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IMPACTS OF LEADERSHIP ON TQM IN FOOD INDUSTRY IN INDIA

A Thesis Presented to The Faculty of the School of Engineering and Applied Sciences Western Kentucky University Bowling Green, Kentucky

> In Partial Fulfillment Of the Requirements for the Degree Master of Science

> > By Abhir Joshi

May 2018

IMPACTS OF LEADERSHIP ON TQM IN FOOD INDUSTRY IN INDIA

Date Recommended ~ Dr. Brent Askins, Director of Thesis Dr. Daniel Jackson Illa

Ms. Shahnaz Aly

Dean, Graduate Studies Date

Dedication

I dedicate this thesis to my late grandfather. I would also like to dedicate this thesis to the strongest pillars of my life, my mother and my father who have supported me at every step of my life. I also like to dedicate this thesis to my friends and my family members. Lastly, I dedicate this thesis to my homeland- India for teaching me the value of home.

Acknowledgement

I would like to express my deepest gratitude to the Almighty God for his spiritual support and love throughout my entire life. In the Indian culture, a teacher or a guru is considered next to god. Therefore, I would like to express my appreciation to gurus, my thesis committee, Dr. Brent Askins, Dr. Daniel Jackson and Prof. Shahnaz Aly whose guidance, suggestions and encouragement helped me complete this research study. I consider myself lucky to be graced by their mentorship and support. I would also like to thank Dr. Elmer Gray for his contribution and support as the reader of the thesis. I would also like to thank my colleagues and my friends who have helped me in this thesis. I now can look into the future with great expectation as I feel I am more qualified to make honorable contributions to the welfare of the human race.

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IMPACTS OF LEADERSHIP ON TOM IN FOOD INDUSTRY IN INDIA

Abhir JoshiMay 201880 PagesDirected by: Dr. Brent Askins, Dr. Daniel Jackson, and Ms. Shahnaz AlySchool of Engineering and Applied SciencesWestern Kentucky University

To improve an organizations competitive edge, leadership has adopted a conventional and organized approach known as TQM to improve the quality of its products and services. Implementation of TQM varies from one organization to another. This study determined the various impacts of leadership on TQM in the food industry in India. The continuous decrement of India's economy has led organizations to hire non-skilled people who lack the basic knowledge of the process and thus do not work efficiently and thus ensuring failure of TQM. Another problem faced was the lack of a healthy management which ensures a positive environment and boosts morale of the people. This study gave an idea about the organizational culture and characteristics, the issues it faced while implementing TQM due to lack of an effective leadership, the linkage between the leadership and TQM policies. Data was collected with the help of a questionnaire survey from the people involved in the industry and thus the results from the survey were analyzed and used to answer the research questions.

Keywords: Leadership, Total Quality Management, Food Industry in India

Х

Introduction

India is the world's second most populated country with more than 1.2 billion people living within its boundaries. Along with being the second largest populated country, India was also the second largest food producer in the world with China being the number one. India produced close to 241.5 million tons of food grains, 88.97 metric million tons of fruits and 162.89 million metric tons of vegetables during the 2014-2015 calendar year (MOFPI, 2015) (Department of Agriculture and Co-operation, 2015). India ranked fifth in terms of production, consumption, exportation of food products and with these numbers India easily dominates the food industry of the world (Devi, 2014). The food processing industry had a critical relationship with the manufacturing and agriculture sector. The quality of the grains, vegetables and the fruits produced should be maintained. To be successful and beat the competition, any food processing industry must provide the utmost quality of the processed food as quality is one of the major factors for the success and growth of the industry. Customers wanted products which are good in appearance, texture and flavor in terms of food products. Therefore, every organization must keep up with the quality of its products with the market as well its competitors. The practice and principles of maintaining the quality of products is referred to as Total Quality Management and it may differ from one organization to another but the goal of implementing Total Quality Management is the same. It encourages the employees and the management to work towards the quality of goods. India's food industry lacks in Total Quality Management strategic plans. Thus, they failed to satisfy the customers while lowering the food processing rate and the food logistic infrastructure in the market. This led to the curtailment of several retail chains (Goswami,2015). This study analyzed

practical solutions to these problems, such as, poor strategic planning and leadership by leaders and the government. It also examined the importance of leadership in the implementation of Total Quality Management, the cultural issues faced, and the impact of improper management activities in the food industry of India.

Statement of the Problem

This research examined the issues which the Indian food industry faces. The major problem contributing to the failure of Total Quality Management in India was the lack of legitimate and qualified leadership. The improper guidance led to erroneous operation of the processes and strategies of Total Quality Management. Another problem the food industries in India faced was that of improper and atrocious strategic planning by its leaders and the manages which contributed to this failure and has directly impacted the food industry. The quality of the food has decreased, thereby, lowering the food processing rate (Zia, 2012). This happened because of the penurious training of the employees and the limited knowledge they were provided with (Singh, 2012). Another problem created by poor unacceptable leadership was that of the inability to improve the culture of the organization (Ristova, E).

Significance of the Study

Lately, the Indian food industry has been on a declining path. The significance of this study was to evaluate the importance and effects of leadership on implementing Total Quality Management effectively. The India's economy has been declining. The declining economy has contributed to the industries hiring unskilled workers who fail to value the importance of quality especially in terms of food production. The food industries along with their stockholders were responsible for delivering superior quality food to the consumers. Due to the lack of production policies, the management failed to implement proper quality management systems within the industry thus ensuring low food processing rate. The present study was directed towards assisting food industries in implementing ethical leadership and its effect on the Total Quality Management. It helped to understand the leadership styles and traits required to implement Total Quality Management successfully in the food industries and it helped the industries in assisting to formulate proper and accurate planning and strategies, the suitable leadership styles the leader should follow, the suitable leadership traits the leader required to ensure that Total Quality Management was implemented successfully. Additionally, this study focused on the administrative changes regarding processes of production which would directly impact the quality of the food. (Mustafa, 2012)

Purpose of the Study

This research was conducted to study the importance of leadership and how it affected the implementation of Total Quality Management in food industries in India. In recent years, the India's Food industry failed to produce considerable standard quality food and has not met the growing food demand. The major factor contributing for this failure was the lack of quality products produced because of the failure to implement TQM within the industry. This study encouraged the leader in the industries in India to focus on the necessary leadership styles to enhance the quality improvement process thus ensuring the implementation of TQM. This helped the Human Resource Development to hire skilled and knowledgeable leaders who would work with a profit-driven production mindset and lead their team members with the same goal which would ensure successful implementation of Total Quality Management.

Research Questions

The study was directed towards answering the following research questions: -

- Is leadership essential for the successful implementation of Total Quality Management in food industries in India?
- What leadership styles are found in India's food industry?
- How has leadership affected the implementation of Total Quality Management in the food industries of India?

Assumptions

The researcher identified some assumptions during the study: -

- One of the assumptions that came forward in this research was that the participants of the study answered the questionnaire honestly and openly.
- Another assumption that the study carried was that of participation of the participants. It is assumed that all the participants would be taking part in the survey.
- The study also assumed that the participants participating in the survey were managers, sub managers, team leaders etc. and belonged to the managerial level and not any labor of the industry.
- The study assumed that the survey was answered individually by each participant.

Limitations

The limitations to this study were: -

- This study was limited to Nagpur and Mumbai region only.
- The time constraint for the survey was a limitation to this study as not all participants were able to complete and answer the survey questions in time provided.
- This study was also limited to the responses generated from the survey and the participant's knowledge.

Delimitations

The delimitations to this study were: -

- The successful implementation of Total Quality Management depended upon numerous factors such as Shared Values, Type of Employees, Management Styles, the Organizational Structure, Process factors (Mann, 1995). However, this study was delimited to Management Styles only.
- This study was accessible only to the managers, sub-managers and the management only.
- The study was delimited to the food industries in Mumbai and Nagpur region only.

Review of Literature

Modern-day organizations, centered on consumer satisfaction, are increasingly aware of the significance of various factors of the quality control system. The implementation of any such system isn't always most effective to ensure right operation however additionally many determinants that may intensify or sag the outcomes of those efforts. One among them is the comprehension of the that means of leadership. It's far being discussed within the second part of the eight-pleasant management principle. A decade in the past, whilst the first Polish firms licensed quality management systems, were satisfied that they may effortlessly meet those guidelines. The range of Polish quality systems certificate is still developing, however, regrettably, there are corporations that don't exercise and believe in leadership. They're no longer aware of the truth that loss of conviction lowers the quality of the merchandise they are producing (Misztal, 2013).

The Role of Leadership

Most organizations try to manage itself by leading its employees into the right direction. This is practiced by most of the leading organizations of the world. It is important to have and maintain a friendly atmosphere and a congenial approach between the management and the employees to ensure involvement of the employees. Forceful actions and decisions do harm the relationship between the management and the employees. If this technique is practiced in organizations, it ensures the quality of the product to be superior along with the higher employee satisfaction. Achieving the desired quality standards for products is a collaborative procedure. It depends 10 percent on the equipment of production, 40 percent on the technological aspects and 50 percent on the

employee work and their management. These 50 percentiles of the process's success depend on the leadership and management of the teams associated with the help of strategic plans aimed towards the goal of the organization. The leader should be able to communicate with the people under him, should be able to resolve conflicts, and should be able to perform tasks with ease and no errors (Salmani, 2010).

Leadership implies finding individuals with their best highlights and overseeing them in the best approach to empower their normal work to be performed by the leader's teaching. The leader is an individual who impacts other individuals' conduct without the need to impel. It is eminently alleged that an individual is born a leader. But Misztal cited that leadership can be taught and there are many examples that can support this statement. An individual can be termed as a leader only when he or she can make other people behave and act in a certain way with the help of appropriate interpersonal relations and does not compel them to achieve desired goals (Misztal, 2013). An individual who is charismatic, trustworthy is an ideal leader. A leader should always be chosen by the team members. If this does not happen, then it is difficult for the team to trust the leader and thus compelling the work and goals of the team members. Therefore, it is mandatory for a leader to gain the trust of his or her team members.

