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The Effect of Total Quality Management Practices on Competitive Priorities of Telecommunication Companies in Qatar

أثر ممارسات إدارة الجودة الشاملة في الأولويات التنافسية لشركات الإتصالات في قطر

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Dedication

This thesis is dedicated to my precious parents Yousef and Kamela, my great uncle Abdulla, and my friends who helped me in every way needed, for their endless support throughout my life to reach this stage.

No words can make me express my gratitude and thanks to each of the above persons, I extend my deepest appreciation.

Naiyf Yousef Alaoun

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The Effect of Total Quality Management Practices on Competitive Priorities of Telecommunication Companies in Qatar

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Abstract

The study aimed to investigating the effect of Total Quality Management (TQM) practices on competitive priorities of Qatari Telecommunication companies.

This study used descriptive as well as cause/effect. Data collected from Qatari Telecommunication Companies (Ooredoo and Vodafone) by means of questionnaire during December 2017. The questionnaire was distributed to 150 out of 180 managers and supervisors, only 125 questionnaires were obtained, and just 119 were suitable for further analysis. After confirming normality, validity, and reliability of the tool, correlation between variables was conducted, and then hypothesis was tested by using multiple regressions.

The results show that both companies are highly implementing TQM and competitive priorities variables, and there are strong relationships between TQM and competitive priorities variables. The results of multiple regressions show that there is a significant effect of TQM on competitive priorities of Telecommunication companies in Qatar. The results also show that employee empowerment, reward, recognition, and customer focus have positive significant effect on competitive priorities of Telecommunication companies in Qatar. However, top management commitment, employee training, employee involvement and continuous improvement do not show significant effect on competitive priorities of Telecommunication companies in Qatar. Finally, the study recommends further testing of hypothesis on same industry in other countries, especially Arab countries and other industries to test the validity of results.

Key Words: Total Quality Management (TQM) Practices, Competitive Priorities, Telecommunication Companies, Qatar.

أثر ممارسات إدارة الجودة الشاملة في الأولويات التنافسية لشركات الإتصالات في قطر

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الدكتور عبد العزيز الشرباتي

الملخص

هدفت هذه الدراسة إلى قياس أثر ممارسات ادارة الجودة الشاملة في الاولويات التنافسية لشركات الاتصالات في دولة قطر.

تعتبر هذه الدراسة وصفية سببية. فقد جمعت البيانات من شركات الاتصالات القطرية (أوريدو وفودافون) عن طريق الاستبيان خلال شهر ديسمبر 2017. ووزعت الاستبانات على 150 مديراً ومشرفاً من أصل 180 منهم. وأجيب على 125 استبانة فقط، وكان 119 منها مناسبة للتحليل. وبعد التأكد من طبيعة، وصحة، وموثوقية الأداة، رُبط بين المتغيرات، ثم اختبرت الفرضية باستخدام الانحدارات المتعددة.

وأظهرت النتائج أن كلتا الشركتين تنفذان بشكل كبير متغيرات إدارة الجودة الشاملة والأولويات التنافسية، وهناك علاقات قوية بين متغيرات كلا إدارة الجودة الشاملة والأولويات التنافسية. تظهر نتائج الانحدارات المتعددة أن هناك تأثيرا كبيرا لإدارة الجودة الشاملة في الأولويات التنافسية لشركات الاتصالات في قطر. وتظهر النتائج أيضا أن تمكين الموظفين والمكافأة والتقدير والتركيز على العملاء لها تأثير إيجابي في الأولويات التنافسية لشركات الاتصالات في قطر. بينما، التزام الإدارة العليا وتدريب الموظفين ومشاركة الموظفين والتحسين المستمر لا يظهر تأثيرا ملموسا في الأولويات التنافسية لشركات الاتصالات في قطر. وأخيرا، توصي الدراسة بإجراء مزيد من اختبار الفرضية على نفس الصناعة في بلدان أخرى، وخاصة الدول العربية وغيرها من الصناعات لاختبار صحة النتائج.

الكلمات المفتاحية: إدارة الجودة الشاملة، الأولويات التنافسية، شركات الاتصالات، قطر.

Chapter One: Introduction

Background:

Nowadays, almost all companies are either implementing or seeking to implement total quality management to be able to compete in the market. TQM is a system used to improve all organization's activities related to suppliers, internal operations and customers. Companies everywhere are exposed to hyper-competition not only from local companies, but also from international companies, which have strong experience in serving the customers around the world with products that have suitable prices, with high quality, in right place at right time. Therefore, companies may need to adapt TQM to be able to compete and survive. TQM can be may considered as the main tool to create competitive priorities, since TQM may affect not only quality of products, but also cost, time/speed, flexibility and innovation.

Sa, et. al. (2003) stated that in the recent years, the business competitiveness has been changed dramatically. Parnell (2006) stated companies seek gaining competitive priorities, which lead to better sales and higher profits. Al-Rfou (2012) said that the increase of global competition has driven the companies to change their approach of running business. Ware (2014) stated that nowadays a TQM is seen as marketing strategy by businesspersons, and considered as a best alternative for getting competitive priorities. Olusanya and Adegbola (2014) stated that TQM has become progressively predominant as one of the strategies to ensure improving products and service quality, customer satisfaction and promote continuous improvement. Chaghooshi, et. al. (2015) agreed that TQM is the main approach for top management to gain and maintain competitive priorities

which leading to sustainable competitive advantage. Azizi, et. al. (2016) stated that competitive priorities help the organizations to overcome competitors.

Several authors have adapted and added to TQM elements and competitive priorities elements lists over the years. Sila and Ebrahimpour (2002); Claver, et. al. (2003), and Conca, et. al. (2004) and many others, considered the critical factors of TQM (top management commitment, employee training, employee involvement and empowerment, employee rewarding and recognizing, customer focus and continuous improvement) as the most significant factors of TQM to achieve competitive priorities. Thai Hoang, et. al. (2006) used in his study Top management commitment, employee involvement, employee empowerment, training and education, teamwork, customer focus, and process management, information and analysis system, strategic planning, open organization, and service culture as TQM elements. Samat, et. al. (2006) study used the following elements as TQM elements: management support and commitment, employee involvement, employee empowerment, information and communication, training and education, customer focus, and continuous improvement). Long, et. al. (2015) study used leadership, strategic planning, customer focus, process management, people management as TQM elements.

Hayes and Wheelwright (1984) proposed that firms compete in the market by one or more of competitive priorities elements, which are quality, cost, lead-time, and flexibility. Foo and Friedman (1992) stated competitive priorities include cost, quality, service, flexibility, time, and technology. Others have added innovation like Kessler and Chakrabart (1996), and Li, et. al. (2006). Vickery, et. al. (1999) identified competitive priorities elements as cost, quality, time/speed, dependability and innovation. Kavitha, et. al. (2013)

stated that competitiveness of an organization in general based on its ability to perform well in several dimensions such as cost, quality, speed, delivery and innovation, based on that organizations can differentiate themselves.

It seems that the TQM is crucial for the organization's success. Implementing all TQM elements (top management commitment, employee training, employee involvement and empowerment, employee rewarding and recognizing, customer focus and continuous improvement) can create competitive priorities (cost, quality, time/speed, flexibility and innovation). Therefore, this study is devoted to investigate the effect of TQM on competitive priorities.

Problem Statement:

Over the last few years, the boom of the economy and the great development in Qatar made the Qatari market attract foreign companies. Ooredoo Telecommunication Company is no longer the only company in Qatar market whereas the Vodafone Company (the international telecommunication company) entered the market. Because of the competition between telecommunication companies in Qatar has increased, every company started seeking how to excel another company by providing better products and/or services. Through my meetings with many managers working in this industry, the researcher was informed that each company is searching how to better service the customers and trying to create competitive priority in cost, quality, time/speed, flexibility or innovation. Many studies recommended that TQM could affect competitive priorities such as Jayaram, et. al. (1999) stated organizations' need to search for new sources of competitive priorities. Zhao, et. al. (2002) stated that global intense competition has forced organizations to improve their cost, quality, speed, delivery, flexibility and innovation. Talib,

et al. (2012) stated that clients choose only the best service providers in terms of quality, speed/time, profitability, and reliability and who has international standards. Addae-Korankye (2013) argued that the application of TQM is an important tool to acquire competitive priorities. Ardestani and Amirzade (2014) stated that TQM is one of the tools companies use to create competitive priorities. Alasmari (2014), Sari and Firdaus (2015) stated that companies that do not practice TQM lose their competitive priorities.

