The impact of Total Quality Management on organisational performance.

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Abstract

The concept of Total Quality Management (TQM) has been developed as a result of intense global competition; empirical studies show that TQM has considerable impact on business performance. Indeed, business practice strongly admit and adhere TQM as a management tool for improving organizational performance. Predominantly, TQM is accepted as a cornerstone for organizational excellence and prosperity, as its prime means are continuous development, systematic control, customer satisfaction and monitoring of the processes and many others that are targeted to maintain competitiveness and efficiency.

Importantly, it is highly desired that TQM could become a management philosophy in the organization that is keenly adopted by managers and employees as a facilitating tool and engine for growth.

The purpose of this paper is to examine this issue and propose the relationship between TQM practices and organizational performance as a whole. Initially, organizational performance will be characterized by competitive advantage, efficiency and financial performance of the company. Hopefully, the results of this paper will inspire the interested companies in TQM model and present in-depth knowledge of TQM theory and its impacts on business outcomes. Moreover, some managerial implications and scope for future study will be offered at the end.

Nevertheless, if applied wisely, TQM constitute the management system that covers all the aspects of the business process that is
consequently aimed to achieve organizational excellence and prosperity.

Key Words:
Total Quality Management, organizational performance, quality, competitiveness, continuous improvement, financial indicators, quality measurement.

Introduction
TQM was initiated as a concept to struggle against extreme global competition that was aimed to boost performance indicators of the company. (Ahmad et al., 2012)

Only through continuous provision of excellent quality, the company can achieve bright product and brand image in the customer’s mind in this competitive world. (Singh, 2013)

By no coincidence, in the last 10 years there was a wide spread of TQM worldwide and it became a pervasive part of business thinking. 93 % of American largest 500 companies have adopted TQM, where Japan using TQM techniques has gained enormous economic advantage in the market. (Powel, 1995)

Executives initiating TQM practices are usually willing to improve the quality level in all processes, that is perceptively targeted for future profitability, transparency and competitiveness, but it takes long period of time to genuinely observe superior results. Sometimes too much efforts and bureaucracy is required for effective functioning of quality management system.

It is important to note that quality concept itself is accepted as ever-changing and flexible model, thus, awareness and attention is essential to keep up with the latest and updated requirements that promise practical and reliable outcomes for business. (Faingenbaum, A.V., 1983)

TQM and organizational performance

It cannot be denied that in the century of modern and advanced technology where global economy is unstable, companies are becoming less competitive and TQM is practically providing companies with key strategic factor for gaining outstanding results in business.

It is recognized that Total Quality Management (TQM) and strategic planning offer the
businesses with the tools to obtain a competitive advantage. TQM mainly targets the organization's objectives on a system of quality and satisfying the needs and demands of the customers. (Hearst news, 2015)

According to Benner and Tushman (1991), management of the processes can favorably benefit the company, creating healthy, competitive surrounding and additional significant improvements. But, it cannot help in situations where specific knowledge, resources and skill would be key to advancement (Pignanelli, 2008).

Indeed, large amount of researches were conducted to find the relationship between implementation of Quality management system and profitability and organizational excellence. However, various hypotheses and assumptions were generated and synthesized.

Powell (1995) as a researcher also deeply analyzed the quality model in business, summarizing that only specific practices connected to TQM were connected to high performance; thus, he suggested that capturing some element from QM system not covering whole “TQM ideology” is quite possible. In addition, Easton and Jarrell (1998) interviewed leading companies on TQM adoption and established favorable associations between underpinning QM and continuous development, prosperity and market share.

Nevertheless, it is quite difficult to evaluate the direct influence of TQM on organizational competitiveness and efficiency. This is the reason why it is impossible to explicitly prove the direct effect of integrated QM system to the organization.