Developed and cultured organizations adopt ardent methods of leadership and target to educate all the levels of management in the organization structure. With the adoption of such methods and practices, the organization can improve its culture, structure and the relations with the partners as well as employees. According to the ISO 9004, the most important capital an organization owns is its employees and the involvement of the employees help the organization to create values and services for their

customers (ISO 9004, 2009) (ISO/DIS 10018, 2011). An embryonic aspect of an ardent method in a leadership is being aware of the gist of the cooperation of the people involved in an organization (Misztal, 2013). Along with the aiming for creating and controlling a shared vision and shared values, the leader should have the potential to maintain a culture in which the people are fully involved in towards the organizational goals. These modifications help improve the organization's adequacy, increase the organization's social standings and benefit the employees on a personal level (Cartwright, 2010).

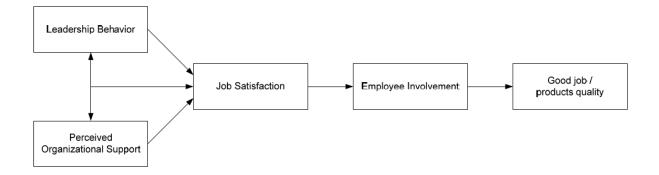


Figure 1. Leaderships' Impact on the product quality (Misztal, 2013). Leadership is an essential pre-condition for keeping a quality management framework in a venture. Shockingly, numerous business visionaries do not comprehend that. Although they announce the quality approach to draw in workers, their practices contrast altogether from the authority's assumption. Thus, strategies would turn into a way to a avoid settlement of representatives appointed assignments without respect to working conditions, the climate also, the method for sorting out the work. Unmotivated employees work imprudently because they do not see the reasonableness. The outcome regularly occurs in dissensions of items and products. An actualized restorative activity doesn't give desired results as in fact that they search for the causes and not the supervisors' personality (Misztal, 2013). An instance of this situation would be of charismatic leaders and pioneers who can coordinate the employees, make the employees feel positive about the targets and create a friendly atmosphere. In such situations, the chances of errors caused due the employee is null. Considering the above, it is rightful to treat the leadership as one of the necessities for the execution and maintaining the quality management frameworks. Just by demonstrating this to the managers, an organization can help its management to search for workers who are dependable, genuine, open and true to different representatives, and those who believe in their capacities, charm, capacity to consult in a gathering of colleagues, and who can consider the execution of accreditation.

Multidimensional Leadership Concept

The concept of leadership goes down far more important in any organization which must be led by leaders towards the goals of the organization. It is alleged that leaders are born and not created. But there are some valid points which suggest that these allegations are wrong. A leader is a person who influences others to do certain things to in a certain way without enforcing decisions (Ciulla, 1995). The leader's attitude is what determines the fact whether the actions of the leader would be followed and appreciated or not. According to Ciulla, "Leadership constitutes an interpersonal relation of influence that is dynamic and free, which goes beyond formal power and which rests on the technical, psycho-affective and moral trust in the leader".

According to the author (Marco Perles, 2002.), the concept of leadership is based on three dimensions depending on which a person can be defined as a leader. The three dimensions are: -

- 1. The Technical Dimension
- 2. The Psycho-Affective Dimension
- 3. The Ethical Dimension

According to the author Marco Perles, the Technical Dimension refers to the technical qualifications the leader possesses. The author mentions that the leader should be aware of his or her strengths, the leader should be knowledgeable and should possess problem-solving abilities. He or she should be positive to find the results. The Psycho-Affective Dimension which relates to the psychological skills that the leader possesses (Marco Perles, 2002). Along with the psychological traits, the leader should pertain social skills and should be able to create a friendly and peaceful atmosphere. The third dimension is the Ethical Dimension. Here, the author is trying to stress on the fact that people are more attracted to a leader because of the moralistic and noble approach a leader has in his actions. This ethical approach is higher than the technological and the psycho-affective approach as it appears to be more correct.

Importance of Ethical Leadership in Total Quality Management

The ethical leadership approach has played an important role in the successful implementation of Total Quality Management. This means that for the successful implementation of Total Quality. For the implementation of Total Quality Management to be successful, the ethical dimension of leadership is utilized in certain ways and processes. These processes are: -

- 1. Designing of Processes and Products
- 2. Managing the process based on facts and assessment systems
- 3. Customer Service

- 4. Cooperation with customers and suppliers
- 5. Training
- 6. Teamwork
- 7. Internal Cooperation
- 8. Continual Improvement
- 9. Participation and Involvement of Management
- 10. Cultural Change (Conti, 1993)

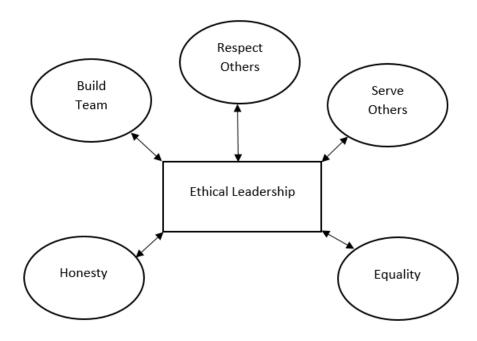


Figure 2. Qualities of an Ethical Leader (Verma, 2014)

According to Verma, an ethical leader should be a person who possess certain qualities that are fit to be an ideal leader. Verma says that an ethical leader should be honest in nature and should be able to gain the trust of his subordinates and team members. The leader should serve and respect his team members and subordinates working under him. This is what it takes to build a team and, in addition, the leader should be able to build a team that would bolster and follow his decisions and thoughts.

Value Leadership in Total Quality Management

The term value leadership is an integral part of leadership. It can be termed as the fourth dimension of leadership. Value leadership is applied when the leader enumerates impulsiveness and moralistic values to his or her management approach. A true leader would apply this dimension as it helps in escalating awareness among the board of directors, CEOs, the upper management and the staff and work efficiently under pressure and maintain harmony and commitment within the organization. It helps to share the same goal among the different teams in an organization especially regarding total quality management and work according to the situation (Blake, 1994). It is considered as the decisive factor in implementation and transformation of Total Quality Management.

Leadership is the foundation of any abiding transformational approach and requires an arrangement of shared esteems and responsibilities that bonds all colleagues together in a common element. Therefore, the team must focus more on consumer and value led approach rather than worker/manager led approach. It is highly recommended that the leaders should possess and gather all possible knowledge about total quality management skills, the required leadership style for the implementation and the path approach (Blake, 1994). The leader is responsible for planning the strategies and policies and he/she must be regularly searching new ways for growth. Team building is crucial here as well as it helps in self-development of the staff and team members and opens a channel for communication between the employees.

Value leadership and Total Quality Management require all the management to be involved in the quality improvement effort. Leadership is the crucial factor that is needed to boost the employee capabilities in a team effort working towards the improvement of quality. Therefore, this concept divided a department into cross-functional teams formed based on their specialties. The elemental team required here are: -

- 1. Measurement Teams which analyses the impacts of poor quality of products.
- 2. Recognition Teams which recognizes the activities.
- 3. Process Improvement Team which perceives the deficiencies in process, policies.
- 4. Training and Development Team which is responsible for training the staff.
- 5. Total Quality Management Working Team which takes care of all support services and activities.

Introduction to Total Quality Management

The term 'Total Quality Management' was originated in Japanese automobile industry. It helped in establishing self-control, creativity among the employees of the organization implementing TQM with cooperation and not compliance. Total Quality Management differs in every organization but there exists one common thing among the implementation of Total Quality Management in every organization. This common thing is Leadership for the successful implementation of TQM. The purpose of TQM is to embolden the staff of the organization to improve the quality of the products and services along with the goal of achieving the organizational goals. The quality can be improved only when the individuals are willing to improve. The organizational goals are achieved only when the staff knows their work and how to perform the tasks assigned to them. Along with the responsibility, it is equally necessary to have a healthy communication

between the different departments of an organization. This is what Total Quality Management is all about. The quality control in an organization depends on certain elemental factors such as: -

- 1. Consumer Care
- 2. Ceaseless Improvements
- 3. Control of Processes
- 4. Appropriate Leadership
- 5. Teamwork

According to Chan (2002), TQM is referred to a management process and principles that are harmonized to ensure that the customers are satisfied and their requirements are fulfilled accordingly. Chan also cites that the implementation of TQM helps an organization to focus its processes and strategies towards the customer which helps to develop a healthy culture within the organization and high employee participation. Six Sigma is an unconventional. It stresses on implementing new methods and practices for the quality management systems. Six Sigma directs an organization towards achieving total quality management by the most convenient and best approach available. Along with this, TQM helps eliminate waste and practice lean. TQM is process acclimatized to acquire continuous transformation of processes aimed to the fulfillment of the client needs and requirements. Every department requires special systems, strategies, and tools for the continual transformation (Ristova, E). It is recommended for the organization to note the customer feedback and acknowledge the quality costs. It is important to modify the culture in TQM as it aims to improve the overall performance of the organization. It utilizes the quality data for continuous improvement (Pathirage, 2006).

Principles of Total Quality Management

Management researchers have derived certain standards from the reasoning of TQM ideas and they can be depicted as beneath: -

1. Leadership

Efficient leadership is the decisive factor of TQM implementation. The top management is responsible for catering the quality improvements in any organization. Their work is to derive strategic plans and guide the individuals towards achieving the goal.

2. Performance Measurement

It must be performed regularly based upon the timely measure and performance feedback via quality management systems.

3. Continuous Improvement

Every individual is responsible for the continuous improvement. The organization's aim must be sustaining continuous improvement and success because customers expect better service and better products than what they had purchased.

4. Education and Training

The employees should have the knowledge of their task and must be trained. Otherwise, They would not work efficiently if they lack the education and thus compromise the quality of the services provided.

