that might be used to assist practitioners in the transformation process. Technology can be regarded as the technological aspect in the seventh factor (product and service innovation), which was synthesised from Deming's fifth point.

The factory of the future, according to another scholar, needs to be developed with appropriate leadership. The key notion of his third concept is a portion of the advantage it has over the flexible outline of machines that could be able to accommodate changes in design and product demand, as well as the ability to produce custom-made products in smaller quantities. According to one study, the outline of this type of technology may vary as well in the future. According to another source, it has the ability to shift into the product mix at any time. There have also been other other causes discovered. They are as follows:

1. Education and training.
2. Management's dedication to the project
3. Measuring the amount of feedback received
4. Complete employee participation
5. Factors related to technology

6. Quantitative and qualitative approaches to research
7. Production that is lean

Customer attention in an atmosphere of continuous improvement is the other major factor shared by most total quality approaches, as outlined above. These two elements serve as the objective and the recipe for total quality management, respectively.

2.16 Quality Management and Performance

Quality is the most important aspect of business internationally, but the fact that this is not commonly understood, regardless of whether the firm is huge or little, is something that can be disputed. Success in the marketplace is a combination of creating valuable items and offering great services at competitive prices and timelines. Researchers have asserted that the link between overall quality and competition is good.

The study, which was done in Oakland, used hard performance indicators (such turnover per employee, profit per employee, and total assets per employee) to determine the competition. Another research endeavour incorporated both hard (pre-tax, pre-interest return on capital, growth of share, growth of value added to GDP) and soft (R&D activities, speed to market, customer focus) means of measuring success by determining a company's place in the marketplace. The last research effort used the middle of a roadshow tour and an inquiry line.

When using comprehensive quality management in business, it has been noticed that most organisations are not happy with the improvements on an empowering level. The one specific study also claims that most businesses could be wasting money on approaches that do not generate the benefits they're pursuing. A survey of 100 UK companies discovered that 80% of their quality techniques are not delivering the desired results. Of course, it's vital to point out that a significant percentage of organisations (20%) who report favourable results apply customer-centric and employee-friendly policies.

One study revealed that the implementation of TQM programmes has not been successful because the programmes' failure was caused by a preoccupation with processes instead of the ultimate goal, overlooking the resources necessary, and expecting too much from the programme too soon.

Another research report discovered twelve actions that may help lead to positive results. All of these benefits are employees' training, recognition of employees' success, and the backing of management. One last study concludes that processes and performance are strongly related.

The 500 US manufacturing and service business leaders surveyed reported that 70% of the organisations' processes provide positive results. Electronics Business, a publication that surveyed 138 senior executives, stated that the number of employees who could afford to live in high-cost urban areas (70%), while the American Electronic Association's survey of 458 members found that 13% of their group is able to live in high-cost urban areas in three years. Even after retaining their processes for over three years, companies that did not have complete processes were unable to reach beneficial outcomes.

According to one study, the quality of service procedures in Britain is more likely to fail when compared to Europe. Roughly 80% of these unsuccessful attempts come about as a result of a focus on the machine side of the process by management, while overlooking the human component. Other studies similarly indicate that ineffective procedures come place due to excessive focus on transformation without consideration of behavioural modifications. Numerous findings have been discovered on unsuccessful attempts.

Even while there are a few positives in the discussion on this topic, they are rarely seen. People believe that success is an exception, not the norm. The information you see here is applicable to each firm, but it's crucial to keep in mind that your scenario can be unique.

Harley-Davidson was able to survive as a business in the United States thanks to the US Congress, which helped it for five years with tariff protection against foreign motorcycles. There are several examples in the current literature of people who turned their own companies around when the entire enterprise was at risk. Organizations of average size just shouldn't seek to imitate this kind of reform.

Chapter-3: Research Methodology

3.1 Objectives of the Research Survey

This survey is the heart of the research on quality management. It includes a broad spectrum of quality practices and measures and indicators used in the industry.

This research would include technological measures, errors and failures, measurement of product and performance, management, and activities connected to quality. This investigation would therefore be carried out with the most significant attention to ensure that:

1. the quantitative measures and indicators are put in place,
2. the procedures for questionnaire design and selection of sampling frame are established, and
3. Additional actions needed to guarantee a sound survey are conducted.

with well-established principles and guidelines. Wherever possible, this research will best use existing instruments and metrics required for measuring appropriate respondents' perceptions.

Specifically, the objectives of the research survey are:

1. To collect information on the quality management aspects.
2. To collect information on various performance indicators.
3. To collect information on the culture of the organization.

3.2 Scope of Research Survey

The target respondents' sample, for which the results are required are all automotive industry of Pune region.

This list of companies was obtained from the DIC (District Industries Centre) of Pune. The coverage of the survey excludes automotive industries outside the Pune district.

The sample size for the research is given as follows:

The Cochran formula is used in our research study, which is given as follows:

$$n_0 = \frac{Z^2 pq}{e^2}$$

Where:

e - the margin of error,

p is the (estimated) proportion of the population that has the attribute in question,

q is $1 - p$.

So, the assumption goes like this: half of the employees contribute to developing the automotive industry's organizational culture, which gives us maximum variability. So, $p = 0.5$. Now let us say we want 95% confidence and at least 5 per cent—plus or minus—precision. A 95 % confidence level gives us Z values of 1.96, per the normal tables, so we get

$((1.96)^2 (0.5) (0.5)) / (0.05)^2 = 385.$

3.3 Collection of Information

There are a variety of methods for gathering information, the most utilized of which are described below:

1) Documentary sources are the first step.
2) observation.
3) mail survey; and
4) in-person interview
5) a mix of the preceding

Depending on the research topic, the sample framework from the government's industries database, the sample characteristics, and the collection method's resources will be selected. The most crucial

decision of this study is to understand whether these points influence the response rate, the survey tool, and the survey's cost.

Due to the pandemic COVID-19, the postal survey method's cost is much less than the interview method, even if it is based on selecting a simple random sampling technique. Since it has homogenous quality teams in each organization, who is aware of its quality and culture, collecting information will be the survey method.

3.4 Questionnaire Design

This is a trivial section of the survey for novice and inexperienced researchers. Sudman discovered several vital criteria and techniques to consider while constructing questionnaires. Several important factors have been uncovered:

1) question-wording,
2) order of questions and
3) formatting the questionnaire.

Also, the questionnaire was assessed on the below-mentioned points:

1) Propose questions relating to the aims of the survey.
2) Avoid dual issues (the question has a confusing statement).
3) Specific and discriminatory issues (requiring ordinal or numerical data).
4) Order the series of questions.
5) The questions should be formatted.
6) Reactions precode and postcode.
7) For comments and critical review, draft questionnaires were submitted to sample responders from the automobile sector.
8) Pilot testing
9) Review, review and resolve issues.

Questions have been designed to capture information about the Pune region's automotive industries' quality management practices and organizational culture.

Utmost care has been taken that the design included several critical factors to evaluate organizational culture and quality management.

3.5 Measurement of Scales

This survey is aimed at learning about quality management and organizational culture by interviewing respondents. The tale is more significant than a single photo. In support of this, the premise is that each company's quality management picture may be studied. It is essential to take your time with developing the question so you can do this correctly. Respondents were given the following choices to answer the question:

1) Nominal or categorical scale: When it comes to categorical variable scales, nominal scaling is a scale that is utilized to classify variables into various classifications but does not require a numerical value.
2) Ordinal scale: - Ordinal Scale is a method of presenting variables according to their order, without regard to their difference. The scale is easy to remember as it sounds like 'order' and what this scale will accomplish.
3) Interval or Numerical scale: - A numerical scale where the ordering of the variables and the gap between them is already known. The Interval scale is used to classify variables with measurable differences.
4) Ratio scale: - The Ratio Scale is a variable measuring scale that provides the order of variables, but it also enables the viewer to determine the value of true zero by revealing the magnitude of differences between variables.

Considering the measurement mentioned above scales, all research efforts must be oriented to develop unique and distinguishing questions that can help differentiate one answer from the other.

Response Errors and Rates

For any survey-based research that examines reliability and validity, this problem is of critical importance and must be addressed. Since the concepts involved in the research are well studied in the past, a significant amount of research is already done on it.

As far as the questionnaire used in this survey is concerned, almost all the questions can be categorized as behavioural or fact-finding. These are questions about the characteristics of the companies, quality initiatives practised, etc., experiences or acts that are discrete, quantitative and quantifiable and can be verified by a third party.

As opposed to the impact of response errors on the survey's reliability and validity, low response rates have long been a primary worry for researchers.

3.6 Pre-test, Pilot and Main Survey

Pre-testing and pilot surveys are required to deliver a sound survey within the context of the general principles and criteria for conducting a sound survey. Pre-testing of the survey questionnaire was carried out on several occasions in this investigation. Sample questionnaires were distributed to peers, members of academic faculty, and executives from the automotive industry. In order to perform the pilot survey, there are several factors to consider. These are as follows:

1. Determine the sufficiency of the DIC database.
2. Provide evidence of the subject's variability in the context of the query.
3. Estimate the likelihood of a non-response rate by providing a range of possibilities.
4. Evaluate the adequacy of the survey method chosen.
5. Evaluate the suitability of the survey instrument.
6. Go over the questions one more time.

Many survey practitioners often refer to the pilot survey as the practice run and standard procedure. The Head of the Management Department signed the accompanying letter with the official letterhead this time around. There has been a total of 24 responses.

The final version of the questionnaire is thus ready for the primary survey. The primary survey was conducted from January to April 2020. Considering the large numbers involved, a selected reminder to a sub-sample of the initial non-respondents was sent without a copy of the questionnaire. The overall survey secured a total of 385 respondents.

3.7 The Questionnaire Content

In developing the questionnaire, the questionnaire was adapted from the survey's work, which is about a study on the evaluation of TQM implementation using the Theory of Constraints (TOC) approach in Malaysia. The organizational culture assessment was adopted from the work of Marshall Sashkin and William E. Rosenbach. Lastly, the demographic questions were specific to the automotive industry managers' point of view.

This survey gathers the perspectives and policies of the organization on quality and culture. This is a snapshot of the quality management stance of the organization.

The Reliability of the Questionnaire:

It has three parts, namely quality management importance and practice and organizational culture.

1. Quality Management Importance

Cron-Alpha	Question Items
.917	37

2. Quality Management Practice

Cron-Alpha	Question Items
.897	37

3. Organizational Culture

Cron-Alpha	Question Items
.874	30

Chapter-4: Data Analysis and Findings

This chapter has discussed the data collected and analysed using various statistical measures and graphs and the chapter will deal with the hypotheses testing. The chapter is devised according to 2 sections, 1st part will discuss about the demographics and descriptive statistics while the 2nd part will discuss about the hypotheses testing.

Part-1: Demographic and Descriptive Part

1. Business nature of your company
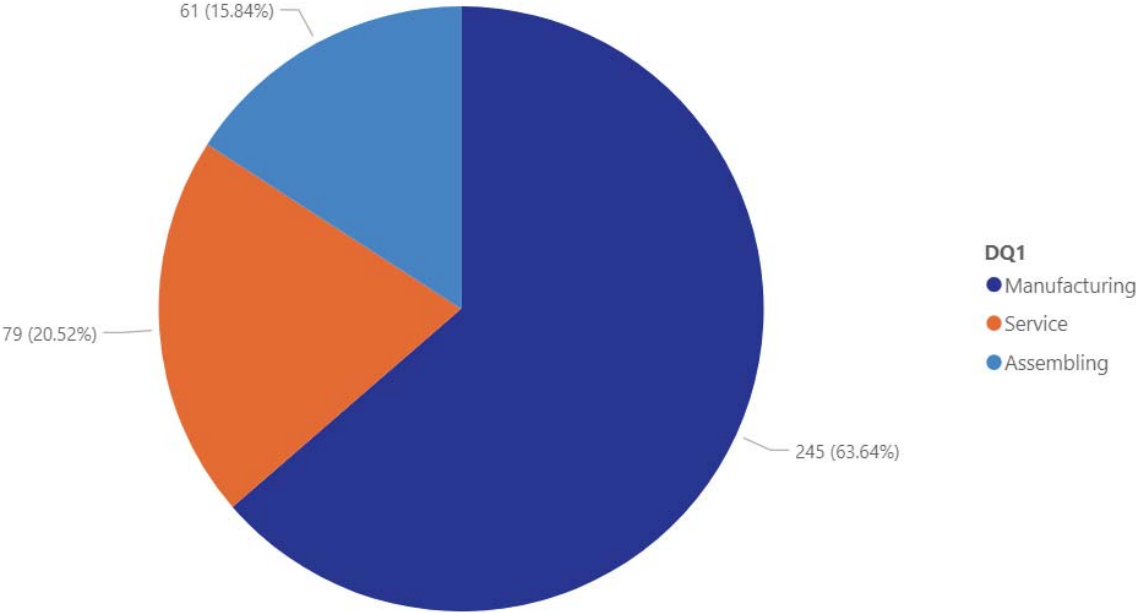
Figure 1 - Nature of business

Considering the above chart most of the companies are having manufacturing domain which constitutes the 64% of the total sample respondents followed by service with 20% samples and lastly assembling which has 16% samples.

2. The ownership type of your company
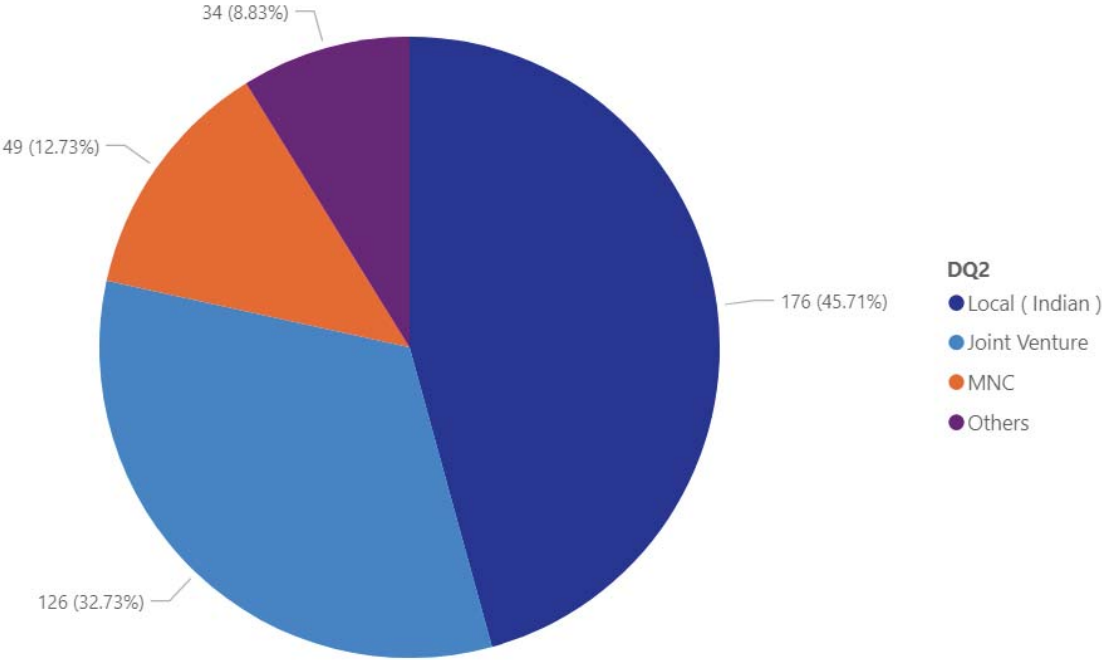
Figure 2 - Type of ownership

The above pie chart suggests that the maximum sample companies were Indian having of 46% sample respondents followed by the companies having Joint Ventures with 33% sample respondents and lastly the MNC's and other companies were there constituting only 20% sample respondents.

3. Has your company won any quality award?

35 (9.09%)

350 (90.91%)

DQ3
- No
- Yes
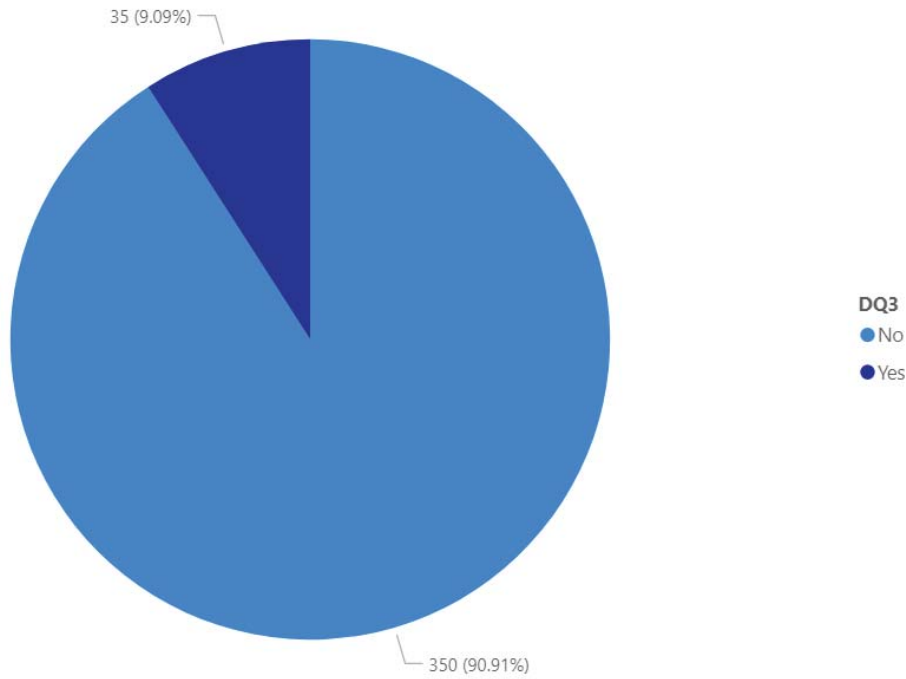
Figure 3 - Quality rewards won.

The above pie chart suggests that almost 90% of the respondent's organization has achieved some sort of quality awards in their lifetime. This gives picture that almost 10% of the organizations are still has to create the pace to get some award in order to compete with others from time to time.

4. Your current position in this company

13 (3.38%)

115 (29.87%)

254 (65.97%)

DQ4
- Production Manager
- Engineering Department Manager
- QA/QC Manager
- CEO/GM/Director
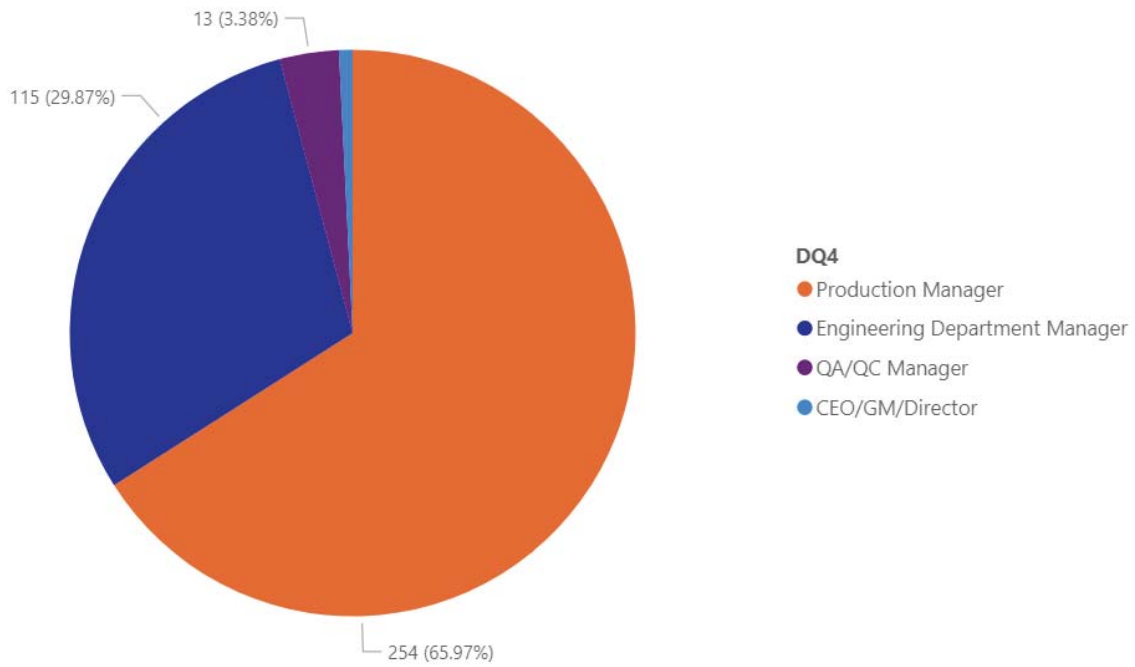
Figure 4 - Employee distribution

The above pie chart suggests that 66% of the respondents were production managers followed by engineering managers constituting 30% of sample respondents and only 4% in total of the responding managers were from quality and senior leadership roles.

5. Your association with this company or organization

98 (25.45%)

176 (45.71%)

DQ5
● 1 to 2 years
● More than 3 years
● Less than 1 year

111 (28.83%)
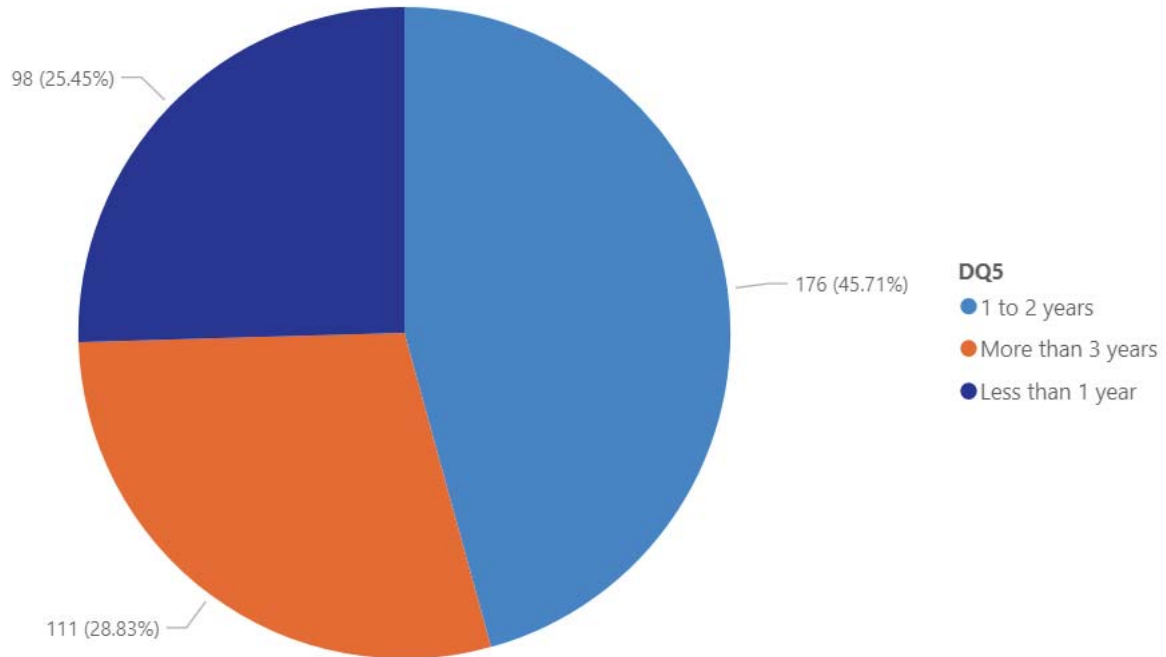
Figure 5 - Work experience

This pie chart suggests that 46% of the total respondents were having association with the company for more than one year and 29% were having association with the company for more than 3 years and only 26% were there who have joined recently and haven't completed their one year respectively.

Part-2: Descriptive Statistics

1. Top management ensures that every employee knows the company's mission and business objectives. (Importance vs Practice)

Table 1 - Dissemination of company's mission and objective

Row Labels	High	Low	Moderate	Very High	Very Low
Important	12	1	6	35	2
Neutral	2		1	1	
Not important	1			1	
Not important at all				4	
Very highly important	24	4	6	279	6
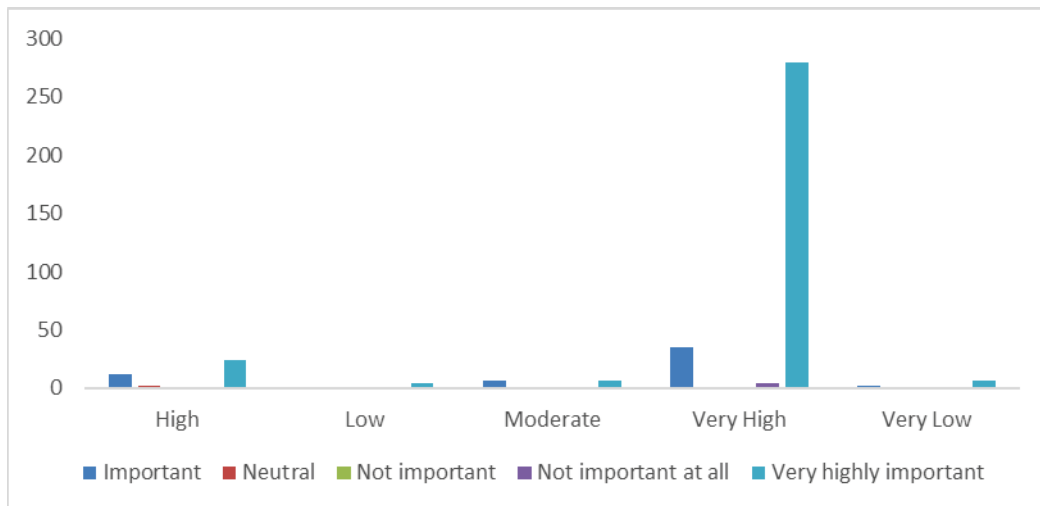
Figure 6- Dissemination of company's mission and objective

Conclusion:

The mission and objective of a company defines the goal of that company. Here we can say from the graph that, efforts are made by top management to ensure that every employee of the organisation is well aware about the mission of the company and about its business objectives.

Various initiatives are taken by management to inculcate the mission and business objective among the employees.

2. Top management strongly promotes staff involvement in quality management and improvement activities.

Table 2 - staff involvement in management activities

Row Labels	High	Low	Moderate	Very High	Very Low
Important	9		5	23	2
Neutral	3			1	1
Not important				1	
Not important at all				0	
Very highly important	85	3	6	238	8
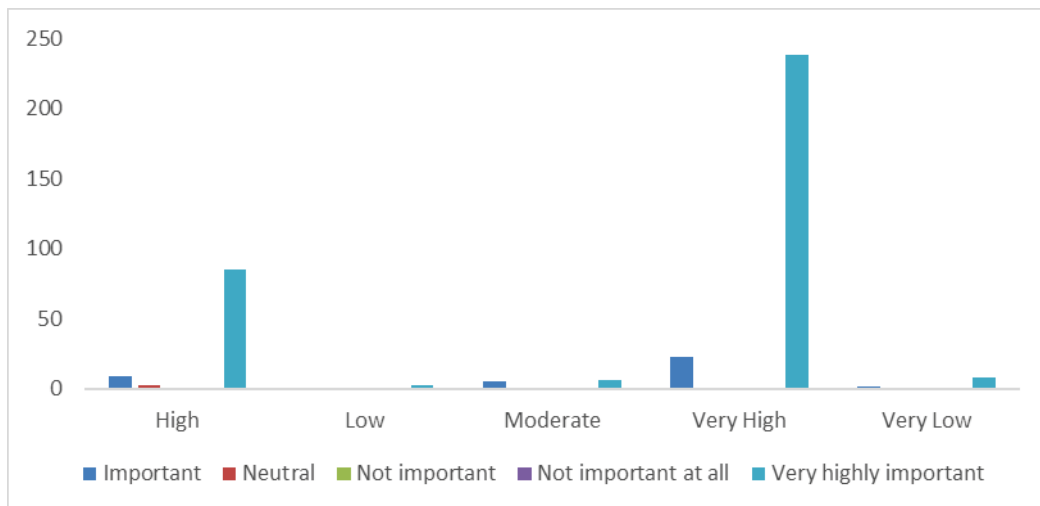
Figure 7- staff involvement in management activities

Conclusion:

Quality is a key asset of any company. Proper management of quality is done with active participation of all stakeholders. Here, the graph tells us that the top management believes in active participation of company employees in quality management and improvement techniques.

3. Managers and supervisors empower employees.

Table 3 - Influence of managers over employees

Row Labels	High	Low	Moderate	Very High	Very Low
Important	7		3	29	
Neutral	1		1	7	1
Not important	2			13	
Not important at all	2			28	
Very highly important	35	1	2	252	1
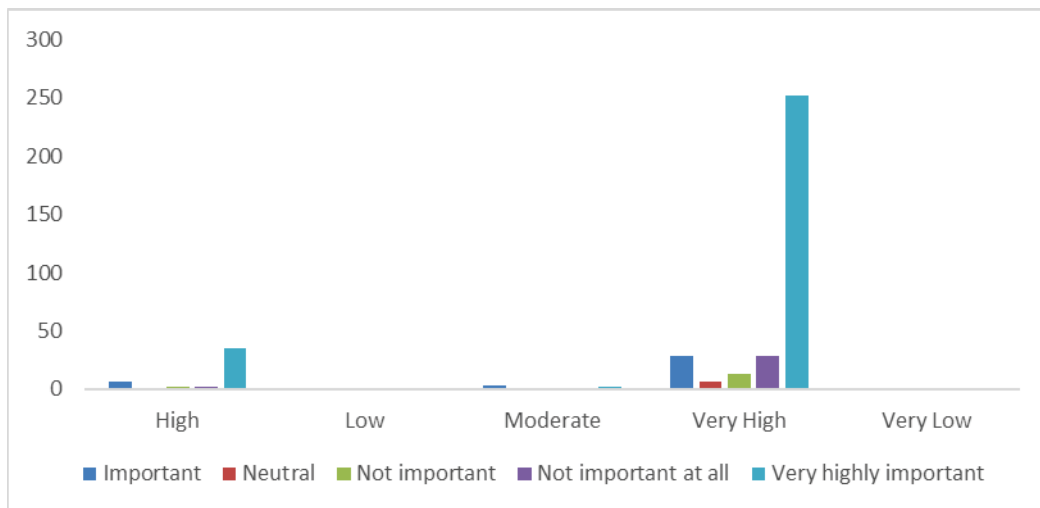
Figure 8- Influence of managers over employees

Conclusion:

Attitude of the leaders or managers or supervisors strongly effects the performance of employees working under them. Here, the graph and result shows that the managers and supervisors are desired to empower their employees so that the employee carries out his/her function properly.