Usually, there is an understanding that TQM is a discrete phenomenon associated with complexity and standard approach. But the degree of implementation can indicate the level of predefined and expected outcomes that can bring to competitiveness. According to the studies of Shortell (1995) to achieve the full potential of the TQM it is crucial to utilize all seven practices to a profound extent. They are: continuous improvement, management involvement, customer orientation, management
by fact, using quality philosophy, importance of TQM-oriented training and utilization of TQM methods. Unfortunately, variability and depth of implementation efforts differentiates companies that successfully attain competitive advantage with those that merely subsist in the market launching TQM program. (Douglas, 2011)

Another research held by Hussan, Z (2011) in Malasia pointed out that production companies ought to pay big attention to measurement methods of TQM and achieve active support of management in quality issues to create sustainable competitive advantage strategically. For instance, after the meticulous evaluation and synthesis of TQM framework by leading researchers as Flynn (1994), Walton (1986), Deming (1995), Crosby (1984) and Juran (1992) some essential components of TQM practices were determined. Interestingly, they were supplier relations, quality measurement, benchmarking and continuous process development.

Thus, enterprises need to search for a strong competitive advantage stressing more attention to creating capability in continuous improvement. Efforts should be addressed to developing and improving quality in all the processes than concentrating on standard indicators of profit as turnover, market share, level of efficiency and various ratios. (Reitsperger, 1986, as cited in Hassan, 2011)

Regarded as a whole, there seems to be several contingent elements that prompt to be critical for implementing TQM besides others. Strategic quality planning, proper human resource utilization, commitment of management, well-built relationships with suppliers, performance measurement and appraisal and total customer focus. (Lewis, et al., 2006, as cited in Bon, 2012).

In short, it can be assumed that company's level of adaptability in rapidly changing environment and condition can fully identify the degree of competitiveness. Broadly, competitive advantage can become perfect positioning method for the firm in comparison with its competitors making the company more efficient and corresponding to the expectations of all
parties. It can be concluded that “the essence of competitive advantage is the fact that the company is doing something better and thus, achieves better results” (Gierczak, B., 2014)

TQM influence on efficiency and financial performance

These days, investment to quality system significantly impacts financial performance and efficiency of the company positioning TQM as reliable competitive strategy. Conversely, it can be accepted as an ambiguous and obscure concept that is widely discussed by specialists in terms of effectiveness.


Mohrman (1995) has conducted a survey with the largest US industrial companies. The objective of the questionnaire was to accumulate data confirming the correlation of quality with performance of the company. Broadly, final results demonstrated trivial correlation between the encompassing TQM elements of and financial well-being of the company.

Ittner and Larcker (1997) had done some analysis to prove the idea that process management incrementally contributes to the financial performance. Interestingly, several techniques showed a positive trend but others almost did not impact the overall productivity. Fortunately, Chenhall (1998) gained verification for the proposition that connected excellent financial position, profitability and development with the adaptation of quality management programs. Accordingly, combination of performance evaluation based on predefined criteria and QM system has demonstrated high level of effectiveness.

However, in the research organized by Staw and Epstein (2000) that analyzed “popular management techniques”, there were no evidences that implementation of quality
management lead to super profits. However, these companies had good reputation and reliability and were innovative. Fynes and Voss (2001) discovered that quality and design practices in the company had an effect on overall customer satisfaction level (Pignanelli, 2008).

Even though TQM is recognized as a management paradigm and practical efficient model adapted by many leading organizations, it was lambasted by some critics of management and presumed to have a lackluster effect on corporate performance. To solve controversial views towards the essence and value of TQM a survey has been organized. Survey demonstrated that 36% of 500 companies observed viable competitiveness and 20% of British firms presumed that QM system offered them substantial results. (Singhal, 2006)

Simply, when the product and service quality is improved, logically customer satisfaction and loyalty level will be increased; consequently, overall performance will be improved effecting market share and profitability. Due to good productivity, cost of production may be decreased simultaneously boosting sales of the company. (Corredor, 2011)

Interestingly, results of the surveys show that leading companies that had won quality awards have demonstrated perfect results after implementing QM system, outperforming competitors. It is essential to emphasize the fact that these companies bring significant results that are even better than benchmarks. The stock values of those firms raised to 114% in five years. So, several years may be needed after effective adaptation of the system for profits to be generated. Thus, TQM should be perceived as a long term investment instrument, that can gradually show results as improved financial performance. (Singhal, 2006)

Most importantly, companies should be patient; as confirmed by many gurus, TQM takes time to put into practice as it requires changes in the company, culture and workers perception. Evidently, managers that seek instant and quick results can be deeply dissatisfied.