5. Communication

Communication is a crucial factor in the TQM implementation. The right way to convey the tasks to individuals is through providing manuals, notice boards. The

organization can improve the communication by conducting problem-solving sessions and meeting.

6. Teamwork

It is the organization's responsibility to make sure that teamwork exists among the employees. TQM can be achieved and practiced only with teamwork.

7. Attitude towards Quality

Every individual must have the attitude to improve quality of the organization (Verma, 2014).

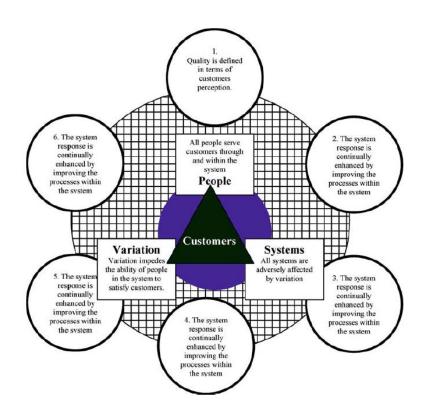


Figure 3. Principles of Total Quality Management (Seetharaman, 2006)

Importance of Management Commitment towards Quality

Any organization's transformation into a TQM organization depends on the approach the organization has taken and the practices towards the implementation of quality management systems. The top management of a firm plays a crucial role in the process of quality improvement. The management's commitment to the endless improvement in the quality sector and the commitment to empower the people to work for change in the culture and the desire to achieve the goals oriented towards improvement are the most essential human developmental needs in an organization (Seetharaman, 2006). There are certain areas where the management can be helpful in the implementation of TQM are: -

1. Control through Visibility

It requires the management to exhibit all the information and data to the working station. The management can depict their commitment by attending the work line and collecting the data.

2. Allocation of Budgets

It is considered as the foundation for the implementation of TQM in an organization. It also included the training programs for the QC tools and the SPC and problem-solving techniques.

3. Organizational Change

According to the leading quality researchers, the management is responsible to develop a healthy culture within the organization. To achieve this goal, the management is responsible to support the lower level of employees by managing them properly. It is important for everybody to understand the concept of quality and therefore, it is the responsibility of every individual to perform outstandingly to maintain the quality. This leads to the establishment of a healthy culture in an organization. The reasons why commitment lacks in some organizations include indigent policies for quality management, no knowledge of quality costs and their effects, the unavailability of quality standards, poor documentation of procedures and results.

4. Monitoring Progress

It is equally important to monitor the progress of any quality system. One of the ways to monitor is conducting quality audits or quality circles to ensure the process is performed under right guidance and in right way. This should be a long-term improvement procedure which would help develop the required skills in the employees.

Reasons for Failure of TQM

There is a situation where the Total Quality Management fails to institute the desired quality despite the efforts of the management and employees towards the implementation of TQM. There are several reasons responsible for this failure of Total Quality Management in an organization, some of the reason being stated as: -

- The concept of TQM is a vast and broad concept which requires time and patience to be implemented and to obtain desired results. It is a long-term process. Often the organizations try to take shortcuts in the implementation which leads to mismanagement and the employees do not understand the importance of the culture of TQM which leads to the failure of implementation of Total Quality Management (Fowler, 1999).
- 2. The culture of an organization plays a vital role in the success of Total Quality Management and the main reason why most of the organizations fail is that of the impotence to establish a supporting culture which leads to TQM.

- 3. The management while being focused towards the transformation of the organization towards TQM should transform themselves as well and bring discipline to the organization.
- 4. There is an utmost need for the management to understand the customers and their suppliers. There should be a two way and healthy communication between the former and the later. This inaugurates trust and support between the two parties (Seetharaman, 2006). TQM fails due to lack of trust and support between the management and the suppliers and the customers.
- 5. One of the major reasons for TQM to fail is that many organizations lose focus on the continual improvement factor of TQM and are satisfied with their performance once they obtain a quality achievement or certificate.
- 6. The lack of the importance of quality at every level of the management leads to the failure of Total Quality Management. It is therefore essential for every level of management to understand their part and work effectively towards achieving the desired results in terms of quality (Ristova, n.d).

Relation between Leadership and Total Quality Management

The relation between Total Quality Management and Leadership can be portrayed as an ambiguous effect which is palpable with time. Leadership is culpable to influence the employees towards building an organizational culture. When the culture is developed, it benefits the organization in enacting TQM policies and frameworks within the organization. Leadership can be short-term and is more effective for implementing policies and activities aligned towards Total Quality Management (Sashkin, 1991). The best aspects or approaches that can be considered for the impacts leadership can create on Total Quality Management are Transformational Leadership theory and the LMX theory.

Transformational Leadership is termed as the driver responsible to drive an organization towards healthy culture. Such leadership helps in the implementation of Total Quality Management policies and frameworks and helps develop successive behavior. Continuous improvement of the products as well as the processes are highly recommended in the implementation of Total Quality Management and the organizations should be enthusiastic to implement the changes to improve their product quality. This style helps encourage people to change and inspire them to work for the changes required. It helps to improve the job and quality skills of the people employed which is highly recommended in the implementation of Total Quality Management (Waldman, 1993). The actions of a transformational leader have been defined as an example of an ideal leader which motivate the supporters to accept and work towards change in the culture. Transformational leaders always dedicate their time towards improving their own skills and behaviors towards quality.

Another fundamental aspect of transformational leadership approach is intellectual stimulation. It is an elemental part of the implementation of TQM as it requires many problem-solving techniques. Processes such as flowcharting, cause and effect analysis, process control are term as the intellectual stimulation. It can be used by leaders to help the employees to help them use this technique. Transformational Leadership also involves group recognition. It is one of the major success factors in TQM. The leader is responsible to recognize excellent talent and performance. This is

achieved by the one who is working for the organization and not for personal achievements (Brown, 1991) (Lewis, 1987).

According to the situation in Total Quality Management, Leadership is an approach of an organization which is works on the participation of the members of the organization targeting a long-term success by satisfying the customer needs and benefitting the organization as well the employees by providing the best quality products (Chandra, 2012). Leadership in TQM focuses on the continuous change of culture and the people need to be guided accordingly throughout the process. The leaders need to be highly motivated and should focus on teamwork and direct leadership. This helps in gaining trust in other people in the organization as this TQM process if people oriented. The leader along with his team is responsible for the quality improvement and the leader should make sure that the team is working according to the quality standards of the organization.

Leadership is elemental during every aspect of the implementation process of Total Quality Management and should be initiated from the top level of management. The TQM practices wary in every organization but the motive is TQM remains the same in every organization trying to implement TQM. The major role of a leader is to make sure that all the processes and phases of the TQM are working efficiently and proper coordination exists among the different teams (Verma, 2014).

Total Quality Management Implementation Process

The plans and techniques of Total Quality Management ought to unify into a comprehensible and a consistent implementation process. Generally, TQM implementation is a top to the bottom procedure and requires the top management and the

leaders to advise and educate the knowledge to the employees. The basic implementation process consists of the following steps: -

1. Development of Quality Strategy

The leaders should have a strong reason to believe in total quality management and that it would be helpful for them in future. They need to give the customer first preference and should satisfy the demands of the customers. They need to figure out what barriers the organization is facing in terms of poor quality and services. The leaders need to analyze the objectives and the functions of the projects they need to pursue and they need to form a feedback and evaluation method as well. But the most important element is to set a performance standard against which the process will be compared.

2. Analyze the process and Define quality measures

This step requires the management to identify the operations that need to be performed and on which quality measures the processes would be performed. This requires the management to develop flow charts for the inputs and the outputs. The other requirement is to identify the requirements of the customers at each stage along with the quality requirements. It is important to note the time, cost and error ratio of the process.

3. Establishment of Process Control System.

It is equally important for the organization to continue to monitor the process of improvement and develop a control for the process. The current process should be analyzed for its performance and the data should be collected and then a temporary control system should be developed based on the results of the current process. It is done to meet the customer requirements.

4. Inspect the process to identify improvement opportunities

The target of this stage is to identify the internal problems which are directly affecting the needs of the customers and increasing the costs. This goal is achieved by reviewing the data collected and developing Ishikawa diagram to identify the root of the problem. It helps to identify the area where the problem is occurring.

5. Improve the process quality

It aims to improve the quality by removing the problem that is causing the quality to deteriorate and it is achieved by regularly monitoring the process and the performance of the employees. Finally, it involves high management maintenance and participation within the process.

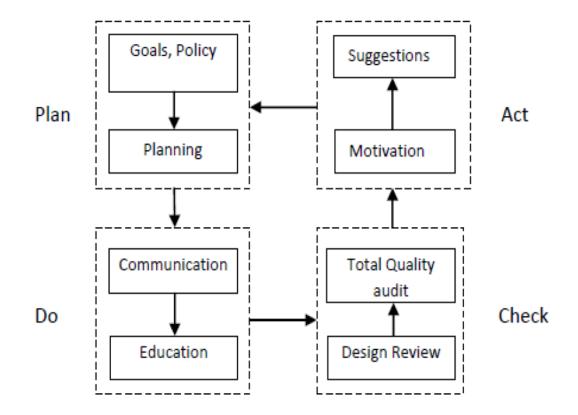


Figure 4. The PDCA Cycle also used in the TQM Implementation Process (Pathirage, 2015.)

The Indian Scenario

India is the second largest manufacturer of food in the world, with agriculture sector playing a crucial role in the economic development of the country. The food processing sector is the connecting link between the agriculture and manufacturing sector. Understanding the significance of this connection, the Government of India, under its Make in India activity included Food Processing Sector among 25 divisions that were given need in the activity. The food processing industry is basic in a horticulture-based economy such as India, where it popularizes the cultivating as well as aides in raising the wage of farmers. The Make in India program is planned to encourage venture, cultivate advancement, improve aptitude improvement, ensure licensed innovation rights, and assembled best-in-class fabricating foundation. The prime thought process of the activity is to make India a manufacturing center. Make in India is another activity of Government of India which means to support makers both multinational and household to fabricate their products in India (MOFPI, 2015). The fundamental thought process of this activity is to make India as the best place for the outside manufacturing world (Zia, M). Another main aspect of the Make in India process is to augment the skill development process in the manufacturing industry which is again interlinked to the implementation of Total Quality Management. It also aims to attract fundamental and technological investments whose focus is on the establishment of high-quality standards.

