ABSTRACT
Total quality Management (TQM) is viewed as an imperative element for the long term achievement of an association. TQM execution has been a vital role for enhancing authoritative proficiency. The connections in the middle of TQM and execution have been examined by various researchers. While looking at the relationship in the middle of TQM and execution researchers have utilized distinctive execution sorts, for example, money, creative, operational and quality execution. Late research on aggregate quality administration has inspected the connections between the Total quality administration and authoritative execution. TQM concentrates on constant procedure change inside of associations to give predominant client esteem and address client issues. TQM a well known rule for hierarchical administration is embraced for creating key infomaps and infocharts for a data association.

Keywords— TQM, Money, Hierarchical, Infomaps

I. INTRODUCTION
Industrial growth and manufacturing technology are the back bone for country’s growth. The products thus manufactured up-to-the-standard only meet the expectation of its customer in the following four aspects namely Quality, Cost, Delivery and Services. The "mantra" to accomplish this four essential aspects is through continuous improvements. For continuous improvements, two type of initiatives shall be geared up in the industry. Suggestion scheme is one such initiative and Quality Circle activity is the other. Suggestion scheme is for tapping individual creativity and Quality Circle is for group contribution.[1]. In Quality Circles, the teams are not only giving improvement ideas and they also implement these ideas into workable one.

The management has to provide such a conducive atmosphere for this voluntary contribution. For that, employee shall be properly motivated. They shall involve in their work and won their process.[2] For creating such a conducive atmosphere, TQM works best. It is strongly supported by management and all improvement initiatives shall be implemented by employee teams. By implementing TQM in an organization, adaptability to change is much easier and also able to gain customer loyalty since there is a continual focus on process improvement that prevents error from occurring. Adverse and non-participative attitudes of employees are the biggest obstacle in the organization’s success, growth and advancement.[3] TQM weights on bringing attitudinal changes and enhancements in the execution of representatives by advancing appropriate work society and compelling cooperation. It gives magnificent chances to self-advancement and expanding worker’s enthusiasm for the employment. Further in today’s complex and uncertain business environment, Human Resource has become the most important contributing factors for the success of an organization. Competent and motivated manpower helps the organization in fulfilling its vision into reality.[4]-[7] People development is thus the key enabling process in overall growth and development of the company.

II. HISTORICAL REVIEW
In any case Level of "Value coincidentally", in incredible old day's suggests that you might have Good Quality Product in some time, but most of the time you won’t, since competitors and alternatives were not exists. Second Level of “Quality by inspection”, since every one of the items experienced reviewers, just few absconds left over by mistake. Third Level of "Quality by Assurance", whatever precautionary measures we took in the arranging organize a few deformities were slipped and went to clients end. Forward Level of "Quality by
counteractive action", jab yoke (mistake proofing) activities were built in the system and defects were very less. Still, few users affected. Fifth Level of “Quality by perfection”, like six sigma level perfection achieved with very few defects. Further Sixth Level in Quality was achieved in space technology, etc.[8] as "Quality by improvement or creation", where no blunder was allowed. In business ventures, we satisfied by fourth or fifth level of Quality.

After the Second World War, even automation and other productivity enhancements might not help the Japanese corporations to market their products or service because of poor Quality and were able to sell their products only at ridiculous low prices.[9] Due to poor Quality it was also very difficult to secure repeat orders. The corporations had not recognized the importance of Quality at that time. Then, during 1950s they learnt and implemented the SQC techniques, PDCA from Dr. W.E. Deming; management principles from Dr. J.M. Juran and Quality Circle concept from Dr. K. Ishikawa. These were resulted in improved product quality.[10][11][12] They achieved the 2nd Quality Product manufacturer in the world during 1970’s. Then they developed their own way of improving this status by implementing Company Wide Quality Control (CWQC of Japan is known as TQM in other Countries) in their processes and other innovative tools like, Just in Time, Jab Yoke, Single Minute Exchange of Dies, Six Sigma, inner client idea, seat checking and other techniques with sincere involvement of all workmen. They made the working atmosphere as Joy of working. With these innovative techniques and involvement of all workmen, they reached the Number 1 Quality Product manufacturer in the world in 1980’s. To achieve this status, the employee taught about problem solving techniques and freedom given to choose their alternative solution for implementation. Quality Circle one such platform to perform and involve all the workmen for continuous improvement with group consensus and joy of working atmosphere. The Japanese industrial growth during 1970’s was mainly build on this individual kaizen (suggestion scheme) and group kaizen (Quality Control Circle) activities. Today, this continual improvement in the processes made them to produce the remarkable Quality products with less cost and ability to deliver on time. This current agents’ affiliation and organization commitment were gathered and secured by and large Quality Management which prompts fulfill "World Class Manufacturer" status.

III. TOTAL QUALITY MANAGEMENT

Its reasoning is a "Top Driven" development and has set of controlling rule that speak to the establishment of a consistently enhancing association. It has further described the improved management role of planning, executing, controlling and directing. Planning include current, future needs of customers and all stockholders.