The main reason is clear; due to continuous development and management proficiency
adapted from QM system, companies can easily reach outstanding results in financial performance, but it depends on the level of implementation and leadership persistence. This is the hardest part to repeat. To sum up, the clear evidence shows that the financial performance of companies implementing TQM effectively and meticulously is obvious. The criticism towards TQM with proclamation that it generates weak economic advantage is unjustified and premature. TQM is a working practical tool that can genuinely provide high performance indicators and competitive advantage.

Methods

Methodology of conducted research is one of the essential parts of the paper.

Purpose of the study is presumed to be explanatory, so that it can probably give opportunities to deeply analyze current business practices worldwide and in Uzbekistan and make corresponding hypotheses.

Moreover, chosen research types can help to discover correlations between TQM and main effectiveness indicators such as profitability, productivity and competitiveness. Obviously, to have better insights to this issue, primary data collection is used combined with secondary data collection.

A qualitative research method is utilized in research process, as it provides deep insights and gives wider perspectives for analysis.

Thus, interviews were conducted with companies that have implemented Quality Management systems. Overall, sample size approximately constituted 10-20 companies, mostly proficient, successful and leading companies will be invited for interview. Semi-structured interviews were organized for better results.

Time horizon was planned to be cross-sectional as the data would be collected in one period.

Results

Observations and analysis discovered that most companies implement ISO 9001 as a fundamental system of Quality management;
thus, it is widely available in companies as a basic standard. From all available companies that have TQM system, 70% consist of ISO 9001 holders.

Table 8: Objectives of implementing TQM

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Important and very important</th>
<th>Neutral</th>
<th>Less important and unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing the competitiveness of the company and creating competitive advantage in the company</td>
<td>70</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Improving financial results of the company</td>
<td>56</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Increasing the export potential of the company</td>
<td>46</td>
<td>30</td>
<td>9</td>
</tr>
<tr>
<td>Acquiring foreign direct investment</td>
<td>30</td>
<td>35</td>
<td>20</td>
</tr>
<tr>
<td>For continuous improvement and development in the market</td>
<td>45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>For possessing and owning Quality certificate</td>
<td>25</td>
<td>18</td>
<td>42</td>
</tr>
<tr>
<td>Increasing market share</td>
<td>67</td>
<td>5</td>
<td>13</td>
</tr>
</tbody>
</table>

The major aims and objectives of TQM implementation in the company is considered to be for increasing market share, competitiveness and export potential. It is clear that these objectives constitute majority of responses. Interestingly, according to the survey most companies seem to achieve their initial objectives and are satisfied with the available system; on the other hand, some companies around 8% admitted that it took time to fully transform the system.

Moreover, competitiveness of the companies was mainly achieved due to improved product and service quality amounting 70%, where improving the satisfaction of customers and process management amounted 55-60%.

Additionally, skilled and qualified personnel also created better perspectives for the development of the company. Generally, figures present that better quality of products, human factor, and process transparency are the key to competitiveness.

Furthermore, another important factor as profitability of the company was taken into consideration, to ascertain the correlation between TQM and financial stability.
As a whole, the results of the questionnaire emphasize the impact of TQM on financial well-being of the company, but it is important to mention that the financial indicators and profitability are a broader context. Questions were formulated to ascertain the level of agreement with certain statements. Most of the respondents supported the first two statements amounting 40-60% agreement that:

- TQM can be a cornerstone for efficiency and profitability of the company
- Financial stability and prosperity can be easily achieved after implementing TQM model.

Meanwhile, 25-35% respondents assure that TQM is not correlated with financial stability and only good management and leadership potential is required.

Remarkably, 60% of companies indicated that 2-3 years is enough for deep adaptation of the system, where 20% of them assumed that 3-5 years are obligatory for operating confidently and effectively.