Flynn, et. al. (1995), Ahire, et. al. (1996), Kassem, (1998), Prajogo and Sohal (2003) stated that there is a need to re-assess the role of Total Quality Management in determining competitive priorities performance. Instead of only investigating one or two of competitive priorities factors, more research should focus on understanding these four factors, which are (cost, quality, speed/time, flexibility and innovation) in combination.

Based on the above recommendations the current study is dedicated to answer the following main question: Do total quality management components have an effect on competitive priorities of Telecommunication companies?

Study Questions:

The study aims to answer the following research main question: Do total management practices affect competitive priorities of Telecommunication companies?

Based on TQM components the following seven sub-questions are derived:

1.1. Does top management commitment affect competitive priorities of Telecommunication companies?

1.2. Does employee training affect competitive priorities of Telecommunication companies?

1.3. Does employee involvement affect competitive priorities of Telecommunication companies?

1.4. Does employee empowerment affect competitive priorities of Telecommunication companies?

1.5. Does rewarding and recognition affect competitive priorities of Telecommunication companies?

1.6. Does continuous improvement affect competitive priorities of Telecommunication companies?

1.7. Does costumer focus affect competitive priorities of Telecommunication companies?

Study Purpose and Objectives:

The study investigates the effect of TQM practices on competitive priorities of Telecommunication companies. Therefore, the current study aimed to find the effect of TQM elements on competitive priorities of Qatari Telecommunication companies.

Moreover, the main objectives of this study are to provide recommendations to Telecommunication organizations regarding TQM and competitive priorities. Furthermore, recommendations can be used by other industries, and decision makers concerned with TQM and competitive priorities. In addition, the current study will shed new light on previous literature, where academicians may use it as reference.

Study Significance and Importance:

This study might be considered as the first study, which investigates the effect of total quality management practices on competitive priorities in Qatar.

This study is important for Telecommunication industry; it is not only useful for those who work in Telecommunication companies industry, but also to other practitioners who work in other industries as well as for scholars and researchers.

Therefore, the importance of this study comes from the following scientific and practical considerations:

1. Highlight on the importance of TQM and its implementation on the Qatari Telecommunication companies and its effect on achieving competitive priorities.

2. Contribute to the development of the Telecommunication companies in Qatar, which may lead to maintain these companies work effectively.

3. Help other researches to talk about TQM, and its importance either on the same industry or for other industries.

4. Help the decision makers to gain the benefits of applying TQM, and give recommendations of using TQM.

Study Hypotheses:

Based on problem statement the study questions can be answered by testing the following hypotheses:

H_{01}: Total quality management practices have no effect on competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

Based on TQM components the following seven sub-hypotheses are derived:

$H_{01.1}$: Top management commitment has no effect on competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

$H_{01.2}$: Employee training has no effect on competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

$H_{01.3}$: Employee involvement has no effect on competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

$H_{01.5}$: Employee empowerment has no effect on competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

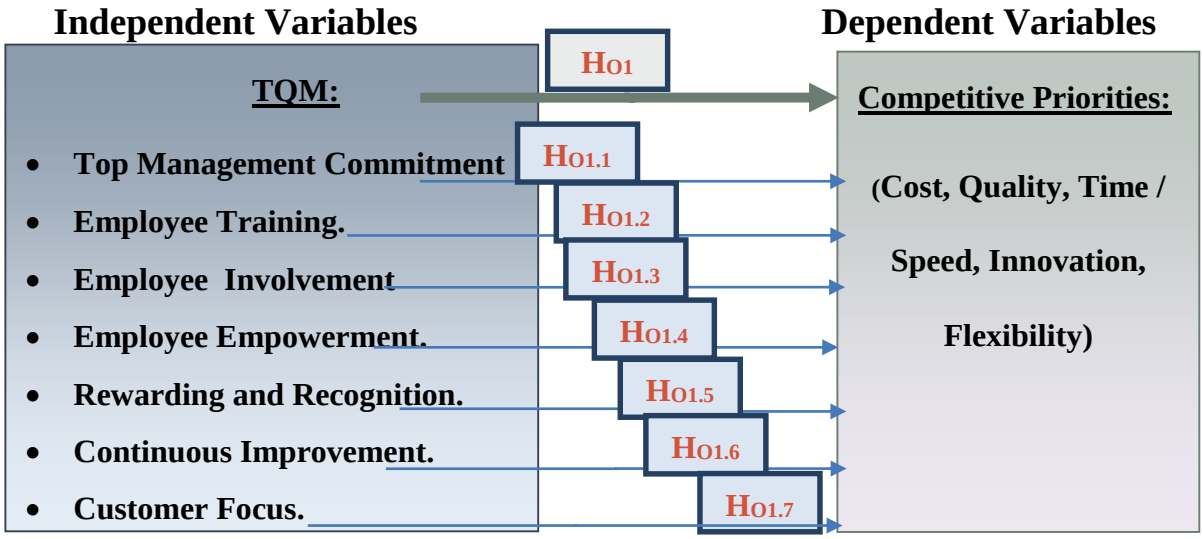
$H_{01.4}$: Rewarding and recognition has no effect on competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

$H_{01.6}$: Continuous improvement has no effect on competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

$H_{01.7}$: Customer focus has no effect on competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

Study Model:

Model (1): Study Model



Sources: The model is developed based on the following previous studies: (Dean and Bowen, 1994; Brah et. al. 2000; Sila and Ebrahimpour, 2002; Samat, et. al. 2006; Awwad, at. al. 2010; Bahri, et. al. 2012; Sari and Firdaus 2015; Long, et. al. 2015; Chaghooshi, et. al. 2015; Priya, 2015; Goetsch and Davis, 2016).

Procedural and Operational Definitions of Terms:

Total Quality Management:

TQM is a management philosophy, and tool or way to doing business through the continuous improvement of everything related to achieving that business including quality of its services, processes, employees (all levels), and environments.

Top Management Commitment: The adoption by top management of the concept of TQM and the commitment to all the requirements of implementing this system as well as providing full support for its application and emphasizing the commitment of all employees at all levels to implement TQM.

Employee Training: Training is a series of activities that aims to improve employee's work-related competency (skills, attitude and knowledge), which should include all employees at all levels.

Employee Involvement: The participation of all employees in the process of improving the services provided and hearing to their inputs in the process of decision.

Employee Empowerment: Empowerment is the process of delegating and giving the employees the authority and power in performing their works and in making decisions.

Rewarding and Recognition: Reward is something tangible given to an employee in return for his contribution to corporation, while recognition is something intangible given to employee such as positive and caring attitude from management that shows the employee that his work is appreciated and valued by management.

Continuous Improvement: The management philosophy that deals with obstacles to improving service and works on continuous improvement of everything related to improving the service in its final form, from the beginning of service design through its implementation mechanism, which includes processes and workers, which in turn lead to the improvement of the final service.

Customer Focus: Focus on the understanding, knowing and meeting the external customer needs and expectations.

Competitive Priorities: Competitive priorities mean act as organization strategic capabilities that enable the organization to gain and/or maintain competitive advantages expressed in terms of cost, quality, time\speed, flexibility, and innovation.

Cost: Lower cost for performing the service, which enable offering lower price when providing same competitors services for clients.

Quality: Providing excellent service to meet the consumer's desire and exceed his expectations, which must focus at least on these factors: Reliability (e.g. Performing the services at designated time and accuracy in billing), Responsiveness: (Staff conduct), Assurance: (e.g. Easy accessibility of services) and Communication (Good information for any change and relationship with customer).

Time/Speed: The duration service needs to be delivered and the degree of response quickness to clients requested service.

Flexibility: The organization ability to respond for any changes reflected in introducing new services and/or adjust services provided to any demand changes quickly, customizing the services and the ability of controlling the services volume according to market condition changes.

Innovation: To what level of newness of new services, what number of new services introduced and the use of the newest and unique technology in developing and introducing the new services.

Study Limitations and Delimitations:

Human Limitation:

The study community was limited to managers and supervisors of Ooredoo and Vodafone companies in Qatar.

Place Limitation:

This study was applied to Ooredoo and Vodafone companies in Qatar.

Time Limitation:

The researcher prepared this study during the academic year 2017.

Delimitations:

The study used one industry, which limits its generalizability to other industries. The study was conducted in the State of Qatar and, therefore, the generalizability of this study to other countries of the same industry or other industries may be questioned. In addition, similar industry studies in Qatar are yet to be conducted. The study investigated the impact of seven TQM variables on five competitive priorities variables where there are more TQM elements and competitive priorities elements that not taken in this study.