India is a colossal country that aggregates almost 2.4 percent of world's land, with 195.25 million hectares of gross cropped area, 62.26 million hectares of net irrigated area and with 127 agro-climatic zones. India has an immense potential in the horticultural segment and is one of the central points for a vast crude material base for India sustenance industry (MOFPI, 2015). The food processing business in India covers an extensive variety of exercises, for example, farming, cultivation, manor products, and fisheries. The Government of India classifies the food processing into following:

- 1. Dairy, fruits processing
- 2. Meat and poultry
- 3. Grain Processing
- 4. Consumer Foods such as packaged foods.

Like different parts of the economy, the food processing division likewise experiences certain requirements. There are some factors which are responsible for the failure of the Indian food industry, including lack of skilled labor and inappropriate guidance from the management's side which, in turn, results the problem of poor quality of the food products and also contributes to the factors responsible for the poor performance of the Indian food industry (Zia, 2012).

The food industry of India has been recognized as one of the prominent sectors for development by the National Manufacturing Policy (2011). It has provided the Indian food industry with an opportunity to become the largest food supplier in the world along with serving its own population (MOFPI, 2015). India is also one of the largest consumers of foods and grocery items among the other nations of the world. The percent of family income spent on food is about 9 percent in the United States, 17 percent in Brazil, and 25 percent in China. In India, the food and grocery sector is the largest retail sector of the country and this sector suffers almost about 23 to 30 percent wastage of the food being processed due to poor quality (Rawat, 2017).

According to Rawat, one of the reasons that have led to this downfall is to the lack of employment and skill development programs in the Indian food industries. The unorganized and uneducated sector comprises approximately 42 percent of the country's food processing industry. The presence of more small-scale industries points to the employment generation for the sector which comprises of unskilled and uneducated workers. This has led to the declining quality standards of the industry. To improve the situation, the food processing sector needs to more responsible and the policymakers must deploy education and training for the labors to achieve and solve the quality problem. It is estimated that by 2024, the Indian food processing industry will generate around 9m jobs and the issue of compromised quality will be resolved.

Methodology

This chapter focused on the methodological processes used for this study. The researcher drafted the procedures and methods used to conduct this study and illustrated the various sources of data collection.

Research Design

A research design is a draft of how the research study is going to be conducted. The present research was based on the quantitative and qualitative research design structure. This design structure was selected because it provided the researcher with necessary data and information required to test the research questions. This methodology helped the researcher determine the improper leadership styles and traits followed in India's food industry that are not familiar with Total Quality Management and to chalk out the advisable leadership styles and traits support and are applicable to ensure the successful implementation of Total Quality Management in India's food industry.

Data Collection and Procedure

This research targeted the food industries of Mumbai and Nagpur region. To identify such food industries located in Mumbai and Nagpur, Google and Just-Dial were utilized. From the list, food industries were randomly selected where the survey would be conducted as a part of the research. The data was collected with the help of a survey that consisted of questions that were based of leadership styles being followed in these industries, preferred leadership traits, food quality assurance systems being implemented, quality indicators observed (Singh, 2012). These questions were selected based on the factors that were responsible for the unsuccessful implementation of Total Quality Management in the food industries of India. This survey was limited to the mid-level and the upper-level managers, quality managers, and their respective teams, production teams. The survey was administered and created with the help of an online survey tool 'Qualtrics'. This platform was selected due to its cost-effectiveness, its various survey evaluation tools, and its ability to provide an easy access to the survey and its results. The survey questionnaire was sent via email to each of the participants. Even though the survey was not mandatory for the participants, all participants were encouraged to take part in the survey through a formal letter stating the purpose of the research and the importance of participation in the survey was provided in the email along with the survey questionnaire. Secondary resources such as published peer reviewed journals, books, articles, academics thesis and dissertation were used to collect the data. The analyzed data was used to make valid references.

Participants and Sample Size

The participants of this research were those personals who belonged to the Indian Food organizations. This research targeted these industries to learn about their methods of implementing Total Quality Management including their leadership styles that were followed, the traits these managers and upper management possessed which enabled the culture in the industry to flourish. The participants were of the food industries that were going to be a part of the questionnaire survey were the personals working as managers, sub-managers, quality engineers, production managers who were responsible for the processing of the food, storage, and other food processing related process which were involved to ensure that the processed food was of the best quality. This research was limited to the upper management only. These participants were made aware of nature and

the purpose the research. These participants were also given the option of leaving the survey at any moment if they feel without any harm.

The selection of the participants was random. A random list of food companies in Nagpur and Mumbai region was made and three companies were randomly selected. The survey was sent to the management for each company and the managers were asked to participate in the survey. Eight to ten participants from each company took part in the survey.

Data Analysis

The data collected from the survey was analyzed using the online survey tool Qualtrics (<u>www.qualtrics.com</u>), which aided in analyzing and sorting the data obtained from the questions of the survey (Creswell, 2009). Microsoft Excel was used to create charts and graphs. This helped in fortifying and outlining the data results. The responses of each of the participants were carefully recorded and analyzed. The participants whose answers were similar were categorized together. The most frequent responses were identified for each of the question of the questionnaire. The percentage determined the success or failure factors. The other responses of the questionnaire were taken into consideration and their recurrence was recorded. The participants data who had no prior knowledge of leadership styles followed and total quality management in the industries was discarded. For the analysis of the data, Descriptive data analysis was used. The data was analyzed and the results helped the researcher to identify the impact leadership has on the implementation of Total Quality Management in the food industry in India and the most followed leadership style followed in the industry.

Validity of Research

The validity of the research was enhanced by requesting that there was a possibility of the participants communicating with each other while participating in the survey. The answers to the survey would have been influenced by other people. To ensure that this does not happen, the participants of a certain industry were told to take the survey at the same time, thereby eliminating the possibility of discussion among the participants while completing the survey.

Description of Questionnaire

The questionnaire was created using the online survey tool Qualtrics. The survey is a mixture of closed-ended questions and self-explanatory questions. The questionnaire consisted of 23 close-ended questions (Question 5 to 27) and some self-explanatory questions (Question 1 to 4 and Question 28) which the participants had to answer according to themselves. A link was created by the software which directed the participants to the survey. The questionnaire consisted of 28 questions. The first four questions were related to the participant's professional background and attributes. Question 5 to 16 were related to the organization's operational characteristics. Question 17 was captious question which asked the participant was familiar with Total Quality Management. Questions 18 to 27 were related to Total Quality Management and its implementation in the food industries of India. If the participant's recorded answer was 'No', then the survey skipped Question 18-27. If the recorded response to Question 17 was 'Yes', then the Questions 18 to 27 inquired about the implementation strategies of the Total Quality Management by the firm. Question 28 was an open-ended question which asked each participant to express their opinions on how they would lead their

business towards improving the quality of their food products and help Total Quality Management to be successfully implemented.

The gathered data have been recorded and documented in minute details in the next chapter. This chapter included the inferences made from the data gathered. The concluding chapter displayed the results and findings from the current research and some possible points that can be considered for some future researches. It also analyzed the proper leadership styles and leadership traits required for the successful implementation of Total Quality Management in the food industries of India.

Results and Findings

This chapter focused on the data collected and the analysis of the data obtained through the survey. Each response to each question from the participants is shown below in graphical form and is explained further.

Data from the Survey

The current study was focused on targeting the manager level participants of the food industries of India. The study included a sample size of 25 managers from three companies of Nagpur and Mumbai region. No responses were missing or discarded due to lack of answers. Descriptive analysis was conducted and the percentage from each question was determined. As this research was a preliminary research, the responses to each of the questions were considered as the benchmark to the proposition. The profile of the participants was illustrated in figures that described the participant's education level, company role and experience. Table 1 illustrates the companies who participated in the survey.

Q1. Your Company Name

Table 1

Company's Full Name

Company's Full Name
Haldiram Foods International Private Ltd.
Allanasons Private Ltd.
Anjali Foods India Private Ltd.

Q2. Your Education

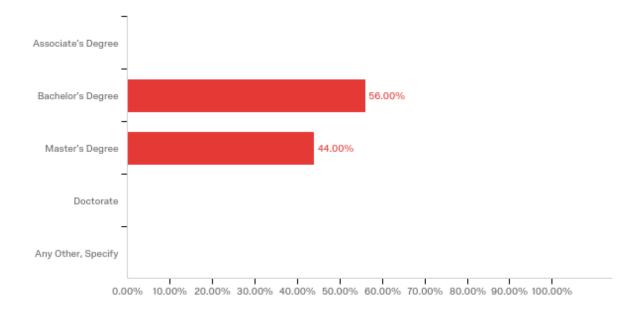


Figure 5. Participant's Education

The data illustrated in Figure 5 indicated that majority (56%) of the participants of this survey had an academic education up to Bachelor's Degree. This was followed by 44% of the participants with a Master's Degree. None of the participants had an Associate's Degree or a Doctorate. Out of the 25 responses obtained, 14 comprised of managers with a Bachelor's Degree and 11 managers had a Master's Degree.