Notably, companies determined some outcomes after implementing QM systems in their enterprises. 50% of respondents that have underpinned TQM elements OBSERVED increased competitiveness and trust among customers. Moreover, 35-45% companies noticed expansion in market share and significant modernization.
For statistical presentation of data, regression analysis was conducted between TQM factors as leadership, continuous development & innovation and quality control and performance indicators as competitiveness and profitability of the company.

Table: The result of regression analysis between TQM factors and competitiveness & profitability

<table>
<thead>
<tr>
<th>TQM factors</th>
<th>Independent variable</th>
<th>Dependent Variable</th>
<th>B</th>
<th>T</th>
<th>P</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality measurement &amp; control</td>
<td></td>
<td>Competitiveness and profitability</td>
<td>0.21</td>
<td>2.73</td>
<td>0.01</td>
<td>Significant</td>
</tr>
<tr>
<td>Leadership &amp; management</td>
<td></td>
<td></td>
<td>0.31</td>
<td>3.93</td>
<td>0.00</td>
<td>Significant</td>
</tr>
<tr>
<td>Continuous development &amp; innovation</td>
<td></td>
<td></td>
<td>0.26</td>
<td>3.21</td>
<td>0.00</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Source: The researches adapted from Excel

The table demonstrates that the TQM factors have a significant impact on the dependent variable that is competitiveness and profitability.

**Conclusions**

“For an organisation to be truly effective each part of it must work properly together towards the same goal, recognizing that each person and each activity affects, and in turn is affected by each others…. The methods and techniques used in TQM can be applied throughout any organisation (Oakland, 1989).”

Main theories were supported after conducting research. Indeed, TQM presented irreplaceable practices that include continuous improvement,
corresponding customer expectations, redesign of the processes, measurement of the outcomes, good relationships with suppliers, workers involvement and learning environment (Crosby 1984; Juran, 1992; Feigenbaum 1991 as cited in Hassan, 2011).

During the research process eligible knowledge and experience was obtained from various companies. Taking into account all findings and personal view, some recommendations can be drawn.

1. Management commitment. Companies should be aware that TQM is not associated with hype; it remains as a philosophy of management that has certain requirements and rules targeted for improving performance of the company. They must have serious intentions and necessary resources for launching a new management model that is Total Quality management. Most importantly, top management commitment gives a huge magnitude in achieving success in the process of implementation. Lack of leader’s interest and concern can lead to drawbacks in the system.

2. Continuous development. Findings showed some occasions, where the companies conform to all requirements of the standards, but they do not move ahead further. They are satisfied with current positions and improvements, but their development is slowed down. This is a very sad situation for the companies with QM system. The top management should strongly assure that there are long-term plans for continuous development and innovation. For organisational excellence companies should strive for non-stop development.

3. It was observed that learning and regular trainings boost the potential of employees benefiting the company. Thus, more corporate training, outdoor trainings should be accomplished for developing workforce. Company should make efforts to create learning
organisations and execute knowledge management. This Chinese proverb can best support this recommendation “If you want one year of prosperity, grow seeds. If you want ten years of prosperity, grow trees. If you want 100 years of prosperity, grow people (Chinese proverb, as cited in Liker, Meier, 2007).

4. Quality certification providing companies. Observations and analysis of results gave an impression that companies have different levels of quality. It is assumed that the level of quality control and auditing is different in certification providing companies. It is suggested that the government should pay attention to accreditation and monitoring of these companies to eliminate possible gaps in quality level.

5. Quality control and measurement. For achieving guaranteed quality of services and products, smart quality control instruments should be integrated to reduce the risk of errors. It would be beneficial to implement statistical methods of management, and verify data using statistical methods. For large manufacturing companies or companies with critical processes it would be long term benefit for quality assurance.

Lastly, it can be added that TQM is capable of bringing competitive advantage as it can deploy available management practices and tools in a structured manner, to give tremendous results in the long run (Gharakhani, 2013). From the data collected from various companies, Quality Management system can be an essential part management in the company that can significantly boost efficiency, profitability and competitiveness of the business. Nevertheless, availability and implementation of the system only is not enough. The QM system must be under control, as the role of management commitment, reliable control and monitoring mechanisms and continuous development are immense.

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