Limitations to data access refer to the fact that data gathering through the questionnaires and annual reports is controlled to the period of these questionnaires, which may limit the quality and quantity of the data collected. And lack of similar studies in Qatar.

Chapter Two: Literature Review

Introduction:

This chapter includes theoretical and conceptual framework, the relationship between TQM and competitive priorities, previews models, previous studies and expected contributions of the current study as compared with previous studies.

Theoretical and Conceptual Framework:

Definitions of Study Variables:

The following section includes different definitions for independent variable and each sub-variable, as well as different definitions of dependent variable and each dimension.

Independent Variable (Total Quality Management):

Total Quality Management (TQM) Definitions:

The total quality management has been defined by different authors and practitioners based on their view and industry. According to Deming (1986), TQM is management philosophy based on customer satisfaction and meets its needs and expectations at present and future. Pfau (1989) and Oakland (1993) stated that total quality management is a method to continuously improving the quality of services delivered by the participation at all functions and levels of the corporation. Nicol (1997) defined TQM as a total system approach (not separated program) and it works across all departments and functions, involving all employees at all levels, and extends to include the customer chain and supply chain. Miller (1996) stated that TQM is an ongoing process in which top management does what it is required to enable every employee in the corporation to perform all duties to build and achieve standards, which

meet or even exceed the requirements (needs) and expectation of both internal and external customers. Dilber, et. al. (2005) defined TQM as an action plan to produce and deliver services, which are consistent with clients' needs by better, faster, cheaper and easier processing than other competitors by the participation of everyone in the firm under leadership of top management. Sadikoglu and Zehir (2010) stated that TQM is a systematic quality improvement method that aims to enhancing firm's performance in terms of quality, productivity, profitability, and customer satisfaction. Sadikoglu and Olcay (2014), and Goetsch and Davis (2016) stated that TQM is a way to perform business that aims to maximize an organization's competitiveness by the continual improvement of the quality of its services, products, processes, employees, and environments.

In summary, TQM can be defined as a management philosophy, and tool or way to doing business through the continuous improvement of everything related to achieving that business including: quality of its services, processes, employees (all levels), and environments etc.

Total Quality Management Elements:

Different previous studies considered a different number of TQM elements. Dean and Bowen (1994) stated that customer focus and continuous improvement are the fundamentals of TQM. Brah, et al. (2000) have identified that top management commitment, customer focus, employee empowerment, employee involvement and rewarding as the important TQM variables. Sila and Ebrahimpour (2002), and Samat, et. al. (2006) used in their study these elements for TQM: management support and commitment, training and education, employee involvement and empowerment, communication, customer focus and continuous improvement. Sari and Firdaus (2015) used in

his study the following independent variables TQM: customer focus, obsession on quality, scientific approach, long term commitment, teamwork, continuous improvement, education and training, controlled freedom, unity of purpose, and employee involvement and empowerment. Long, et. al. (2015) study identified the following independent variables of TQM: (leadership, strategic management, customer focus, process management, and people management), Priya (2015) used the following variables as TQM factors in his study: employee empowerment, employee training and education, and customer satisfaction. Goetsch and Davis (2016) stated that key factors of the TQM approach are customer focus, obsession with quality, scientific approach, long-term commitment, teamwork, employee involvement and empowerment, continual process improvement, education and training, freedom through control, and unity of purpose.

Based on the above discussion and according to the field study type, the variables of the TQM used in this study are top management commitment, employee training, employee involvement, employee empowerment, rewarding and recognition, continuous improvement, and customer focus.

Top Management Commitment: The previous studies present so many descriptions and definitions of top management commitment that sometimes it seems as if each researcher has his own definition. Downton (1973) argued that commitment must not be viewed as an emotion because it emerges from the tension generated by the desire to satisfy a personal need, from the opportunity and freedom to take action, and from making investments and sacrifices, which will produce a profit in the end. Flynn, et. al. (1995) stated that top management commitment should do the changes required for implementation of TQM, and provide support to encouraging the

practices that lead to improving performance throughout the organization. Zeitz, et. al. (1997) stated that top management commitment is the level of support and visibility that top management provides in implementing a total quality environment. Al-Saraira and Alasaf (2008) stated that top management plays a leading role in the TQM environment to coordinate efforts to achieve the organization's objectives. Sadikoglu and Zehir (2010) stated that top management commitment means that the leadership does what it takes to implement and maintain the TQM. Nurhayati and Mulyani (2015) agreed that top management commitment means the participation of the top management in their organization's quality improvement efforts.

In summary, top management's commitment means the adoption by top management of the concept of TQM and the commitment to all the requirements of implementing this system as well as providing full support for its application and emphasizing the commitment of all employees at all levels to implement TQM.

Employee Training: Training of employees is a broad term covering multiple types of employee learning. Juran (1992) stated that to achieve quality, training should include all employees' levels and the purpose of training is to acquire or update skills. Flynn et. al. (1995) stated that training in a TQM includes technical skills, supervision skills, communication, new work procedures, and customer relations. According to Powell (1995), training includes total quality management principles, problem solving, and team skills. According to Reed, et. al. (2000), employee training means that all employees should be trained in the use of quality techniques and tools. Babakus, et. al. (2003) stated that employees training should contain job-related skills and behavioral skills to improve their capability to deliver better

service quality. Sari and Firdaus (2015) in TQM everyone expects to learn and apply the principle, that learning is a process that has no end. By education and training companies can enhance their employee's technical skills and professional expertise. Goetsch and Davis (2016) said, "Training is an organized series of activities designed to enhance an individual's needed knowledge, skills, understanding, and motivation"

In summary, training is a series of activities aim to improve employee's work-related competency (skills, attitude and knowledge), which should include all employees at all levels.

Employee Involvement: No matter what you call involvement (voice, engagement, participation or democracy) the concept of employee involvement has been a topic for researches for centuries. According to Al-Saraira and Alasaf (2008), employee involvement means the participation of all employees in the process of improving the services provided through team work and quality workshops that identify the obstacles to performance excellence and work to develop appropriate solutions and hear their inputs. Apostolou (2000) stated that management listens to and values each employee’s contribution. Prajogo and Sohal (2003) stated that employee involvement is the extent to which employee are involved in activities related to quality. Powell (2011) stated that employee involvement refers to approaches that allow employees to give their input (ideas, expertise, and efforts) toward solving problems and decisions that affect their work. Goetsch and Davis (2016) stated that employee involvement means asking employees for inputs.

In summary, employee involvement means that all employees participation in the process of improving the provided services and listening to their contributions in decision-making process.

Employee Empowerment: One of the TQM variables is empowerment**.** Miller (1996) stated that employee's empowerment means the extent to which employees have a particular level of autonomy in doing their work. According to Motwani (2001), employee's empowerment means giving authority to employees to make their own decision on any improvement project. Kilton (2003) stated that empowerment means giving the employees the power and authority to make decisions related to their works. Nzuve and Bakari (2012) stated that employee empowerment is a way of management and philosophy that give the employees the power to make decisions for their jobs, giving them the ownership of their work and take responsibility as well as serve clients at the level of the firm where the client interface exists. Awamleh (2013) stated that empowerment means that the process of enabling employees in several ways including delegating, development and training, and fair promotion opportunities. Goetsch and Davis (2016) defined it as that employee inputs are heard and acted upon, in other words giving them ownership of their work.

In summary, empowerment is the process of delegating and giving the employees the authority and power in performing their works and in making decisions.

Rewarding and Recognition: Several studies considered rewarding as a tool of motivation. According to Luthans (2000), the rewards such as financial rewards, pay and benefits, incentives and promotions and other tangible gifts that satisfy employees and the recognition such as certificate,

acknowledgement, and genuine appreciation, both can be used positively to enhance employee's performance. Danish and Usman (2010) defined the recognition as a process giving an employee a specific status within the company and reward is a tangible gift given to an employee in return for his contribution to corporation. Safiullah (2014) stated that rewards could be tangible or intangible. Tangible rewards can be in terms of salary/pay, bonuses, incentives, etc. intangible rewards are psychological rewards like recognition, appreciation, positive and caring attitude from manager. According to Dessler (2016), employee rewarding means giving employee something in recognition for his achievement. The behavior or action gets the management rewards.

In summary, reward is something tangible given to an employee in return for his contribution to corporation, while recognition is something intangible given to employee such as positive and caring attitude from management that shows the employee that his work is appreciated and valued by management.