4. Communication links are established between employees and top management.

Table 4 - Interaction between top management and employees

Row Labels	High	Low	Moderate	Very High	Very Low
Important	16	1	2	39	
Neutral	3			5	
Not important	1			3	
Not important at all	1			2	
Very highly important	76		7	229	
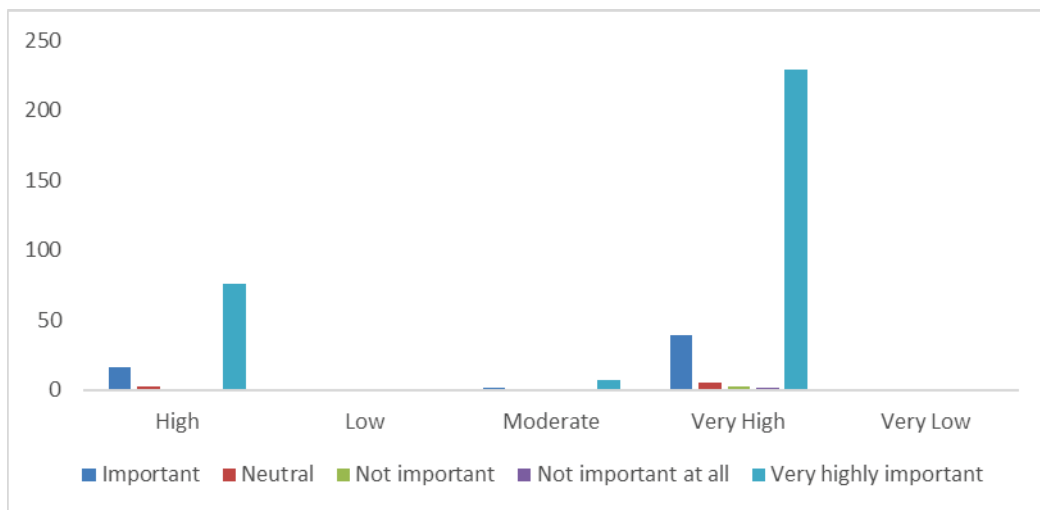
Figure 9 - Interaction between top management and employees

Conclusion:

A proper communication network between the employees and management is very much needed to channel the processes. Here, from the above descriptive data we can conclude that there are communication links between the employees of the company and management people.

5. Top management takes care of employee well being (e.g. welfare, health and safety provision, etc.).

Table 5 - Management role in employee welfare

Row Labels	High	Low	Moderate	Very High	Very Low
Important	16		9	63	
Neutral	1		2	3	
Not important				3	
Not important at all				10	
Very highly important	39	1	14	224	
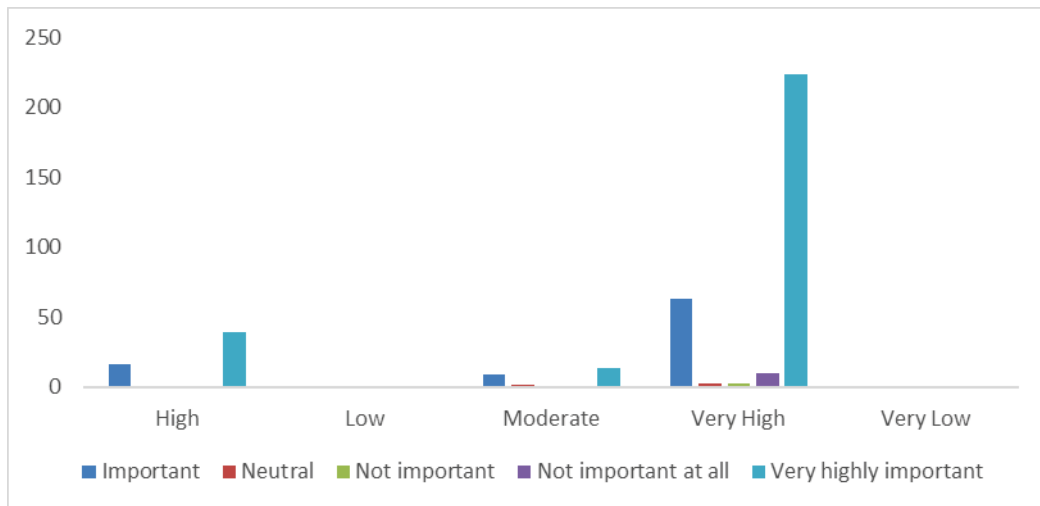
Figure 10- Management role in employee welfare

Conclusion:

The working efficiency of an employee depends on his/her mental as well as physical health. The top management of a company is responsible for their employee's well-being. Here, as it can be concluded that the top management takes keen interest in their employee's health and safety measures.

6. Company fulfils its social responsibilities (such as environment friendly operation, charity to school, etc).

Table 6 - Social awareness of company

Row Labels	High	Low	Moderate	Very High	Very Low
Important	14	3	5	50	
Neutral		1	1	2	
Not important					
Not important at all				1	
Very highly important	51	3	6	248	

Conclusion:

The way in which an organisation is active in its social responsibility denotes how actively they are concerned about the ongoing societal issues and their upliftment. Here, it can be concluded that, the company fulfils its social responsibility properly and takes up the social issues as their responsibility.

7. Human resource ability considered in improvement activities.

Table 7-Role of human resources in improvement

Row Labels	High	Low	Moderate	Very High	Very Low
Important	10	3	4	50	
Neutral	3			12	
Not important	1			4	
Not important at all	1				
Very highly important	27	1	9	260	
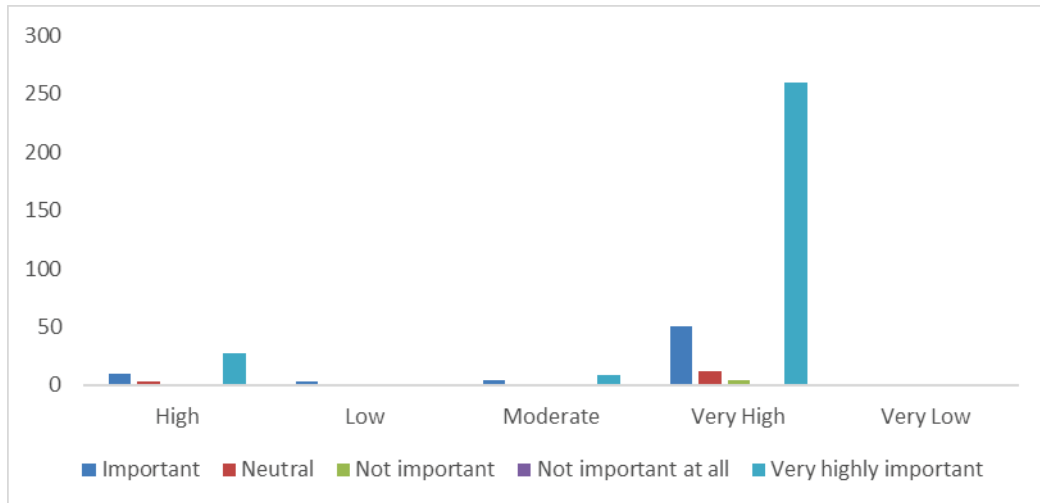
Figure 12-Role of human resources in improvement

Conclusion:

A company's human resource team is responsible to manage all the activities related to other than business. Here, the graph tells us that human resource of the company is capable and is always forward in improving activities.

8. Employees are given information and training they need to do the job effectively.

Table 8-Trainings conducted in company

Row Labels	High	Low	Moderate	Very High	Very Low
Important	9		55		
Neutral	1		4		
Not important					
Not important at all			1		
Very highly important	40	2	272	1	
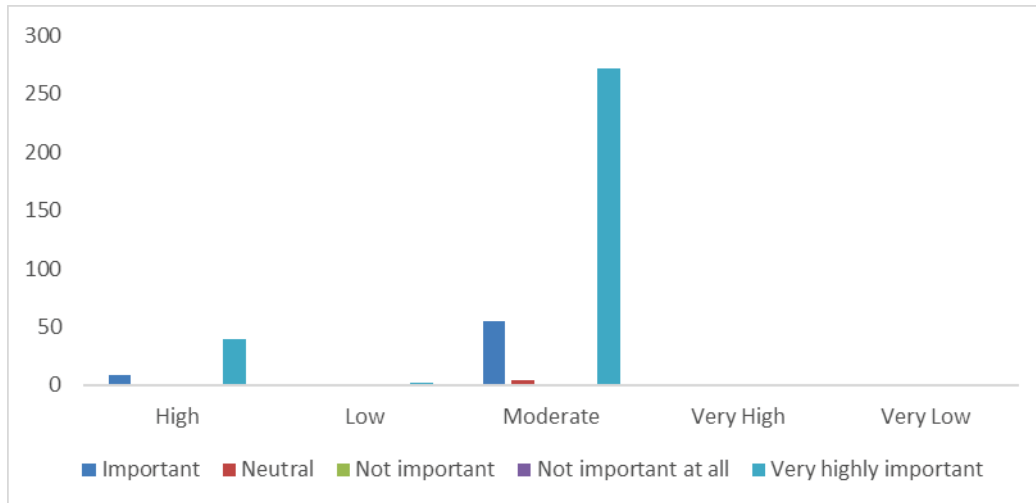
Figure 13-Trainings conducted in company

Conclusion:

For any job to be done efficiently and effectively, prior training becomes an essential part. This boosts the confidence of an employee and increase the productivity. The data above tells us that, proper training and guidance is provided to the employees of the company to carry out their further tasks efficiently.

9. Employees are given tools they need to do the job effectively.

Table 9-Tools and instruments given to employees

Row Labels	High	Low	Moderate	Very High	Very Low
Important	13	2	50		
Neutral	1		10		
Not important					
Not important at all			4		
Very highly important	27	4	273	1	
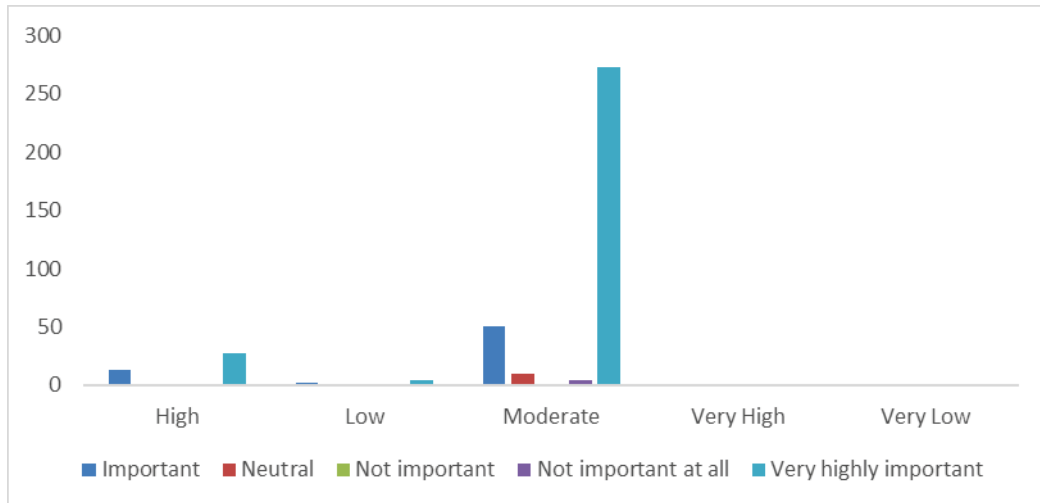
Figure 14-Tools and instruments given to employees

Conclusion:

Along with the training and guidance a fresh employee joining the company will need basic infrastructure at his disposal for proper execution of his tasks. Here we can conclude from the given data that the company provides all the required accessories, tools and machines to the employee to carry out their task effectively.

10. Sufficient financial resources provided to support improvement activities.

Table 10-Financial support for improvement

Row Labels	High	Low	Moderate	Very High	Very Low
Important	19		2	53	
Neutral	3			2	
Not important	2			2	
Not important at all				1	
Very highly important	45		3	253	
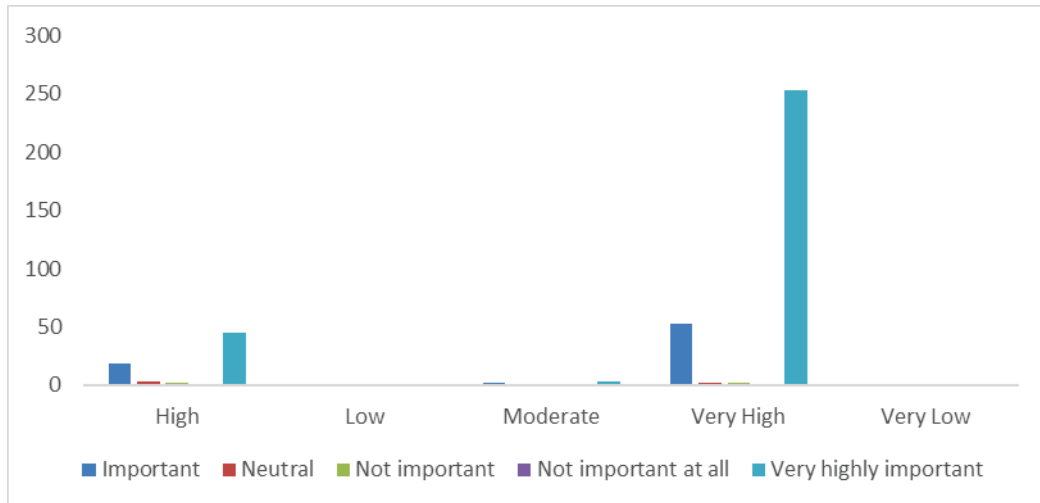
Figure 15-Financial support for improvement

Conclusion:

To carry out any alteration and redesigning of existing process/processes funding is required. This alteration and redesigning is aimed to improve the existing process. Here the descriptive data concludes that the company is keen in supporting any improvement activities coupled with sufficient financial funding.

11. Company manages its material resources effectively.

Table 11-Material resource management

Row Labels	High	Low	Moderate	Very High	Very Low
Important	13		1	59	
Neutral			2	6	
Not important				1	
Not important at all					
Very highly important	23		1	279	
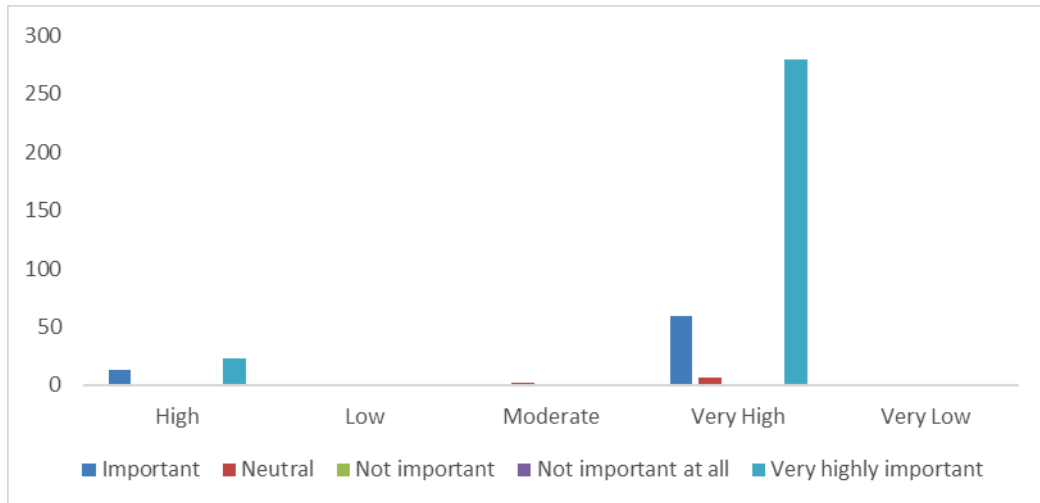
Figure 16-Material resource management

Conclusion:

Material resource are the key aspect of any company. Managing the material resource denotes functioning of the management. From the above graph we can conclude that, the company and its employees effectively manages their company's material resources.

12. Customer satisfaction level are measured and monitored.

Table 12-Monitoring satisfaction of customers

Row Labels	High	Low	Moderate	Very High	Very Low
Important	16		3	36	
Neutral				2	
Not important					
Not important at all	1				
Very highly important	45		9	273	
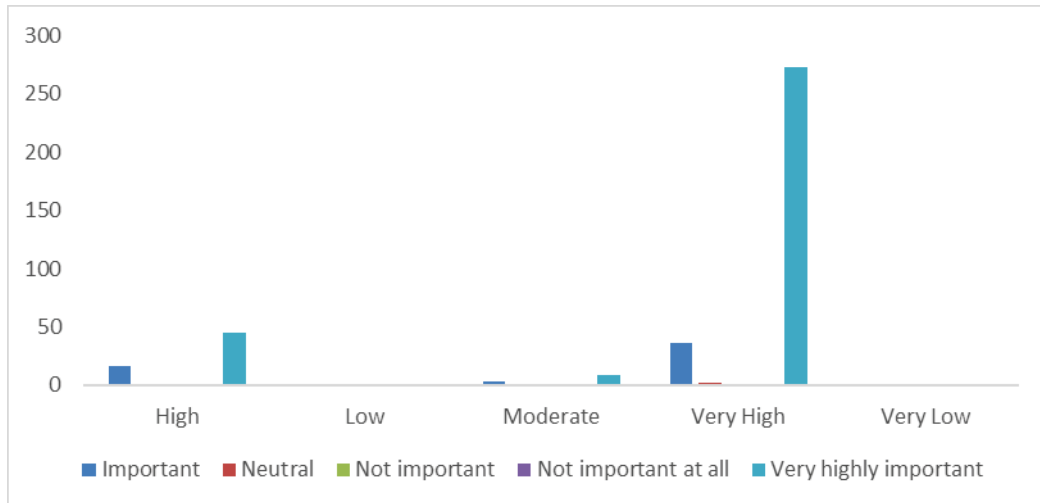
Figure 17Monitoring satisfaction of customers

Conclusion:

Customer is the most important person for any company. Needs and satisfaction of the customer should be continuously monitored and timely catered. From the above descriptive graph it is evident that the company measures and monitors the customer satisfaction level from time to time.

13. Information on quality and customers are collected and analysed.

Table 13-Analysing customer information and quality measures

Row Labels	High	Low	Moderate	Very High	Very Low
Important	5	1	2	34	
Neutral	1		2	1	
Not important	2			1	
Not important at all	3			12	1
Very highly important	16		3	301	
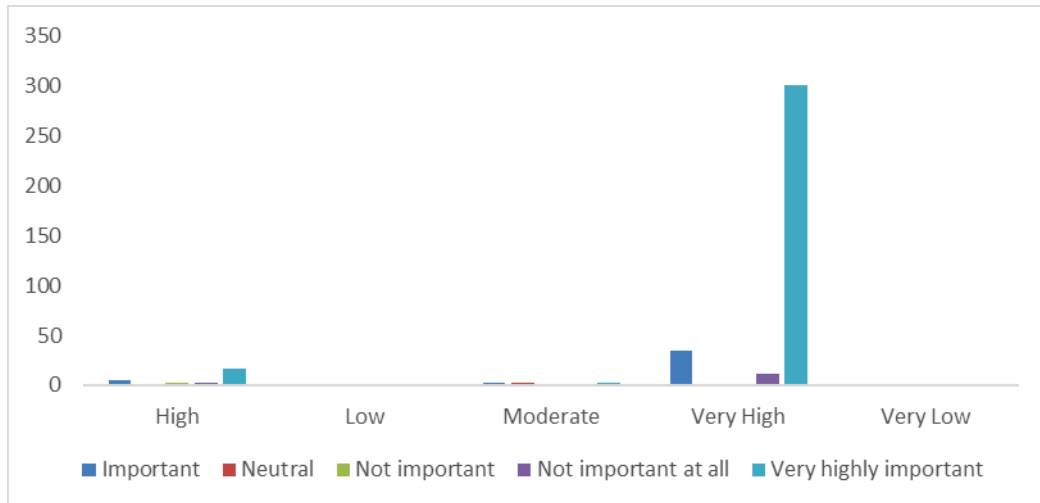
Figure 18-Analysing customer information and quality measures

Conclusion:

In order to be in the market and compete with the rivals every company and organisation is required to keep the quality of their products up-to-date. This also helps in attracting the customers and generating new business. From the above graph we can conclude that, the company collects and analyses the information regarding the quality and customers after regular intervals of time.

14. Information on operational and financial performances are collected and analyzed.

Table 14-Financial and operational performances are analysed

Row Labels	High	Low	Moderate	Very High	Very Low
Important	6		1	61	
Neutral	5		2	10	
Not important				2	
Not important at all				13	
Very highly important	23		1	261	
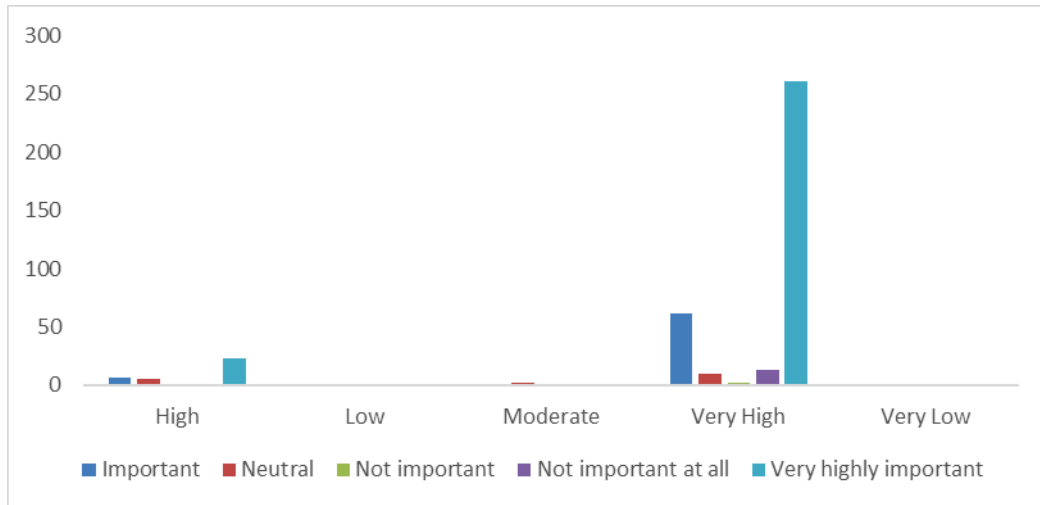
Figure 19-Financial and operational performances are analysed

Conclusion:

To improve the process efficiency of the company, the whole process should be in a feedback circuit or loop. This feedback circuit helps in analysing each and every step so that any deviation from the ideal process can be corrected timely. From the above graph we can say that the data generated regarding the operational and financial performances are collected and analysed properly.

15. Employees' views are listened to and acted upon.

Table 15-Importance given to views of employees

Row Labels	High	Low	Moderate	Very High	Very Low
Important	11		1	16	
Neutral			1	12	
Not important				6	
Not important at all	2		2	10	1
Very highly important	59		4	259	1
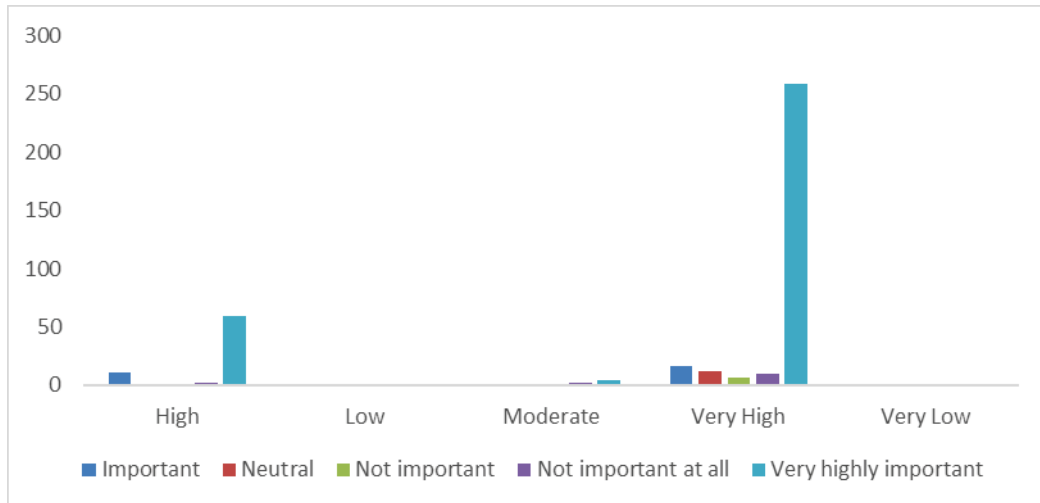
Figure 20-Importance given to views of employees

Conclusion:

The real asset of any organization is their employees. The actual ground level work is done by the employees themselves. Any lacunas in any process are firstly acknowledged by them. Hence they should be allowed to express their views regarding the process and its parameters. The above graph is evident that the views of the employees are given due importance and actions are taken considering them.

16. Employee performance are measured and recognized.

Table 16-Measuring of employee performance

Row Labels	High	Low	Moderate	Very High	Very Low
Important	13		6	26	
Neutral			1	6	
Not important				3	
Not important at all		2		4	1
Very highly important	49		2	271	1
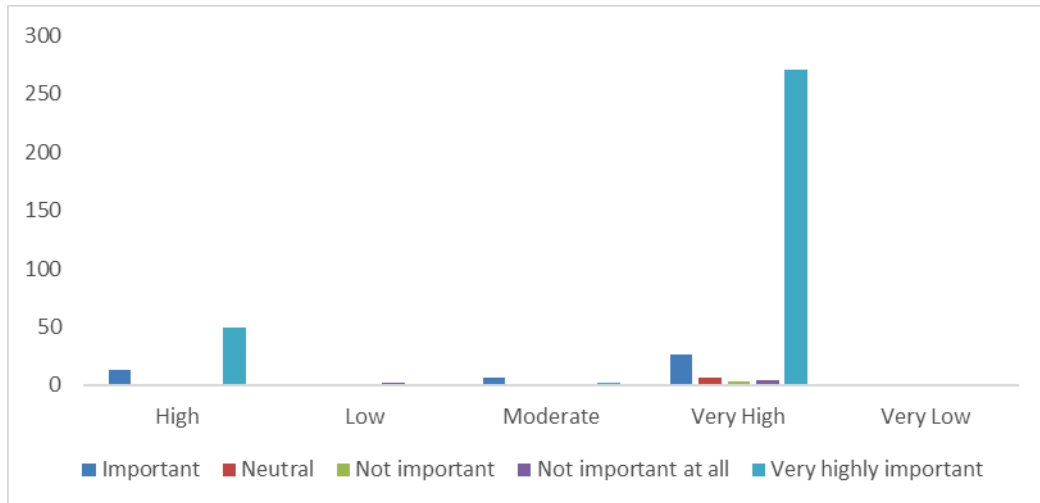
Figure 21-Measuring of employee performance

Conclusion:

Monitoring each and every process running in the company along with the employee's participation will help in improving the efficiency of the overall processes. From the above graph it is evident that participation of the employees is monitored and their contribution to the work is recognized.

17. There is a quality improvement coordinating body (e.g. quality steering committee).

Table 17-Presence of quality assessment body

Row Labels	High	Low	Moderate	Very High	Very Low
Important	18		5	45	
Neutral	4	1	1	8	
Not important					
Not important at all				3	
Very highly important	62		7	231	
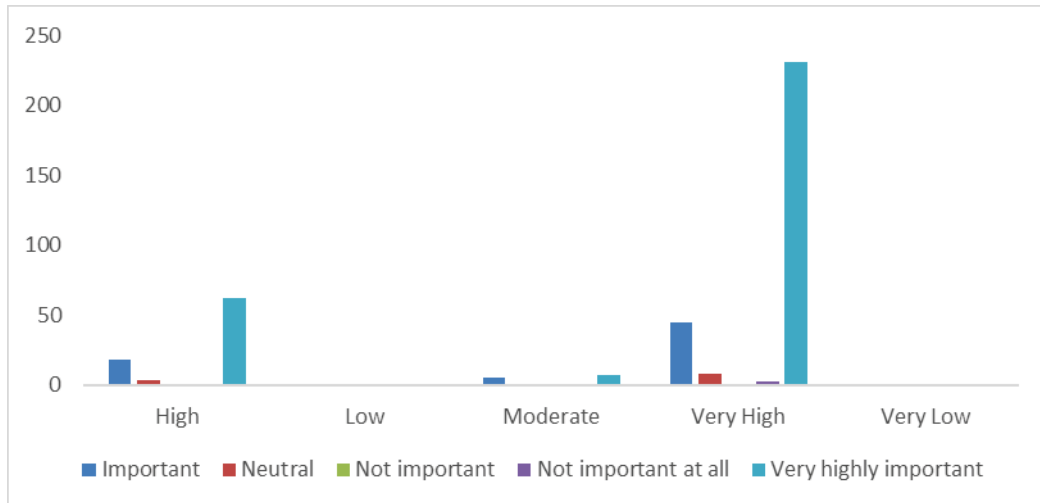
Figure 22-Presence of quality assessment body

Conclusion:

Quality of the product manufactured by a given company denotes the company's value and prestige in the market. Therefore, a dedicated team or committee to handle the quality issues is to be maintained by the company. The above descriptive data tells us that in the given company a quality improvement and management team is maintained for that purpose.

18. Improvement teams are active in all departments.

Table 18-Activeness of improvement teams

Row Labels	High	Low	Moderate	Very High	Very Low
Important	8		2	44	
Neutral	3		3	6	
Not important	1			3	
Not important at all	3			2	
Very highly important	50		8	252	
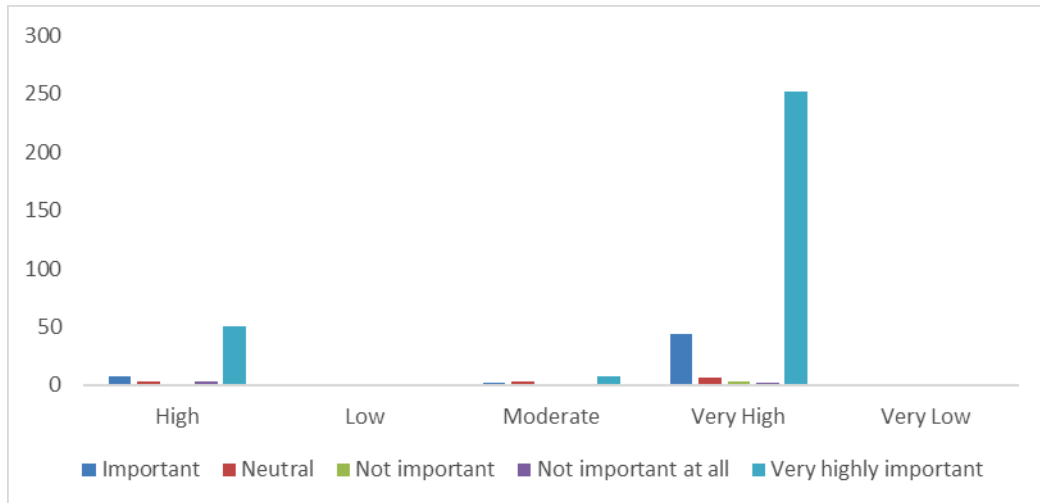
Figure 23-Activeness of improvement teams

Conclusion:

Improvement leads to innovation. And innovation leads to business generation. Improvement should have a holistic approach to gain maximum benefits. For that reasons dedicated improvement teams should be formed in every department. The above graph shows that improvement teams are actively functioning in every department of the company.