Q3. Your Company Role

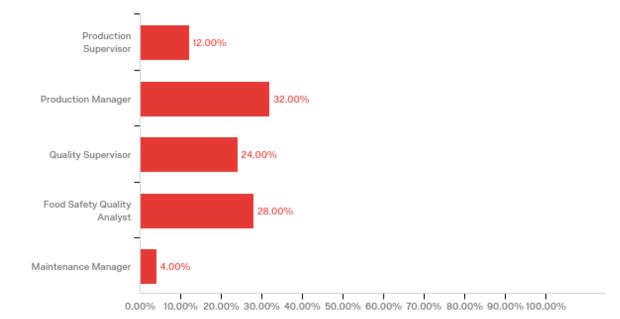


Figure 6. - Participant's Company Role

The data illustrated in Figure 6 is about the participants role in the company. Out of the 25 participants from the three companies, 8 individuals (32%) who were working as Production Manager, followed by 7 individuals (28%) who worked as Food Safety Quality Analyst. Participants who worked as Quality Supervisors were the third largest group which comprised of 6 individuals (24%). There were 3 individuals (12%) who worked as Production Supervisor while the remaining 1 individual (4%) worked as Maintenance Manager respectively.

Q4. Experience

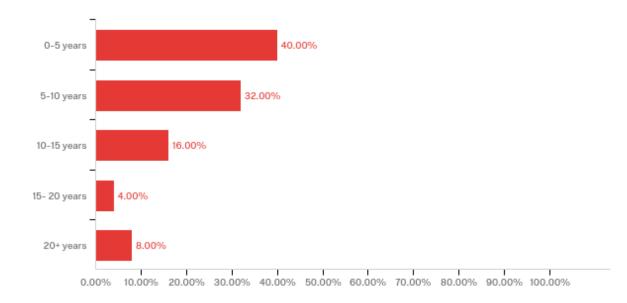
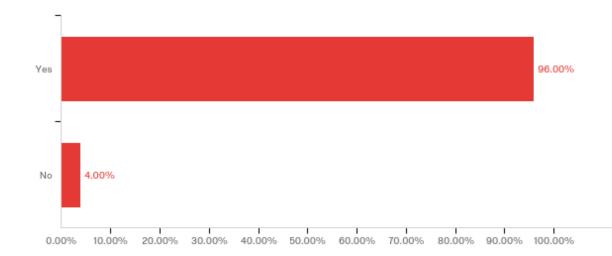


Figure 7 - Participant's Experience

It can be noticed that Figure 7 has data regarding the participants experience. It was observed that as many as 10 (40%) of the participants had work experience of 0 to 5 years. There were 8 participants (32%) who had work experience of 5 to 10 years. There were 4 participants (16%) with work experience of 10 to 15 years and only 1 participant (4%) who had work experience of 15 to 20 years. There were 2 participants (8%) who had work experience of more than 20 years in the industry.



Q5. Do you check the staff's work regularly to assess their progress and learning?

Figure 8. Responses for Question 5

Figure 8 illustrated that 24 participants (96%) agreed and accepted that they regularly assess staff's progress and knowledge and 1 participant (4%) did not check the regular progress of the staff. The overall results stated that the majority (96%) of the participants checked the progress of the work and staff which is a characteristic of a good leader and a stable leadership.

Q6. Do you make sure that the staff is aware of, and understand, all organization policies and procedures?

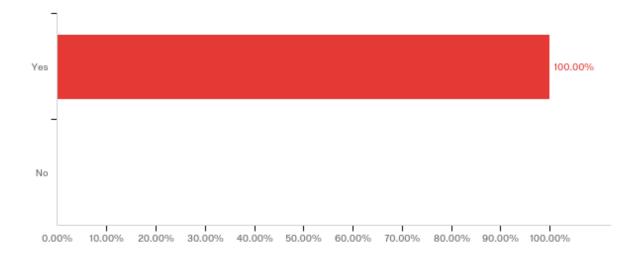
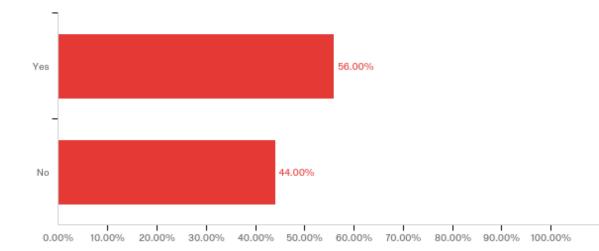


Figure 9. Responses for Question 6

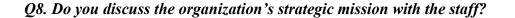
The data in Figure 9 stated the results for Question 6. 100% (25) results were obtained for this question as all the participants answered 'YES' for the given question. The overall results indicated that the managers were communicating with the staff and the staff was aware of the processes of the organization. There was no communication gap between the two parties.



Q7. Do you recognize staff's achievements with encouragement and support?

Figure 10. Responses for Question 7

Figure 10 illustrated that 14 participants (56%) supported their staff and recognized their achievements and 11 participants (44%) did not support their staff and did not recognize their achievements. As the overall results indicated that only few of the managers were supporting their staff and encouraging them and this factor was responsible for the failure of Total Quality Management which could be summed up as a reason for lack of commitment from the staff.



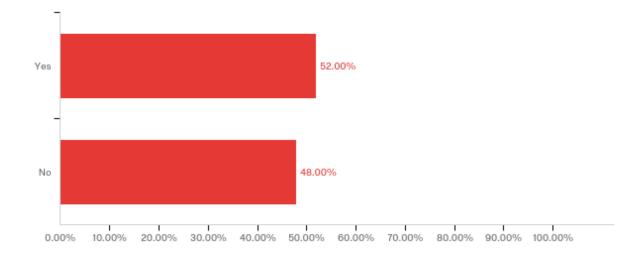


Figure 11. Responses for Question 8

Figure 11 illustrated that 13 participants (52%) discussed the organization's strategic missions with their staff and 12 participants (48%) did not discussed the strategic missions with their staff. The overall results concluded that due to the lack of knowledge about the goals of the organization, the Total Quality Management implementation process failed to make an impact as only 52% participants followed the policy.

Q9. Do you meet with staff regularly to discuss their needs?

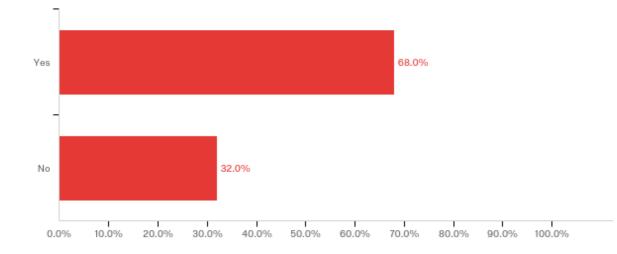


Figure 12. Responses for Question 9

Figure 12 showed that majority (68%) of the participants, 17 individuals, met and discussed the needs of their staff and only 8 individuals (32%) of the participants did not met and discussed and followed this protocol. Understanding the needs of the staff is an imperative part of leadership and it is influential in the way Total Quality Management is implemented. It helps maintain commitment of the employees to work towards quality and for the organization.

Q10. Do you emphasize the importance of quality and allow your staff to establish the control standards?

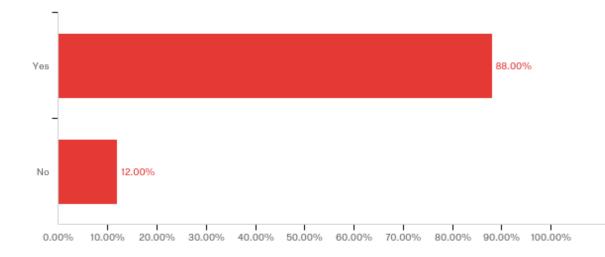


Figure 13. Responses for Question 10

Figure 13 showcases that 88% of the participants, 22 individuals, allowed the staff to establish control standards and emphasized on the importance of quality and just 12%, 3 individuals, did not emphasize the importance to the staff. The overall results stated that most of the participants emphasized on the importance of quality and thus establishing a foundation for quality management. As the results obtained showcased majority of the participants emphasized the importance of quality, but practical knowledge was not implied.

Q11. Do you ensure that information systems are timely and accurate and that information is fed directly to staff?

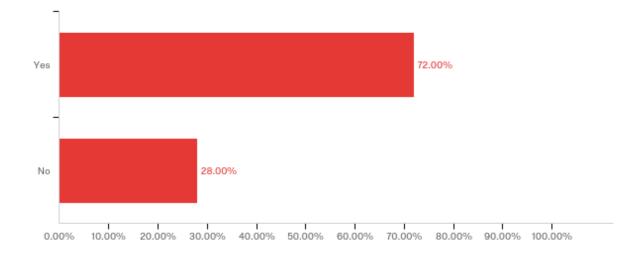


Figure 14. Responses for Question 11

Figure 14 shows that the majority (72%) of the participants, 18 individuals, ensured that the information is directly fed to the staff and the information accurate. The rest 7 individuals (28%) did not emphasize on the accuracy of the information and did not ensure that their staff is aware of the information. The overall results obtained indicated that most of the participants ensured that the information sent to the employees is accurate and in time.

Q12. Do you allow the employees to be a part of the decision-making process?

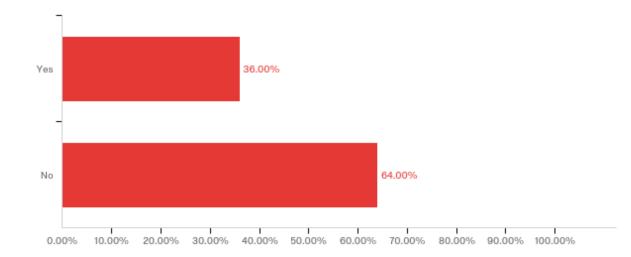


Figure 15. Responses of Question 12

Figure 15 illustrated that majority of the participants (64%) did not want their employees and staff to be a part of the decision-making process and the rest of the 36% agreed for their employees to help make decisions. The overall results concluded that as majority of the participants responded negatively and did not want their employees to the part of the decision-making process, lack of trust between the parties could have been a reason for the unsuccessful Total Quality Management implementation. It was also responsible for the lack of commitment from the employees.