Continuous Improvement: It is also called continuous improvement process. According to Powell (1995), employee empowerment means increasing the autonomy in decision-making. Tena, et. al. (2001) stated that the most effective approaches of continuous improvement involve following a systematic process of planning, implementation and evaluations, which can be achieved by standardized process operations, using various tools for improvement, obtaining performance indicators and gathering information by benchmarking and self-assessment. Sadikoglu and Zehir (2010) stated that continuous improvement means looking for never-ending improvements and developing processes to find better approaches to achieve better outputs.

Shattuch (2015) continuous improvement is an ongoing effort that aims to improve the final products or services. Sari and Firdaus (2015) stated that continuous improvement is based on the principle that development and improvement opportunities are continuous and that the desires of the customer are variable and not fixed. Product or service is produced by using specific processes by a system. Therefore, this system should be improved continuously, which will result in improving system quality.

In summary, continuous improvement is the administrative philosophy that deals with obstacles to improve service and works on continuous improvement of everything related to improving the service in its final form, from the beginning of service design through its implementation mechanism, which includes processes and workers through going under breakthrough improvement or incremental improvement over time.

Customer Focus: Several studies consider customer focus as one of the important TQM elements that is fundamental for customer satisfaction. Juran (1988) stated that customer focus encourages firms to consistently search for new customer requirements, needs and expectations, which leads firms to be innovative in developing and introducing new services as a continual adaptation to the changes in market's needs. According to Sink and Tuttle (1989), customer-focus means how to fulfill clients' needs. According to Chin, et. al. (2002), customer focus is about knowing the customers' requirements and expectations. Kuei, et. al. (2008) stated that focusing on the client emphasizes the mechanisms for communication with the client, also to know the needs of clients and the degree of their satisfaction. Azizi, et. al. (2016) stated that customer focus means mechanisms, and tools are created which are required to manage the relationship with clients in the system.

Goetsch and Davis (2016) stated that customer needs should be known and understood by putting employees in touch with customers and adopting the concept customer defines quality.

In summary, customer focus means focus on the understanding, knowing and meeting the external customer needs and expectations.

Dependent Variable (Competitive Priorities):

Competitive Priorities Definitions:

There are many different definitions of competitive priorities. According to Hayes and Wheelwright (1984), competitive priorities mean strategic preferences or the approaches in which a company chooses to compete with other organizations in the market. Krajewski and Ritzman (1993) stated that competitive priorities mean the dimensions that a company's service system has to support markets demands in which the company wishes to compete. Flynn, et. al. (1995) agreed that a firm's competitive priorities is the way in which it creates value for its customers and exceed its competitors, which enables it to increase and sustain its position in the market. Boyer and Lewis (2002) defined competitive priorities as a strategy that develops specific competitive capabilities such as quality, cost, delivery and flexibility. Krajewski, et. al. (2013) stated that competitive priorities mean the critical operational dimensions that a process should possess to gain customers satisfaction. Espino-Rodríguez and Gil-Padilla (2017) stated that competitive priorities are the operations strategies that organization uses in term of cost, quality, and flexibility.

In summary, competitive priorities mean to act as organization strategic capabilities that enable the organization to gain and/or maintain competitive

advantages expressed in terms of cost, quality, time\speed, flexibility, and innovation.

Competitive Priorities Elements:

Different studies used different competitive priorities elements. Hayes and Wheelwright, 1984; Fine and Hax, 1985; and Awwad, at. al. (2010) stated that it has been widely accepted that competitive priorities can be expressed by at least these basic factors: cost, quality, and time/speed. Sari and Firdaus (2015) used in his study the following elements as competitive priorities: price, quality, and innovation. Long, et. al. (2015) studied innovation performance as competitive priority. Chaghooshi, et. al. (2015) identifies the elements of competitive priorities in five factors: price/cost, quality, delivery dependability, product innovation, time to market. Priya (2015) used for his study the quality service as competitive priority. Goetsch and Davis (2016) stated that key elements of the competitive priorities are lower-cost, speed, quality, and innovation.

Based on the above and according to the field study type, the variables of competitive priorities used in this study are cost, quality, time/speed, flexibility and innovation.

Cost: A major component of competitive priorities is cost. Porter (1980) stated that cost means when the organization provides same competitor's service at a lower cost because of the way its activities are performed. Santos (2000) defined cost as that to offer services with the lowest cost and price. Flynn and Flynn (2004) stated that cost means making and delivering services to clients cheaply. Askar and Mortagy (2007) stated that cost means the ability of the organization to achieve profits in competitive markets while introducing services at the lowest price through effectively

managing service cost. Porter (2008) stated that cost means when the organization provides same competitor's service at a lower cost because of the way its activities are performed. Goetsch and Davis (2016) stated that cost is the money spent to introduce a service and including any related expenses on activities or materials required for introducing that service.

In summary, cost means lower cost for performing the service, which enables offering lower price when providing same competitors services for clients.

Quality: the quality related to the uses, needs and expectations. Crosby (1979) defined quality as meeting the specifications or requirements. Reeves and Bednar (1994) stated that quality associates with excellence, value, and meeting or exceeding clients' expectations. According to Jayaram, et al. (1999), quality means to offer with high performance and to differentiate services from competitors. Santos (2000) stated that quality means to differentiate services from competitors. Awwad, at. al. (2010) stated that quality means performance and reliability. Goetsch and Davis (2016) stated that quality means fitting the purpose of customer use. Akpulonu (2017) stated that quality means meeting customer requirements and leads to improving company image through improving products or service reliability and durability.

In summary**,** quality means providing excellent service to meet the consumer's desire and exceed his expectations, which must focus at least on these factors: Reliability (e.g. Performing the services at designated time and accuracy in billing), Responsiveness (Staff conduct), Assurance (e.g. Easy

accessibility of services) and Communication (Good information for any change and relationship with customer).

Time/Speed: Time and speed related to each other. Blackburn (1991) stated time/speed as the rapid response degree to orders and as that time shorter as it enables client to enjoy the service benefits immediately. According to Krajewski and Ritzman (1993), Li (2000), Kumar and Kumar (2004), and Phusavat and Kanchana (2007), time/speed mean how quickly a service is delivered to a client. Goetsch and Davis (2016) stated that time/speed refers to the time needed to deliver the service to customer, and how many customers served during fixed periods.

In summary, time/speed the duration service needs to be delivered and the degree of response quickness to clients requested service.

Flexibility: The flexibility is related to the market needs changes and conditions. Mandelbaum (1978) stated that flexibility means the organization ability to respond effectively to changing conditions. Corrêa (1992) stated that flexibility means the ability of organization to deal with different conditions effectively. Zhao, et. al. (2002) agreed that flexibility is the ability of organization to introduce a broad service line and new services quickly. According to Awwad, et. al. (2010), flexibility means when the organization has the ability to diffuse and/or re-diffuse resources to adapt to changes, such as volume changes, product variety, and design/planning. Fayezi, et. al. (2015) stated that flexibility means the ability to respond to market changes effectively and efficiently.

In summary, flexibility is the organization ability to respond for any changes which may be reflected in introducing new services and/or adjust

services provided to any demand changes quickly, customizing the services and the ability of controlling the service volume according to market condition changes.

Innovation: Innovation related to process, people and service. Moore and Tushman (1982) stated that innovation means both developing new services and working on existing services to improve them. Askar and Mortagy (2007), and Peng, et. al. (2008) also agreed that innovation refers to the developing or introducing new services or processes or technologies. Sari and Firdaus (2015) stated that innovation is introducing new ideas services or goods, or ways that add benefit or value for customers. Goetsch and Davis (2016) said, "Innovation is how organizations continually improve the quality and cost of their products as well as the quality of their services".

In summary, innovation means the level of uniqueness of new services, how many new services are offered to customers and the use of updated technology in developing and introducing the new services.

The Relationship between TQM and Competitive Priorities:

Many studies tacked the relationship between TQM practices and achieving competitive priorities, for example: Flynn, et. al. (1995) in their research investigated the relationship between total quality management practices and organization performance and competitive advantage, which includes low cost, quality, flexibility, innovation and deliverability. Prajogo and Sohal (2003) in their study investigated the relationship between TQM practices and achieving quality performance, and innovation performance. Thai Hoang, et. al. (2006) in their study tried to investigate the effect of TQM on firm innovation. Long, et. al. (2015) aimed to analyze the impact of TQM

practices on organization innovation performance among manufacturing industry in Malaysia, while they used leadership, customer focus, and process/people management as elements of TQM to see their effects on the process innovation and product innovation.