19. Quality improvement tools and techniques are widely used.

Table 19-Usage of quality improvement techniques

Row Labels	High	Low	Moderate	Very High	Very Low
Important	12	2	5	68	2
Neutral	2		3	7	
Not important				3	
Not important at all	1			28	
Very highly important	24	3	5	214	6
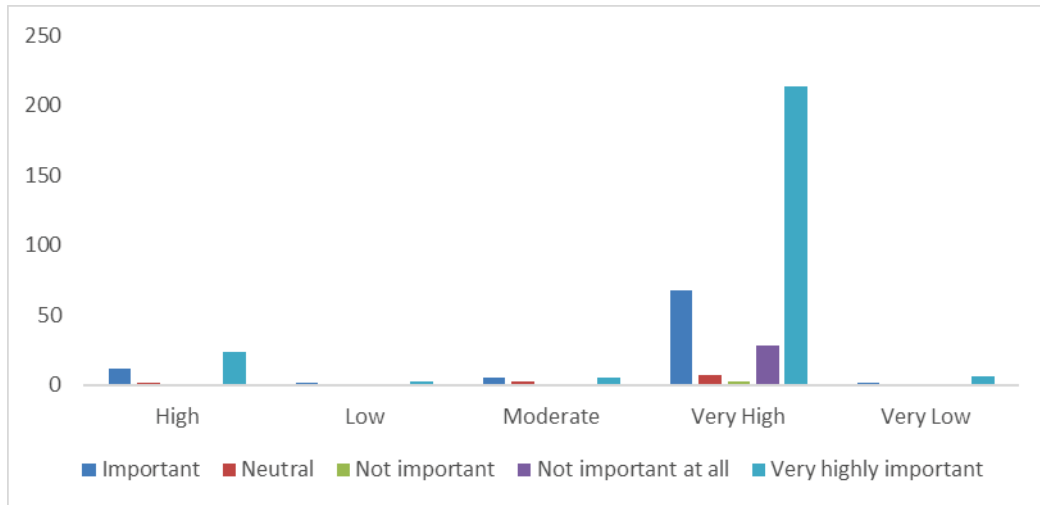
Figure 24-Usage of quality improvement techniques

Conclusion:

Quality of a product denotes its position in the hierarchy of its competitive products in the market. Hence quality is an important aspect. In order to achieve the standard quality levels some quality tools and techniques are to be implemented. Here, the above data tells us that in the given company quality tools and techniques are practiced widely.

20. The company practices continuous improvement of all its products, services, and processes.

Table 20-Continuous improvement practiced by company

Row Labels	High	Low	Moderate	Very High	Very Low
Important	20	2	4	56	4
Neutral	5		1	6	1
Not important					
Not important at all	1			2	
Very highly important	71	1	6	199	6
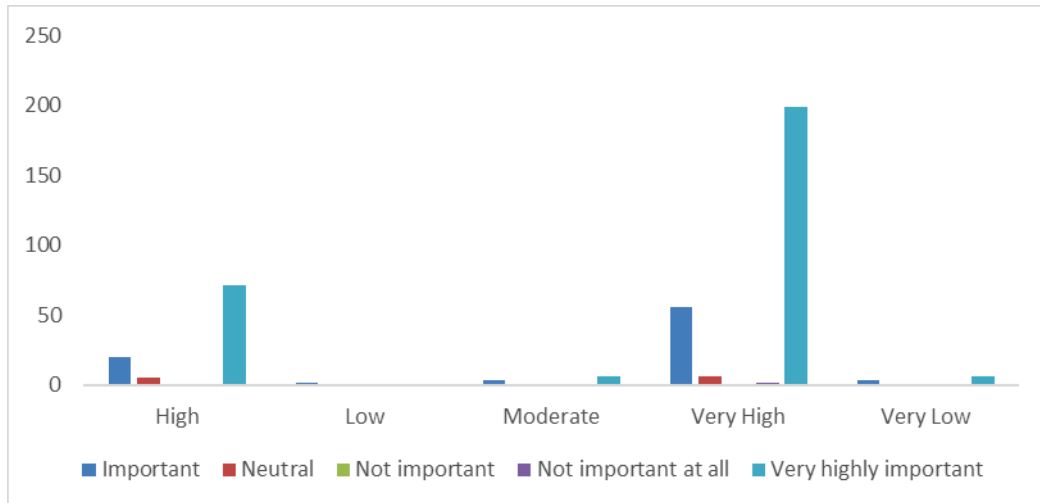
Figure 25-Continuous improvement practiced by company

Conclusion:

Continuous improvement is the key to get edge over the market competitors. The company should be well aware about the new technologies and hence continuous improvement is a must. The descriptive data shown above is evident that the given company adopts continuous improvement in all its sector i.e. process, products and services.

21. Suppliers are selected on the basis of quality aspects.

Table 21-Supplier selection on quality aspects

Row Labels	High	Low	Moderate	Very High	Very Low
Important	14	1	3	46	1
Neutral				7	
Not important					
Not important at all					
Very highly important	33		3	276	1
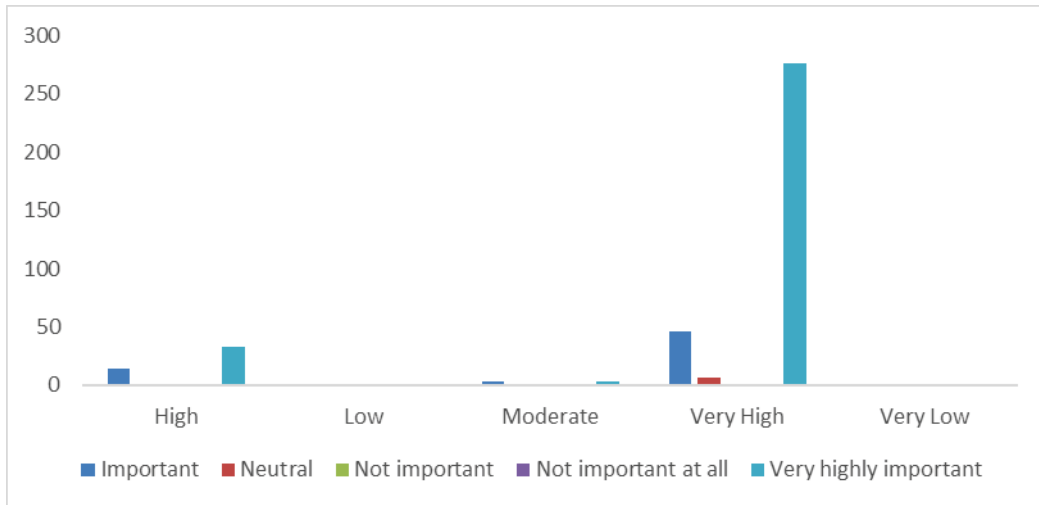
Figure 26-Supplier selection on quality aspects

Conclusion:

Quality of the manufactured product will mainly depend on the quality of the raw material. Hence, it is required to have a check on the raw materials suppliers to comply with the quality standards. In the given company, the above data tells us that the company is strict regarding the selection of suppliers from quality point of view.

22. Company ensures that suppliers can maintain high technical standards and meeting quality specifications.

Table 22-Suppliers maintain high quality standards is ensured by company

Row Labels	High	Low	Moderate	Very High	Very Low
Important	28	1	4	56	
Neutral	5			3	
Not important					
Not important at all				1	
Very highly important	64		5	218	
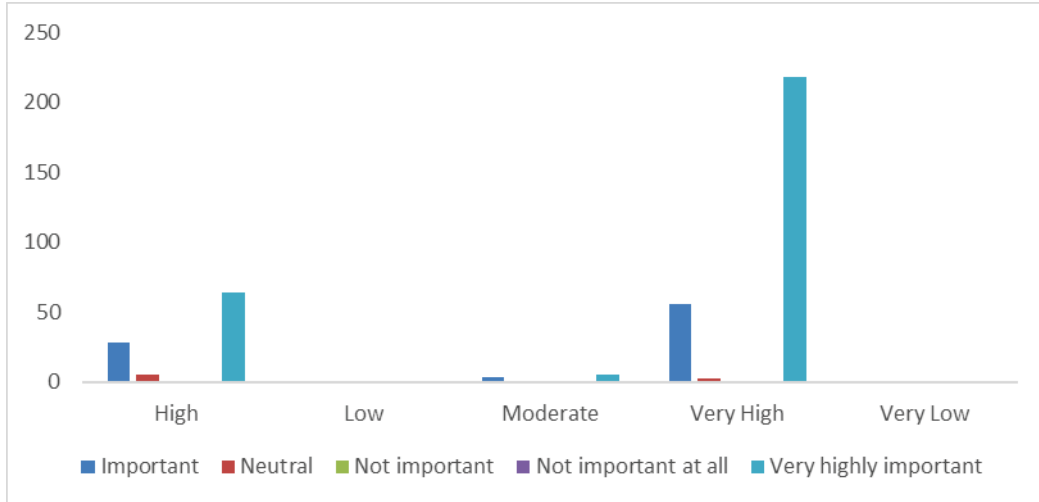
Figure 27-Suppliers maintain high quality standards is ensured by company

Conclusion:

The quality of the product depends on the raw materials used for its manufacturing. This raw material suppliers are helped by the company to keep up the quality standards intact. The above data shows that technical help is provided to the suppliers to maintain their quality standards.

23. Company regularly conducts suppliers' quality audits.

Table 23-Regular quality audits of suppliers are conducted

Row Labels	High	Low	Moderate	Very High	Very Low
Important	15	1	5	49	
Neutral			1	5	
Not important					
Not important at all				26	
Very highly important	41		19	223	
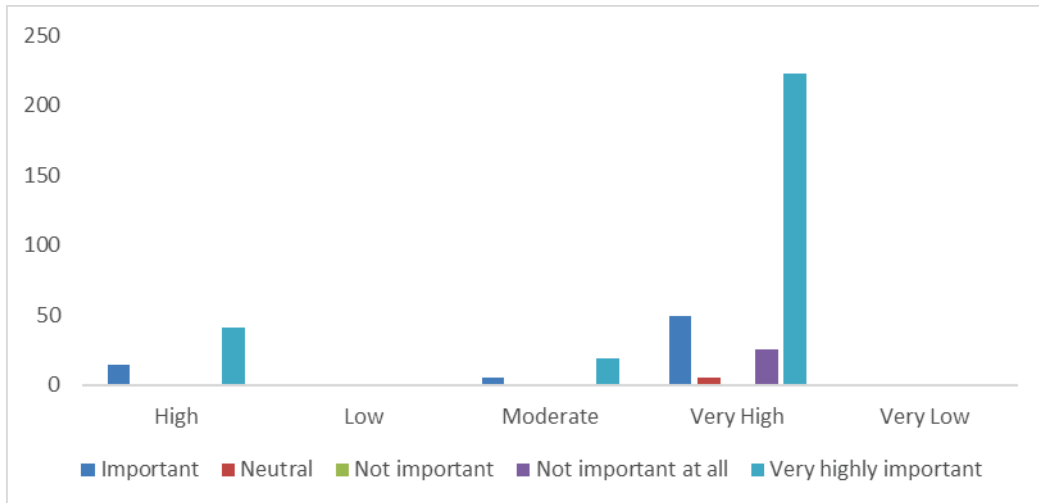
Figure 28-Regular quality audits of suppliers are conducted

Conclusion:

Auditing is the best practice to check compliance issues. Quality audits of the suppliers should be carried out at regular intervals of time so that they do not dilute their standards. From the above data it is clear that this company conducts regular quality audits of their suppliers.

24. Company works closely with suppliers toward long term partnership and improvement.

Table 24-Company's try to maintain long term relationship with suppliers

Row Labels	High	Low	Moderate	Very High	Very Low
Important	10	4	5	38	
Neutral	3			2	
Not important				4	
Not important at all				1	
Very highly important	52	3	7	256	
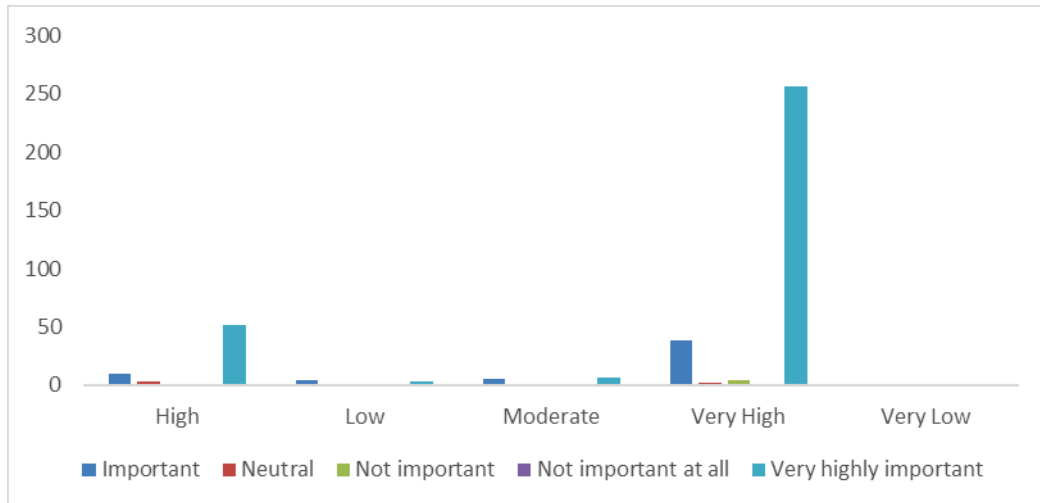
Figure 29-Company's try to maintain long term relationship with suppliers

Conclusion:

The practice of long term partnership of the company and raw material suppliers helps in catering for the conflicts arising amongst them smoothly. The above data tells us that such a situation of mutual understanding in the long term relationship is practiced in the company under consideration.

25. Suppliers provide relevant quality records and data.

Table 25-Relevant data is provided by the suppliers

Row Labels	High	Low	Moderate	Very High	Very Low
Important	9	1	4	54	
Neutral	1	1	1	4	
Not important					
Not important at all				1	
Very highly important	32	2	8	267	
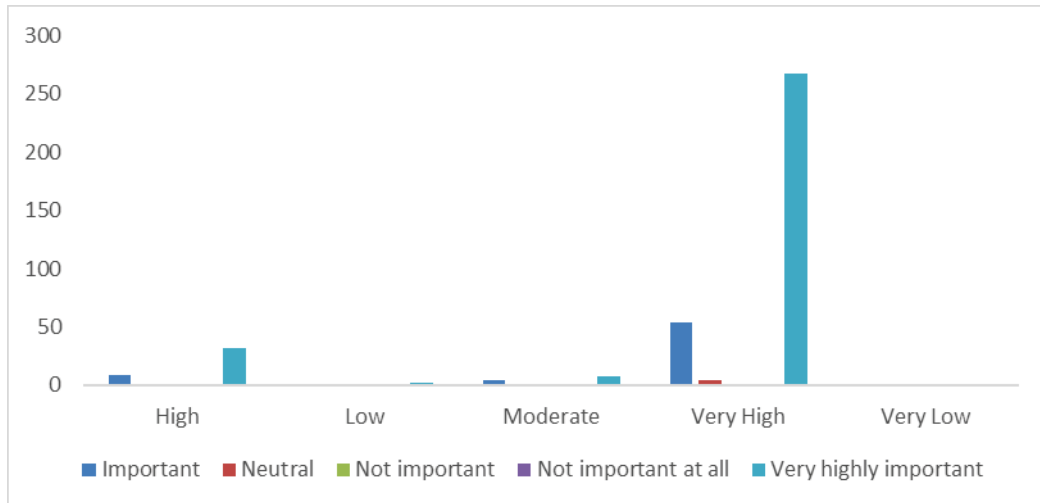
Figure 30-Relevant data is provided by the suppliers

Conclusion:

Transparency and honesty are the pillars on which business relations are formed and maintained. The above data is evident that the suppliers of the given company provides relevant data to their clients (i.e. the company) for their references.

26. Systems and procedures for quality assurance are implemented.

Table 26-Implementation of systems for quality assurances.

Row Labels	High	Low	Moderate	Very High	Very Low
Important	9			46	
Neutral				2	
Not important					
Not important at all				1	
Very highly important	41		2	283	1
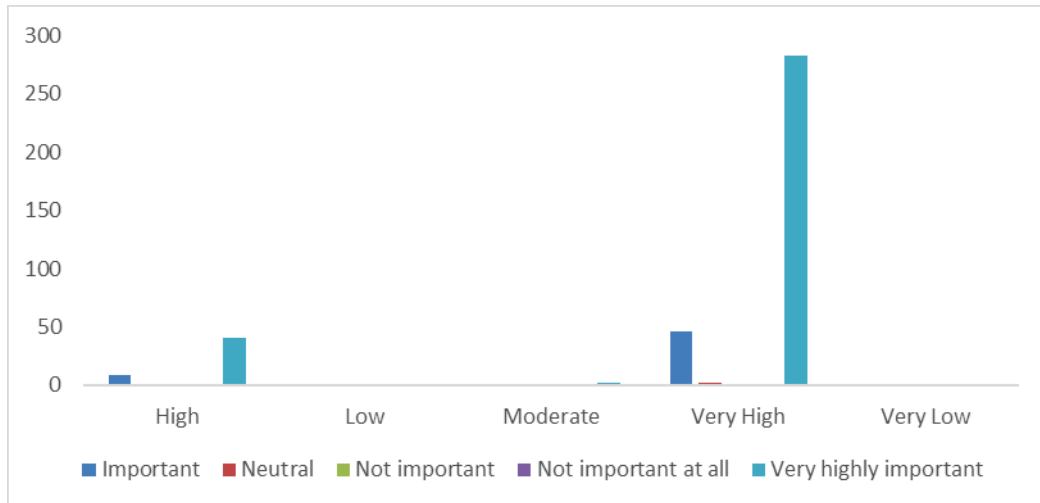
Figure 31-Implementation of systems for quality assurances.

Conclusion:

For any company to be in the market should not dilute the quality of its products. For that matter, companies take every step to maintain quality of their product. Different systems and procedures are adopted for the same. From the data above we can conclude that in the given company systems and procedures required for quality assurances are implemented.

27. Internal data collection system is established.

Table 27-Presence of Internal data collection system

Row Labels	High	Low	Moderate	Very High	Very Low
Important	2		1	31	
Neutral				4	
Not important				3	
Not important at all	2			14	
Very highly important	37		5	285	1
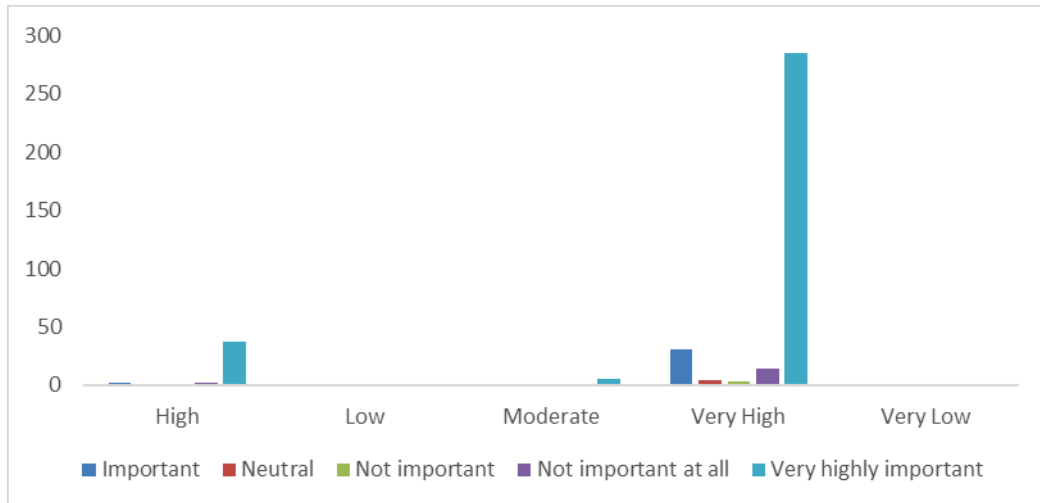
Figure 32-Presence of Internal data collection system

Conclusion:

Data is the important aspect which provides insights about the given process. Based on this data corrective steps can be taken for improvement if necessary. The above descriptive data and graph is evident to tells us that the company has an established system to collect the internal data.

28. Market information and feedback system is established.

Table 28-Establishment of feedback system

Row Labels	High	Low	Moderate	Very High	Very Low
Important	17			55	
Neutral	5			12	
Not important				2	
Not important at all	1			12	
Very highly important	46		5	230	

Conclusion:

As any product manufactured by the company eventually lands into the market, a good company will always have in-depth market information skills. The above graph tells us that the company has a proper market information collection techniques along with that also has feedback system.

29. The employees involved in different processes know how to evaluate them.

Table 29-Knowledge of evaluation of employees

Row Labels	High	Low	Moderate	Very High	Very Low
Important	4		2	17	
Neutral	1			12	
Not important				6	
Not important at all	2			13	
Very highly important	29		2	297	
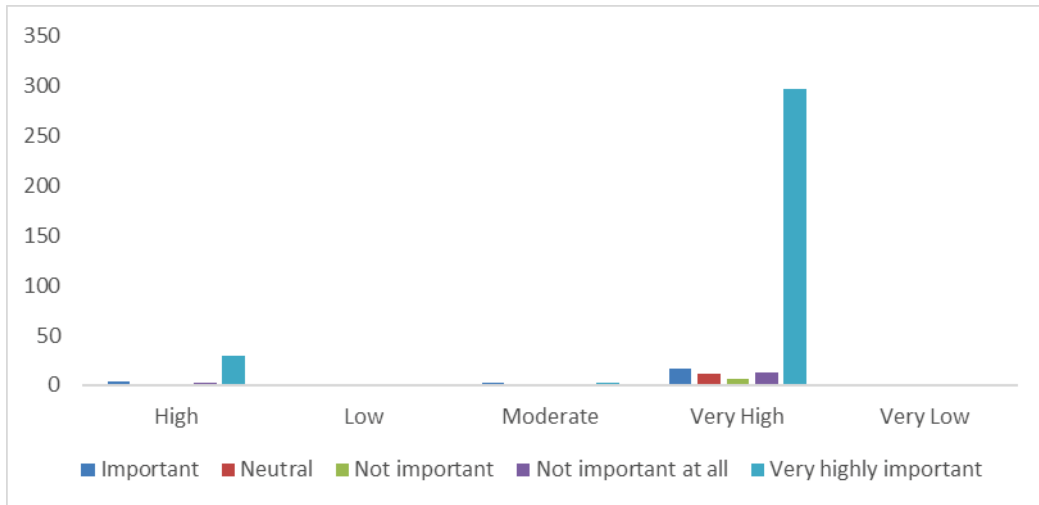
Figure 34-Knowledge of evaluation of employees

Conclusion:

Evaluation helps in monitoring the path followed so that we can take corrective steps. Every employee in the given company is well aware about evaluation techniques to be followed for the same. It is evident from the above descriptive graph and data.

30. Top management always updates their knowledge.

Table 30-Knowledge up gradation of management

Row Labels	High	Low	Moderate	Very High	Very Low
Important	10		5	27	
Neutral	2			5	
Not important				3	
Not important at all	4			3	
Very highly important	46		7	273	
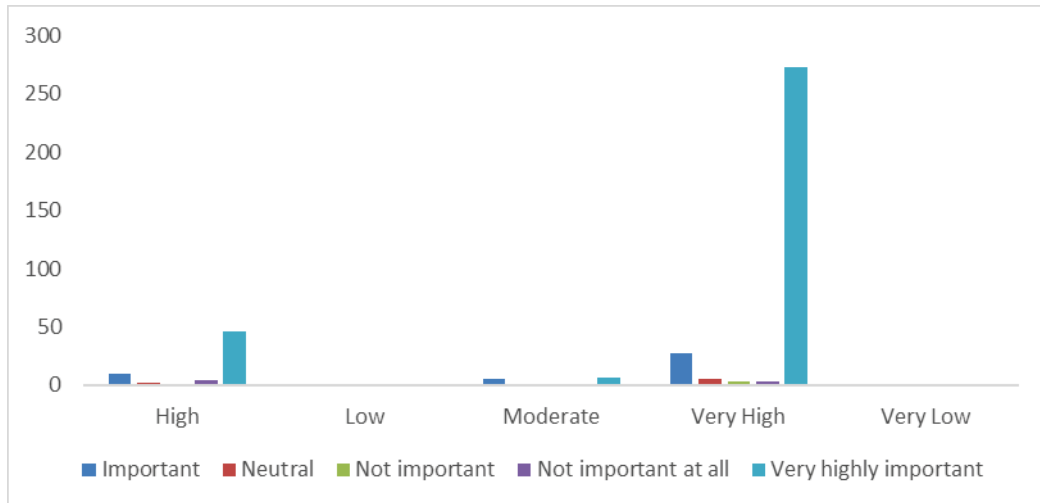
Figure 35-Knowledge up gradation of management

Conclusion:

Continuous up gradation in knowledge as well as technology should be practiced by the managers so as to keep them equipped with latest techniques and technology. The above data concludes that the top management in the given company are keen in updating their knowledge continuously.

31. Employees are trained for job related skills.

Table 31-Employee training

Row Labels	High	Low	Moderate	Very High	Very Low
Important	6	1	1	66	
Neutral	4		1	9	
Not important					
Not important at all			1	2	
Very highly important	17		4	272	1
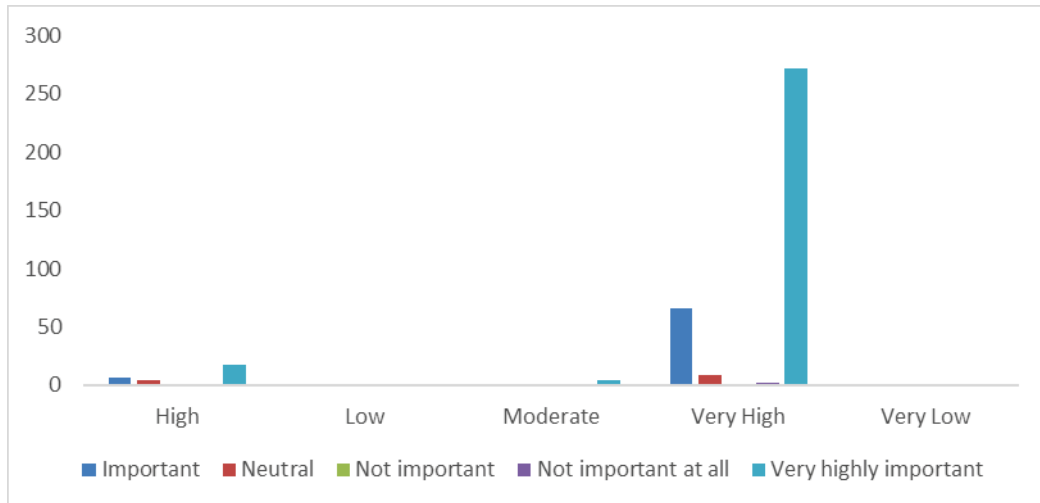
Figure 36-Employee training

Conclusion:

Every employee in the company is assigned with a particular job. To carry out his/her job satisfactorily he/she requires some basic training skills. This skills should be provided by the company itself. From the above data and graph we can conclude that employees are provided with necessary training skills in the given company.

32. Employees are trained on total quality concepts.

Table 32-Employees training on quality concepts

Row Labels	High	Low	Moderate	Very High	Very Low
Important	9			40	
Neutral	2		1	10	
Not important	1			3	
Not important at all	2			3	
Very highly important	20		3	291	
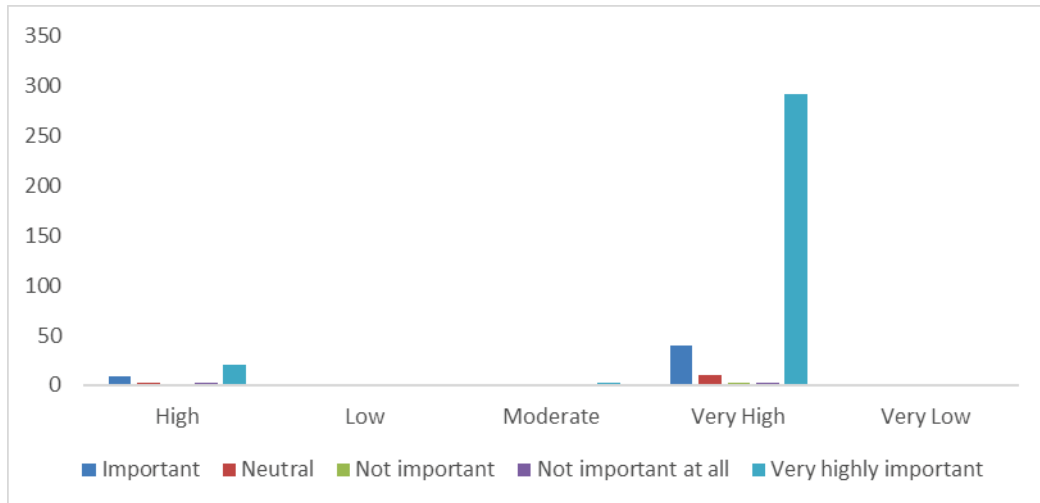
Figure 37-Employees training on quality concepts

Conclusion:

As quality is an important factor for any company, improvement in quality can be achieved only when all the stakeholders participate in the improvement process. Hence every employee should be imparted with necessary knowledge about quality concepts. The above data given is evident that in the given company employees are imparted with necessary knowledge regarding total quality concepts.

33. Continuous learning is provided through education and training.

Table 33-Constant learning through various training

Row Labels	High	Low	Moderate	Very High	Very Low
Important	15		1	70	
Neutral	1		2	8	1
Not important				3	
Not important at all	2		2	25	
Very highly important	54		3	197	1
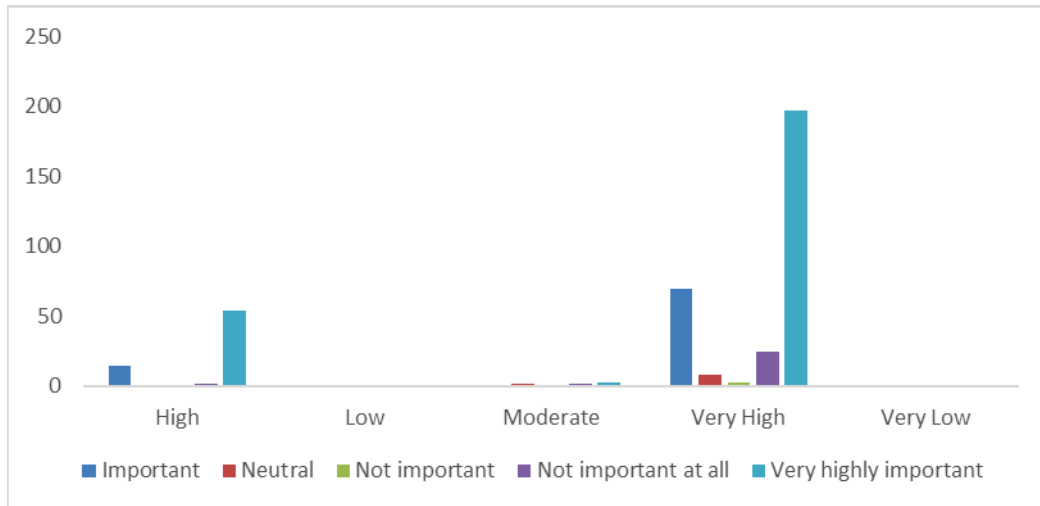
Figure 38-Constant learning through various training

Conclusion:

Continuous improvement is the key to survive in this huge pool of competitive market. This improvement can be carried out with continuous training and education programs undertaken by the company from time-to-time. Here in the given company, the above data is evident that continuous learning is undertaken by company in the form of training and education.