Management shall lead the transformation of the organization to the new culture of continuous improvement and empowering others to accept personal responsibility for it too. The approach shall be as follows:

IV. OUR APPROACH

As following the Table.1. shows Modified approach

<table>
<thead>
<tr>
<th>Key Element</th>
<th>Normal Approach</th>
<th>TQM Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation</td>
<td>Product oriented</td>
<td>Customer oriented</td>
</tr>
<tr>
<td>Priorities</td>
<td>Quality First, Cost second and Services Third</td>
<td>Equal priorities to all the three</td>
</tr>
<tr>
<td>Approach</td>
<td>Short term</td>
<td>Long term</td>
</tr>
<tr>
<td>Emphasis</td>
<td>Deduction</td>
<td>Prevention</td>
</tr>
<tr>
<td>Find fault</td>
<td>In operations</td>
<td>In systems</td>
</tr>
<tr>
<td>Responsibility of Quality</td>
<td>Lies with Quality Department</td>
<td>Every one</td>
</tr>
<tr>
<td>Problem solving</td>
<td>By Executives/Managers</td>
<td>By task performer</td>
</tr>
<tr>
<td>Procurement policy</td>
<td>Price</td>
<td>Life cycle cost, partnership</td>
</tr>
<tr>
<td>Management Role</td>
<td>Plan, execute, control and enforce</td>
<td>Delegate, coach, facilitate and mentor</td>
</tr>
</tbody>
</table>

Table.1. TQM approach

The customer needs shall be understood thoroughly by the task performer through proper communication. Based on the needs, the errand entertainer alters their procedure to achieve the best quality items in the reasonable expense and ensure on time delivery.[13]-[18] To achieve this, continuous improvement shall be carried out by implementing the innovative / creative ideas of all employees in the organization to prevent defects. To improve the human capability of the well trained employees, they shall know the work first and do it better than anyone.[19][20] To do better than anyone, they require to know about analyze the problem quantitatively. Based on the analysis they shall find out solutions to improve the current working method. Further, they shall learn about decision making, regular implementation, monitoring, standardizing the improvements and responsible to prepare themselves for the new improved standard. This cycle shall continue forever.[21][22]. This improvement activity shall spread all over the plant and this experience shall be shared among all employees. Top Management shall recognize and motivate the individual responsible for the development.

V. TQM IMPLEMENTATION
Considers demonstrate that administration procedures were the foundation for the accomplishment of any organization. To streamline the administration process, TQM is one of the best vehicle to channelize all the effort in a systematic and holistic approach. The TQM implementation process begins with senior management and the most important, the CEO’s commitment. Leadership is essential in every aspect during TQM implementation processes and if any failure was happened, it was due to lack of senior management involvement.[23][24]. 
The active involvement of middle management and first line supervisors is essential to the success of TQM implementation. Without early and active support of middle management TQM implementation will not be successful.[25][26].Similarly if there are unions, they shall be consulted for effective implementation. Communication plays a vital role in implementing TQM. During initial stages of implementations there will be lot of obstacles due to: 
a) Lack of Management commitment  
b) Inability to change organizational culture  
c) Improper planning  
d) Lack of training and education  
e) Incompatible organizational structure and isolated individuals and departments  
f) Ineffective measuring techniques and lack of access  
g) Inadequate attention to internal/external customers  
h) Inadequate use of empowerment and team work and  
i) Failure of continual / continuous improvement.

The successful TQM implemented companies improved their performances in the following areas, namely, product quality, on time delivery, employees’ involvement in the work, team working culture, working relationships, customer satisfaction, employee satisfaction, efficiency, correspondence and piece of the share. Though TQM works best and strongly supported by management and all improvement initiatives shall be performed by the employee teams. Thus the success of TQM lies on employees’ hand who are really in charge to make these changes. When compared two groups of industry with / without TQM implementation companies during the five years prior to TQM Award and five years after the award. No difference was shown during five years between two groups in the prior to TQM Award duration. But abnormal improvement equal of 200% increase was observed after the period of five years won the award between these two groups in the area; Growth in Income, Increase in Sales and Increase in Total Assets as below:( Table.2).

<table>
<thead>
<tr>
<th>Area of improvement</th>
<th>Growth in TQM practiced Companies (after award winning)</th>
<th>Growth in TQM non-practiced Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth in Income</td>
<td>91%</td>
<td>43%</td>
</tr>
<tr>
<td>Increase in</td>
<td>69%</td>
<td>32%</td>
</tr>
</tbody>
</table>

Table 2. Growth potential

The data clearly indicate that the TQM practiced company can out beat the performance of TQM non-practiced company. In this competitive atmosphere, what we are given etc., to the customer than our competitor will make the customer loyal and feel them happy to continue their business with us.