Q13. Do you agree that providing guidance without pressure is the key to be a good

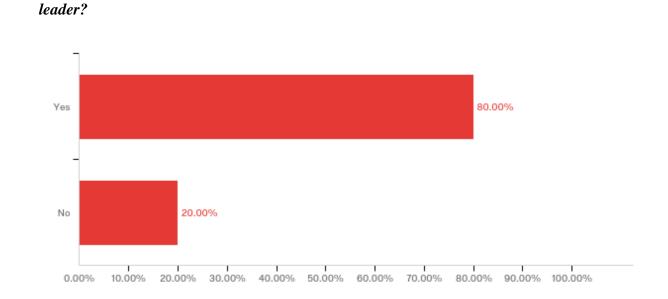


Figure 16. Responses for Question 13

Figure 16 illustrated that 20 participants (80%) have agreed that enforcing the subordinates to complete a task is not a characteristic of a good leader and the remaining 5 participants (20%), did not agree with the given question. Pressurizing the employees to follow the ideas and actions have been defined as a Dictating leadership and it is not a preferred style. The rest 20% of the participants have disagreed with the statement.

Q14. Do you agree that leadership requires staying out of the way of subordinates as they do their work?

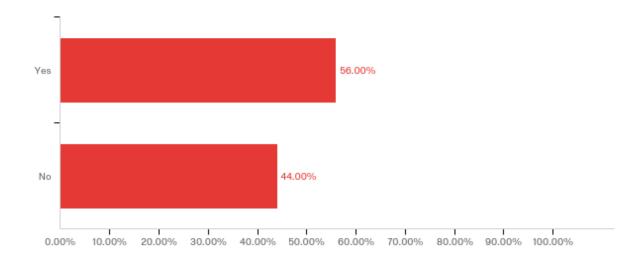


Figure 17. Responses for Question 14

Figure 17 shows that 14 (56%) of the participants agreed with the statement. The rest of the 11 participants (44%) disagreed with the statement. The overall results show that even though more participants agree with the statement, there are some trust issues within the organization. A leader should trust his subordinates and vice versa.

Q15. Do you think that leaders should give subordinates complete freedom to solve problems on their own?

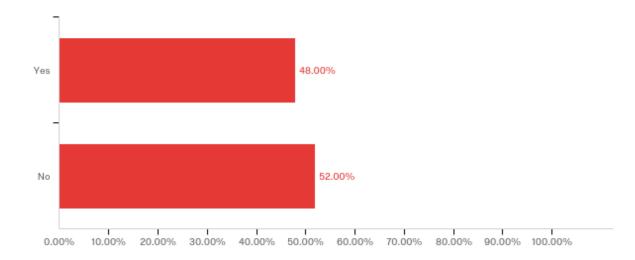


Figure 18. Responses for Question 15

Figure 18 showed that 13 participants (52%) did not allow complete freedom to their subordinates whereas the remaining 12 (48%) of the participants allow their subordinates to work as per their comfort. This data showcased that more people believe that empowering the employees would affect quality of the products as their focus may shift towards personal gains rather than the quality improvement.

Q16. Do you agree that effective leaders give orders and clarify procedures?

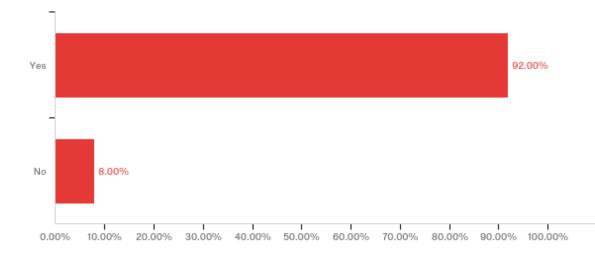


Figure 19. Responses for Question 16

Figure 19 illustrated that the majority (92%) of the participants, 23 individuals, agreed with the given statement. The remaining of 8%, 2 individuals, disagreed with the statement. The successful implementation of Total Quality Management requires the leaders to clarify the processes involved to the staff to nullify the errors.

Q17. Do you have any knowledge of Total Quality Management practices and its implementation procedure?

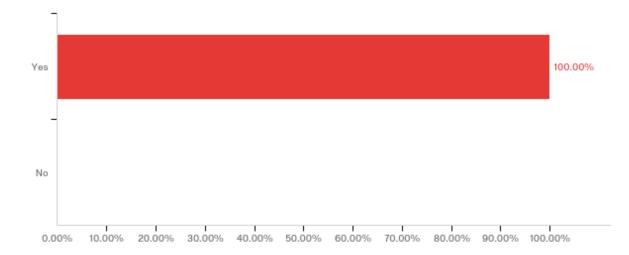


Figure 20. Responses for Question 17

The above figure illustrated that every participant, 25 individuals who participated in the survey had the knowledge of Total Quality Management. All the participants had the knowledge of Total Quality Management and there the results were 100% for the respective question.

Q18. Do you agree with the statement 'TQM is a management philosophy and practice to ensure effective and efficient use of all available resources'?

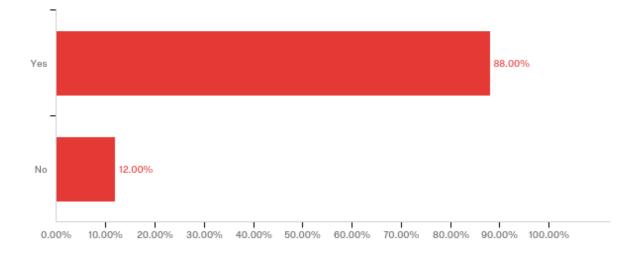


Figure 21. Responses for Question 18

The figure above stated that 88% of the participants, 22 individuals, believed and agreed in the given statement and only 12% of the participants, 3 individuals, did not agree with the statement. The majority believed in the philosophy of Total Quality Management and its practices. The management was responsible for the encouraging and cultivating this ideology into the staff. This showcased the management's ability to sustain and maintain a healthy quality culture.

Q19. Does TQM assist in alignment of company's goals as well as individual goals?

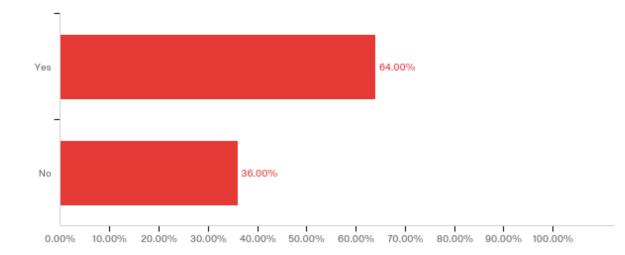


Figure 22. Responses for Question 19

Figure 22 showed that 64% of the participants, 16 individuals, have agreed about that Total Quality Management helps assist company's and individual goals. The rest 36% of the participants, 9 individuals do not feel the same way. Therefore, the overall results were concluded as the management and the employees failed to believe in the concept of Total Quality Management could align personal and organizational goals simultaneously.

Q20. Does TQM aim to make customer satisfaction as the focus of a business?

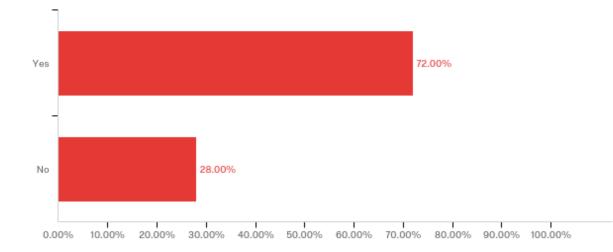


Figure 23. Responses for Question 20

The data from the figure above concluded that most of the participants (72%), 18 individuals, believed that Total Quality Management aimed at customer satisfaction as the focus of the business, the rest of the 7 individuals (28%) did not agree with the statement. It was concluded from the data that the leadership aimed to satisfy the customer, thus, improving the quality of the products.

Q21. Do you practice the 5'S philosophy?

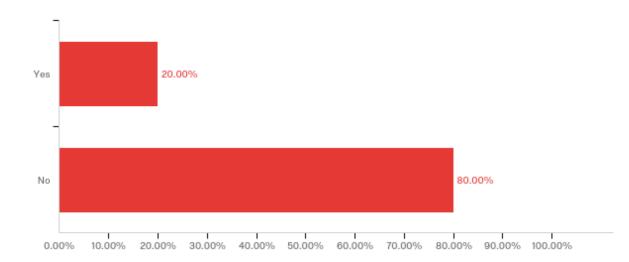


Figure 24. Responses for Question 21

Figure 24 concluded that most of the participants (80%) in the respective companies, 20 individuals, did not practice the 5'S philosophy whereas the remaining 20%, 5 individuals responded by agreeing to practice the 5'S philosophy. As 5'S philosophy is an essential part of the quality management system, the lack of 5S justified the failure of Total Quality Management. The lack of commitment from the management to practice the 5S is the reason for the failure to improve quality.

Q22. Do you agree that training and education are vital elements with respect to TQM implementation?

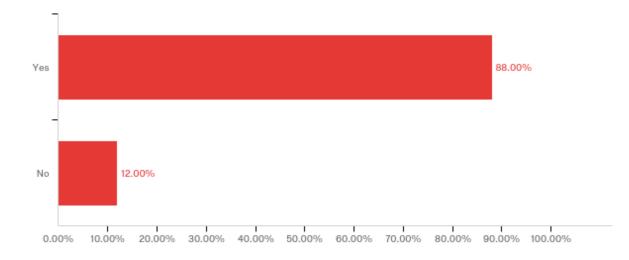


Figure 25. Responses for Question 22

The figure above illustrated that majority (88%) of the participants, 22 individuals, were aware of the importance of education and training with respect to the implementation of Total Quality Management systems. The remaining 12% of the participants, 3 individuals, disagreed with the statement. These results indicated that the industries were aware of the importance of education and training and their impacts on the implementation of Total Quality Management. Still the implementation of philosophies such as 5S did not take place.

Q23. Does your organization implement any Statistical techniques (such as Statistical Process Control, Design of Experiments, etc.) that are important to ensure consistency of product and process quality?