34. A pleasant environment exists in all working areas.

Table 34-Existance of pleasant working atmosphere

Row Labels	High	Low	Moderate	Very High	Very Low
Important	18	2	3	68	1
Neutral	1		2	11	
Not important					
Not important at all				2	1
Very highly important	43		4	229	
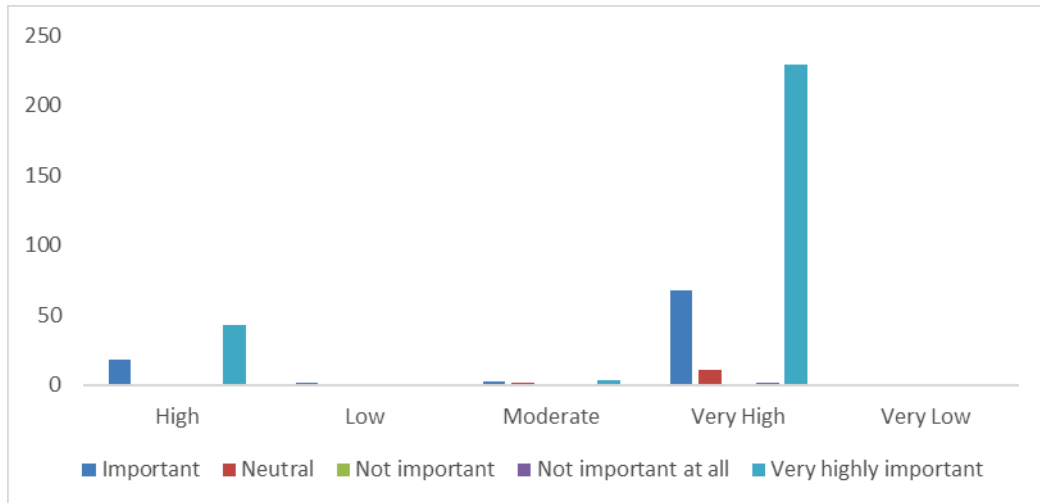
Figure 39-Existance of pleasant working atmosphere

Conclusion:

It is proved by various theories that pleasant atmosphere has direct relation with the working efficiency and interest of the employees in their work. Every company should strive to provide pleasant atmosphere to their employees. The above data is proof that the given company provides a pleasant environment for working of its employees.

35. Positive values such as trust, honesty, hardworking, are fostered by management.

Table 35-Good values inculcated by management

Row Labels	High	Low	Moderate	Very High	Very Low
Important	15	1	4	43	
Neutral	1		1	5	
Not important					
Not important at all					
Very highly important	68		8	239	
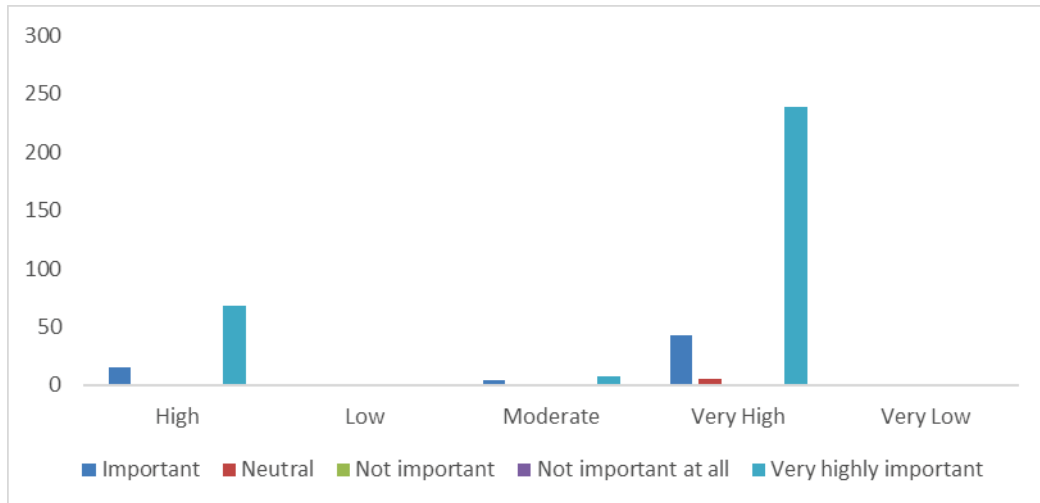
Figure 40-Good values inculcated by management

Conclusion:

Values and ethics are the basic foundation stones for a person's attitude. To imbibe right attitude in their employees, companies along with top management strive hard to inculcate values such as hard work, honesty, etc. The graph given above tells us the same thing that the company and its management takes necessary steps to inculcate positive values in their employees.

36. Teamwork and involvement are normal practices in the company.

Table 36-Practice of team work in company

Row Labels	High	Low	Moderate	Very High	Very Low
Important	22		6	51	
Neutral	3			4	
Not important					
Not important at all				1	
Very highly important	40		7	251	
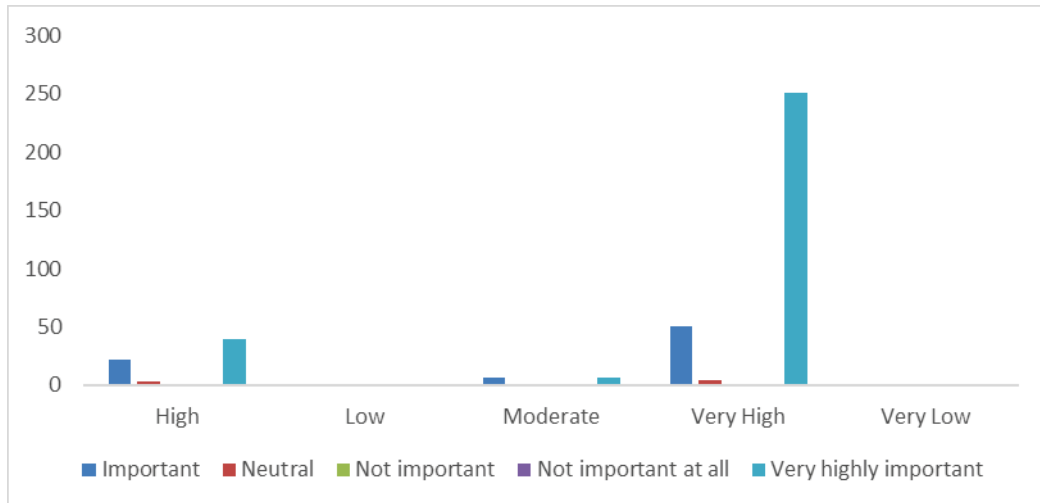
Figure 41-Practice of team work in company

Conclusion:

Team work helps the employee's self-growth which eventually helps in company's overall growth. Team work also makes the task easier and innovative because all the employees contribute their own ideas. This culture should be practiced in every company and form the above descriptive data we can conclude that it is being practiced in the given company.

37. The company adopts 'Employee satisfaction' initiatives (such as suggestion schemes, profit sharing, etc.).

Table 37-Conducting initiatives relating to employee satisfaction

Row Labels	High	Low	Moderate	Very High	Very Low
Important	19		2	46	1
Neutral	1			5	
Not important					
Not important at all	2		1	22	1
Very highly important	50		5	230	
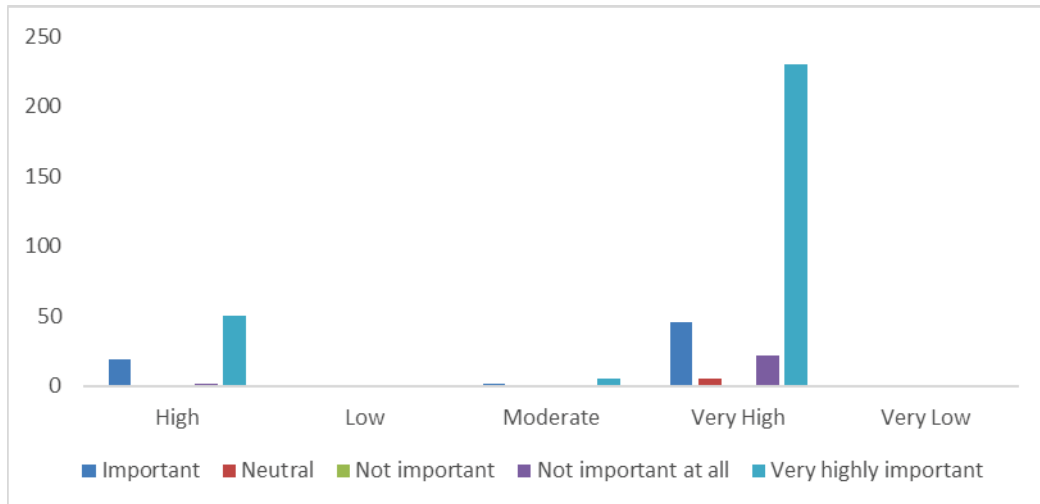
Figure 42-Conducting initiatives relating to employee satisfaction

Conclusion:

Employees working under any company should be ultimately satisfied for the work they perform. This satisfaction can be guaranteed by undertaking different schemes by the management. The above graph tells us that the management of the given company carries out employee satisfaction initiatives to keep the zeal among the employees.

43. People are flexible and adaptable when changes are necessary.

Table 38-Descriptive statistics on how flexible people are for changes

Mean	4.581818182
Standard Deviation	0.63670851
Sample Variance	0.405397727

Table 39-Frequency table on how flexible people are for changes

Levels	Counts	% of Total
Agree	111	28.8 %
Disagree	4	1.0 %
Neutral	19	4.9 %
Strongly Agree	251	65.2 %
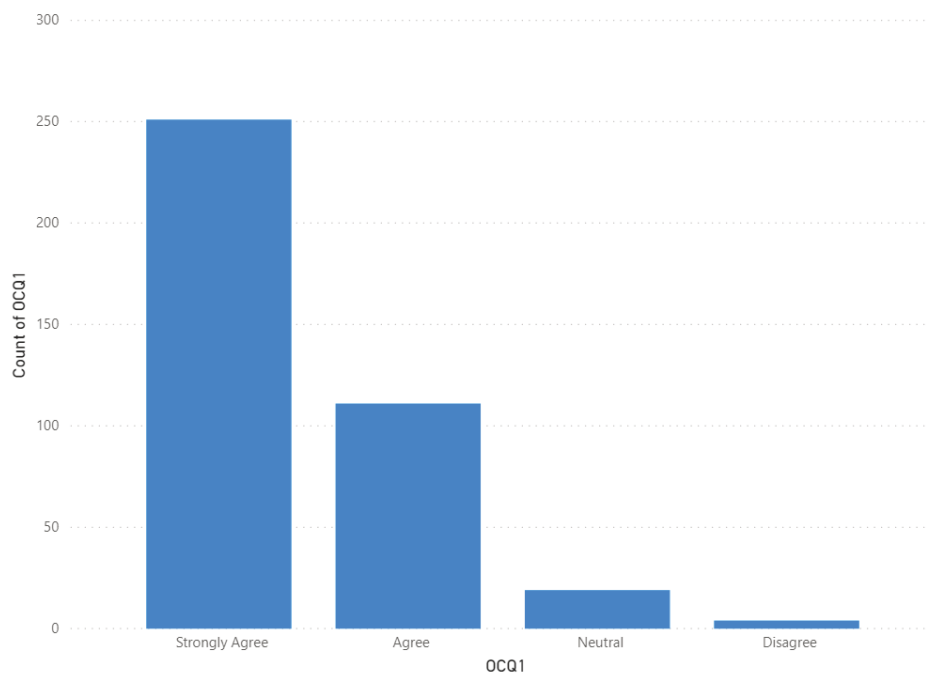
Figure 43-Bar graph on how flexible people are for changes

Conclusion:

To improve and evolve continuously changes is a must needed pursuit. Changes improves the efficiency of the existing process. This help to improve the overall efficiency of the company. The above descriptive data tells us that, the employees of the given company is flexible and adaptive to the necessary changes undertaken.

44. Individuals and teams have clearly defined goals that relate to the goals and mission of the business.

Table 40-Descriptive statistics of employees and their teams have clearly defined goals

Mean	4.823376623
Standard Deviation	0.520390504
Sample Variance	0.270806277

Table 41-Frequency table of employees and their teams have clearly defined goals

Levels	Counts	% of Total
Agree	32	8.3 %
Disagree	4	1.0 %
Neutral	12	3.1 %
Strongly Agree	337	87.5 %
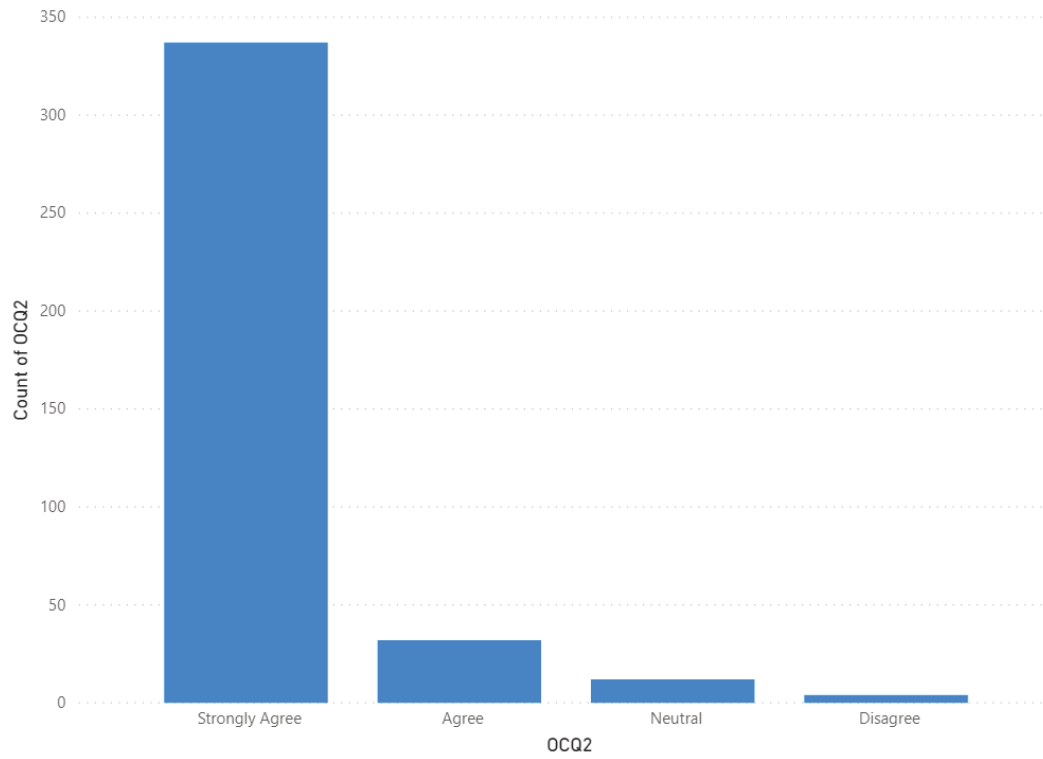
Figure 44-Bar graph on employees and their teams have clearly defined goals

Conclusion:

Every employee of the company work to achieve the prescribed organisational goals. For this reason, they formulate their individual team goals on the same track. From the above data we can conclude that all company employees formulate their goals in such a manner that at the end it helps in achieving the organisational goals.

45. Teams often lack the authority needed to get the job done effectively.

Table 42-Descriptive statistics on employees lacking authority for job completion

Mean	4.246753247
Standard Deviation	0.628238364
Sample Variance	0.394683442

Table 43-Frequency table on employees lacking authority for job completion

Levels	Counts	% of Total
Agree	237	61.6 %
Disagree	1	0.3 %
Neutral	19	4.9 %
Strongly Agree	125	32.5 %
Strongly Disagree	3	0.8 %
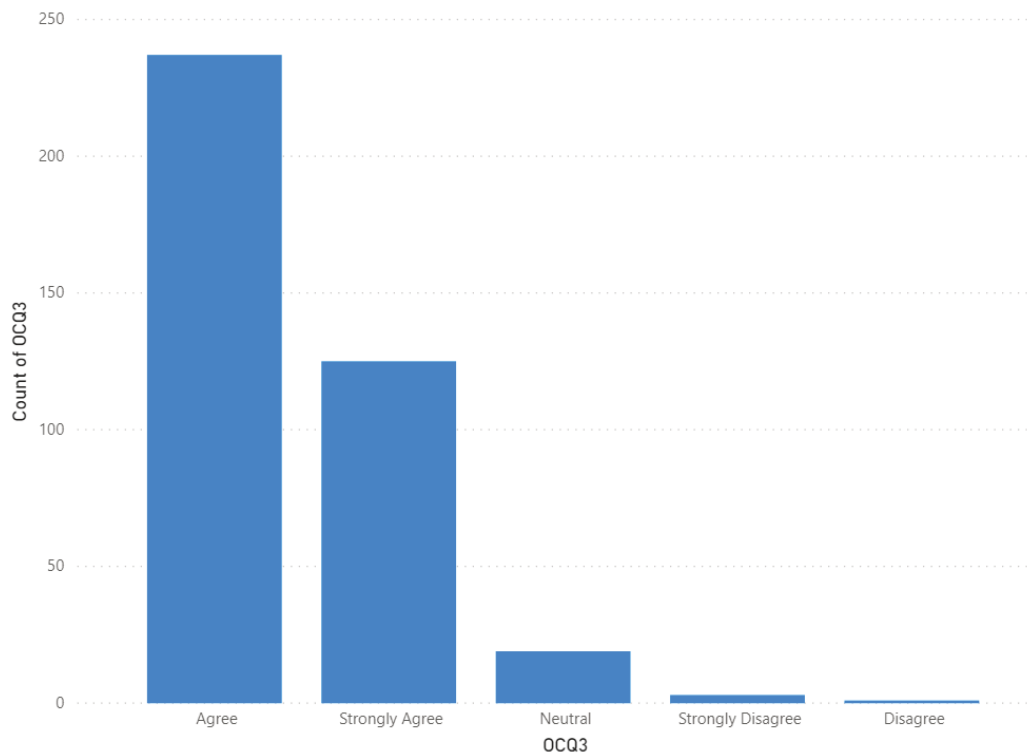
Figure 45-Bar graph on employees lacking authority for job completion

Conclusion:

Decentralisation of an authority is the key to make the teams independent in their tasks and decision making process. From the data we can conclude that in the given company, teams lack this authority of get their tasks and operations done effectively.

46. We give the highest priority and support to meeting the needs of clients and customers and to solving their problems.

Table 44-Descriptive data on handling customers and clients effectively

Mean	4.428571429
Standard Deviation	0.69650488
Sample Variance	0.485119048

Levels	Counts	% of Total
Agree	131	34.0 %
Disagree	1	0.3 %
Neutral	43	11.2 %
Strongly Agree	210	54.5 %
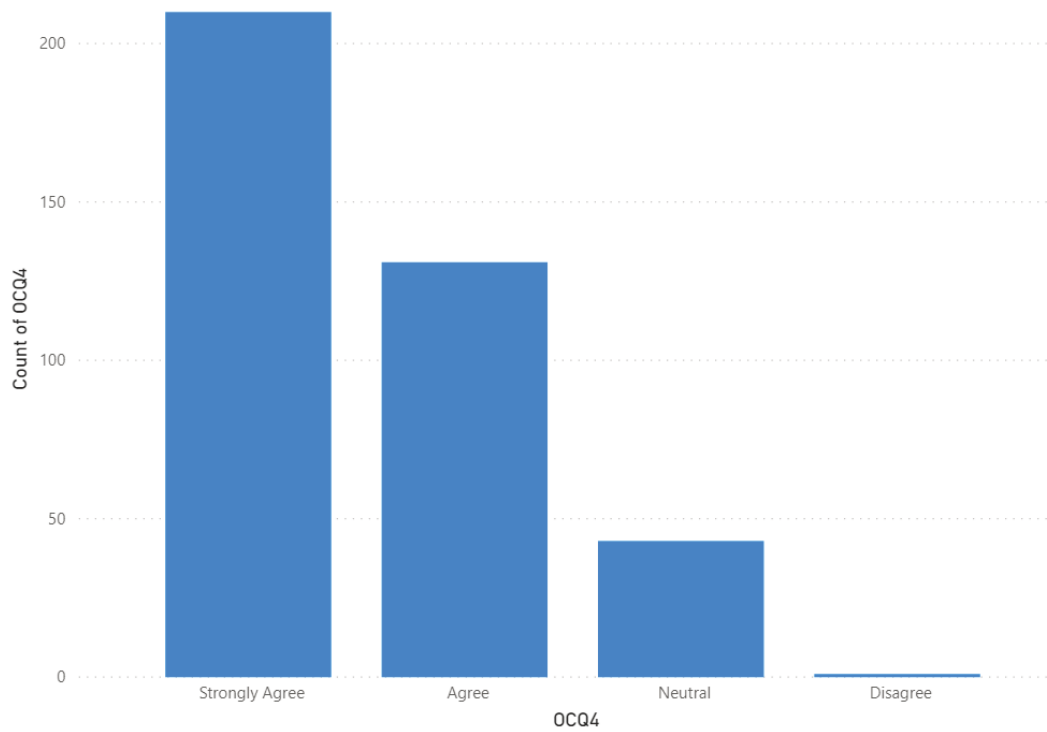
Figure 46-Bar graph on handling customers and clients effectively

Conclusion:

Clients and customers for any company are the real business giver. Keeping a brief record of their clients and customers is company's top priority. The above data concludes that the company gives top priority to their customers need and support in solving their problem.

47. People value and make use of one another's unique strengths and different abilities.

Table 46-Descriptive data on how people use each-other's abilities

Mean	4.612987013
Standard Deviation	0.679566086
Sample Variance	0.461810065

Table 47-Frequency data on how people use each-other's abilities

Levels	Counts	% of Total
Agree	90	23.4 %
Disagree	1	0.3 %
Neutral	22	5.7 %
Strongly Agree	269	69.9 %
Strongly Disagree	3	0.8 %
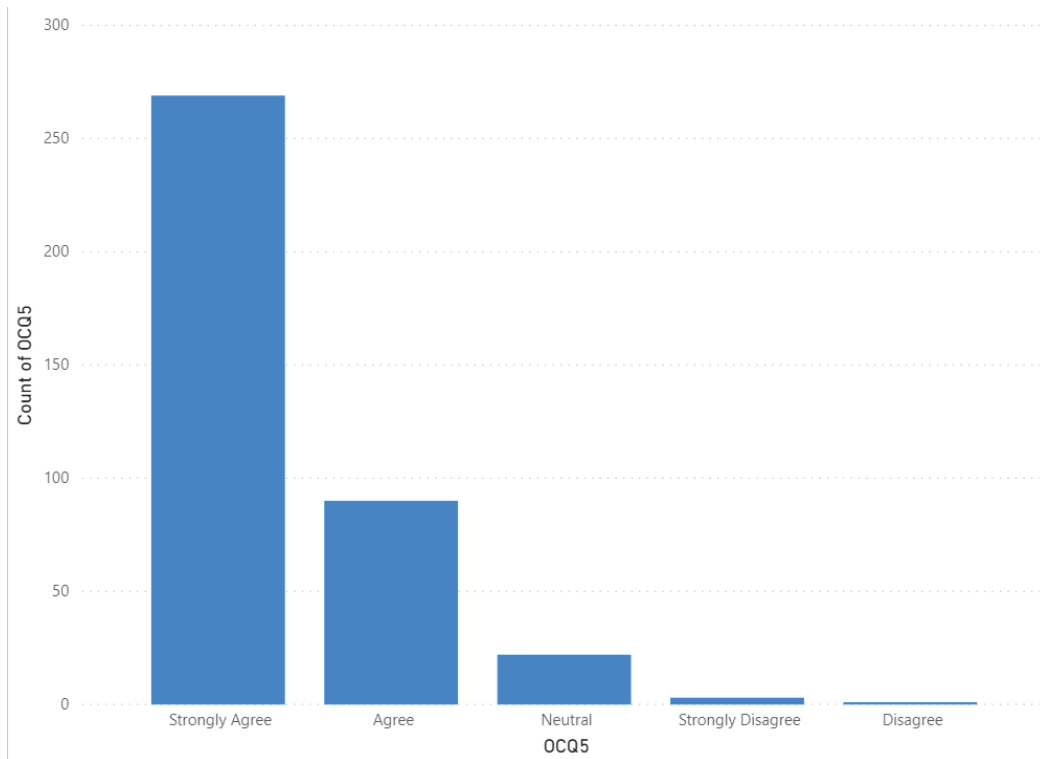
Conclusion:

Team work is much needed in any organisation for its efficiency improvement. Team work includes helping each other to complete the task. Helping each other leads to sharing of abilities and ideas amongst the team members. The above data tells us that in the given company individual abilities and strengths of the employees are valued and shared amongst the team members.

48. People feel that most change is the result of pressures imposed from higher up in the organization.

Table 48-Descriptive data on pressure put by management on employees

Mean	4.592207792
Standard Deviation	0.667271776
Sample Variance	0.445251623

Table 49-Frequency table on pressure put by management on employees

Levels	Counts	% of Total
Agree	79	20.5 %
Neutral	39	10.1 %
Strongly Agree	267	69.4 %
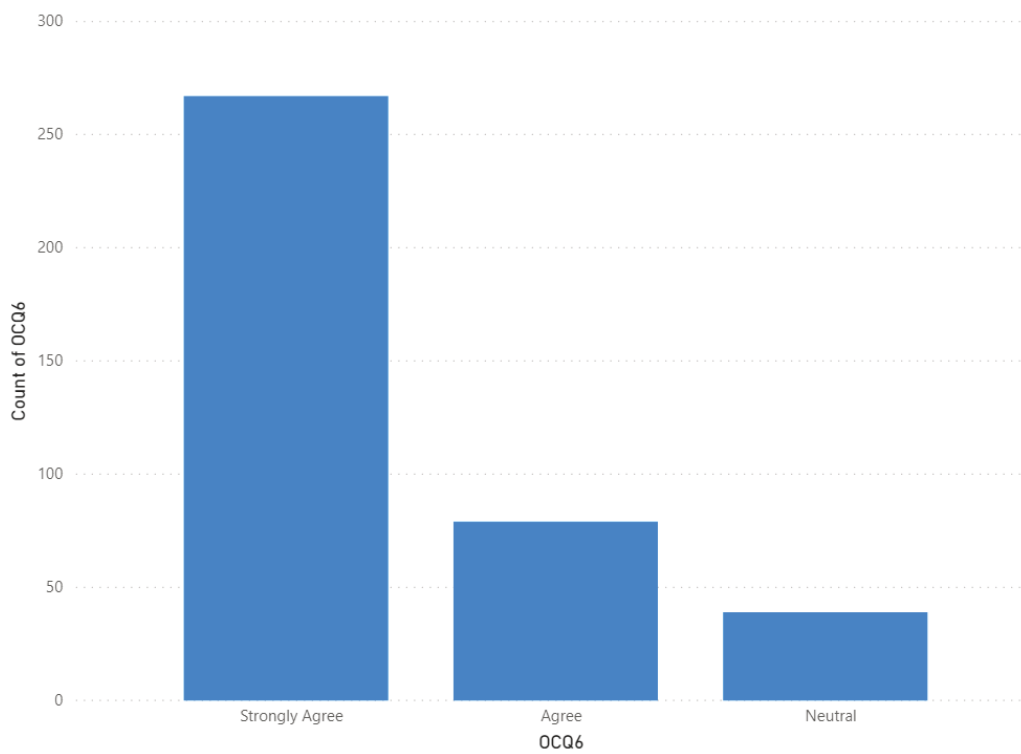
Figure 48-Bar graph on pressure put by management on employees

Conclusion:

Decisions taken by top management plays a vital role in the process completion. The pressure imposed by the top management is directly proportional to the increase in work output of the

employees. The above graph is evident that in the given organisation the pressure imposed by the top management is a major factor in the changes that occur in the organisation.

49. People and teams are often expected to reach goals which they believe are unattainable.

Table 50-Descriptive data on expectation of achieving unattainable goals

Mean	4.72987013
Standard Deviation	0.599275808
Sample Variance	0.359131494

Table 51Frequency table on expectation of achieving unattainable goals

Levels	Counts	% of Total
Agree	50	13.0 %
Neutral	25	6.5 %
Strongly Agree	309	80.3 %
Strongly Disagree	1	0.3 %
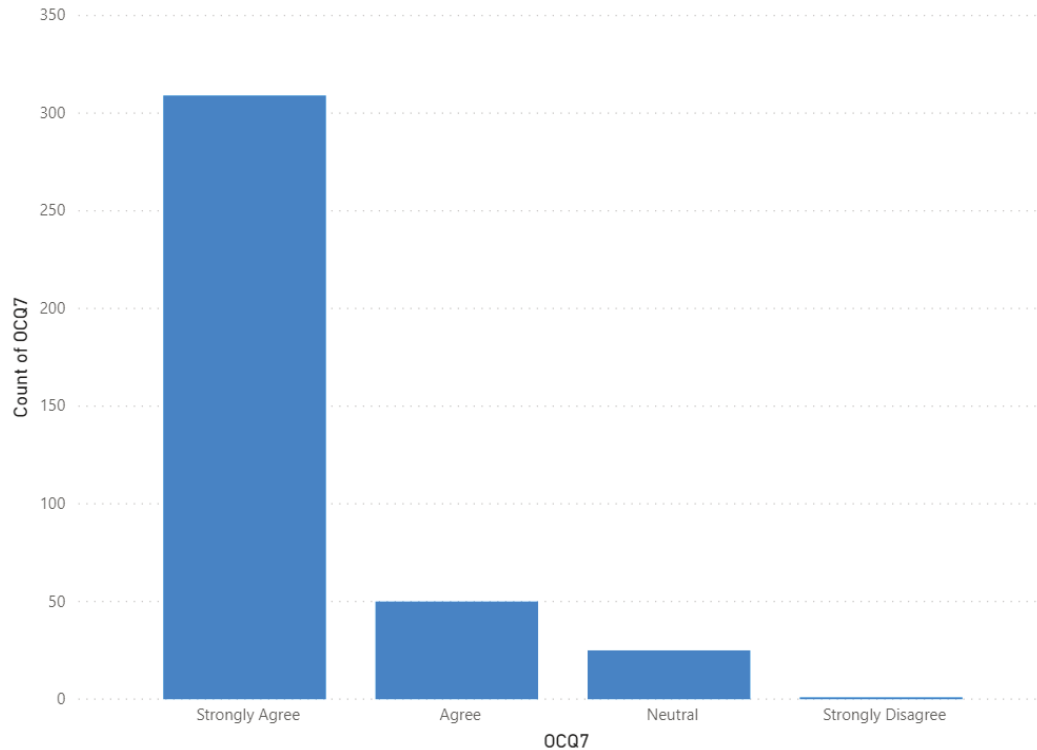
Figure 49-Bar graph on expectation of achieving unattainable goals

Conclusion:

Top management in any organisation always keeps their pressure high on the employees in order to increase their work output. But sometimes it leads to superficial goals and targets which in practical are impossible. From the above descriptive data and graph it is evident that same thing happens in the given organisation. Here too, unattainable goals are expected to be attained by the teams.