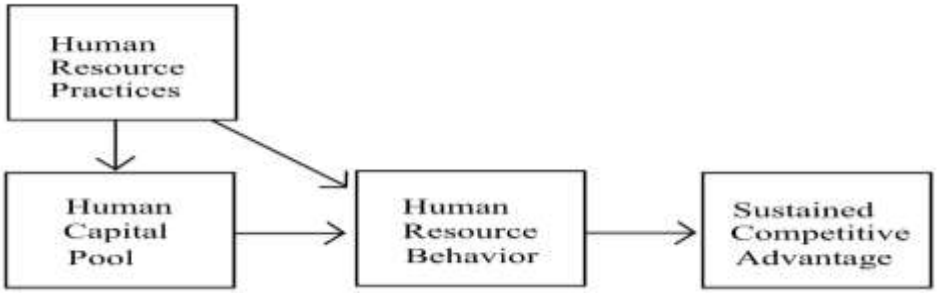
All the studies mentioned above showed a positive relationship between TQM variables and competitive priorities dimensions. Therefore, the current study will investigate the impact of TQM practices as total and for each variable on competitive priorities dimensions (as total) of Telecommunication companies in Qatar.

Previous Models:

Scholars and practitioners have used different models to measure TQM and competitive priorities. The following section will briefly discuss the most widely used models to measure TQM and competitive priorities.

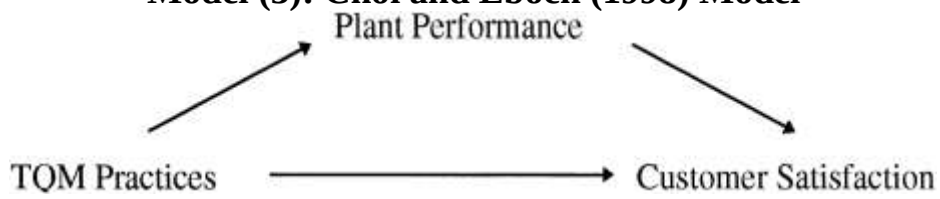
1. **Wright, et. al. (1994) Model:** The study tried to find the relationship between HR practices on sustained competitive advantage. The model uses human resource practices as independent variables and sustained competitive advantage as dependent variables. The current study model used some of human resource elements that mentioned in Wright, et. al. (1994) model as TQM variables.

Model (2): Wright et. al. (1994) Model



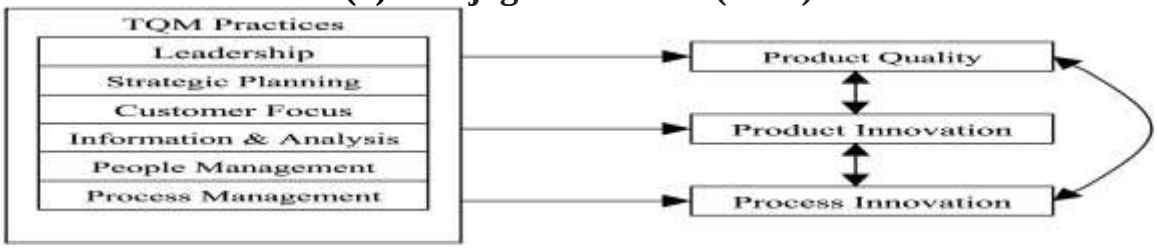
2. Choi and Eboch (1998) Model: The study tried to investigate the effect of TQM practices on firm's performance and customer satisfaction. The model used TQM as an independent variable and plant performance (innovation in products and processes) and customer satisfaction as dependent variables. The current study model used TQM as independent variables and used performance in term of innovation as one of competitive priorities dimensions.

Model (3): Choi and Eboch (1998) Model



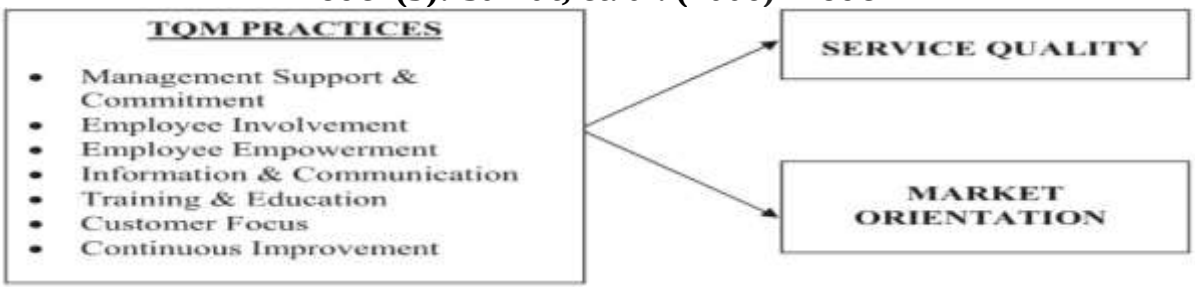
3. Prajogo and Sohal (2003) Model: The study investigated the effect of TQM practices on quality performance, and innovation performance. The model used the TQM elements as independent variables: (leadership, strategic planning, customer focus, information and analysis, people management, and process management) and quality performance: (product quality and innovation) and process innovation as dependent variables. The current study model used all the TQM elements that used in Choi and Eboch (1998) model (except strategic planning and info and analysis) as independent variables and used quality and innovation (in product or process) as elements of competitive priorities dimensions.

Model (4): Prajogo and Sohal (2003) Model



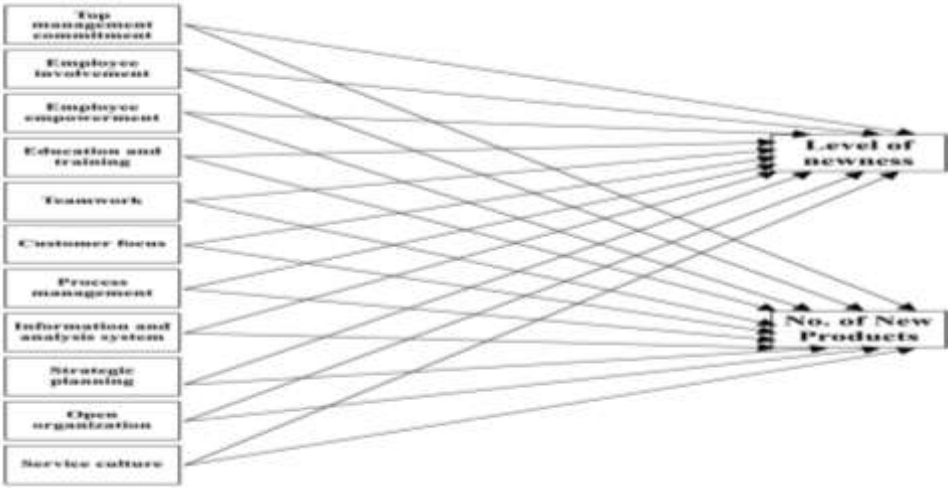
4. Samat, et. al. (2006) Model: The study investigated the effect of TQM practices on service quality and market orientation. The model used the TQM elements as independent variables: (management support and commitment, employee involvement, employee empowerment, information and communication, training and education, customer focus, and continuous improvement) and quality performance: (product quality and innovation) and process innovation as dependent variables. The current study model used all the TQM elements that used in Samat, et. al. (2006) model (except info and communication) as independent variables and used quality (service quality) as one of competitive priorities dimensions.

Model (5): Samat, et. al. (2006) Model



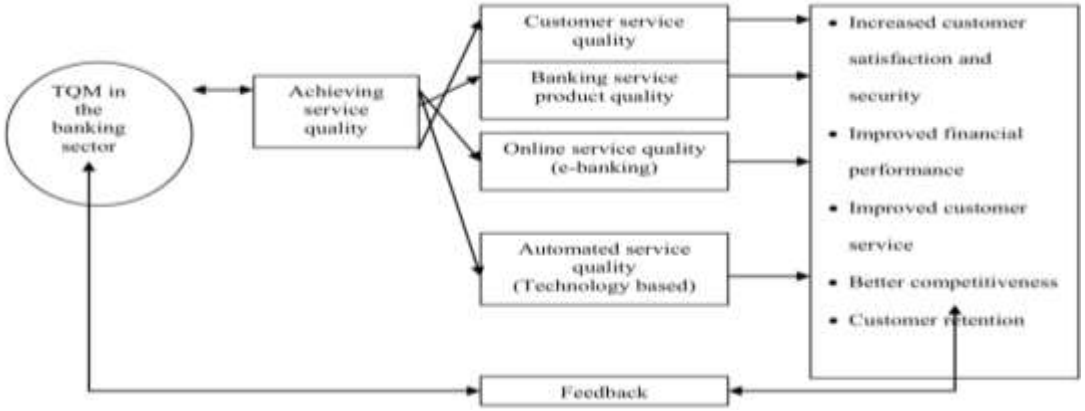
5. Thai Hoang, et. al. (2006) Model: The study tried to study the effect of TQM on Innovation. The model used the TQM elements as independent variables: (top management commitment, employee involvement, employee empowerment, training and education, teamwork, customer focus, and process management, information and analysis system, strategic planning, open organization, and service culture) and innovation: (level of newest and No. of new products) as dependent variables. The current study model used some of TQM elements that used in Thai Hoang, et. al. (2006) model (top management commitment, employee involvement, employee empowerment, training and education, customer focus, and process management) as independent variables and used innovation as one of competitive priorities dimensions.