VI. ROLE OF LEADERSHIP

Leaders shape the organization’s value, promote the organization’s values, protect the organization’s value and exemplify the organization’s value. A leader strengthens and inspires the followers to accomplish organization’s value. Pioneers and supporters raise each other to more higher amounts of inspiration and profound quality. Initiative gets to be moral in that it raises the level of human behavior and moral goal of both the pioneer and the drove, and hence has a changing impact on both. A leader is one who can take a group of people to a place they don’t think they can go. Senior leader might rouse and motivate the whole workforce and urge all representatives to contribute, to create and learn, to be inventive and to be imaginative. Senior pioneer might serve as good examples through their moral conduct and their own inclusion in arranging, correspondences, training, advancement of future pioneers, survey of authoritative execution and worker acknowledgment. As a role model, they can reinforce the values and expectations while building leadership, commitment and initiative throughout the organization. Senior management’s role is no longer to make the final decision, but to make sure the team’s decision is aligned with the organization’s goal. Push critical thinking and choice delegating so as to make to the most reduced suitable level power and obligation. Senior management shall practice the philosophy of “Management by wandering around (MBWA). This MBWA will significantly diminish paper work. Urge subordinates to compose just essential messages that should be a piece of the perpetual record. This approach is an excellent technique for gaining firsthand information. Pioneers should comprehend the human instinct and capacities of individuals like “Individuals can prepare just a couple of realities at once; accordingly a pioneer needs to keep, things basic”. Leader shall understand that satisfied customers only pay their bills promptly, which greatly improves in the cash flow of the organization. To understand the customer expectations, customer perception survey and customer meet shall be conducted. Leader cannot deliver as he promised to the customer without the support of down the level. So leader has to gain the confident from down the level subordinates.
VII. BENEFITS OF EMPLOYEE INVOLVEMENT

Making employees’ to involve in their job, make them to own their process and induce them to improve the process for improved productivity and quality, which resulted in cycle time reduction, improved product quality, safety and reduce cost. Indirectly, it empowers the employee to take right decision and corrective action at the early stage itself with their creativity and innovation ideas. They are the right people to spot and pinpoint the areas for improvement.[28].Since the modifications are initiated from their end, implementation will not be a problem. [27]to[33].This increases the morale by creating a feeling of belongings and more committed. The top management recognition will motivate them for continuous improvement which makes the process perfect and no defects will occur.[34][35] and [36] Obviously flawlessness is unthinkable in light of the fact that the race is never over; then again, we should consistently take a stab at its fulfillment.(Fig.1).

VIII. SEVEN MAIN FEATURE OF TQM INITIATIVES CONSTANTLY FOLLOWED UP IN JAPAN

1) CWQC, involving all employees, organization, hardware and software  
2) Accentuation on instruction and preparing for Top and Middle administration and specialists  
3) Quality Control Circle activities by small groups of volunteers  
4) CWQC audits  
5) Application of statistical methods  
6) Steady update and overhauling guidelines  
7) Across the nation usage of CWQC

All industries that followed TQM (CWQC) shall constantly review their performances in the above seven initiatives and strive for further improvement continuously.

IX. CONCLUSION

To Make in India advancement” accomplishment, experts to be moved to take after their occupation and own their strategy.This will result in constant change, an approach to accomplish flawlessness and to use the imaginative/innovative capability of the first line employee to underwrite the mental aptitude of inexhaustible HR accessible in India. This will change the representatives thinking example to love India, love homeland and own India. By enhancing the information, ability of the representative and change their disposition will bring about a gigantic force according to the accompanying mathematical statement.

The power = Knowledge x Skill x Attitude

Inclusion of first line workers' part is an imperative one. They are the errand entertainers and others are just supporting them to perform their part well. Flawlessness can be accomplished just if the undertaking entertainers performed well.

1. All specialists in the affiliation ought to know “what their client needs” w.r.t. Thing, Quality, Cost, Delivery, Service and Morale that is inbuilt in the things.
2. Every worker might picture in their everyday work about the consistent stream of quality expansion that gets inbuilt into the items/administrations which thusly meets the client desires.
3. Every worker might ready to recognize whether the stream is typical or unusual.
4. If they recognized anomalous stream, then they ought to comprehend what to do to remedy this circumstance without others/administration mediation.
5. This corrective methodology shall be standardized and every employee can use this established standard if similar situations arise in the future. The end result shall be similar to “self-healing” which leads to bottom line growth in the organization.
6. All employees might think for further enhancements to make that stream easily.
7. The above made worth stream won't just take care of the client demand(asking rate),yet it will likewise made unmistakable in a manner that each worker in the association can physically see that stream.
8. To make the visual manufacturing plant, which implies that visuals are entirely for the timing of stream and might be effortlessly justifiable to each representative.
9. Since everyday issues are taken consideration by the line working gathering, the pioneers can invest their important energy working with deals groups to accomplish higher target and can do process change for growing new items to
fit into the current operation capacities. This prompts top line growth. When both main concern and best line developments are guaranteed, the association might accomplish "World Class Manufacturer" status.

By actualizing TQM, unmistakable additions are as better item quality, improvement in efficiency, expanded piece of the overall industry and benefit and so forth, while immaterial increases are compelling cooperation, upgrade of occupation interest, change in human relations, participative society, consumer loyalty enhanced correspondence and assembling better picture of the company. TQM works best where it is unequivocally fortified by association and execute all activities by agent teams for changing over the business as "World class Manufacturer", which along these lines prepared to fulfill "Make in India" advancement accomplishment.

REFERENCES

[1] Course materials provided by course instructor Mr. Quamrul Islam