50. People believe in teamwork, the "what's in it for us" approach rather than "what's in it for me."

Table 52-Descriptive data on teamwork approach

Mean	4.820779221
Standard Deviation	0.569707907
Sample Variance	0.3245671

Levels	Counts	% of Total
Agree	33	8.6 %
Neutral	10	2.6 %
Strongly Agree	338	87.8 %
Strongly Disagree	4	1.0 %
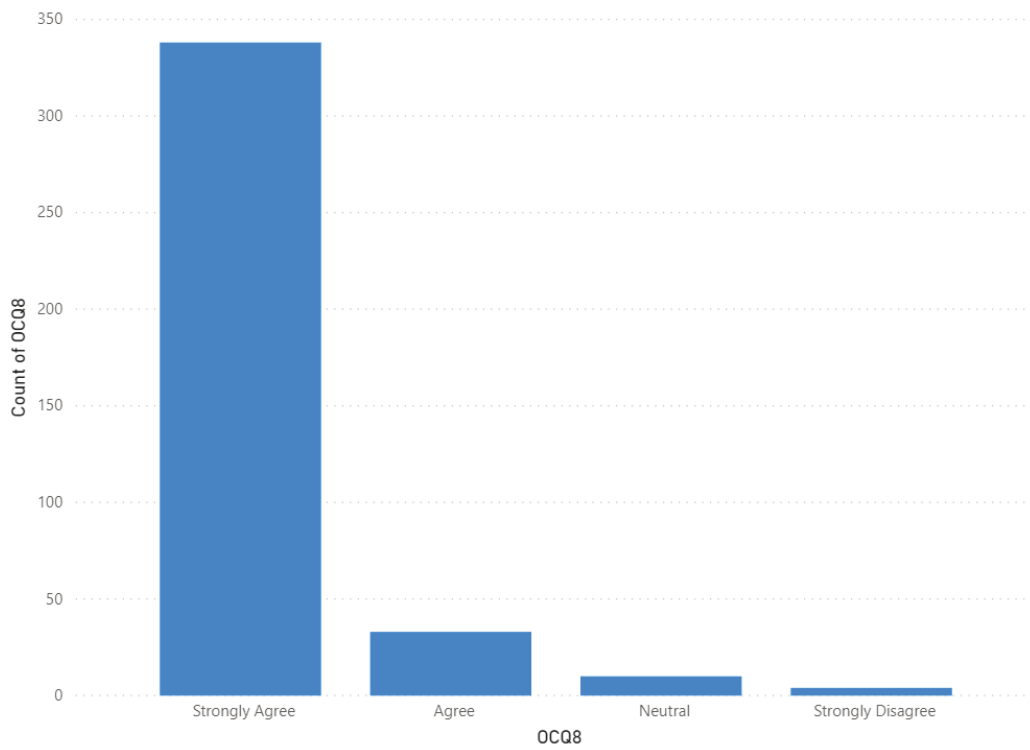
Figure 50-Bar graph on teamwork approach

Conclusion:

The above data is a proof that in the given company a strong sense of team spirit is observed. Overall growth of an organisation depends upon how strongly the team members are co-ordinated. This also denotes the working culture of the company under consideration.

51. Our policies and procedures help us to provide the service our customers want and need.

Table 54-Descriptive data on significance of policies

Mean	4.883116883
Standard Deviation	0.455693896
Sample Variance	0.207656926

Table 55-Frequency data on significance of policies

Levels	Counts	% of Total
Agree	24	6.2 %
Disagree	1	0.3 %
Neutral	5	1.3 %
Strongly Agree	353	91.7 %
Strongly Disagree	2	0.5 %
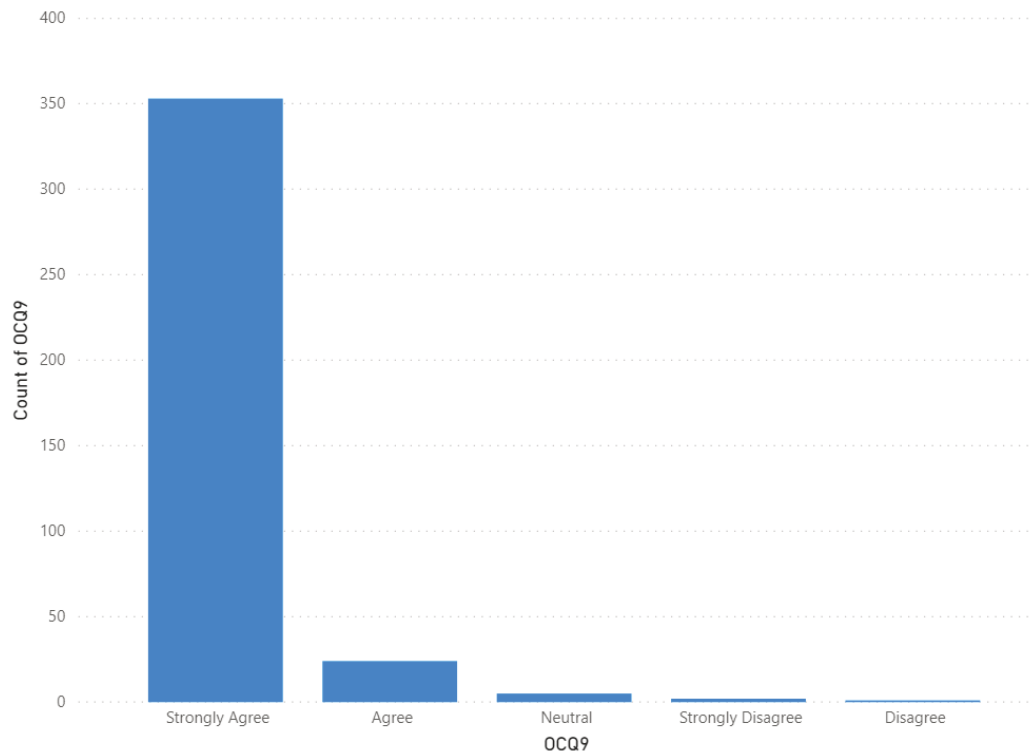
Figure 51-Bar graph on significance of policies

Conclusion:

Policies and procedures of the given company are formulated in such a manner that it helps in catering the problems of their customers swiftly. For the proof of given conclusion, we can analyse the above data and graph.

52. Everyone knows and understands our business objectives and priorities.

Table 56-Descriptive data on understanding of business objectives

Mean	4.823376623
Standard Deviation	0.499972943
Sample Variance	0.249972944

Levels	Counts	% of Total
Agree	36	9.4 %
Neutral	14	3.6 %
Strongly Agree	334	86.8 %
Strongly Disagree	1	0.3 %
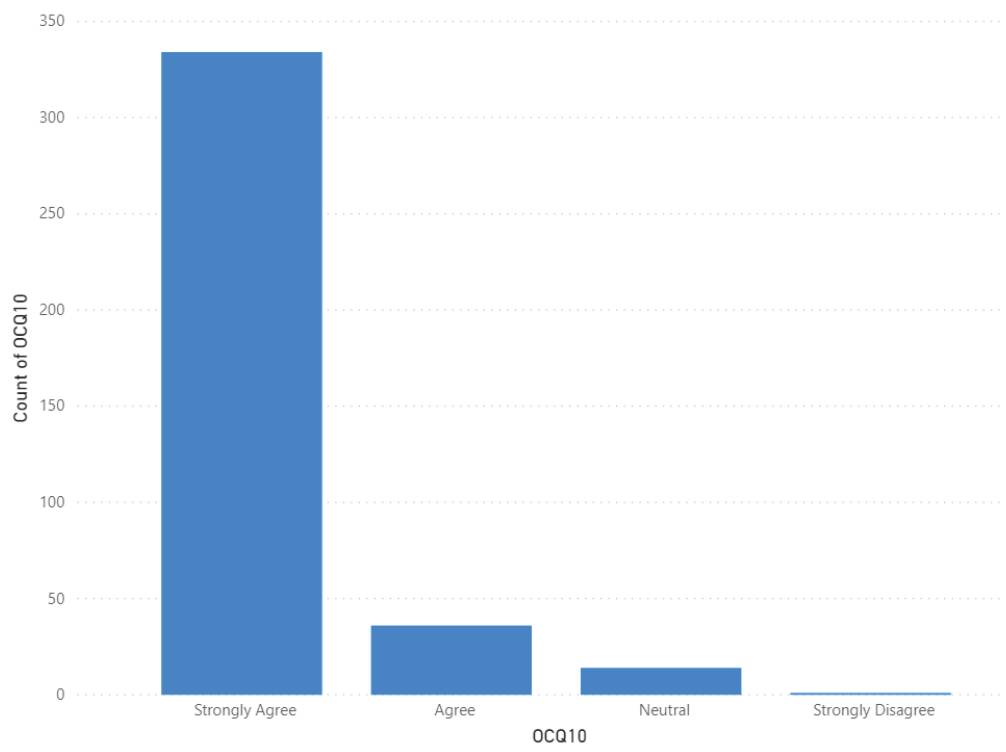
Figure 52-Bar graph on understanding of business objectives

Conclusion:

Objectives and goals of a company decides its growth. The working efficiency of employees depends upon how easily the objectives and priorities of the company are disseminated among them. From the above data we can conclude that the employees of the company under consideration are well aware about the goals, priorities and objectives of the company.

53. People have a clear idea of why and how to proceed throughout the process of change.

Table 58-Descriptive data on how to handle changing circumstances

Mean	4.664935065
Standard Deviation	0.59023438
Sample Variance	0.348376623

Table 59-Frequency data on how to handle changing circumstances

Levels	Counts	% of Total
Agree	87	22.6 %
Disagree	2	0.5 %
Neutral	18	4.7 %
Strongly Agree	278	72.2 %
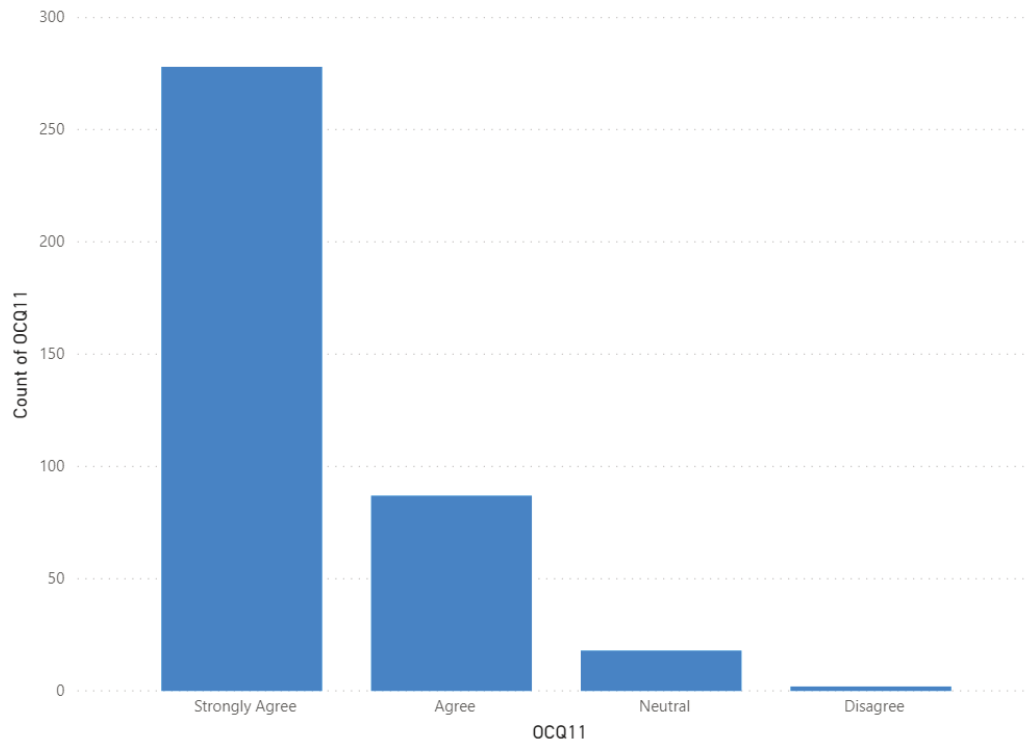
Figure 53-Bar graph on how to handle changing circumstances

Conclusion:

In any manufacturing unit or a company, change is inevitable. But methods and ideas about how to handle this change helps to sail through the situation. From the above descriptive data it is evident that in the given company the employees are well aware about how to handle this situation of process change comfortably.

54. Individuals and teams are measured and rewarded according to how well goals are achieved.

Table 60-Descriptive data on rewards on achieving goals

Mean	4.657142857
Standard Deviation	0.622375442
Sample Variance	0.38735119

Table 61-Frequency data on rewards on achieving goals

Levels	Counts	% of Total
Agree	76	19.7 %
Disagree	2	0.5 %
Neutral	25	6.5 %
Strongly Agree	282	73.2 %
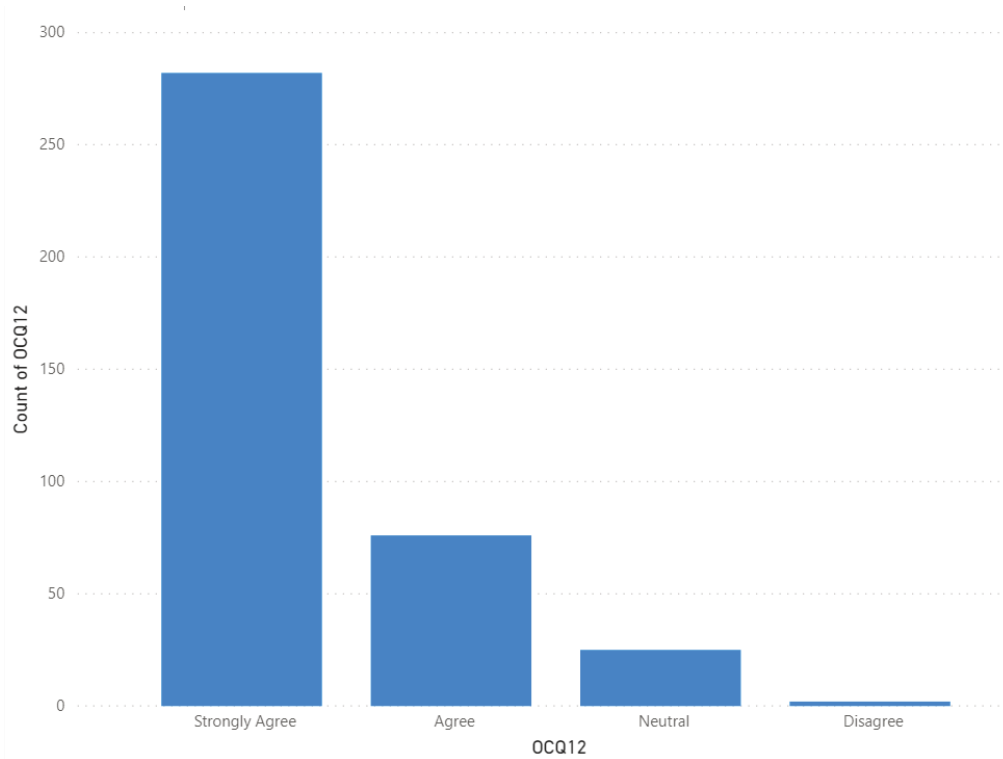
Figure 54-Bar graph on rewards on achieving goals

Conclusion:

Working culture of any company defines how efficiently the employees of that company contributes to the business of that company. One of the major aspects of working culture is rewards and recognitions. This also boosts the morale of employees and worker. The above data tells us

that, in the given company efforts of teams as well as individuals are considered and rewarded appropriately.

55. People lack the interpersonal and technical skills they need to work effectively in teams.

Table 62-Descriptive data on lack of skills for efficient working

Mean	4.836363636
Standard Deviation	0.496579207
Sample Variance	0.246590909

Table 63-Frequency data on lack of skills for efficient working

Levels	Counts	% of Total
Agree	32	8.3 %
Disagree	1	0.3 %
Neutral	12	3.1 %
Strongly Agree	339	88.1 %
Strongly Disagree	1	0.3 %
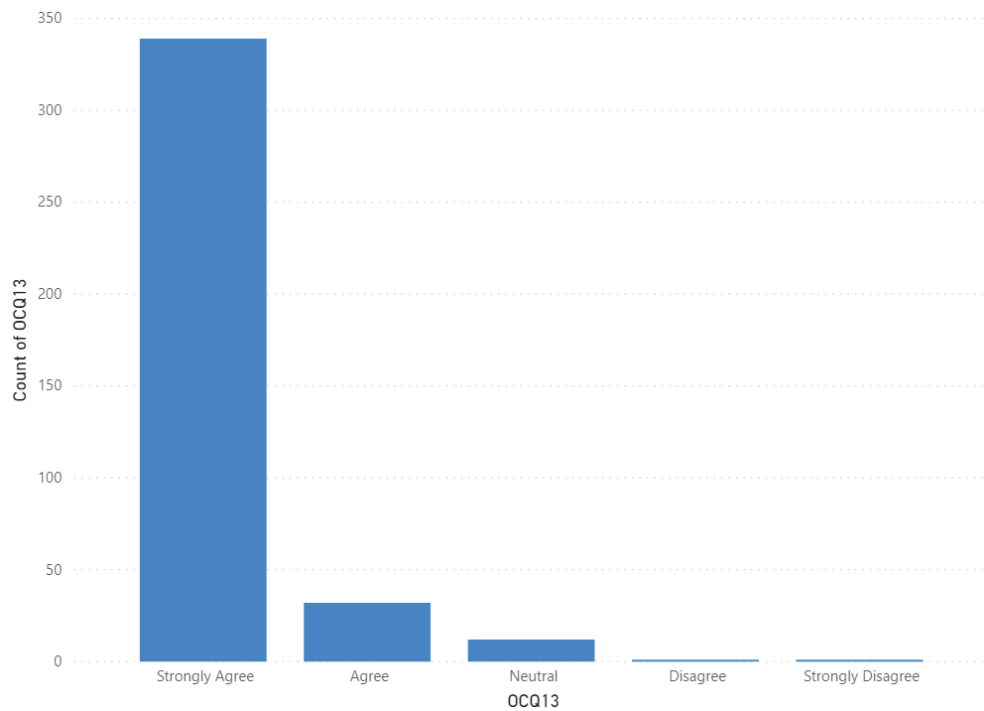
Figure 55-Bar graph on lack of skills for efficient working

Conclusion:

Team work is the contribution of every member of the team. Lethargy of any member affects the efficiency of the team. The data shown above of the given company tells us that, employees working in the team lack interpersonal as well as technical skills.

56. People often see customer and client problems as someone else's responsibility.

Table 64-Descriptive data on taking responsibility

Mean	4.841558442
Standard Deviation	0.418750202
Sample Variance	0.175351732

Table 65-Frequency table on taking responsibility

Levels	Counts	% of Total
Agree	48	12.5 %
Disagree	1	0.3 %
Neutral	5	1.3 %
Strongly Agree	331	86.0 %
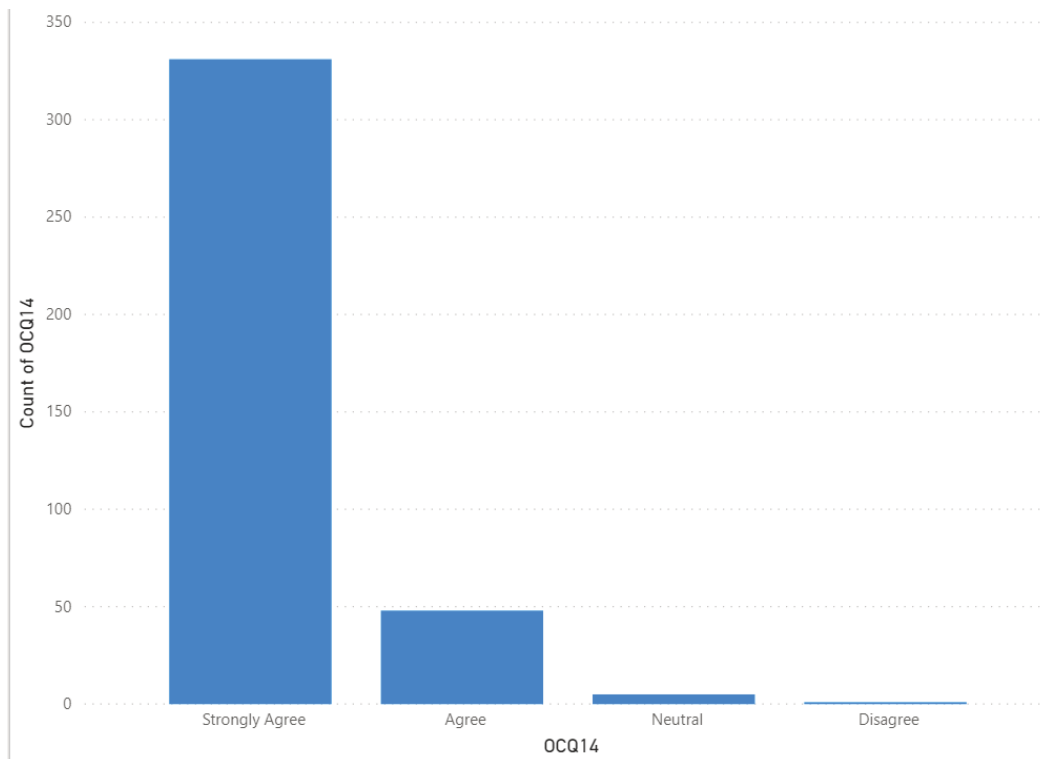
Figure 56-Bar graph on taking responsibility

Conclusion:

Customers and clients are the whole and sole business generator for any organisation. There has to be a proper complaint resolving mechanism. Proper mechanism can function only when employees take keen interest into their customer's problems. Here, we can conclude from the

above data that the employees shed their responsibilities related to problems of customers and clients.

57. People sometimes compromise company policies or principles to reach operational goals.

Table 66-Descriptive data on compromising policies to achieve goals

Mean	4.771428571
Standard Deviation	0.520130478
Sample Variance	0.270535714

Table 67-Frequency table on compromising policies to achieve goals

Levels	Counts	% of Total
Agree	58	15.1 %
Disagree	2	0.5 %
Neutral	12	3.1 %
Strongly Agree	313	81.3 %
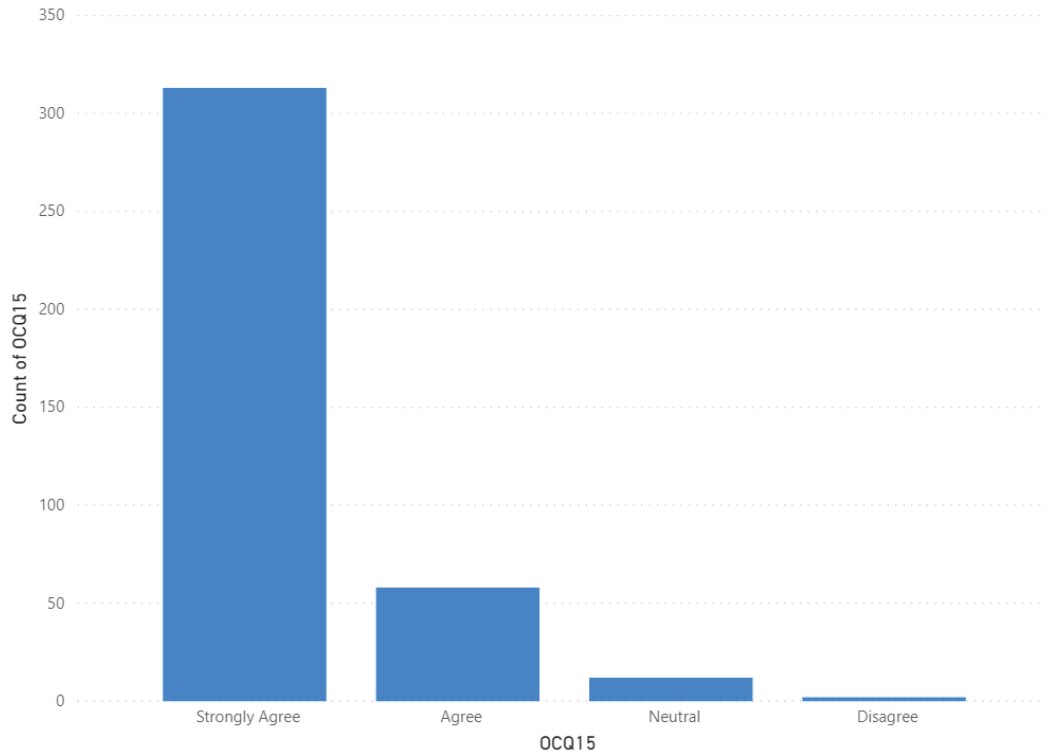
Figure 57-Bar graph on compromising policies to achieve goals

Conclusion:

Many a time compromises are to be made to achieve certain goals. But this compromises should be within specified limits and tolerances. The above descriptive data tells us that in the given organisation, principles and rules are compromised in order to achieve the operational goals.

58. People believe that change happens too quickly and causes too much disruption.

Table 68-Descriptive data on quick changes causing disruption

Mean	4.153246753
Standard Deviation	1.082481767
Sample Variance	1.171766775

Table 69-Frequency table on quick changes causing disruption

Levels	Counts	% of Total
Agree	172	44.7 %
Disagree	2	0.5 %
Neutral	14	3.6 %
Strongly Agree	167	43.4 %
Strongly Disagree	30	7.8 %
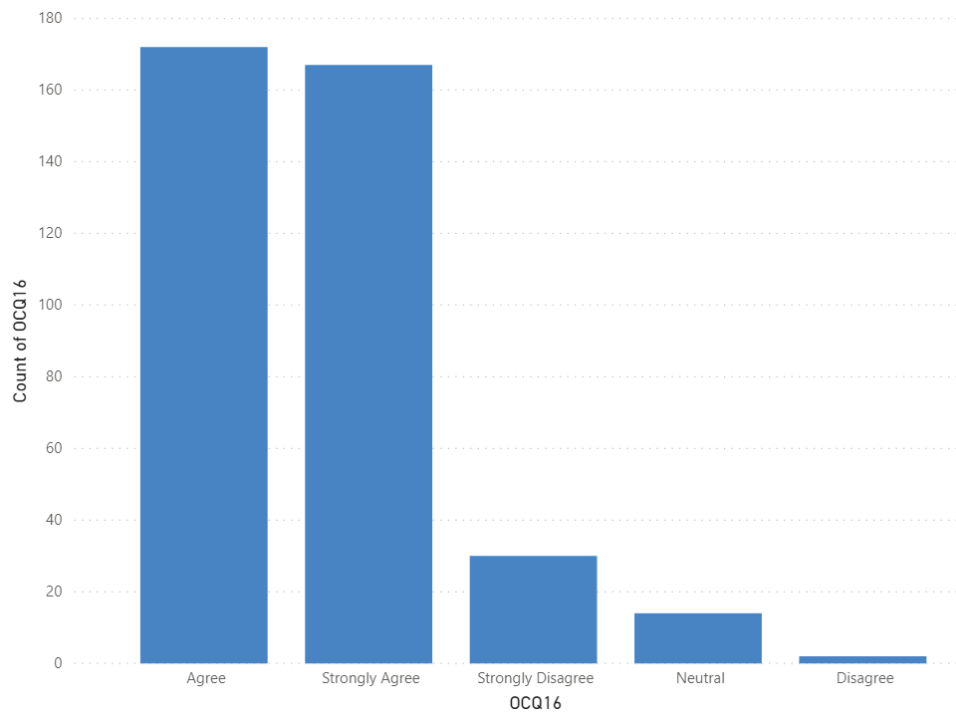
Figure 58-Bar graph on quick changes causing disruption

Conclusion:

We have historical evidence that quick and abrupt change is always followed by criticism. Because human beings take certain amount of time to adjust. The above data tells us that in the given company changes are made too quickly which leads to disruption in the existing process.

59. Individuals and teams participate in defining specific goals.

Table 70-Descriptive data on employees participation in defining goals

Mean	4.683116883
Standard Deviation	0.636028243
Sample Variance	0.404531926

Table 71-Frequency table on employees participation in defining goals

Levels	Counts	% of Total
Agree	67	17.4 %
Disagree	3	0.8 %
Neutral	21	5.5 %
Strongly Agree	293	76.1 %
Strongly Disagree	1	0.3 %
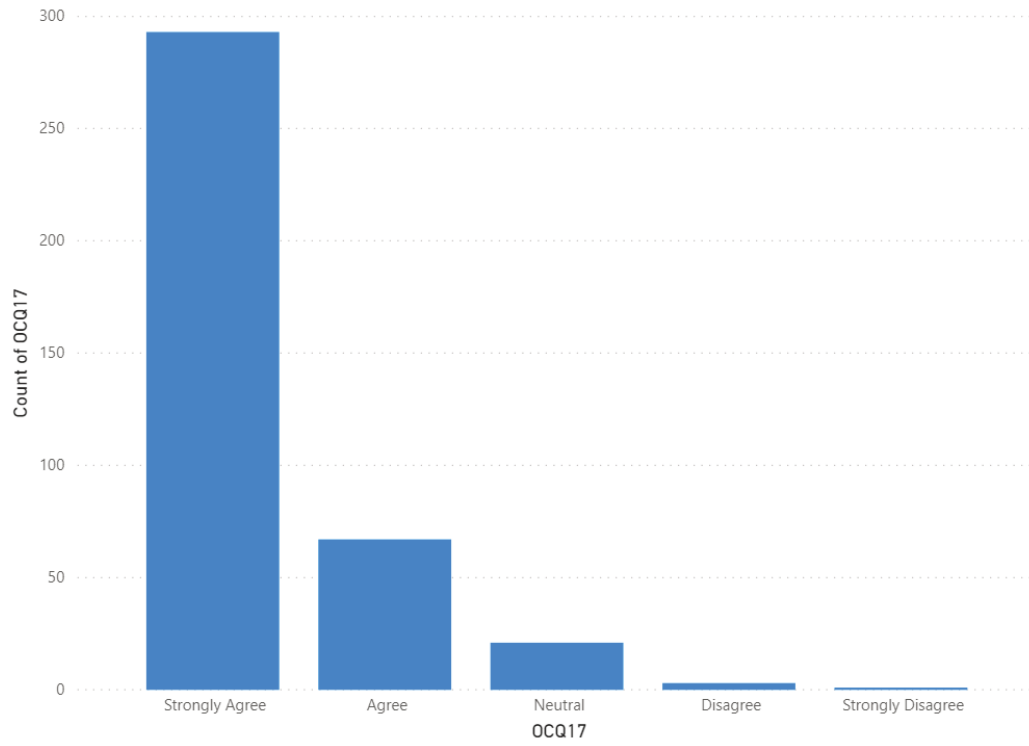
Figure 59-Bar graph on employees participation in defining goals

Conclusion:

Success of any organisation depends on how swiftly the employees are contribution to the development of that organisation. Ideally this contribution should be including top to bottom spectrum of employees. Altogether defining the goals helps to achieve them easily and quickly. The above data is evident that in the given company all the employees participate in defining specific goals.