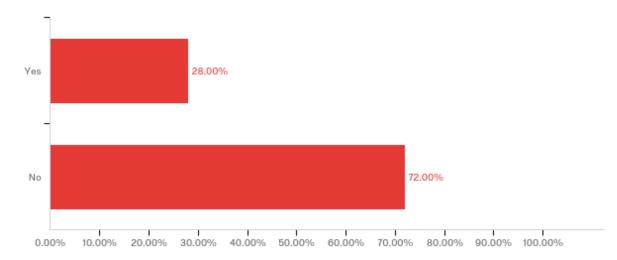


Figure 26. Responses for Question 23

Figure 25 showed the data from Question 26. The majority (72%) of the participants responded in a negative way. 18 individuals recorded has their response as 'No' to the question. The remaining 28%, 7 individuals responded 'Yes' as they practiced and implemented statistical techniques such as SPC.

Q24. "Six Sigma focuses on quality improvement and reducing wastage". Do you think it most effective TQM practice?

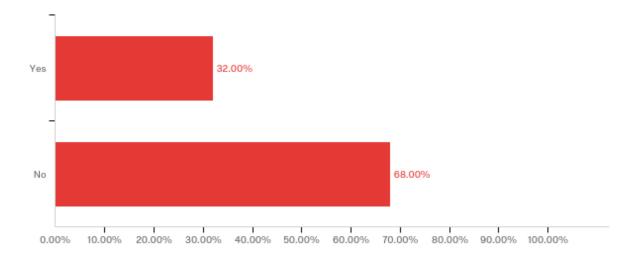


Figure 27. Responses for Question 24

Figure 27 shows that 68% of the participants, 17 individuals disagreed with the statement and did not think Total Quality Management as the most effective practice whereas only 32% of the participants, 8 individuals accepted and agreed with the given statement. The majority participants responded negatively by disagreeing with the statement and did not considered Six Sigma as the most effective Total Quality Management practice. This effort did not encourage the management and the staff to implement Six Sigma.

Q25. Do you agree that management- staff relationship is responsible for the quality culture to flourish?

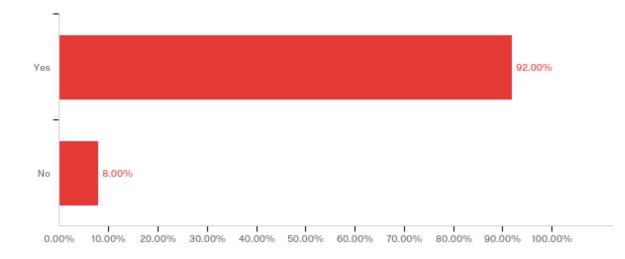
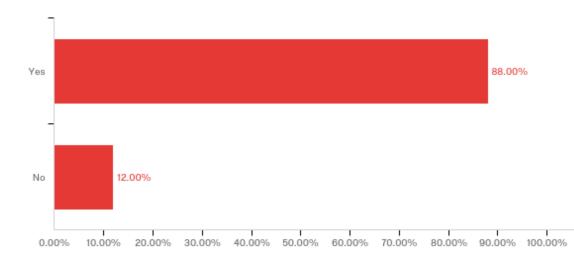


Figure 28. Responses for Question 25

Figure 28 illustrated that 92% of the participants, 23 individuals, agreed with that the relation of the management and staff is important in establishing a culture and maintaining it. The participants accepted the importance of that whereas the rest 8%, 2 individuals disagreed with the statement. The importance of the relation of the management and the staff is highly critical.

Q26. Do you conduct quality circles or quality audits to motivate employee to



participate in quality improvement?

Figure 29. Responses of Question 26

Figure 29 described that 88% of the participants, 22 individuals, conducted quality audits which motivated the employees as well as checked the quality of the products. The remaining 12%, 3 individuals did not conduct any quality audits. As the majority opted and conducted quality audits and believed in performance evaluation as it is critical for success in implementing Total Quality Management.

Q27. Do you think that lack of top management commitment leads to failure of TQM?

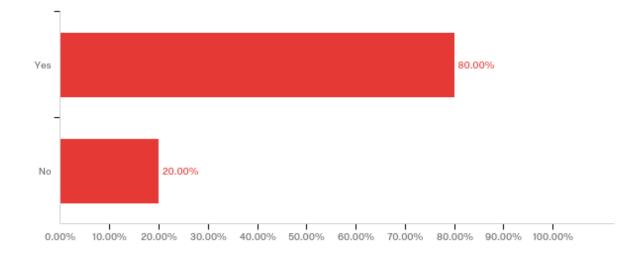


Figure 30. Responses of Question 27

Figure 30 showed that 80% of the participants, 20 individuals considered the leadership commitment as one of the critical success and failure factors of Total Quality Management. The rest 20%, 5 individuals did not consider management commitment as one of the critical success and failure factor of Total Quality Management.

Q28. Please provide some suggestions and views you have regarding the leadership styles and methods required to improve the overall involvement of people in the successful implementation of Total Quality Management in an organization below.

Table 2

Responses for Question 28

Please provide some suggestions and views you have regarding the leadership styles and methods required to improve the overall involvement of people in the successful implementation of Total Quality Management in an organization below.

Response 1: Employees appreciation is highly important and employees should be empowered to take decisions on their own.

Response 2: The implementation of TQM and its success depends entirely on the relationship between the staff and the management. The people should be aware that the best way to lead an organization is through making people follow your thoughts and idea by actions and not by force. Freedom to act and think is an essential criterion in an organization which helps develop that culture. Authoritative leadership is not accepted and appreciated, only applicable in special conditions.

Response 3: Total Quality Management is a cooperative process and its

implementation is successful only when the entire team works together and moreover

understands what their work is. The cooperation of the management is highly

important. People should be given freedom to do their work and tasks and orders

should never be enforced. Authoritative styles are always bad for an organization.

Response 4: Appreciate our work, it may be in forms of incentives, bonuses etc.

Response 5: The ability to perform well depends on the education and training provided. The staff should be well trained and have knowledge and understanding of the work they are doing. Therefore, it is mandatory to conduct several training sessions and seminars which would help the management and the staff to understand and gain knowledge of the work they are responsible of.

Response 6: In an organization which focuses on quality improvement, a leader should divide the groups for various processes involved in the industry. There should be a person in every group who will be their leader. Strategic plans and decision making should involve all the leaders and consider all the options that are required for quality control and improvement. Leaderboards must be prepared and every group's success rate should be tracked to continuously improve.

Response 7: A leader must be authentic in his/her leadership which fetch success in career. Be authentic and empower your subordinates.

Response 8: The employees should be appreciated for their work and empowered. This will help in making a better relationship between the employees and the management.

Response 9: The management should be ready and free to accept suggestions and opinions from the employees. It would help in making the relationship between the management more stable and would help the employees to understand the goals more clearly.

Response 10: Open Leadership, Enough Participation from Employees, Freedom of Expression and Activities.

Response 11: Communication, both internal and external is a key component in improving quality of services provided

Response 12: The leaders should never dictate their subordinated and team members. Democratic leadership should be preferred and practiced in an industry for smoother functioning and achieving the desired targets.

Table 2 depicted the responses recorded for Question 28. Majority of the participants (52%), 13 individuals, did not provide any suggestion. The remaining 12 individuals (48%) provided their views and preferred leadership styles for the successful implementation of Total Quality Management.

Conclusion and Future Recommendations

Conclusion

The purpose of the research was to study the importance of leadership and its impacts on the implementation of Total Quality Management in the food industries of India. A questionnaire survey was sent to the managers of three food companies of Nagpur and Mumbai region and the data was collected from 25 responses that were received from the survey. Most of the participants had a Bachelor's degree and had a working experience of 0 to 5 years. The data collected helped to provide answers to the research questions raised in the study. The conclusion obtained from the study were:

- Is leadership essential for the successful implementation of Total Quality Management in food industries in India?
 - Question 5 to Question 16 were related to the organizational leadership characteristics. The participant's recorded responses were mostly towards the important tasks that should be followed up for an effective and efficient functioning of organization. These responses indicated that leadership is an essential factor for the successful implementation of Total Quality Management and answered the research question. The responses for Question 17 to Question 27 were based on Total Quality Management. The responses for Question 21 and Question 23 were negative as the participant's recorded answers states that they did not practice the 5S philosophy and any statistical techniques such as SPC. The 5S philosophy is an essential part of Total Quality Management and its implementation would require a strategic planning and guidance from the leaders and the

management. The implementation of statistical processes such as SPC would help improve the processes thus affecting and improving the quality and help the quality management systems to be implemented successfully.

- 2. What leadership styles are found in India's food industry?
 - This research question was answered mostly from the responses obtained 0 from Question 28 and the survey as well. The responses indicated that the current style that was followed by the management in the food industries was Coercive Leadership or Autocratic Leadership style. The leaders following this leadership styles concentrated on all the decision-making power to themselves (Robert, 1978). The subordinates were depended upon the leaders and had to follow the orders. These leaders were not open to suggestions and discarded any suggestions given. The participants had different opinions but all of them stated that they needed and preferred more of a democratic approach in the management where participants and the staff could make decisions on a certain level and the management appreciated and recognized the involvement and the work of the people. The recognition of the achievements and work of the employees would help to increase the involvement of the employees and the commitment towards the improvement of quality.
- 3. How has leadership affected the implementation of Total Quality Management in the food industries of India?
 - The successful implementation of the Total Quality Management systems in the food industries of India has been a scarce scenario lately. The

current management in the Indian food industries followed the coercive leadership to govern its organization. The leaders failed to implement Total Quality Management up to a certain level as the leadership could not follow some critical factors that are required for the successful implementation of Total Quality Management. The factors such as only 56% of the managers recognized the achievements and encouraged their staff contributed to lack of commitment from the employees towards improving quality. The leadership failed to identify the needs of the employees and thus failed to satisfy the costumers. The management failed to trust their employees at some point as they opted not to allow complete freedom to the employees while solving problems. Also, due to the coercive nature, the management was not open to new suggestions and practices such implementation of 5S and technical strategies such as SPC throughout the entire food industry. These results had an overall negative impact on the quality management systems and their implementation and these factors contributed to the reasons for the failure of a perfect Total Quality Management implementation in the food industries of India. Even though the responses for Question 12 and Question 15 were marked as negative as most of the participants recorded 'NO' to the question. These questions were related to the employees' involvement in decision making process and their freedom to work without and act. These were some of the factors responsible for the declining growth of the food industries in India as stated by Zia (2012). This has resulted in food wastage due to

poor quality as the Indian sector faces almost 23 to 30 percent of food being wasted due to the poor quality (Rawat, D. 2017), thus resulting in the overall decline in the profits in the food industries of India.