Model (6): Thai Hoang, et. al. (2006) Model



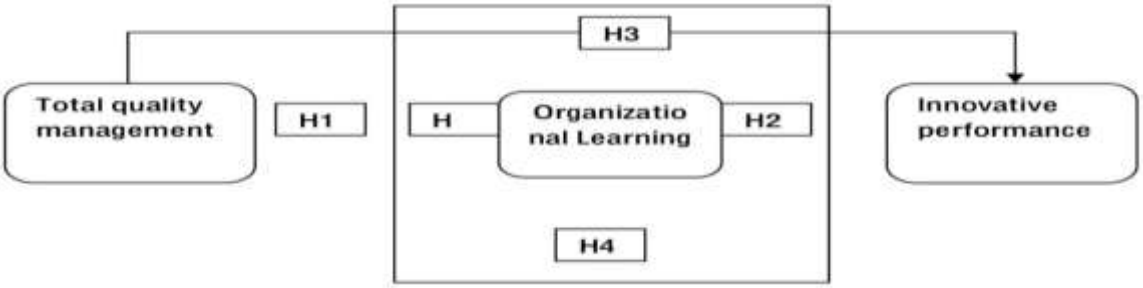
6. Talib, et. al. (2012) Model: The study tried to examine the effect of TQM on service quality. The model used the TQM elements as independent variables: (Top management commitment, HR management, teamwork, technical and important system, customer focus, employee satisfaction, service culture and social responsibility) and service quality as dependent variables. The current study model used two of TQM elements that used in Talib, et. al. (2012) model as independent variables (top management commitment and customer focus) and used quality (service quality) as one of competitive priorities dimensions.

Model (7): Talib, et. al. (2012) Model



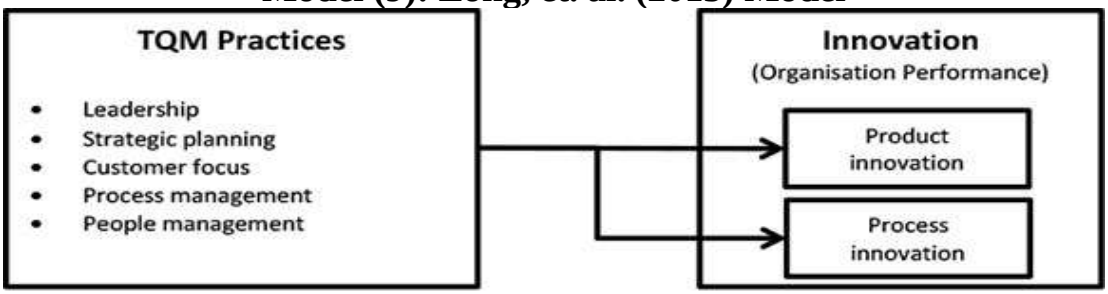
7. Nosrat, et. al. (2014) Model: The study tried to identify the effect of TQM on Innovation. The model used the TQM elements as an independent variable and innovation as dependent variables. The current study model used TQM elements that used in Nosrat, et. al. (2014) model as independent variables and used innovation as one of competitive priorities dimensions.

Model (8): Nosrat, et. al. (2014) Model



8. Long, et. al. (2015) Model: The study investigated the effect of TQM on organization performance (innovation). The model used the TQM elements as independent variables: (leadership, strategic planning, customer focus, process management, people management) and innovation: (product innovation and process innovation) as dependent variables. The current study model used all the TQM elements that used in Long, et. al. (2015) model (except strategic planning) as independent variables and used innovation as one of competitive priorities dimensions.

Model (9): Long, et. al. (2015) Model



The previous models helped in developed the current study model and to select independent variables and dependent dimensions as discussed above.

Previous Studies:

1. Choi and Eboch (1998) study titled **"The TQM Paradox: Relations among TQM Practices, Plant Performance, and Customer Satisfaction",** aimed to investigate the correlation between total quality management and organizations performance and customer satisfaction. The study targeted employees and managers of 339 companies. The results showed that the correlation between total quality management and customer satisfaction is stronger than the impact on organization performance.

2. Douglas and Judge (2001) study titled **"Total Quality Management Implementation and Competitive Advantage: the Role of Structural Control and Exploration",** aimed to study the relationship between the degree to which TQM practices were adopted within companies and the corresponding competitive advantages achieved. The targeted sample was sent to the CEOs and the directors of 512 hospitals in 19 standard metropolitan statistical areas in the U.S. by questionnaires. The study found that there is strong support for the relationship between the degree of TQM implementation and achieving competitive advantage. In addition, the study results showed some support for the moderating influence of organizational structure on TQM implementation effectiveness

3. Prajogo and Sohal (2003) study titled **"The Relationship between TQM Practices, Quality Performance, and Innovation Performance: an Empirical Examination",** aimed to investigate the correlation between TQM, quality and innovation performance. The sample targeted 194 managers in Australian industry. Structural equation modeling technique was used in this study. The study found that total quality

management relates positively to product/service quality and innovation performance.

4. Dilber, et. al. (2005) study titled **"Critical Factors of Total Quality Management and its Effect on Performance in Health Care Industry: A Turkish Experience"**, aimed to define the main factors of TQM in the healthcare field and to measure its effect on business performance in hospitals in Turkey. Canonical correlation analysis was employed to examine this relationship. The sample targeted 150 chief administrative officers of health care institutions in Turkey. Result showed that there was a positive correlation between the performance and the four main factors of total quality management in Turkish healthcare industry.

5. Samat, et. al. (2006) study titled **"TQM Practices, Service Quality, and Market Orientation: Some Empirical Evidence from a Developing Country",** aimed to investigate the relationship between TQM practices, service quality and market orientation. Questionnaires were distributed to managers of 175 organizations in Malaysia. The study found that employee empowerment, information and communication, continuous improvement and customer focus had a significant effect on service quality and the considerable effect on market orientation was only by employee empowerment and customer focus.

6. Prajogo and Sohal (2006) study titled "**The Relationship between Organization Strategy, Total Quality Management (TQM), and Organization Performance—the Mediating Role of TQM"**, aimed to investigate the relationships between TQM practices and organization strategy and performance. Structural equation modeling technique was used. The sample targeted 194 middle/senior managers from Australian firms. The

results show that TQM practices related to differentiation strategy and highly affect organization performance.

7. Thai Hoang, et. al. (2006) study titled **"The Impact of Total Quality Management on Innovation: Findings from a Developing Country",** aimed to study the relationship between TQM practices and innovation in the Vietnamese industry. Confirmatory factor analysis was used in this study. Data were collected from 12 firms that had been ISO 9001 certified by a pilot survey in Hochiminh city. The results showed that there is a positive relationship between TQM and innovation. Results also showed that only top management, people management, process management and strategic management showed a positive effect on the company's innovation performance.

8. Demirbag, et. al. (2006) study titled **"An Analysis of the Relationship between TQM Implementation and Organizational Performance: Evidence from Turkish SMEs",** aimed to determine the effect of total quality management and organizational performance of firms in Turkish textile industry. The study used a self-administered questionnaire and employed the structural equation modeling technique. The sample targeted 500 SMEs in textile industry in Istanbul in Turkey. The study found a high positive correlation between total quality management practices and non-financial performance, while there is low correlation of total quality management practices on financial performance of SMEs.