60. People know what's expected of them and understand their impact on other people, teams and functions.

Table 72-Descriptive data on awareness of people about their role and responsibility

Mean	4.706493506
Standard Deviation	0.739217221
Sample Variance	0.5464421

Table 73-Frequency table on awareness of people about their role and responsibility

Levels	Counts	% of Total
Agree	30	7.8 %
Disagree	5	1.3 %
Neutral	26	6.8 %
Strongly Agree	320	83.1 %
Strongly Disagree	4	1.0 %
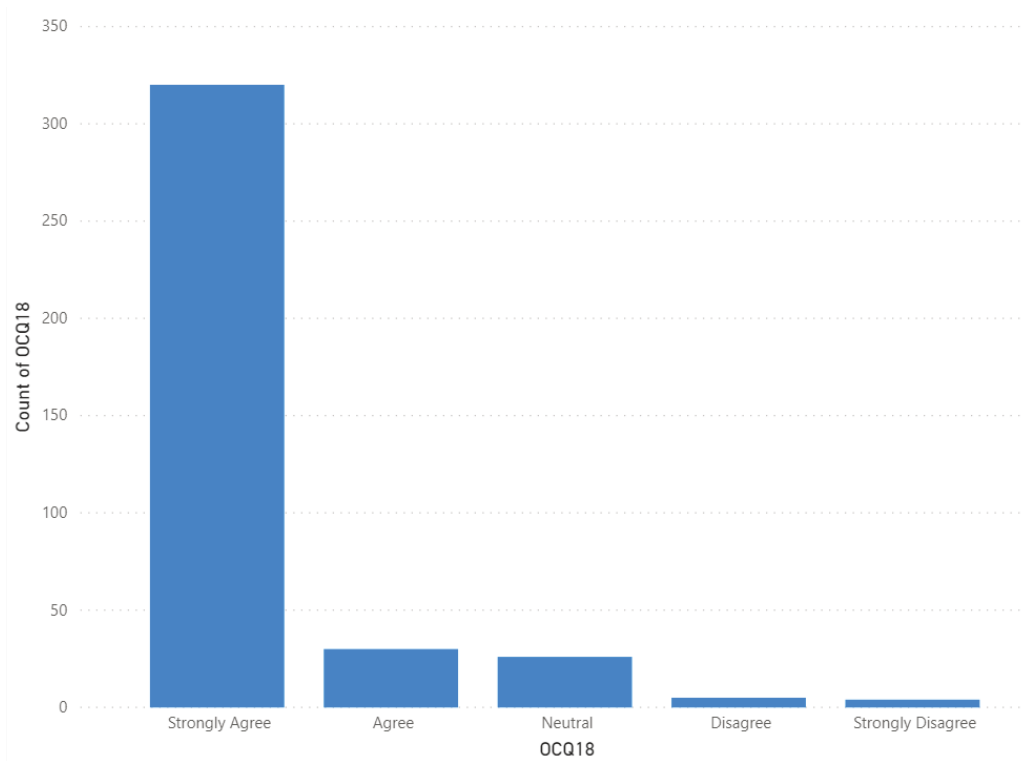
Figure 60-Bar graph on awareness of people about their role and responsibility

Conclusion:

Every employee in a company should be well aware about his/her role in the company and its aftermath impact on the stakeholders involved. The above descriptive data tells us that in the given company, the employees working are aware about how their functioning will affect other employees and teams involved.

61. People are always looking for new ways to better serve clients and customers.

Table 74-Descriptive data on new techniques to serve customers

Mean	4.781818182
Standard Deviation	0.628475187
Sample Variance	0.394981061

Table 75-Frequency table on new techniques to serve customers

Levels	Counts	% of Total
Agree	41	10.6 %
Disagree	1	0.3 %
Neutral	10	2.6 %
Strongly Agree	328	85.2 %
Strongly Disagree	5	1.3 %
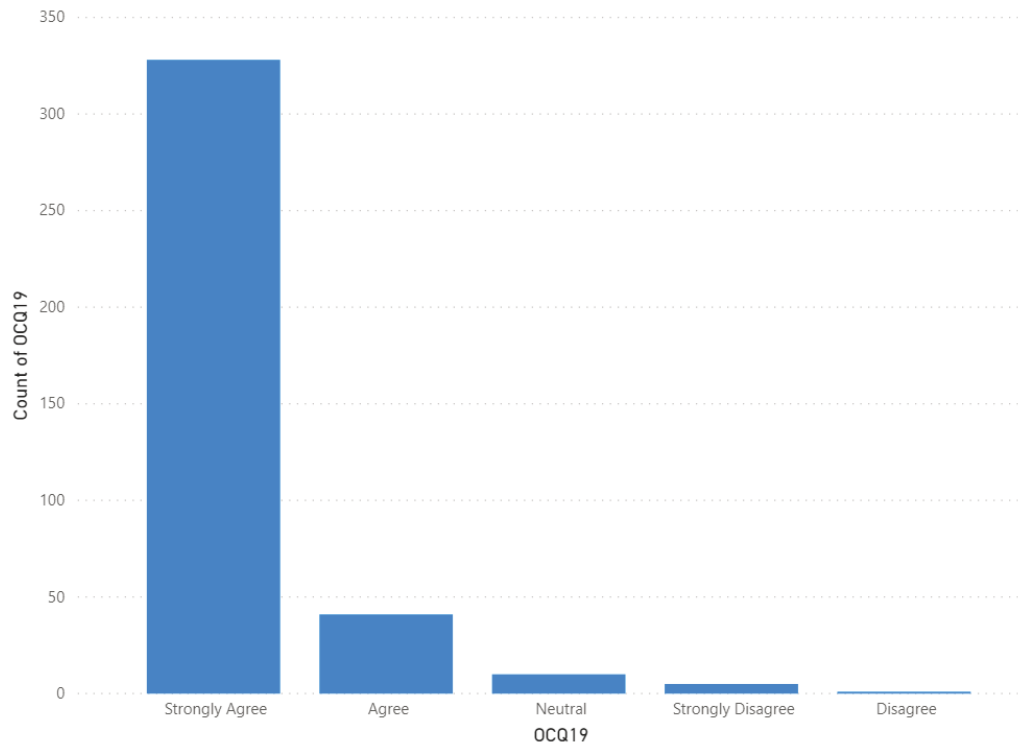
Figure 61-Bar graph on new techniques to serve customers

Conclusion:

To maintain their status in this ever increasing competitive market, every company strives hard to please and impress their clients and customers in every possible way. This is done with the help of introducing new ways and techniques to meet the needs of their customers and solve their

problems and grievances. The above data tells us that the company under consideration is on the fore front to effectively handle their customers.

62. Business decisions are most often made on the basis of facts, not just perceptions or assumptions.

Table 76-Descriptive data on taking factual business decisions

Mean	4.716883117
Standard Deviation	0.637663908
Sample Variance	0.40661526

Table 77-Frequency table on taking factual business decisions

Levels	Counts	% of Total
Agree	66	17.1 %
Disagree	1	0.3 %
Neutral	12	3.1 %
Strongly Agree	302	78.4 %
Strongly Disagree	4	1.0 %
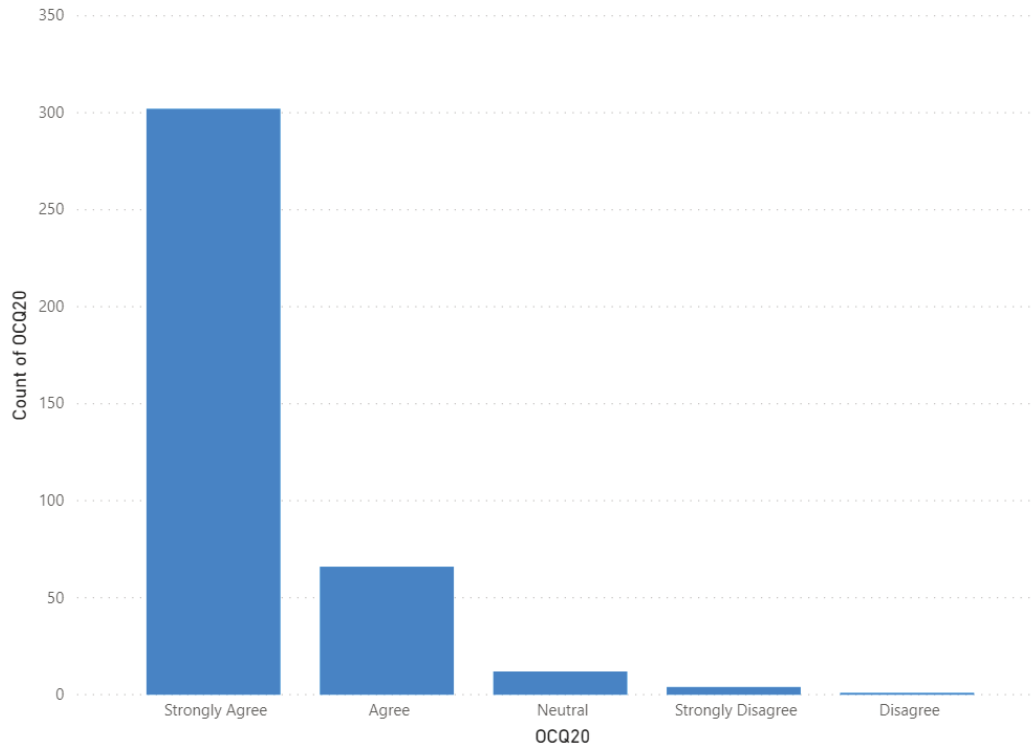
Figure 62-Bar graph on taking factual business decisions

Conclusion:

In any business risk is involved and hence any decision should be backed up with data, facts and figures. Emotionally driven decisions made on assumptions and perceptions cannot hold strong in the long run. In the given company also, as the above data suggests, the business decision are taken based on facts and figures.

63. People believe they can influence and affect their work place through their ideas and involvement.

Table 78-Descriptive data on employees contribution in influencing their workplace

Mean	4.61038961
Standard Deviation	0.594152148
Sample Variance	0.353016775

Levels	Counts	% of Total
Agree	115	29.9 %
Disagree	3	0.8 %
Neutral	13	3.4 %
Strongly Agree	254	66.0 %
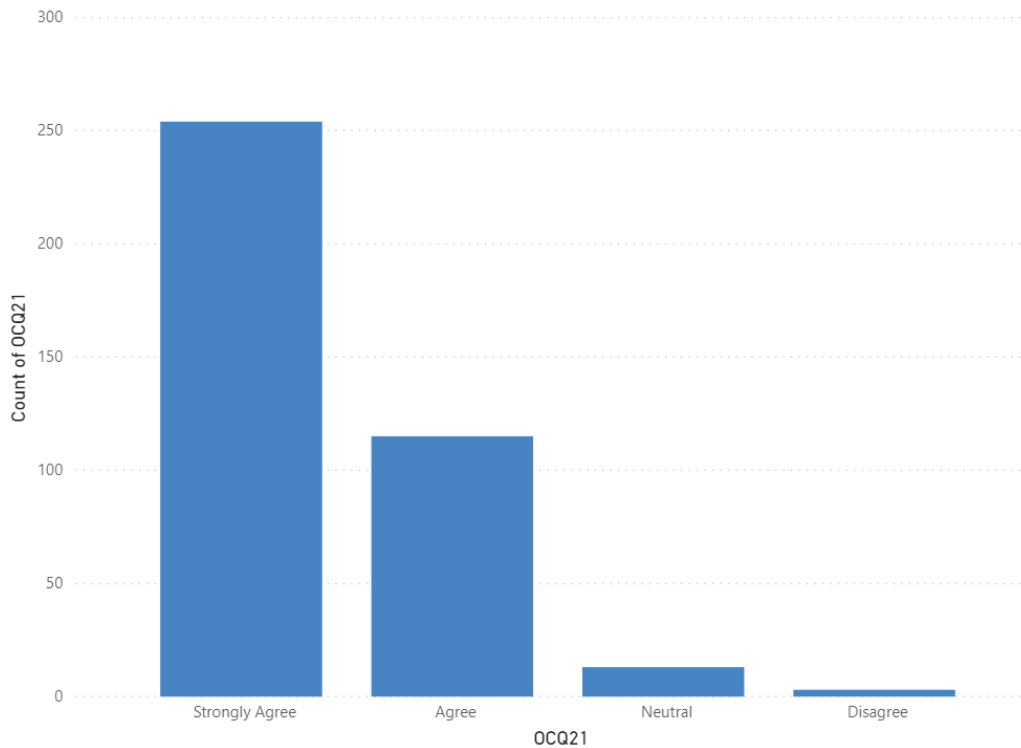
Figure 63-Bar graph on employees contribution in influencing their workplace

Conclusion:

Each and every employee's contribution should be considered in planning and executing any process. The above data tells us that in the given organisation, people's contribution are considered and people think that they can bring a significant change by their ideas and involvement.

64. We constantly stretch our goals, to continuously improve.

Table 80-Descriptive data on continuous improvement

Mean	4.607792208
Standard Deviation	0.598993564
Sample Variance	0.35879329

Table 81-Frequency table on continuous improvement

Levels	Counts	% of Total
Agree	119	30.9 %
Disagree	2	0.5 %
Neutral	11	2.9 %
Strongly Agree	252	65.5 %
Strongly Disagree	1	0.3 %
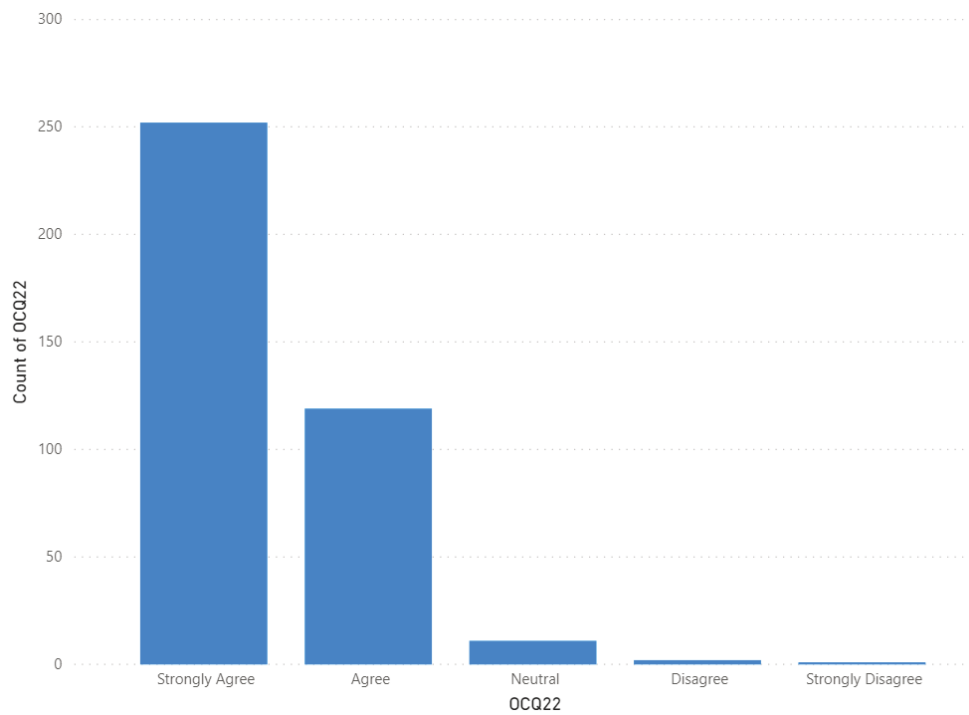
Figure 64-Bar graph on continuous improvement

Conclusion:

The above data is evident that the employees and the company as a whole takes new measures and techniques to reach and accomplish the targeted goals and strive hard to achieve the desired targets as well.

65. People believe in working together collaboratively, preferring cooperation over competition.

Table 82-Descriptive data on collaborative working

Mean	4.761038961
Standard Deviation	0.535255937
Sample Variance	0.286498918

Levels	Counts	% of Total
Agree	64	16.6 %
Disagree	4	1.0 %
Neutral	8	2.1 %
Strongly Agree	309	80.3 %
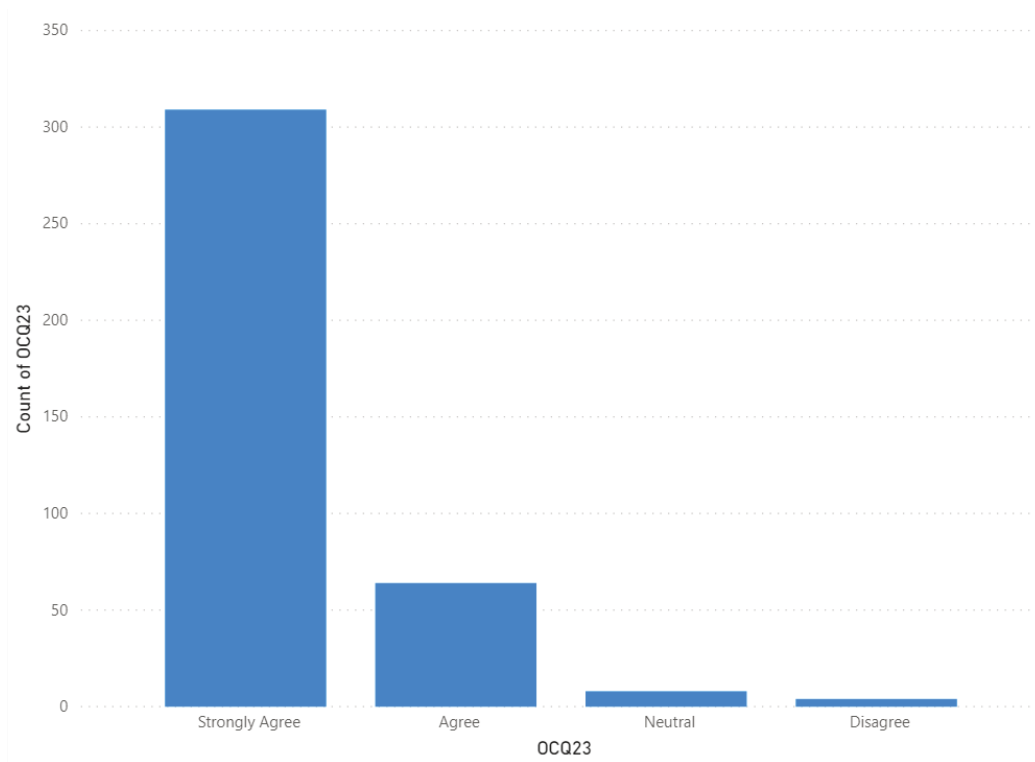
Figure 65-Bar graph on collaborative working

Conclusion:

Sometimes, team work leads to unhealthy competition for individual benefits. But this is not recommended as it leads to quarrels and misunderstanding among the employees. The employees in the company under consideration prefers collaborative working with co-operation rather that competition.

66. Employees who do the best job of serving customers are more likely than other employees to be recognized or rewarded.

Table 84-Descriptive data on rewards and recognition of employees based on their performance

Mean	4.875324675
Standard Deviation	0.408297993
Sample Variance	0.166707251

Table 85-Frequency table on rewards and recognition of employees based on their performance

Levels	Counts	% of Total
Agree	29	7.5 %
Disagree	1	0.3 %
Neutral	8	2.1 %
Strongly Agree	347	90.1 %
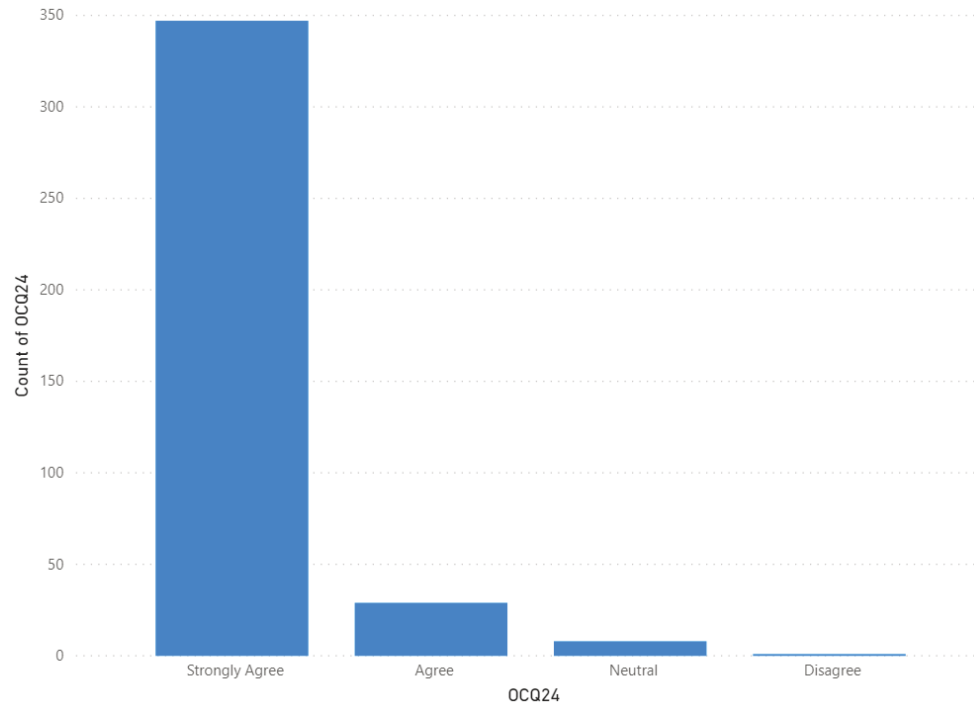
Figure 66-Bar graph on rewards and recognition of employees based on their performance

Conclusion:

Employees those who interact with their customers and serve them properly are more likely to be recognised and rewarded by the top management. The above descriptive data is evident that similar practice of recognition and reward is followed in the given company.

67. People have access to timely and accurate information about what's really happening in the organization and why.

Table 86-Descriptive data on transparency in company

Mean	4.685714286
Standard Deviation	0.542398773
Sample Variance	0.294196429

Levels	Counts	% of Total
Agree	102	26.5 %
Disagree	1	0.3 %
Neutral	6	1.6 %
Strongly Agree	275	71.4 %
Strongly Disagree	1	0.3 %
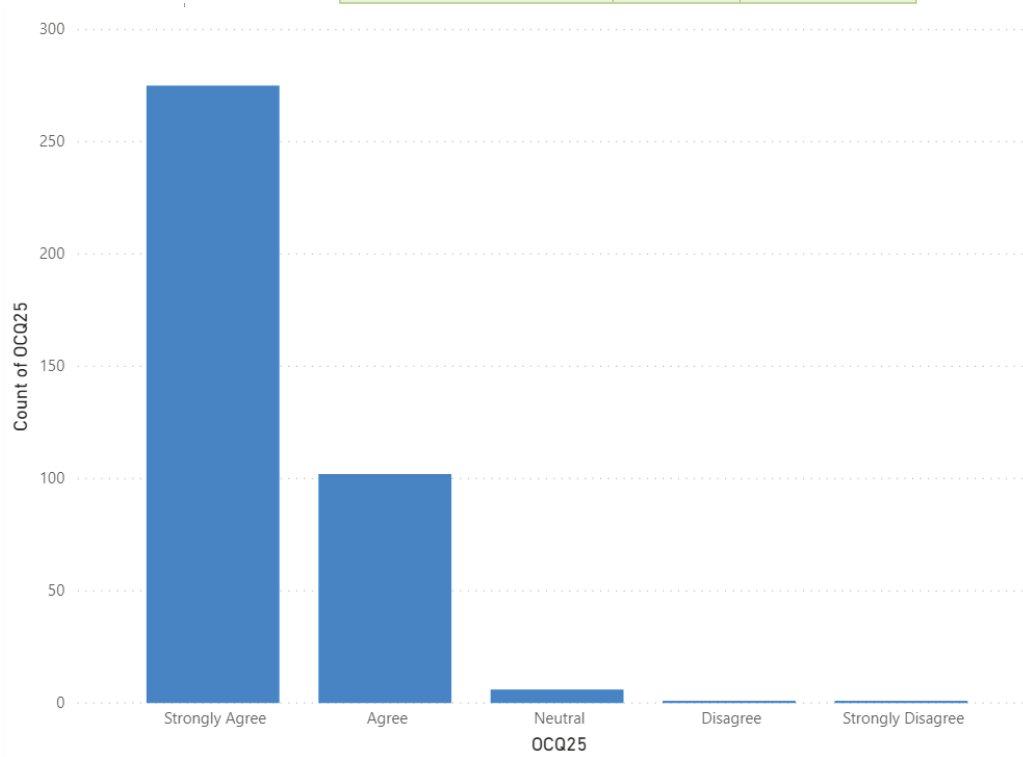
Figure 67-Bar graph on transparency in company

Conclusion:

Transparency in the company's management keeps the employees securely bonded to the company without any stress of future mishap. This transparency is maintained by regularly sharing data, facts, figures and important decisions of the top management with the employees. The above data

tells us that this act of sharing vital information regarding company matters is being practiced in this organization.

68. People believe that their concerns and anxieties during periods of change are heard and taken into consideration.

Table 88-Descriptive data on hearing employees concerns

Mean	4.787012987
Standard Deviation	0.722652566
Sample Variance	0.522226732

Table 89-Frequency table on hearing employees concerns

Levels	Counts	% of Total
Agree	24	6.2 %
Disagree	2	0.5 %
Neutral	8	2.1 %
Strongly Agree	342	88.8 %
Strongly Disagree	9	2.3 %
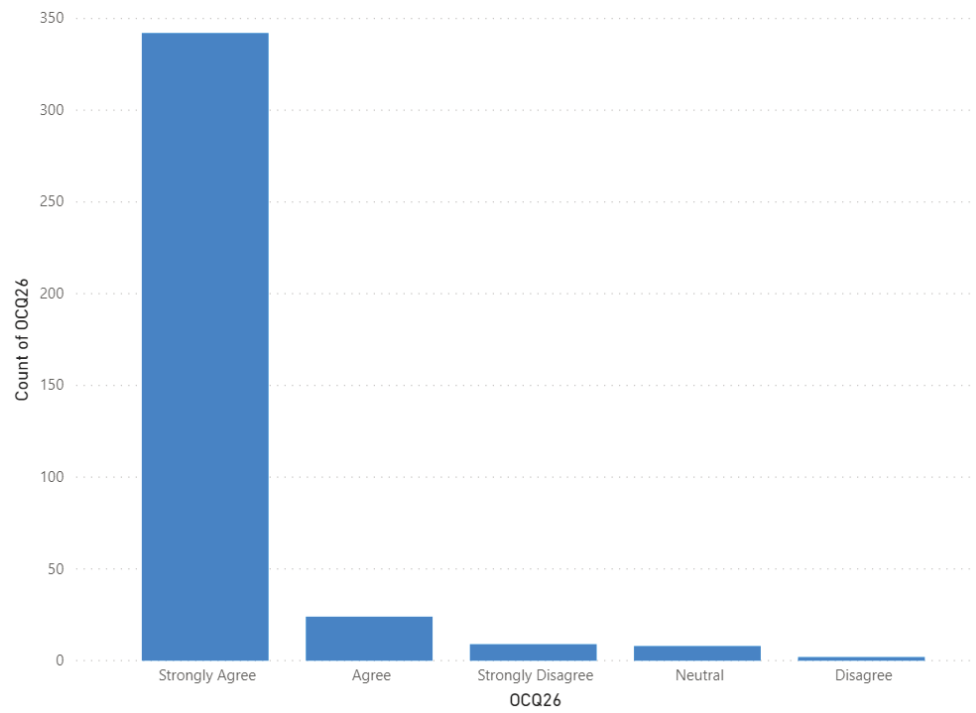
Figure 68-Bar graph on hearing employees concerns

Conclusion:

Changes has always been backed up with criticism. But also change is inevitable in any organisation. The only concern of the stakeholders is to resolve the issues arising with this changes for smooth operation. The data shown above tells us that such practice of hearing concerns and anxieties of employees is followed in the given company.

69. Individuals, teams, and functional areas often have incompatible goals.

Table 90-Descriptive data on incompatible goals

Mean	4.81038961
Standard Deviation	0.48185417
Sample Variance	0.232183442

Table 91-Frequency table on incompatible goals

Levels	Counts	% of Total
Agree	46	11.9 %
Disagree	1	0.3 %
Neutral	12	3.1 %
Strongly Agree	326	84.7 %
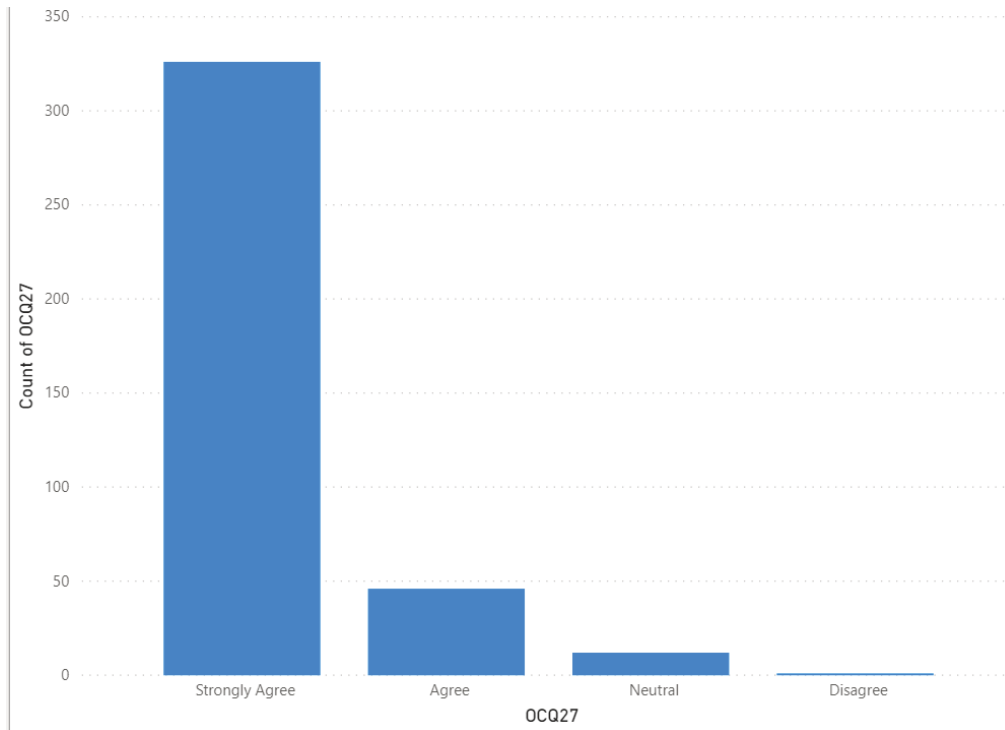
Figure 69-Bar graph on incompatible goals

Conclusion:

Sometimes goals are designed in such a manner that it becomes incompatible for individuals and teams to achieve. The above data is evident that such incompatible goals are formulated in the company under consideration.

70. Managers at all levels work together as a team to achieve results for the organization.

Table 92-Descriptive data on involvement of top managers

Mean	4.628571429
Standard Deviation	0.886657044
Sample Variance	0.786160714

Table 93-Frequency table on involvement of top managers

Levels	Counts	% of Total
Agree	59	15.3 %
Neutral	10	2.6 %
Strongly Agree	300	77.9 %
Strongly Disagree	16	4.2 %
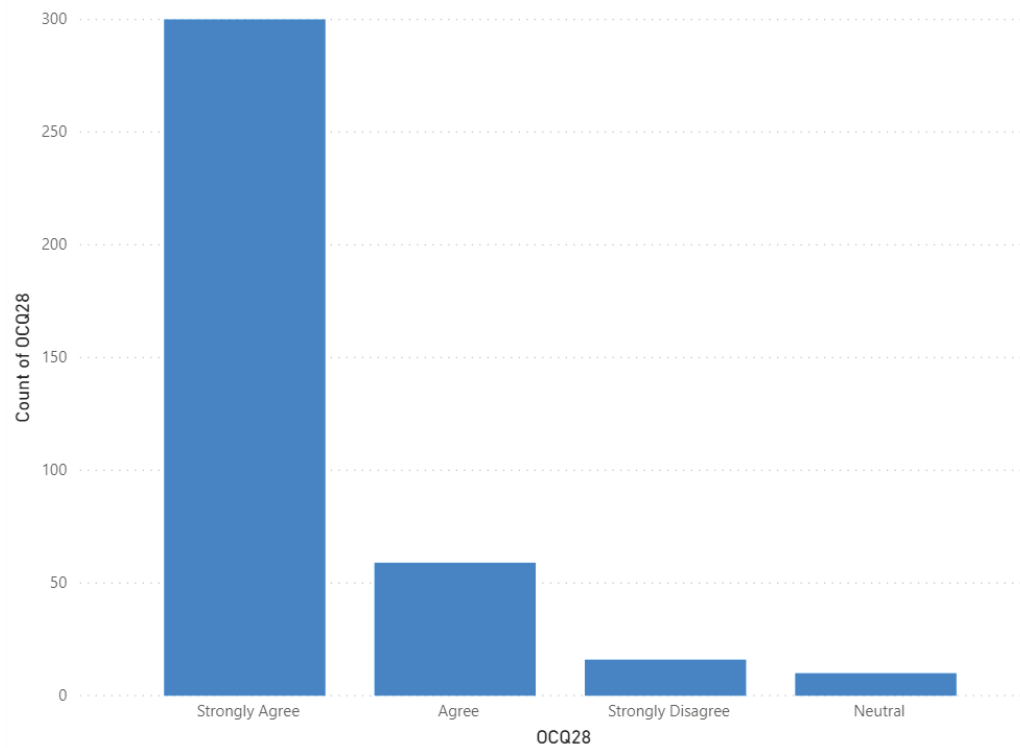
Figure 70-Bar graph on involvement of top managers

Conclusion:

The role of managers becomes crucial when it comes to goal oriented approach followed usually followed by most of the companies. As the data tells us, in the given organisation too managers of all levels strive hard for team work and organisational goal oriented approach.