Future Recommendations

The current study focused on the impacts of leadership on the food industries in India. It was conducted in two regions of India only. Therefore, the first recommendation would be to conduct the research on wider scale and selecting more companies. The increased sample will be beneficial as more data from various food industries would be collected and the researcher could analyze this data deep and use other data methods of data analysis.

The second recommendation for future study is to conduct the research by comparing various sectors of food industries such as packaged food industries, dairy products industries, agricultural products industries situated in different locations of the world. The implementation of Total Quality Management is different in every organization. This could be advantageous to collect diverse data. The location also plays an important role as every nation has different policies and rules of implementation of Total Quality Management due to which the results may vary.

The third recommendation would be continuing the study and initiating longitudinal data analysis after some period and collect the same data from with the help of the questionnaire provided. This would help track the change in the information over time.

Appendix A

Email Invite

Subject: Leadership and Total Quality Management Survey

Hello,

My name is Abhir Joshi. I am a graduate student at Western Kentucky University, USA and I am pursuing my Master's degree in Engineering Technology Management. I am conducting a survey for my thesis topic 'Impacts of Leadership on Total Quality Management in the Food Industry in India'. Therefore, I request you to participate in the survey.

The responses you provide me will help me assess the leadership styles followed in the industry, necessary measures and steps taken to ensure the food quality, how are these strategies formed and implemented in the industry.

The participation is voluntary and the data collected will be confidential and used for research purpose only. The estimated time to complete the survey is 10 minutes.

To participate, click the link below:

{Survey Link}

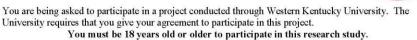
Thank You.

Appendix B

Informed Consent Document

INFORMED CONSENT DOCUMENT

Project Title: Impacts of Leadership on TQM in food industry in India Investigator: Abhir Joshi, School of Engineering and Applied Sciences. Phone: 270-320-2258 Email: abhir.joshi415@topper.wku.edu



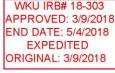
The investigator will explain to you in detail the purpose of the project, the procedures to be used, and the potential benefits and possible risks of participation. You may ask any questions you have to help you understand the project. A basic explanation of the project is written below. Please read this explanation and discuss with the researcher any questions you may have. You should keep a copy of this form for your records.

- Nature and Purpose of the Project: As a requirement for the fulfillment of a degree in the School of Engineering and Applied Sciences department, the research is aimed to find and analyze the impacts of leadership on the implementation of Total Quality Management in the food industry of India. The research indicates the current leadership styles and traits followed in the food industry of India and the impact it has on the implementation of Total Quality Management.
- 2. Explanation of Procedures: Survey format will be used to collect the data from you as a participant. The survey questionnaire consists for questions related to leadership and total quality management practices being followed in the company. You will be asked to answer the survey questions which will take around 10 minutes to answer the questions.
- 3. Discomfort and Risks: The research has no discomforts and no risk elements at to the participants and the participation is entirely voluntary. The data collected will be confidential.
- Benefits: The benefit of the research will help to understand the role leadership plays in the implementation of total quality management.
- Confidentiality: All the data obtained will be confidential and will be used for the educational and research purposes only.
- Refusal/Withdrawal: Refusal to participate in this study will have no effect on any future services you may be entitled to from the University. Anyone who agrees to participate in this study is free to withdraw from the study at any time with no penalty.

You understand also that it is not possible to identify all potential risks in an experimental procedure, and you believe that reasonable safeguards have been taken to minimize both the known and potential but unknown risks.

Your continued cooperation with the following research implies your consent.

THE DATED APPROVAL ON THIS CONSENT FORM INDICATES THAT THIS PROJECT HAS BEEN REVIEWED AND APPROVED BY THE WESTERN KENTUCKY UNIVERSITY INSTITUTIONAL REVIEW BOARD Robin Pyles, Human Protections Administrator TELEPHONE: (270) 745-2129



Appendix C

Approval Letter



INSTITUTIONAL REVIEW BOARD OFFICE OF RESEARCH INTEGRITY

DATE:

March 9, 2018

TO:	Abhir Joshi
FROM:	Western Kentucky University (WKU) IRB
PROJECT TITLE:	[1209761-1] Impacts of Leadership on TQM in Food Industry in India
REFERENCE #:	IRB 18-303
SUBMISSION TYPE:	New Project
ACTION:	APPROVED
APPROVAL DATE	March 9, 2018

APPROVAL DATE: EXPIRATION DATE: REVIEW TYPE:

APPROVED March 9, 2018 May 4, 2018 Expedited Review

Thank you for your submission of New Project materials for this project. The Western Kentucky University (WKU) IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding followed by an *implied* consent form. Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office. Please use the appropriate reporting forms for this procedure. All FDA and sponsor reporting requirements should also be followed.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office.

This project has been determined to be a Minimal Risk project. Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the appropriate forms for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of May 4, 2018.

Please note that all research records must be retained for a minimum of three years after the completion of the project.

If you have any questions, please contact Paul Mooney at (270) 745-2129 or irb@wku.edu. Please include your project title and reference number in all correspondence with this committee.

- 1 -

Generated on IRBNet

Appendix D

CITI Report

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM) COMPLETION REPORT - PART 1 OF 2 COURSEWORK REQUIREMENTS*

* NOTE: Scores on this <u>Requirements Report</u> reflect quiz completions at the time all requirements for the course were met. See list below for details. See separate Transcript Report for more recent quiz scores, including those on optional (supplemental) course elements.



For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: https://www.citiprogram.org/verify/?d8278b3e-21e7-4994-9c7a-510f4deee1d8

CITI Program Email: <u>support@citiprogram.org</u> Phone: 888-529-5929 Web: <u>https://www.citiprogram.org</u>

> Collaborative Institutional Training Initiative

Appendix E

Questionnaire Survey

- 1. Your Company Name
- 2. Your Education
 - Associate's Degree
 - Bachelor's Degree
 - Master's Degree
 - Doctorate
 - Any other, Specify
- 3. Your company role
 - Production Supervisor
 - Production Manager
 - Quality Supervisor
 - Food Safety Quality Analyst
 - Maintenance Manager
- 4. Experience
 - 0-5 years
 - 5-10 years
 - 10-15 years
 - 15-20 years
 - 20+ years

- 5. Do you check the staff's work regularly to assess their progress and learning?
 - Yes
 - No
- 6. Do you make sure that the staff is aware of, and understand, all organization policies and procedures?
 - Yes
 - No
- 7. Do you recognize staff's achievements with encouragement and support?
 - Yes
 - No
- 8. Do you discuss the organization's strategic mission with staff?
 - Yes
 - No
- 9. Do you meet with staff regularly to discuss their needs?
 - Yes
 - No

10. Do you emphasize the importance of quality and allow your staff to establish the

control standards?

- Yes
- No

11. Do you ensure that information systems are timely and accurate and that information

is fed directly to staff?

- Yes
- No
- 12. Do you allow the employees want to be a part of the decision-making process?
 - Yes
 - No

13. Do you agree that providing guidance without pressure is the key to be a good leader?

- Yes
- No
- 14. Do you agree that leadership requires staying out of the way of subordinates as they do their work?
 - Yes
 - No
- 15. Do you think that leaders should give subordinates complete freedom to solve

problems on their own?

- Yes
- No

16. Do you agree that effective leaders give orders and clarify procedures?

- Yes
- No

- 17. Do you have any knowledge of Total Quality Management practices and its implementation procedure?
 - Yes
 - No
- 18. Do you agree with the statement 'TQM is a management philosophy and practice to ensure effective and efficient use of all available resources'?
 - Yes
 - No

19. Does TQM assist in alignment of company's goals as well as individual goals?

- Yes
- No

20. Does TQM aim to make customer satisfaction as the focus of a business?

- Yes
- No

21. Do you practice the 5'S philosophy?

- Yes
- No

22. Do you agree that training and education are vital elements with respect to TQM

implementation?

- Yes
- No

- 23. Does your organization implement any Statistical techniques (such as Statistical Process Control, Design of Experiments, etc.) that are important to ensure consistency of product and process quality?
 - Yes
 - No

24. "Six Sigma focuses on quality improvement and reducing wastage". Do you think it most effective TQM practice?

- Yes
- No
- 25. Do you agree that management- staff relationship is responsible for the quality culture to flourish?
 - Yes
 - No

26. Do you conduct quality circles or quality audits to motivate employee to participate

in quality improvement?

- Yes
- No

27. Do you think that lack of top management commitment leads to failure of TQM?

- Yes
- No

28. Please provide some suggestions and views you have regarding the leadership styles and methods required to improve the overall involvement of people in the successful implementation of Total Quality Management in an organization below.

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Abbreviations of Terms

- 1. CEO- Chief Executive Officer
- 2. MOFPI- Ministry of Food Processing Industries
- 3. ISO- International Organization for Standardization
- 4. LMX- Leader-Member Exchange
- 5. PDCA- Plan Do Check Act
- 6. SPC- Statistical Process Control
- 7. TQM- Total Quality Management