9. Hung, et. al. (2010) study titled **"Knowledge as a Facilitator for Enhancing Innovation Performance through Total Quality Management"**, aimed to investigate the relationships between knowledge management, total quality management and innovation performance. The

sample of the study was 223 managers from 1139 high-tech companies in Taiwan. The method used structural equation modeling. The study results showed that knowledge management is positively correlated with both total quality management and innovation performance and that total quality management is a mediator between KM and innovation performance. Results also showed that total quality management is important to achieve innovation performance.

10. Sadikoglu and Zehir (2010) study titled **"Investigating the Effects of Innovation and Employee Performance on the Relationship between Total Quality Management Practices and Firm Performance: An Empirical Study of Turkish Firms",** aimed to investigate the relationship between total quality management practices and organization multiple performance measures and to investigate the mediating impacts of employee and innovation performance of the TQM practices and organization performance in Turkish firms. The cross-sectional survey methodology was used. The sample targeted 500 organizations certified with ISO 9001:2000 randomly selected in the Marmara in Turkey. Only 373 questionnaires were obtained. Confirmatory and exploratory factor analyses were used to test validity and reliability then structural equation modeling used to test the model and hypotheses. The study showed that employee and innovation performance partly mediate the relationship between TQM practices and organization performance.

11. Kuye and Sulaimon (2011) study titled "**Employee Involvement in Decision Making and Firms Performance in the Manufacturing Sector in Nigeria"**, aimed to investigate the correlation between employee involvement in decision-making and firm's performance in the manufacturing

sector in Nigeria. A simple random sampling technique was used. The sample targeted 740 manufacturing firms in Nigeria. Descriptive statistics, regression analysis, product moment correlation and Z-test were used to analyze collected data. The study showed significant relationship between employee involvement in decision-making and firms' performance.

12. Osman, et. al. (2011) study titled **"Relationship between Human Resource Practices and Firm Performance: an Empirical Assessment of Firms in Malaysia",** aimed to investigate the correlation between Human Resource practices and performance. The sample targeted top executives of 800 organizations from different industry sectors from Malaysia, 217 questionnaires were collected only. The methods frequency distribution, reliability analysis, and regression analysis were used in this study. The study showed that there is a high correlation between HR practices and firms performance.

13. Gupta and Belokar (2012) study titled **"Applications of Total Quality Management in Indian Airline Industry",** aimed to determine the benefit of Total quality management implementation in the Airline industry by examining the basic principles of TQM in the airlines. The researcher used the Questionnaire Survey and semi-structured interviews in this study. The sample consisted of 116 employees from different departments of airline. The result of the study showed that TQM impact is highly positive on organization innovation and maintaining sustainable competitiveness.

14. Nzuve and Bakari (2012) study titled **"The Relationship between Empowerment and Performance in the City Council of Nairobi",** aimed to investigate the level employees empowerment and to evaluate empowerment practices and its relationship with performance in city council

of Nairobi. The researcher used the questionnaire to collect data. The sample was 60 employees of one organization, 4 employees from each of the15 departments selected randomly. The study found that the employees in the City Council of Nairobi are empowered and there is a strong positive relationship between employee empowerment and performance.

15. Addae-Korankye (2013) study titled **"Total Quality Management (TQM): A Source of Competitive Advantage. A Comparative Study of Manufacturing and Service Firms in Ghana"**, aimed to examine whether or not TQM is a source of competitive advantage in service and manufacturing sectors in Ghana**.** The Study used questionnaire and interview to collect data. Simple random and stratified sampling techniques were used to select 30 service firms and 30 manufacturing firms in Accra. The study found that implementation of TQM is a source of competitive advantage.

16. Fening, et. al. (2013) study titled **"Linkages between Total Quality Management and Organizational Survival in Manufacturing Companies in Ghana",** aimed to investigate the relationship between TQM and organizational survival in manufacturing companies in Ghana. Data were collected by questionnaire. A sample targeted 250 managers of manufacturing companies within the metropolis of Kumasi. A structural equation model was used to test the relationships between the seven organizational linkages and five practices of total quality management effect on the Ghanaian firms. The study found high positive impact between the seven TQM elements and organizational performance.

17. Munizu (2013) study titled **"The Impact of Total Quality Management Practices towards Competitive Advantage and**

Organizational Performance: Case of Fishery Industry in South Sulawesi Province of Indonesia", aimed to investigate the impact of TQM practices on competitive advantage and organization's performance. Questionnaire was used for collecting data. The study targeted the 66 managers of fishery companies in South Sulawesi Province, Indonesia. The study found that TQM practices have significant positive effect on performance and competitive advantage.

18. Nosrat, et. al. (2014) study titled **"The Study of Total Quality Management as a Window on Innovative Performance (Mellat Bank Staff Qom Province)",** aimed to investigate the effect of TQM and organizational learning on innovation performance in Mellat Bank of Qom province. The population was all employee of Mellat Bank of Qom province (210 employees). The sample was 136 employees. The results showed that TQM has significant effect on innovation performance.

19. Ardestani and Amirzade (2014) study titled "**The Impact of Total Quality Management Practices on Innovation Performance and Organizational Performance"**, aimed to investigate if the TQM activities impact quality and/or innovative performance. The sample targeted mid- and upper-level managers in 100 companies in Tehran, and 242 valid questionnaires were collected. Factor analysis, Cronbach alpha scale and Correlation and regression analysis are used. The study found that there is a significant and positive effect of TQM practices on organizational performance and innovation performance.

20. Safiullah (2014) study titled **"Impact of Rewards on Employee Motivation of the Telecommunication Industry of Bangladesh: An Empirical Study",** aimed to identify the impact of rewards on employee

performance. The study population was the employees from four selected Telecommunication companies in Bangladesh. Only 81 questionnaires were collected and data analyzed by values and frequency percentage tables. The study showed that rewards have a great positive impact on employee performance, which leads to better general performance in the telecom industry.

21. Ware (2014) study titled **"Investigate the Benefit Practice of Total Quality Management as Competitive Advantage in Corporate Institution: A Case Study of Cocoa-Cola Bottling Company Ghana Ltd"**, aimed to evaluate the benefit of TQM as competitive advantage in corporation institution. Coca Cola Bottling Company Ghana Ltd was taken as a case study in this research. Method used was correlation Analysis, Time Series and Control Chart. Results showed that TQM practices have benefits in maintaining and developing competitive advantages compared to the competitors.

22. Geraie and Rad (2015) study titled: **"Mediator Role of the Organizational Identity Green in Relationship between Total Quality Management and Perceived Innovation with Sustainable Competitive Advantage",** aimed to examine the mediating role of green organizational identity in understanding how TQM is related to innovation with sustainable competitive advantage. The study consisted of 147 continuous undergraduate students and 43 discontinuous undergraduate management students enrolled in 2012 plus 248 staffs working at Islamic Azad University of Shiraz. The sample size included 123 students and 146 using simple random sampling. The results found that TQM and innovation are correlated with sustainable competitive advantage as mediated by green organizational identity.

23. Gemina, et. al. (2015) study titled **"Implementation of Total Quality Management Related to Company Managerial and Competitive Advantage"**, aimed to define the effects TQM on competitive advantage at SMEs and Cooperatives in Bogor, Sukabumi. The population was CEOs of SMEs and Cooperatives in Bogor, Sukabumi. Questionnaire was used and distributed to 100 respondents. Simultaneous significant test and partial significant test were used to test the hypothesis. Results showed that TQM impacted competitive advantage at SMEs and Cooperatives in Bogor, Sukabumi. Results also showed that focused on customers did not impact competitive advantage in Bogor, Sukabumi.

24. Kaskari, et. al. (2015) study titled "**Evaluation of Total Quality Management Influence on Operation in Iran's Automobile Industry",** aimed to evaluate the application of TQM impact on operation (continuous recovery, on time delivery, and financial operation) in Iran's automobile industry. The study targeted all the Iranian automobile manufacturing industry. The sample was 384 top managers of Iran Khodro and Saipa companies. Questionnaire was used to collect data. The results showed that TQM has direct and positive correlation on operational performance.

25. Long, et. al. (2015) study titled **"Impact of TQM Practices on Innovation Performance among Manufacturing Companies in Malaysia"**, aimed to investigate the effect of TQM practices on a firm's innovation performance. The study targeted the managers of manufacturing firms in the zone of Rawang in Selangor, Malaysia. Questionnaire was distributed to 123 managers from 35 firms in Rawang, Selangor, Malaysia. The study found that TQM has a positive effect on innovation performance at five practices: process management, leadership, customer focus, people management and

strategic planning where customer focus was the most effective TQM practice followed by process management, then people management.