71. When customers have problems with the products or service they receive, those problems are almost always resolved to their satisfaction.

Mean	4.761038961
Standard Deviation	0.535255937
Sample Variance	0.286498918

Levels	Counts	% of Total
Agree	64	16.6 %
Disagree	4	1.0 %
Neutral	8	2.1 %
Strongly Agree	309	80.3 %

Figure 71-Bar graph on resolving customers problems

Conclusion:

Customers should always remain happy and satisfied by the company and its services. For this reason, employees make extra efforts and try to resolve each and every problems faced by their customers to the earliest. The above data is evident that this practice of resolving customer issues promptly is practiced in the given company.

72. Everyone strongly believes in a set of shared values about how people should work together to solve common problems and reach mutual objectives.

Table 96-Descriptive data on belief in team work to solve common problems

Mean	4.875324675
Standard Deviation	0.408297993
Sample Variance	0.166707251

Levels	Counts	% of Total
Agree	29	7.5 %
Disagree	1	0.3 %
Neutral	8	2.1 %
Strongly Agree	347	90.1 %
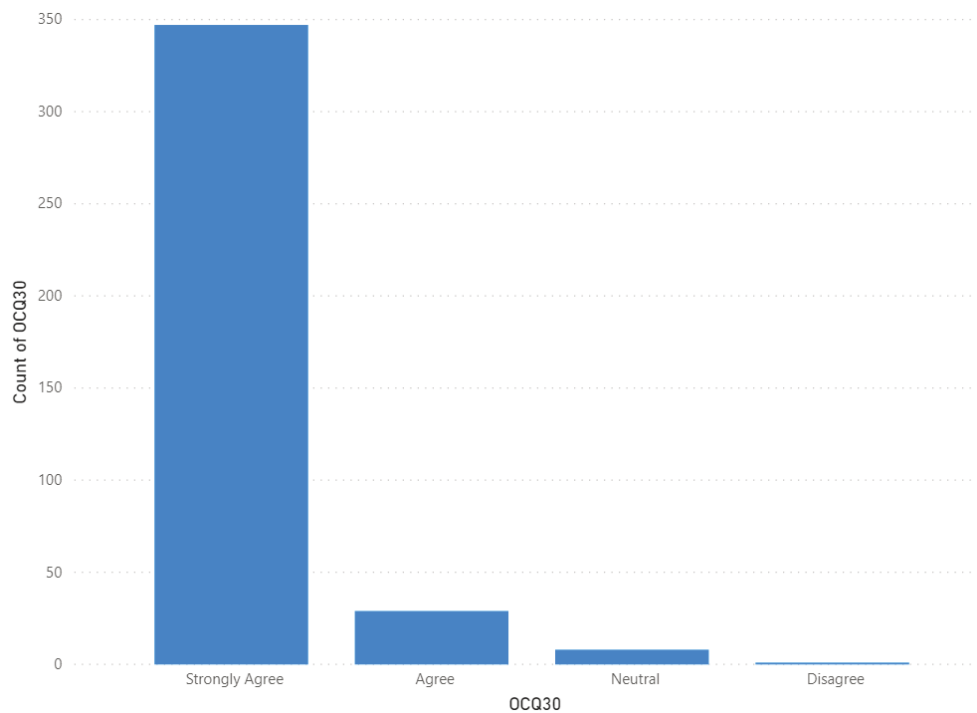
Figure 72-Bar graph on belief in team work to solve common problems

Conclusion:

Every employee in the organisation should work in co-operation to achieve the desired goals. There should be a feeling of co-operative working, mutual understanding and collaborative working to solve common issues. The above descriptive data is proof that such practice is followed by the employees of the given company.

Part-3: Hypotheses Testing

Research Question-1:

Whether there is any correlation between different dimensions of organizational culture?

Statistical Test: Pearson Correlation test

Hypothesis:

H0: There is no correlation between different dimensions of organizational culture.

H1: There is a correlation between different dimensions of organizational culture.

Level of Significance α = 0.05

Test Statistics:

Correlation Matrix

Correlation Matrix

		Managing_Change	Achieving_Goals	Coordinated_Teamwork	Customer_Orientation	Cultural_Strength
Managing_Change	Pearson's r	—				
	p-value	—				
Achieving_Goals	Pearson's r	0.602	—			
	p-value	< .001	—			
Coordinated_Teamwork	Pearson's r	0.588	0.548	—		
	p-value	< .001	< .001	—		
Customer_Orientation	Pearson's r	0.613	0.579	0.648	—	
	p-value	< .001	< .001	< .001	—	
Cultural_Strength	Pearson's r	0.552	0.657	0.652	0.632	—
	p-value	< .001	< .001	< .001	< .001	—

From the above correlation stable, we can see that p-value is less than 0.05 hence we reject the null hypothesis and accepts the alternate hypothesis and hence we can conclude that there is a correlation between different dimensions of organizational culture.

It is evident that change management is highly correlated to customer orientation, while achieving goal is highly correlated to cultural strength, also customer orientation and coordinated teamwork is highly correlated.

Research Question-2:

Whether there is any correlation between different dimensions of quality management from importance and practice perspective?

Statistical Test: Pearson Correlation test

Hypothesis:

H0: There is no correlation between different dimensions of quality management practice from importance and practice perspective.

H1: There is a correlation between different dimensions of quality management practice from importance and practice perspective.

Level of Significance α = 0.05

Test Statistics:

Relationship	Pearson Value	p-value	Status
Work Environment Culture Importance ↕ Work Environment Culture Practice	.270	Less than 0.05	Accepted
Education and Training Culture Importance ↕ Education and Training Culture Practice	.319	Less than 0.05	Accepted
System and Processes Culture Importance ↕ System and Processes Culture Practice	.028	More than 0.05	Rejected
Supplier Quality Management Culture Importance ↕ Supplier Quality Management Culture Practice	.183	Less than 0.05	Accepted
Continuous Improvement Culture Importance ↕ Continuous Improvement Culture Practice	.132	Less than 0.05	Accepted
Measurement and Feedback Culture Importance ↕ Measurement and Feedback Culture Practice	.329	Less than 0.05	Accepted

Resource Management Culture Importance ↕ Resource Management Culture Practice	.330	Less than 0.05	Accepted
Management and Leadership Culture Importance ↕ Management and Leadership Culture Practice	.123	Less than 0.05	Accepted

From the above correlation stable, we can see that p-value is less than 0.05 in all cases except Systems and Processes Culture Importance-Practice, hence we reject the null hypothesis and accepts the alternate hypothesis and hence we can conclude that there is a correlation between different dimensions of quality management practice from importance and practice perspective.

It is evident that education and training, measurement and feedback and resource management culture importance and practice were more correlated as compared to other dimensions.

Research Question-3:

Whether the organizational culture impacts the quality management practice?

Statistical Test: Multiple Regression test

Hypothesis:

H0: There is no impact on quality management practice due to organizational culture.

H1: There is an impact on quality management practice due to organizational culture.

Level of Significance α = 0.05

Test Statistics:

1. Work Environment Practice

Model Fit Measures							
				Overall Model Test			
Model	**R**	**R²**	**RMSE**	**F**	**df1**	**df2**	**p**
1	0.449	0.201	0.290	19.1	5	379	< .001

Model Coefficients – Work Environment Practice				
Predictor	**Estimate**	**SE**	**t**	**p**
Intercept	2.39710	0.2592	9.2496	< .001
Achieving Goals	0.26331	0.0650	4.0479	< .001
Cultural Strength	0.22440	0.0699	3.2117	0.001

What we can conclude from the above model testing statistics that model fit is there and we can say that the organizational culture dimensions do impact the quality management practice dimensions. Since the model fit is there due to p-values less than 0.05 we lead to interpret the model coefficients and got to know that out of 5 dimensions of organizational culture only 2 dimensions are there which impacts the work environment culture practice and these are the culture with achieving goals and cultural strength impact the work environment.

2. Education and Training Practice

Model Fit Measures							
				Overall Model Test			
Model	**R**	**R²**	**RMSE**	**F**	**df1**	**df2**	**p**
1	0.425	0.181	0.248	16.7	5	379	< .001

Model Coefficients – Education and Training Practice				
Predictor	**Estimate**	**SE**	**t**	**p**
Intercept	3.0457	0.2219	13.724	< .001
Achieving Goals	0.1465	0.0557	2.629	0.009
Cultural Strength	0.2537	0.0598	4.241	< .001

What we can conclude from the above model testing statistics that model fit is there and we can say that the organizational culture dimensions do impact the quality management practice dimensions. Since the model fit is there due to p-values less than 0.05 we lead to interpret the model coefficients and got to know that out of 5 dimensions of organizational culture only 2 dimensions are there which impacts the education and training practice with respect to quality management perspective are the culture with achieving goals and cultural strength.

3. System and Processes Practice

Model Fit Measures							
				Overall Model Test			
Model	**R**	**R²**	**RMSE**	**F**	**df1**	**df2**	**p**
1	0.514	0.264	0.216	27.2	5	379	< .001

Model Coefficients – System Processes Practice				
Predictor	**Estimate**	**SE**	**t**	**p**
Intercept	2.70199	0.1926	14.027	< .001
Achieving Goals	0.12720	0.0484	2.631	0.009
Cultural Strength	0.23636	0.0519	4.551	< .001

What we can conclude from the above model testing statistics that model fit is there and we can say that the organizational culture dimensions do impact the quality management practice dimensions. Since the model fit is there due to p-values less than 0.05 we lead to interpret the model coefficients and got to know that out of 5 dimensions of organizational culture only 2 dimensions are there which impacts the system and processes practice are the culture with achieving goals and cultural strength.

4. Supplier Quality Management Practice

Model Fit Measures							
				Overall Model Test			
Model	**R**	**R²**	**RMSE**	**F**	**df1**	**df2**	**p**
1	0.763	0.582	0.235	106	5	379	< .001

Model Coefficients – Supplier Quality Management Practice				
Predictor	**Estimate**	**SE**	**t**	**p**
Intercept	0.2183	0.2097	1.041	0.299
Managing Change	0.2745	0.0428	6.408	< .001
Achieving Goals	0.1507	0.0526	2.863	0.004
Customer Orientation	0.2411	0.0602	4.004	< .001
Cultural Strength	0.2859	0.0565	5.057	< .001

What we can conclude from the above model testing statistics that model fit is there and we can say that the organizational culture dimensions do impact the quality management practice dimensions. Since the model fit is there due to p-values less than 0.05 we lead to interpret the model coefficients and got to know that out of 5 dimensions of organizational culture almost 4 dimensions are there which impacts the supplier quality management practice and these are the managing change culture, achieving goals culture, Customer Orientation and cultural strength.

5. Continuous Improvement Practice

Model Fit Measures							
				Overall Model Test			
Model	**R**	**R²**	**RMSE**	**F**	**df1**	**df2**	**p**
1	0.622	0.387	0.360	121	2	382	< .001

Model Coefficients – Continuous Improvement Practice				
Predictor	**Estimate**	**SE**	**t**	**p**
Intercept	0.290	0.2837	1.02	0.308
Achieving Goals	0.534	0.0662	8.07	< .001
Coordinated Teamwork	0.401	0.0599	6.70	< .001

What we can conclude from the above model testing statistics that model fit is there and we can say that the organizational culture dimensions do impact the quality management practice dimensions. Since the model fit is there due to p-values less than 0.05 we lead to interpret the model coefficients and got to know that out of 5 dimensions of organizational culture only 2 dimensions are there which impacts the continuous improvement practice and these are the achieving goals culture, coordinated teamwork.

6. Measurement and Feedback Practice

Model Fit Measures							
				Overall Model Test			
Model	**R**	**R²**	**RMSE**	**F**	**df1**	**df2**	**p**
1	0.437	0.191	0.244	17.9	5	379	< .001

Model Coefficients – Measurement Feedback Practice				
Predictor	**Estimate**	**SE**	**t**	**p**
Intercept	3.0337	0.2183	13.897	< .001
Achieving Goals	0.1707	0.0548	3.115	0.002
Cultural Strength	0.2561	0.0589	4.351	< .001

What we can conclude from the above model testing statistics that model fit is there and we can say that the organizational culture dimensions do impact the quality management practice dimensions. Since the model fit is there due to p-values less than 0.05 we lead to interpret the model coefficients and got to know that out of 5 dimensions of organizational culture only 2 dimensions are there which impacts the measurement and feedback practice and these are the achieving goals culture, cultural strength.

7. Resource Management Practice

Model Fit Measures							
				Overall Model Test			
Model	**R**	**R²**	**RMSE**	**F**	**df1**	**df2**	**p**
1	0.616	0.379	0.202	46.3	5	379	< .001

Model Coefficients – Resource Management Practice				
Predictor	**Estimate**	**SE**	**t**	**p**
Intercept	2.1895	0.1809	12.105	< .001
Achieving Goals	0.1394	0.0454	3.071	0.002
Customer Orientation	0.1348	0.0519	2.595	0.010
Cultural Strength	0.2468	0.0488	5.061	< .001

What we can conclude from the above model testing statistics that model fit is there and we can say that the organizational culture dimensions do impact the quality management practice dimensions. Since the model fit is there due to p-values less than 0.05 we lead to interpret the model coefficients and got to know that out of 5 dimensions of organizational culture only 3 dimensions are there which impacts the resource management practice and these are the achieving goals culture, customer orientation and cultural strength.

8. Management and Leadership Practice

Model Fit Measures							
				Overall Model Test			
Model	**R**	**R²**	**RMSE**	**F**	**df1**	**df2**	**p**
1	0.732	0.536	0.275	220	2	382	< .001

Model Coefficients – Management Leadership Practice				
Predictor	**Estimate**	**SE**	**t**	**p**
Intercept	0.0532	0.2218	0.240	0.810
Achieving Goals	0.4550	0.0561	8.104	< .001
Cultural Strength	0.5267	0.0567	9.282	< .001

What we can conclude from the above model testing statistics that model fit is there, and we can say that the organizational culture dimensions do impact the quality management practice dimensions. Since the model fit is there due to p-values less than 0.05 we lead to interpret the model coefficients and got to know that out of 5 dimensions of organizational culture only 2 dimensions are there which impacts the management and leadership practice and these are the achieving goals culture, cultural strength.

Research Question-4:

Whether there is any association between business nature of organization and wining quality award?

Statistical Test: Chi square test

Hypothesis:

H0: There is no association between business nature of organization and winning quality award.

H1: There is an association between business nature of organization and winning quality award.

Level of Significance α = 0.05

Test Statistics:

Contingency Tables			
	Has your company won any quality award		
Business nature of your company	No	Yes	Total
Assembling	56	5	61
Manufacturing	216	29	245
Service	78	1	79

χ² Tests			
	Value	df	p
χ²	8.15	2	0.017
N	385		

Observation: χ² (8.15,2) =0.017

Association Between Business Nature of Company * Winning Quality Award

From the above test statistics and observation we can conclude that there is an association between business nature of organization and winning quality award. From the graph and cross tabulation mentioned above we can say that the business who are having manufacturing activity has won quality awards more as compare to assembling or service business activity.

Chapter-5: Conclusions and Recommendations and Scope for Future Research

5.1 Conclusions

From the data analysis, top management is aware that if everyone in the company understands its vision and mission, only people will believe in its growth and strive to improve quality management practices. If they failed to understand the vision and mission, it would impact the quality management adversely.

Since the communication channels are established appropriately between the employee and management, the senior management and the managers want to empower them because they can efficiently perform their tasks with a quality feedback mechanism.

From the data analysis, we can conclude that organizations involved in the study are serious about the responsibility towards society and consider all the issues in society seriously. Also, they think about various options to create the change for the better this attitude of the organization and the management leads to take care of their employee's health and safety on topmost priority hence we can see that the organizations who are socially responsible they also do take care of their employees well.

Since we have found from the data analysis that company organizations involved in this research study have appropriate coaching, mentoring and training programs for the development of the employees, which leads to more capable human resources or workforce hence we can say that companies which invest in training and development seriously their workforce also becomes capable that much.

As we have seen that organizations involved in our research study were very prompt to provide necessary tools and equipment is for the employees to carry out their task which ultimately helps employees to be innovative in improvising the processes and the quality management practices in order to achieve the respected growth as visualize by the organization.

From the analysis, we conclude that where is the relation between how the company manages its resources and the satisfaction customer derived from companies search operational gesture, we can conclude that if the company can manage its resources appropriately, it helps them, in the long run, to keep the customer satisfaction at the higher level.

When we have analyzed the data that companies collect from different functional departments, we conclude that organizations are leveraging the data available to them to understand trends and patterns and build out efficient organizational strategies for long term sustenance and growth.

From the organization's perspective, we can also conclude that giving due consideration to the employee's concern is majorly practised by them, which ultimately helps the organization improve its productivity. In return, employees have been appreciated appropriately.

Since we have seen in earlier conclusions that organizations are giving importance to customers' satisfaction and looking forward to data-centric app root hey approach hey since we can say that improvising is in the blood of these organizations. This improvement was not restricted to a particular Department. However, it is organization-wide, helping the organization be more proactive in managing its quality and operational issues. Also, we can say that in terms of the conclusion that companies, all Products services and processes always remain in the improvement phase due to the availability of the various tools and techniques at their disposal.

The organizations are following standard operating procedures where they are mentoring and coaching their suppliers hey since these suppliers are carefully selected based on the quality aspects they provide; hence, the organization believes in building long-term relationships with suppliers and educating them about the best practices involved in delivering quality products.

The critical conclusion which comes to highlight that is organizations is consistently doing the audits, which helps them to maintain the long term relationship with the clients and since everything is audited, the things are transparent, which helps clients to cross verify and build an environment of trust with the respective organizations to do the further business in the long run.

We can conclude that Organizations are focusing on implementing hi-tech systems to collect the required data. Quality can be assured this all can happen because these systems will help organizations understand the market, and this system has a mechanism where an employee of the organization can share their views in the light of quality management improvement.

Since organizations have well-designed evaluation techniques that help monitor the task in terms of workforce intellectuality, top management is very keen on developing its intellectuality and Technology from time to time.

The very essence of any organization is to remain agile and consistent in terms of quality. This can only happen if the workforce proactively gets involved in the various improvement programs of the organization. We can conclude that top management ensures that their workforce should have appropriate knowledge about the quality and processes through the appropriate learning and development programs.

It has also been noted that the workforce remains productive if they work in a safe and sound organizational climate. Hence, from the data analysis, we can conclude that organizations involved in the research study provide a safe and sound organizational climate that shows that the workforce remains upbeat and, on edge, by always sticking to the principle of continuous learning.

For any organization to be successful, it needs the one essential ingredient, the value that the organization respects and practices. The data analysis concludes that organizations involved in this research study proactively pay attention to developing organization-wide values in the workforce. This also helps the individuals work in the teams and towards the organization's mission, which leads to sustained work satisfaction and makes this happen organization keeps on conducting various engagement programs for them.

For any organization to remain efficient, one must continuously respond to the change since change brings out the best from all the organization's stakeholders. This helps the organization and its workforce be on their toe's by devising strategies that can help achieve the goals or mission set by the organization.

As we know, for any organization to succeed, the main ingredient is to keep their clients or customers happy, and this is only possible if they solve their queries in the given stipulated time. To make this happen most of the time, employees need to be empowered or have the authority to make the decisions. From the analysis, we can conclude that organizations are still following the centralization of power which can hinder the efficiency of employees from responding to customer queries and resolving them.

The data analysis researcher also concludes that the organization's top-level management often imposes decisions on the employees, which sometimes creates situations where unrealistic expectations are expected from the employees, even if the employees share the shared values and teamwork failed to deliver those unrealistic expectations.

As we have seen, the company culture or the organization climate plays a crucial role in how the organization's policies have been developed and how the individuals interact. This leads to the conclusion that if the vision and mission of the organization are more elaborative and exhaustive, more easily employees can understand it. They are subsequently helping the organization reach its objective.

Since the current research studies focusing on manufacturing units, we conclude that the employees of these organizations are well aware of the surroundings in which they operate and put all their efforts to respond to change effectively and efficiently. However, as we have seen that employee empowerment is lacking hey it also creates the problem hey incoordination or interpersonal engagement of the employees hey hence keep the morale of the employee's high organization should focus on employee empowerment and rewards in recognition.

As we are talking about manufacturing units, we conclude that these units are operating to respond to this dynamic change with many constraints. Organizations are finding a shorter or quick way that might disturb their existing processes. Also, this is happening because of rules bending the nature of these organizations to achieve the goals.

For any organization to remain at the forefront is only possible if they manage their customers well. This can only happen if the top to the bottom level workforce of the organization is in sync. We can conclude that they are in sync, and that is why they understand their actions can impact other employees and, hence, act appropriately.

Without risk, no organization can grow; hence, organizations involved in the research study should take a data-driven approach while minimizing the uncertainty and confidently approaching risk. Also, employees think that their inputs make considerable impacts in the organization.

The employees want to work in collaboration fashion this helps then you also build good rapport and relationship with the respective customers enhance they got to recognize and rewarded for

their efforts also this is only possible when there is a transparency in the information sharing among the employee's and that too on the organization comprehensive level.

Since the organization can only grow if it can manage the internal concerns of the employees, from the data analysis, we can conclude that the organizations involved in the research study do address the concerns and the criticism raised by the employees. Also, managers play a crucial role in this with their goal-oriented approach to achieve the set expected goal of the organization. Hence, addressing the internal versus external climate is essential for any organization success, and remaining goal-oriented is of prime importance.

Also, we can conclude that if the employees' customer orientation is high, it will also help employees remain collaborative and work in a more coordinated fashion. It also helps in managing the change. If the strength specifically about the organizational culture is the high ability of that organization to achieve goals also goes exceptionally high.

The relationship between education entraining feedback and measurements and managing resources culture from the importance and actual practice point of view can conclude that these three factors about learning and development feedback and resource say top management give importance and practice them proactively.

We can also conclude that the two most critical significant factors that are goal achievement and the organization's cultural strength, are significant factors that can influence the feedback and measurement practice. However, these leadership and management practices the work environment of the organization but not prior learning and development function and the system and processes of the organization's practice are not working out to be a significant contributor. Hence, focusing on goal achievement and building up cultural strengths is essential for any organization involved in the research study.

He also concludes that goal achievement and cultural strengths do not influence the practices mentioned above. However, all the practices such as supplier quality management, continuous improvement in resource management, particularly when it comes to supplier quality management practice, change management and orientation towards customers, are essential aspects that influence this practice and when the continuous improvement practice has to be considered teamwork mostly plays a role.

Last but not least, we can conclude that the organizations, explicitly manufacturing units as compared to the similar service units involved in the research study, have one or more quality awards. Since they are manufacturing, the aspect of delivering the quality is more on them than other two business activities, namely assembling and services.

5.2 Recommendations

The recommendations have been drafted based on analysis and conclusion of the research, which are mentioned below:

1. The organizations from assembling and service units should focus more on quality aspects since very few companies were focusing on this issue. This will only help them to elevate their brand image and create more sustainable business and customer retention.
2. Organizations should build their competencies around culture, orientation towards customers, goal setting, and collaborative working style since these are the factors that impact the organization's various practices in some or another way. Profoundly the culture and goal setting plays a significant role in shaping up the organizations future. Hence it should be appropriately crafted.
3. The system and process that organizations have must practice what they have in place because bending the system and process of the organization may disrupt the normal or routine practice and may create an environment for the employee that might not be comfortable. We have seen in our analysis and conclusion that these organizations do bend the policies and procedures sometimes. Thus, sticking to the principal system and processes will help the organization grow consistently and respond to change dynamically.
4. The orientation of the employees towards their customers is the key, and hence organizations should focus on building learning and development function around these aspects. The happier the client would be, the more sustainable the business would be.
5. The organization should design their mission and vision so that the employees of the organization can easily comprehend these things. This will become part of their working DNA which helps to create a competitive advantage for the organization.

6. For the success of any organization, transparent and lucid communication is the essential aspect, and hence proper communication channels must be established within the organization and should not put many constraints on information sharing.

7. From the research, we know that for the success of the organization, its employees have to be proactively involved in various activities and to do that, those employees have to be equipped with the right skills and hence the organization should invest appropriately in their respective learning and development functions.

8. Also, the organization should invest specifically in technology up-gradation if needed and leverage the data in whatever form they have; it will only help them create a competitive advantage over their competitors.

9. Since teamwork plays a significant role in achieving the goal set by the organization, it is of prime importance that hey organization should focus on building cross-functional communication and working strategy.

10. For healthy and long-term sustenance, the business organization should develop a coaching and mentoring program for their respective vendors or suppliers hey this will create trust between the two parties in the business but also helps in delivering quality products from time to time.

11. Since research is focused on the quality management aspect, agility is one thing that focuses on how one should respond to the change in this dynamic business environment; hence organizations should critically look into the organizational structure, which can offer flexibility in terms of decision making and manufacturing processes. It has to be done continuously because only consistent improvement can deliver the best quality products.

12. Employee empowerment and engagement are the two aspects that cannot be neglected, and organizations should positively work towards these aspects. One way to tackle this is by decentralizing the power/ authority, or we can say that giving autonomy to the employees in their date today jobs.

13. Measuring customer satisfaction from time to time can help the organization to build their strategies in terms of culture skill development and other aspects critically so that they can serve customers in a much better way in the upcoming features.

5.3 Scope for Future Research

As a researcher, it is evident that every research creates a plethora of opportunities for other researchers. The researcher aims to propose here some research prospects which future researchers can consider.

1. The researchers could take the opportunity to see the different management practices and their importance from top-level management and frontline employees, and it can give a 360-degree picture of reality in terms of practices and their importance.

2. The researchers could only conduct the study where the organizations mandatorily have quality certification, and it can create a more viable picture of how culture can influence the quality aspects in detail.

3. The study on identifying how customer satisfaction can impact the organization's culture, and thereby the quality management aspects add those respect to organizations.

4. The study can also be conducted on identifying the learning and development functions potential and employees learning index and how this can impact the culture and the quality management aspect.

5. Also, the study can be conducted play storm comparative mode, such as whether the business comes from manufacturing or assembling or from a service unit. This can create a knowledge base where one can learn from each other.

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SURVEY QUESTIONNAIRE

SECTION-1: DEMOGRAPHIC INFORMATION

In this section, we would like to know about your organization in general. Please tick in the appropriate boxes or fill in the blanks

1. What is the nature of your company?
   a. Manufacturing
   b. Assembling
   c. Service
   d. Others (Please specify) …………………

2. What is the status of the ownership of your company?
   a. Local (Indian)
   b. Joint Venture
   c. Fully foreign
   d. Others (Please specify) …………………

3. Which of the following quality awards have your company won?
   a. Quality Management Excellence Award
   b. State Quality Award
   c. Industry Excellence Award
   d. Others (Please specify) ………………..

4. What is your position in your company?
   a. CEO/ General Manager/ Director
   b. Quality Assurance/Control Manager
   c. Engineering Department Manager
   d. Production Manager
   e. Human Resource and Development Manager
   f. Others (Please specify) ………………..

5. Your association with this company or organization

    a. Less than 1 year

    b. 1 to 2 years

    c. More than 3 years

SECTION-2: QUALITY MANAGEMENT PRACTICES

This section attempts to determine the level of QM implementation in Pune automotive companies. Please circle your perception on the importance of each statement listed below and the extent practice in your organization. Please use the following scales:

A. IMPORTANCE (The level of perceived importance of the factor):

1 = Not important at all   3 = Neutral important   5 = Very important
2 = Not important   4 = Important

B. PRACTICE (The extent or degree of practice in your organization):

1 = Very low   3 = Moderate   5 = Very high
2 = Low   4 = High

For example: Quality policy is communicated to all employees.

If Importance = 4, this means it is perceived by you to be an important element for successful

QM and Practice = 5, this means it is very highly practiced.

FACTORS	IMPORTANCE	PRACTICE
F1. Management Leadership		
1. Top management ensures that every employee knows the company's mission and business objectives.	1 2 3 4 5	1 2 3 4 5
2. Top management strongly promotes staff involvement in quality management and improvement activities.	1 2 3 4 5	1 2 3 4 5
3. Managers and supervisors empower employees.	1 2 3 4 5	1 2 3 4 5
4. Communication links are established between employees and top management.	1 2 3 4 5	1 2 3 4 5
5. Top management takes care of employee well being (e.g. welfare, health and safety provision, etc.).	1 2 3 4 5	1 2 3 4 5
6. Company fulfils its social responsibilities (such as environment friendly operation, charity to school, etc).	1 2 3 4 5	1 2 3 4 5
F2. Resource Management		
1. Human resource ability considered in improvement activities.	1 2 3 4 5	1 2 3 4 5
2. Employees are given information and training they need to do the job effectively.	1 2 3 4 5	1 2 3 4 5
3. Employees are given tools they need to do the job effectively.	1 2 3 4 5	1 2 3 4 5
4. Sufficient financial resources provided to support improvement activities.	1 2 3 4 5	1 2 3 4 5
5. Company manages its material resources effectively.	1 2 3 4 5	1 2 3 4 5
F3. Measurement and Feedback		
1. Customer satisfaction level are measured and monitored.	1 2 3 4 5	1 2 3 4 5
2. Information on quality and customers are collected and analyzed.	1 2 3 4 5	1 2 3 4 5
3. Information on operational and financial performances are collected and analyzed.	1 2 3 4 5	1 2 3 4 5
4. Employees' views are listened to and acted upon.	1 2 3 4 5	1 2 3 4 5
5. Employee performance are measured and recognized.	1 2 3 4 5	1 2 3 4 5
F4. Continuous Improvement		
1. There is a quality improvement coordinating body (e.g. quality steering committee).	1 2 3 4 5	1 2 3 4 5
2. Improvement teams are active in all departments.	1 2 3 4 5	1 2 3 4 5
3. Quality improvement tools and techniques are widely used.	1 2 3 4 5	1 2 3 4 5
4. The company practices continuous improvement of all its products, services, and processes.	1 2 3 4 5	1 2 3 4 5

FACTORS	IMPORTANCE	PRACTICE
F5. Supplier Quality Management		
1. Suppliers are selected on the basis of quality aspects.	1 2 3 4 5	1 2 3 4 5
2. Company ensures that suppliers can maintain high technical standards and meeting quality specifications.	1 2 3 4 5	1 2 3 4 5
3. Company regularly conducts suppliers' quality audits.	1 2 3 4 5	1 2 3 4 5
4. Company works closely with suppliers toward long term partnership and improvement.	1 2 3 4 5	1 2 3 4 5
5. Suppliers provide relevant quality records and data.	1 2 3 4 5	1 2 3 4 5
F6. Systems and Processes		
1. Systems and procedures for quality assurances are implemented.	1 2 3 4 5	1 2 3 4 5
2. Internal data collection system is established.	1 2 3 4 5	1 2 3 4 5
3. Market information and feedback system is established.	1 2 3 4 5	1 2 3 4 5
4. The employees involved in different processes know how to evaluate them.	1 2 3 4 5	1 2 3 4 5
F7. Education and Training		
1. Top management always updates their knowledge.	1 2 3 4 5	1 2 3 4 5
2. Employees are trained for job related skills.	1 2 3 4 5	1 2 3 4 5
3. Employees are trained on total quality concepts.	1 2 3 4 5	1 2 3 4 5
4. Continuous learning is provided through education and training.	1 2 3 4 5	1 2 3 4 5
F8. Work Environment and Culture		
1. A pleasant environment exists in all working areas.	1 2 3 4 5	1 2 3 4 5
2. Positive values such as trust, honesty, hardworking, are fostered by management.	1 2 3 4 5	1 2 3 4 5
3. Teamwork and involvement are normal practices in the company.	1 2 3 4 5	1 2 3 4 5
4. The company adopts 'Employee satisfaction' initiatives (such as suggestion schemes, profit sharing, etc.).	1 2 3 4 5	1 2 3 4 5

SECTION-3: ORGANIZATIONAL CULTURE

Sr. No.	Structured Questionnaire	SD	D	N	A	SA
1	People are flexible and adaptable when changes are necessary.					
2	Individuals and teams have clearly defined goals that relate to the goals and mission of the business.					
3	Teams often lack the authority needed to get the job done effectively.					
4	We give the highest priority and support to meeting the needs of clients and customers and to solving their problems.					
5	People value and make use of one another's unique strengths and different abilities.					
6	People feel that most change is the result of pressures imposed from higher up in the organization.					
7	People and teams are often expected to reach goals which they believe are unattainable.					
8	People believe in teamwork, the "what's in it for us" approach rather than "what's in it for me."					
9	Our policies and procedures help us to provide the service our customers want and need.					
10	Everyone knows and understands our business objectives and priorities.					
11	People have a clear idea of why and how to proceed throughout the process of change.					
12	Individuals and teams are measured and rewarded according to how well goals are achieved.					
13	People lack the interpersonal and technical skills they need to work effectively in teams.					
14	People often see customer and client problems as someone else's responsibility.					
15	People sometimes compromise company policies or principles to reach operational goals.					
16	People believe that change happens too quickly and causes too much disruption.					
17	Individuals and teams participate in defining specific goals.					
18	People know what's expected of them and understand their impact on other people, teams and functions.					
19	People are always looking for new ways to better serve clients and customers.					
20	Business decisions are most often made on the basis of facts, not just perceptions or assumptions.					
21	People believe they can influence and affect their work place through their ideas and involvement.					
22	We constantly stretch our goals, to continuously improve.					
23	People believe in working together collaboratively, preferring cooperation over competition.					
24	Employees who do the best job of serving customers are more likely than other employees to be recognized or rewarded.					
25	People have access to timely and accurate information about what's really happening in the organization and why.					
26	People believe that their concerns and anxieties during periods of change are heard and taken into consideration.					
27	Individuals, teams, and functional areas often have incompatible goals.					
28	Managers at all levels work together as a team to achieve results for the organization.					
29	When customers have problems with the products or service they receive, those problems are almost always resolved to their satisfaction.					
30	Everyone strongly believes in a set of shared values about how people should work together to solve common problems and reach mutual objectives.					

Annexure-2

BHOSARI & PIMPRI CHINCHWAD AREA

1. Renuka Auto Components: (Annual Turnover: Rs. 5 - 10 Crore, Manpower 45 People) (No. of Samples: Prod. Mngr. 2, Q.C. Mngr.01)

Renuka is brand well known for its premier quality and delivery. Mr Madigeri started machining components in 1999, then Renuka did backward integration and diversification into aluminum casting business, then all supporting activity like shot blasting, powder coating were steup in house for quality assurance. Address – Survey No.23, Bhagat Wasti, Dhawade Vasahat, Hanuman Nagar, Bhosari, Pune, Maharashtra 411026

2. Autoline Industries Ltd: (Turnover Rs. 284.14 Crore, Manpower 78 People) (No. of Samples: Prod. Mngr. 5, QA Mngr.01)

Autoline Industries Ltd (AIL) (incorporated on December 16, 1996, as Autoline Stampings Private Ltd.) was initially set up in January 1995 as a partnership firm known as "Autoline Pressings" under Indian Partnership Act 1932.Our Company has grown into a medium sized engineering and auto ancillary Company, manufacturing sheet metal components, sub-assemblies and assemblies, Foot Control Modules, parking brakes, hinges, cab stay and cab tilt, exhaust systems, tubular structures, fabrications, etc. Address – 12-17, Bhosari Telco Rd, near Thermax Envi. Divison, MIDC, Bhosari, Pimpri-Chinchwad, Maharashtra 411026

3. Lumax Auto Technology: (Turnover Rs. 902.95 Crore)

(No. of Samples: Prod. Mngr. 42, Engg. Dept. Mngr.45) LUMAX auto is 9,000-strong workforce, working across 33 modern manufacturing locations across 8 states. This manufacturing strength is backed by 4 Research Centers and 1 design center in Taiwan. The Lumax Group diligently empowers the assembly lines of almost all Top Automotive OEM brands. Address – W 230 's' Block, M I D C, Bhosari, Pune, Maharashtra 411026

4. Bharat Automotive Pressings India Pvt. Ltd.: **(Turnover: Rs. 10 - 25 Crore, Manpower 200 People) (No. of Samples: Prod. Mngr. 6, QC Mngr.03, Engg. Dept. Mngr. 10)**

Welcome to Bharat Automotive Pressings India Pvt. Ltd. (BAPIPL) an ISO/TS 16949-2009 Certified Company established in the year 1991. BAPIPL is located in the heart of MIDC. Industrial belt of Pimpri-Chinchwad at Pune a place having one of the biggest Industrial belts in India. Address – W 148/149 S Block , MIDC, Bhosari, Pimpri Pune, Maharashtra 411026

5. Patson Auto Products Pvt Ltd.: (*Turnover*, Rs. 5 - 10 Crore, Manpower 23 People) (CEO. 01, GM. 01, Prod. Mngr. 4, Engg. Dept. Mngr. 7)

Patson Auto is a group of engineering companies engaged in the manufacture of precision machined auto components and assemblies since 1982. With production facilities in Pune our product list includes planetary gear box housings, under bracket assemblies, material handling systems and other precision machined components. Address – J-248, M I D C, M I D C Bhosari, Pune, 411026, Pimpri Chinchwad New Twp Development Authority, Bhosari, Pimpri-Chinchwad, Maharashtra 411026

6. Tapovan Auto Tech Pvt. Ltd.: (Manpower 325, Annual *Turnover*. Rs. 10 - 25 Crore, Prod. Mngr. 14, Engg. Dept. Mngr. 17)

Tapovan Auto Tech provide Stamping Parts, Sheet Metal Press Component & Welding finds wide applications in the automobile industry. Manufacturing these components is one of the key capabilities that the team at Tapovan is fast acquiring and mastering. Tapovan Auto Tech understand that these components are highly critical for the performance, stability, and safety of an automobile and require extraordinary levels of craftsmanship. Address – Bhosari Alandi Road, J-175, MIDC Rd, Gavalinagar, Bhosari, Pimpri-Chinchwad, Maharashtra 411026.

7. Talbros Automotive Components Limited: (Turnover of Rs. 392.98 crore, Manpower 150) (No. of Samples: Prod. Mngr. 8, QC Mngr.02)

Talbros Automotive Components Ltd., the flagship manufacturing company of the Group was established in the year 1956 to manufacture Automotive & Industrial Gaskets in collaboration with Coopers Payen of UK. Today, after 58 successful years, Talbros stands proud and tall as a mother brand of Gaskets & Heat Shields, Forgings, Suspensions Systems and Anti Vibration components and Hoses. Talbros Group has strong partnerships formed with global giants. Address – Plot No 68, Block F-2, MIDC, Pimpri Colony, Pune, Maharashtra 411018

8. Classic Automotive Industries Pvt. Ltd.: (Manpower 40, Turnover : Rs 55 Lakhs) (No. of Samples: Prod. Mngr. 3, QA Mngr.01)

Arco Whitney, is a leading brand name in hydraulic equipment's in India and is being manufactured by Classic Automotive Industries Pvt. Ltd. (CAIPL) Pune, India. Classic Automotive specializes is in Bus Bar Shearing Machines, Bus Bar Punching Machines, Bus Bar Bending Machines, Bus Bar Notching Machines. Angle / Channel Shearing Machines, Angle / Channel / I-beam Punching Machines, Angle / Channel Notching Machines, Portable Hydraulic Equipment's , Special Purpose Presses and the required power pack units.
Address – Dhanna 64/4, D-II Block, MIDC Chinchwad, Pune, Maharashtra 411019

CHAKAN AREA

9. Tata Autocomp Hendrickson Suspension Pvt. Ltd.: (*Turnover* Rs. 100 - 500 Crore, Manpower 3500) (No. of Samples: Prod. Mngr.56, QC Mngr.03)

Tata AutoComp Systems, promoted by the Tata Group, provides products and services to the Indian and Global automotive OEMs as well as Tier 1 suppliers. Tata AutoComp Systems' portfolio includes Automotive Interior & Exterior Plastics, Composites, Sheet Metal Stampings, Engine cooling solutions, Automotive Batteries, Rear View Mirrors, Command systems like Park Brake Lever, Gear Shifters, Washer Systems, HVAC solutions, Exhaust and Emission control systems, Seating systems and Electronic solutions including ADAS, BMS, Telematics, etc. Address – 679/2, Chakan Alandi Rd, Kurali, Pune, Maharashtra 412105

10. Tenneco Automotive India Pvt Ltd. (Turnover Rs. 500 Cr. Manpower 1834) (No. of Samples: Prod. Mngr. 54, QC Mngr.01, Engg. Dept. Mngr.5)

Tenneco is one of the world's leading designers, manufacturers and marketers of automotive products for original equipment and aftermarket customers, with 2019 revenues of $17.5 billion and approximately 78,000 team members working at more than 300 sites worldwide. Address – Gat no. – G6 Phase – III,Chakan MIDC Kuruli, Khed, Maharashtra 410501

11. Dura Auto India Pvt. Ltd. (Turnover 250 Cr., Manpower 300) (No. of Samples: Prod. Mngr. 18, Engg. Dept. Mngr.3)

DURA Automotive Systems is a global automotive supplier specializing in the design, engineering and manufacturing of solutions that drive the evolution of mobility. With a legacy comprising more than 100 years of inspired invention, the company is recognized by leading

vehicle manufacturers as the preferred supplier partner for innovative, highly integrated, mechatronic systems, and lightweight solutions. Address – Kharabwadi,Chakan, Pune, Maharashtra 410501

12. Imperial Auto Industries Limited (Turnover 500Cr.) (No. of Samples: Prod. Mngr. 27, Engg. Dept. Mngr.3)

Imperial Auto Industries Limited is India's largest integrated manufacturer and assembler of Fluid Transmission Products covering all spectrums, including flexible high-pressure assemblies, metal tubular assemblies, and low-pressure hose assemblies. Address – Chakan, Pune, Maharashtra 410501

13. Litens Automotive India Pvt Ltd (No. of Samples: Director-1) (Turnover 100 Cr.)

At Litens, we are driven to produce the most innovative powertrain technologies and products in the world. Litens Automotive invent technologies that reduce fuel consumption and carbon dioxide emissions. Litens Automotive provide total engineered solutions that help our customers build better vehicles. Address – Gat No 357, Waghjai Nagar Road, Off. Chakan Ambethan Road, Waghjai Nagar, Kharabwadi, Chakan, Pune, Maharashtra 410501

14. Ojass Auto Components Pvt. Ltd (No. of Samples: Prod. Mngr. 15)

Ojass Auto Components Pvt Ltd, is a leading manufacturer of precision automotive components & sub-assemblies for the automobile & mechanical sector. Our Journey in the Auto components manufacturing sector started in 1993 with the formation of Tanay Industries, a sole proprietorship firm, under the leadership of Sushil Kumar Gupta. Address – chakan, Pune, Maharashtra 412109

15. YASH INDUSTRIES (No. of Samples: Engg. Dept. Mngr.5)

YASH Industries a leading manufacturer supplier of Machined Casting, Sheet Metal Assay &Hot Forged components to OEMs (Vehicles Manufacturers) & Global Tier1 companies. Currently, YASH industries manufacturing Companion Flanges , Gear Carrier , Rear and Front Wheel Hub, Case Differential (Integral as well as Split), Tube Yoke, Flange Yoke, Brackets and many more parts for various applications such as Tractors, SUV, MUV & Car Segments in various grades from 450 to 800 and developing in 900 grade also. Now Group is having 8 plants across India. Address – Kharabwadi, Maharashtra 410501

16. Sudarshan Auto Electrical Components (No. of Samples: Engg. Dept. Mngr.4)

Established in 1994 engaged in the manufacturing of Wring Harness, Battery Cable, Suppressor Cap Assemblies and other allied products for Automotive, Elevators, FMCG products and Industrial Application. Sudarshan Auto Electrical have the infrastructure, unmatched expertise & trained professionals & equipped to meet the Global competition and provide service keeping in mind the price structure, timely delivery and Quality of the product. Address – Gat no 357/83,(New),Waghjai Nagar, Kharabhwadi, Khed-2,, Chakan, Maharashtra 410501

17. Super Auto India Ltd (No. of Samples: Engg. Dept. Mngr.2)

Super Auto India Limited, a name to reckon with. Since its inception in 1968, the company has excelled to redefine values and products in pressure die-casting and sheet metal fields. Our company specializes in Pressure die-casting components, Aluminum die-casting components, die-cast components, and automotive pressure die-casting components. Address – Gat No. 308, Nanekarwadi, Pune, Maharashtra 410501

<u>**OTHERS**</u>

18. Pravi Auto Swing Private Limited (No. of Samples: Director 01, Engg. Dept. Manager – 02)

Pravi Auto Swing is a Company designing and manufacturing gas springs to your specifications and needs. Over the past 25 years, Pravi Auto Swing has developed expertise in designing gas springs for various applications. Pravi Auto Swing is now entering the area of designing and manufacturing oil dampers.

Address – Plot No 5, S. No. 81/4A, Dangat Industrial Estate, Warje-NDA Road, Shivane, Pune, Maharashtra 411023

19. Kelkar Auto Parts (No. of Samples: Engg. Dept. Manager – 02)

Kelkar Auto Parts Pvt. Ltd. is an ISO 9001:2008 certified company catering OEM and major engineering organization for manufacture and supply of IC engines parts and assemblies. The working Culture of Kelkar Auto Parts Pvt. Ltd. involves defect prevention, Promotion of continual Improvement, Reduction in variation & Waste elimination in the organization.

Address – SR. No. 25, 8, Damber Plant Rd, opposite Dran Engineers, Narhe, Pune, Maharashtra 411041

20. Panorama Automotive Industries Pvt. Ltd (No. of Samples: Prod. Mgnr. 01, Engg. Dept. Manager – 02)

Panorama Automotive is manufacturers of Specialized Fabricated Assemblies, Precision Machined Parts of Hydraulic Systems a Allied Rubber Bonded Components as Tier 1 Supplier for Automotive O.E.M's, Allied. Address – 98A/15A, behind Kirloskar Pneumatics, Hadapsar Industrial Estate, Hadapsar, Pune, Maharashtra 411013

21. Micro Supreme Auto Industries (I) Pvt. Ltd (No. of Samples: Prod. Mgnr. 01, Engg. Dept. Manager – 03)

Micro Supreme is a renowned manufacturer of Piston Cooling Jets/Nozzles of high precision and other engine components serving OEMs & Aftermarket globally. Micro Supreme range of products includes Piston Cooling Jets, Spray bars, Lubrication assembly for gears, In-Line Check Valves, Push Rods, Rocker arms assemblies, Injector Holding clamps, injector sleeves, valve guides, valve seats, valves, turbo shaft, steering components, high precision machined parts for various applications. Address – No.49, Opp Shatrunjay temple, Katraj Kondhwa Road, Kondhwa(BK), Pune, Maharashtra 411048

22. Automag India Pvt. Ltd (No. of Samples: Prod. Mgnr. 01, Engg. Dept. Manager – 02)

Automag is a leader providing a comprehensive range of intelligent automation, conveying, intra logistics and materials handling solutions. With a global knowledge network of highly skilled engineering professionals, we are able to provide our customers a unique perspective in world class engineering solutions & design. Address – Shri Krishna Nagar, Sagar Co-Operative Housing Society, Bavdhan, Pune, Maharashtra 411021

23. Automate India (No. of Samples: Prod. Mgnr. 01, Engg. Dept. Manager – 01)

Automate is delighted to introduce an a host of innovative products aimed at making driving easy and an ultimate pleasure. The object of developing these products is to give the common man the convenience of relaxed driving at an affordable cost. Automate's best selling product is the AUTO-Clutch – automatic transmission at an affordable cost. This patent product has been evolved over twelve years of Research & Development and is under constant improvement, keeping abreast with the changes in modern automobiles. Address – Factory : Auto-mate India Plot No. 10, S.No.28, Near Sus- Pashan Bridge Beside Buddha Vihar, Mumbai-Bangalore Highway, Sutarwadi, Pashan, Pune, Maharashtra 411021

Data Collection Period: January to April 2020

Sector	No. of Samples
Manufacturing Company	245
Service	79
Assembly	61
Total:	385

Positional Level	No. of Samples
Production Manager	254
Engineering Dept. Manager	115
QA/QC Manager	13
CEO/GM/Director	3
Total:	385

Awards Received by Companies

1. **Autoline Industries Ltd.**
   - "Quality Performance Award – 2013" by Volkswagen.
   - Best performance award for "Excellence in Quality" in sheet metal business at National Vendor meet – February, 2010 by Tata Motors Ltd.

2. **Lumax Auto Technology.**
   - 2017: Chakan plant received TPM excellence award from JIPM.
   - 2020: Bengaluru plant has been awarded JIPM-TPM Excellence award.

3. **Bharat Automotive Pressings India Pvt. Ltd.**
   - Received the award of RASHTRIYA UDYOG in the year of 1995 from International Economic Forum.
   - Excellence award in the year - 2001.

4. **Tapovan Auto Tech Pvt. Ltd.**
   - Customer Satisfaction Awards By MAGNA in 2015.
   - Customer Satisfaction Awards By JBM in 2018.

5. **Tenneco Automotive India Pvt. Ltd.**
   - 2012 John Deere Supplier Innovation award
   - 2012 GM Brazil Supplier of the Year award

6. **Talbros Automotive Components Limited**
   - JLR Q-award for consistent performance across all aspects while maintaining high standards of quality, cost and delivery, - QCD. April 2023

7. **Dura Auto India Pvt. Ltd.**
   - GM – 2017 Quality Excellence Award
   - Honda – 2017 Green Excellence Award

8. **Tata Autocomp Hendrickson Suspension Pvt. Ltd.**
   a. Emerging Industry Leader Award in TATA Business Excellence Model Assessment 2019
   b. JRD QV Awards, 29th July 2020

IMPACT OF ORGANIZATIONAL CULTURE ON QUALITY MANAGEMENT IN AUTOMOBILE INDUSTRY OF PUNE REGION

A THESIS
SUBMITTED TO THE
TILAK MAHARASHTRA VIDYAPEETH PUNE

FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

In Management
Under the Board of Management Studies

BY
MR. PREETAM SUSHIL UPLAP
(Registration No.:- 15815008554)

UNDER THE GUIDANCE OF
Prof. (Dr.) HEMANT ABHYANKAR

DEPARTMENT OF MANAGEMENT
June (2023)

80_Recommendation
Conclusions

From the data analysis, top management is aware that if everyone in the company understands its vision and mission, only people will believe in its growth and strive to improve quality management practices. If they failed to understand the vision and mission, it would impact the quality management adversely.

Since the communication channels are established appropriately between the employee and management, the senior management and the managers want to empower them because they can efficiently perform their tasks with a quality feedback mechanism.

From the data analysis, we can conclude that organizations involved in the study are serious about the responsibility towards society and consider all the issues in society seriously. Also, they think about various options to create the change for the better this attitude of the organization and the management leads to take care of their employee's health and safety on topmost priority hence we can see that the organizations who are socially responsible they also do take care of their employees well.

Since we have found from the data analysis that company organizations involved in this research study have appropriate coaching, mentoring and training programs for the development of the employees, which leads to more capable human resources or workforce hence we can say that companies which invest in training and development seriously their workforce also becomes capable that much.

As we have seen that organizations involved in our research study were very prompt to provide necessary tools and equipment is for the employees to carry out their task which ultimately helps employees to be innovative in improvising the processes and the quality management practices in order to achieve the respected growth as visualize by the organization.

From the analysis, we conclude that where is the relation between how the company manages its resources and the satisfaction customer derived from companies search operational gesture, we can conclude that if the company can manage its resources appropriately, it helps them, in the long run, to keep the customer satisfaction at the higher level.

When we have analyzed the data that companies collect from different functional departments, we conclude that organizations are leveraging the data available to them to understand trends and patterns and build out efficient organizational strategies for long term sustenance and growth.

From the organization's perspective, we can also conclude that giving due consideration to the employee's concern is majorly practised by them, which ultimately helps the organization improve its productivity. In return, employees have been appreciated appropriately.

 Since we have seen in earlier conclusions that organizations are giving importance to customers' satisfaction and looking forward to data-centric app root hey approach hey since we can say that improvising is in the blood of these organizations. This improvement was not restricted to a particular Department. However, it is organization-wide, helping the organization be more proactive in managing its quality and operational issues. Also, we can say that in terms of the conclusion that companies, all Products services and processes always remain in the improvement phase due to the availability of the various tools and techniques at their disposal.

The organizations are following standard operating procedures where they are mentoring and coaching their suppliers hey since these suppliers are carefully selected based on the quality aspects they provide; hence, the organization believes in building long-term relationships with suppliers and educating them about the best practices involved in delivering quality products.

The critical conclusion which comes to highlight that is organizations is consistently doing the audits, which helps them to maintain the long term relationship with the clients and since everything is audited, the things are transparent, which helps clients to cross verify and build an environment of trust with the respective organizations to do the further business in the long run.

We can conclude that Organizations are focusing on implementing hi-tech systems to collect the required data. Quality can be assured this all can happen because these systems will help organizations understand the market, and this system has a mechanism where an employee of the organization can share their views in the light of quality management improvement.

Since organizations have well-designed evaluation techniques that help monitor the task in terms of workforce intellectuality, top management is very keen on developing its intellectuality and Technology from time to time.

The very essence of any organization is to remain agile and consistent in terms of quality. This can only happen if the workforce proactively gets involved in the various improvement programs of the organization. We can conclude that top management ensures that their workforce should have appropriate knowledge about the quality and processes through the appropriate learning and development programs.

It has also been noted that the workforce remains productive if they work in a safe and sound organizational climate. Hence, from the data analysis, we can conclude that organizations involved in the research study provide a safe and sound organizational climate that shows that the workforce remains upbeat and, on edge, by always sticking to the principle of continuous learning.

For any organization to be successful, it needs the one essential ingredient, the value that the organization respects and practices. The data analysis concludes that organizations involved in this research study proactively pay attention to developing organization-wide values in the workforce. This also helps the individuals work in the teams and towards the organization's mission, which leads to sustained work satisfaction and makes this happen organization keeps on conducting various engagement programs for them.

For any organization to remain efficient, one must continuously respond to the change since change brings out the best from all the organization's stakeholders. This helps the organization and its workforce be on their toe's by devising strategies that can help achieve the goals or mission set by the organization.

As we know, for any organization to succeed, the main ingredient is to keep their clients or customers happy, and this is only possible if they solve their queries in the given stipulated time. To make this happen most of the time, employees need to be empowered or have the authority to make the decisions. From the analysis, we can conclude that organizations are still following the centralization of power which can hinder the efficiency of employees from responding to customer queries and resolving them.

The data analysis researcher also concludes that the organization's top-level management often imposes decisions on the employees, which sometimes creates situations where unrealistic expectations are expected from the employees, even if the employees share the shared values and teamwork failed to deliver those unrealistic expectations.

As we have seen, the company culture or the organization climate plays a crucial role in how the organization's policies have been developed and how the individuals interact. This leads to the conclusion that if the vision and mission of the organization are more elaborative and exhaustive, more easily employees can understand it. They are subsequently helping the organization reach its objective.

Since the current research studies focusing on manufacturing units, we conclude that the employees of these organizations are well aware of the surroundings in which they operate and put all their efforts to respond to change effectively and efficiently. However, as we have seen that employee empowerment is lacking hey it also creates the problem hey incoordination or interpersonal engagement of the employees hey hence keep the morale of the employee's high organization should focus on employee empowerment and rewards in recognition.

As we are talking about manufacturing units, we conclude that these units are operating to respond to this dynamic change with many constraints. Organizations are finding a shorter or quick way that might disturb their existing processes. Also, this is happening because of rules bending the nature of these organizations to achieve the goals.

For any organization to remain at the forefront is only possible if they manage their customers well. This can only happen if the top to the bottom level workforce of the organization is in sync. We can conclude that they are in sync, and that is why they understand their actions can impact other employees and, hence, act appropriately.

Without risk, no organization can grow; hence, organizations involved in the research study should take a data-driven approach while minimizing the uncertainty and confidently approaching risk. Also, employees think that their inputs make considerable impacts in the organization.

The employees want to work in collaboration fashion this helps then you also build good rapport and relationship with the respective customers enhance they got to recognize and rewarded for

their efforts also this is only possible when there is a transparency in the information sharing among the employee's and that too on the organization comprehensive level.

Since the organization can only grow if it can manage the internal concerns of the employees, from the data analysis, we can conclude that the organizations involved in the research study do address the concerns and the criticism raised by the employees. Also, managers play a crucial role in this with their goal-oriented approach to achieve the set expected goal of the organization. Hence, addressing the internal versus external climate is essential for any organization success, and remaining goal-oriented is of prime importance.

Also, we can conclude that if the employees' customer orientation is high, it will also help employees remain collaborative and work in a more coordinated fashion. It also helps in managing the change. If the strength specifically about the organizational culture is the high ability of that organization to achieve goals also goes exceptionally high.

The relationship between education entraining feedback and measurements and managing resources culture from the importance and actual practice point of view can conclude that these three factors about learning and development feedback and resource say top management give importance and practice them proactively.

We can also conclude that the two most critical significant factors that are goal achievement and the organization's cultural strength, are significant factors that can influence the feedback and measurement practice. However, these leadership and management practices the work environment of the organization but not prior learning and development function and the system and processes of the organization's practice are not working out to be a significant contributor. Hence, focusing on goal achievement and building up cultural strengths is essential for any organization involved in the research study.

He also concludes that goal achievement and cultural strengths do not influence the practices mentioned above. However, all the practices such as supplier quality management, continuous improvement in resource management, particularly when it comes to supplier quality management practice, change management and orientation towards customers, are essential aspects that influence this practice and when the continuous improvement practice has to be considered teamwork mostly plays a role.

Last but not least, we can conclude that the organizations, explicitly manufacturing units as compared to the similar service units involved in the research study, have one or more quality awards. Since they are manufacturing, the aspect of delivering the quality is more on them than other two business activities, namely assembling and services.

Recommendations

The recommendations have been drafted based on analysis and conclusion of the research, which are mentioned below:

1. The organizations from assembling and service units should focus more on quality aspects since very few companies were focusing on this issue. This will only help them to elevate their brand image and create more sustainable business and customer retention.

2. Organizations should build their competencies around culture, orientation towards customers, goal setting, and collaborative working style since these are the factors that impact the organization's various practices in some or another way. Profoundly the culture and goal setting plays a significant role in shaping up the organizations future. Hence it should be appropriately crafted.

3. The system and process that organizations have must practice what they have in place because bending the system and process of the organization may disrupt the normal or routine practice and may create an environment for the employee that might not be comfortable. We have seen in our analysis and conclusion that these organizations do bend the policies and procedures sometimes. Thus, sticking to the principal system and processes will help the organization grow consistently and respond to change dynamically.

4. The orientation of the employees towards their customers is the key, and hence organizations should focus on building learning and development function around these aspects. The happier the client would be, the more sustainable the business would be.

5. The organization should design their mission and vision so that the employees of the organization can easily comprehend these things. This will become part of their working DNA which helps to create a competitive advantage for the organization.

6. For the success of any organization, transparent and lucid communication is the essential aspect, and hence proper communication channels must be established within the organization and should not put many constraints on information sharing.

7. From the research, we know that for the success of the organization, its employees have to be proactively involved in various activities and to do that, those employees have to be equipped with the right skills and hence the organization should invest appropriately in their respective learning and development functions.

8. Also, the organization should invest specifically in technology up-gradation if needed and leverage the data in whatever form they have; it will only help them create a competitive advantage over their competitors.

9. Since teamwork plays a significant role in achieving the goal set by the organization, it is of prime importance that hey organization should focus on building cross-functional communication and working strategy.

10. For healthy and long-term sustenance, the business organization should develop a coaching and mentoring program for their respective vendors or suppliers hey this will create trust between the two parties in the business but also helps in delivering quality products from time to time.

11. Since research is focused on the quality management aspect, agility is one thing that focuses on how one should respond to the change in this dynamic business environment; hence organizations should critically look into the organizational structure, which can offer flexibility in terms of decision making and manufacturing processes. It has to be done continuously because only consistent improvement can deliver the best quality products.

12. Employee empowerment and engagement are the two aspects that cannot be neglected, and organizations should positively work towards these aspects. One way to tackle this is by decentralizing the power/ authority, or we can say that giving autonomy to the employees in their date today jobs.

13. Measuring customer satisfaction from time to time can help the organization to build their strategies in terms of culture skill development and other aspects critically so that they can serve customers in a much better way in the upcoming features.

Scope for Future Research

As a researcher, it is evident that every research creates a plethora of opportunities for other researchers. The researcher aims to propose here some research prospects which future researchers can consider.

1. The researchers could take the opportunity to see the different management practices and their importance from top-level management and frontline employees, and it can give a 360-degree picture of reality in terms of practices and their importance.
2. The researchers could only conduct the study where the organizations mandatorily have quality certification, and it can create a more viable picture of how culture can influence the quality aspects in detail.
3. The study on identifying how customer satisfaction can impact the organization's culture, and thereby the quality management aspects add those respect to organizations.
4. The study can also be conducted on identifying the learning and development functions potential and employees learning index and how this can impact the culture and the quality management aspect.
5. Also, the study can be conducted play storm comparative mode, such as whether the business comes from manufacturing or assembling or from a service unit. This can create a knowledge base where one can learn from each other.