26. Sari and Firdaus (2015) study titled: **"The Implementation of Total Quality Management (TQM) in Small and Medium Manufacturing Company (SMMC) and Its Impact on Competitiveness and Performance",** aimed to investigate the effect of TQM implementation on competitive advantage and company's performance. PT-RIS and MHI-ESI employees in Indonesia were the population of this study and the sample was 80 employees. The study found that there is positive effect of TQM practices on competitive advantage. The study also found that there is a significant positive effect between competitive advantage and the company's performance. Nevertheless, there is no significant effect of total quality management on the company's performance.

27. Priya (2015) study titled "**Impact of Total Quality Management Practices on the Profitability and Service Quality of Public Sector Commercial Banks in Chennai",** aimed to investigate the effect of TQM practices on the profitability and service quality. The employees of Indian Bank, Indian Overseas Bank and Canara Bank in the city of Chennai were the sample of the study. The study used a structured and comprehensive questionnaire. The study found that there is a highly positive effect between TQM practices, achieving profitability and service quality.

28. Chaghooshi, et. al. (2015) study titled **"Canonical Correlation Analysis between Supply Chain Quality Management and Competitive Advantages"**, aimed to investigate the relationships between Supply Chain Quality Management and competitive advantage. The sample targeted 68 experts of 25 firms in Sahami Alyaf supply chain. Results showed that supply

chain quality management and competitive advantages have a significant relationship.

The literature review above show that all organizations benefit from using TQM on achieving competitive priorities but not every TQM variable has significant effect on competitive priorities and their effect may not be the same in different places or different industries. This study going to investigates the effect of the most important seven TQM elements on nearly all competitive priorities elements of Telecommunication companies in Qatar. The results of these previous studies will be useful compared to the current study to highlight differences and similarities that might be there**.**

Expected Contributions of the Current Study as Compared to Previous Studies:

1- TQM concept: This study may increase awareness about the role of TQM in achieving organization competitive priorities.

2- Purpose: Most of the previous studies were conducted to analyze and investigate TQM practices on competitive advantages not priorities. While this study were carried out to study the effect of TQM elements on the organizations' competitive priorities.

3- Environment: Most of the previous studies were executed out of the Middle-East countries while this study will be executed in one of the Middle-Eastern countries (Qatar).

4- Population: Most previous studies samples targeted employees and/or customers of the organizations, while this study targeted managers and supervisors.

5- Methodology: Most researches depended on reports from different organizations and industries, while this study depends on perception.

6- Variables: Most of researchers studied five elements of TQM or less, and studied their impact on one or two competitive priorities elements only, while the current study takes seven elements of TQM and will investigate their impact on five elements of competitive priorities.

7- Comparison: The results of this study will compare to the previous studies results mentioned earlier to highlight differences and similarities that might be there.

Chapter Three: Study Methodology:

Study Design:

This study is descriptive as well as cause/effect. Its purpose is to investigate the effect of TQM on competitive priorities at Qatar Telecommunication Organizations. The study starts by reviewing previous studies to select the model, and build the questionnaire, which was developed through panel of judges. Then data have been collected from all managers and supervisors working at these companies via the questionnaire. After checking the suitability and completeness of the collected questionnaires, the data were coded against SPSS 20. After assuring the data normality, validity, reliability and correlation, the effect of the independent variable on dependent variable was tested through multiple regressions.

Study Population, Sample, and Unit of Analysis:

Study population and sample: There are only two Telecommunication companies in Qatar: Ooredoo and Vodafone. Both companies were targeted; therefore, there is no need for sampling. All managers and supervisors (at all levels) working at Qatar Telecommunication companies (about 180 managers and supervisors) were targeted for data collection, which negates the need for sampling. The unit of analysis is the managers and supervisors (in all levels) who are working in these companies.

Data Collection Methods (Tools):

The data that will be used for fulfilling the purposes of the study can be divided into two groups: secondary and primary data as follows:

Secondary Data: Data was collected from different sources such as journals, working papers, researches, thesis, articles and worldwide Web and Qatari Telecommunication organizations. Primary Data: Data was collected by extensive survey by questionnaire.

The Questionnaire:

The Questionnaire was chosen and tested to suit the current study and to match the study hypothesis and research model. Basically the original questionnaire items were developed relying on previous studies. Then, the questionnaire was revised and validated by an academic panel of judges and references. Then, the questionnaire was also reviewed and validated by professional and highly experienced experts in the field of Telecommunication organizations.

Questionnaire Variables:

The questionnaire includes three parts as follows:

Demographic Dimensions: Company, gender, age, education, division, and experience.

Independent Variables (TQM): The independent variable contains seven sub-variables: top management commitment, employee training, employee involvement, employee empowerment, rewarding and recognition, continuous improvement, and customer focus. Each sub-variable was tested via six questions. Therefore, the total items were 42.

Dependent Variable (Competitive Priorities): The dependent variable includes five dimensions: cost, quality, time/speed, flexibility, and innovation.

Each dimension was measured by six items. Therefore, the total dependent items are 30.

All variable items were measured by five Likert-scale as follows: Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), and Strongly Disagree (1).

Data Analysis Methods:

Both Telecommunication companies in Qatar were targeted and the questionnaires were distributed to all managers and supervisors working in these companies and were available at the time of implementing this study. A hundred fifty questionnaires were distributed to 150 managers and supervisors out of 180, 30 managers and supervisor were out of reach. Only 125 questionnaires were obtained, and only 119 questionnaires were suitable for analysis, while six questionnaires were eliminated because of uncompleted or anomalies data. After that, the data were coded against SPSS 20 for further analysis.

Validity Test: Two methods were used to confirm validity: content and face validity. Content validity was confirmed through using multiple sources to collect the data such as books, journals, articles, theses, dissertations, researches, and worldwide web. The face validity was confirmed through expert interviews and panel of judges.

Reliability Test: (Cronbach’s Alpha): Cronbach’s alpha coefficients of internal consistency were used to test the consistency and suitability of the measuring tools. Table (3.1) shows that the Cronbach's Alpha coefficient for independent sub-variables ranges between 0.872 and 0.973, and for dependent dimensions ranges from 0.839 and 0.987.

Table (3.1): Cronbach's Alpha Test for Reliability.

No.	Variable	No. of items	Cronbach's Alpha
1	Top Management Commitment	6	0.956
2	Employee Training	6	0.930
3	Employee Involvement	6	0.930
4	Employee Empowerment	6	0.872
5	Rewarding and Recognition	6	0.955
6	Continuous Improvement	6	0.971
7	Customer Focus	6	0.973
	Total Quality Management	**7 sub variables**	**0.951**
1	Cost	6	0.873
2	Quality	6	0.896
3	Time/Speed	6	0.945
4	Flexibility	6	0.987
5	Innovation	6	0.839
	Competitive Priorities	**5 dimensions**	**0.926**

Since the value of all sub-variables and dimensions is more than 60%, then reliability was assumed (Sekaran 2003).

Demographic Analysis: this section includes demographic dimensions description (frequency and percentage) of participants related to age, gender, education level, experience, departments and positions.

Company: Table (3.2) shows that 77 (64.7%) participants were from Ooredoo Company and 42 from Vodafone Company. Most of respondents were from Ooredoo, because Ooredoo is larger than Vodafone.

Table (3.2): Companies Frequency and Percentage.

		Frequency	Percent
Company	Ooredoo	77	64.7
	Vodafone	42	35.3
	Total	119	100.0

Gender: Table (3.3) shows that 87 (73.1%) respondents were male, while only 32 (23.9%) were female. Most of employees of both companies come from other countries (not citizens).

Table (3.3): Gender Frequency and Percentage.

		Frequency	Percent
Gender	Male	87	73.1
	Female	32	26.9
	Total	119	100.0

Age: Table (3.4) shows that most of the respondents age were between 25-35 years old 53 (44.5%), followed by 36-45 years 52 (43.7%), then above 45 years 13 (10.9%), finally less than 25 only one (0.8%). Most of respondents' ages were between 25 and 45, because Telecommunication industry needs more young bloods.

Table (3.4): Age Frequency and Percentage.

		Frequency	Percent
Age	Less than 25	1	0.8
	Bet. 25-35	53	44.5
	Bet. 36-45	52	43.7
	Above 45	13	10.9
	Total	119	100.0

Education: Table (3.5) shows that the majority of respondents were Bachelor 60 (50.4%), followed by Master by or higher 41 (34.5%), then Diploma 15 (12.6%), after that high school 3 (2.5%).That is because the companies appoint in managers positions employees having Bachelor ,Master or Higher degrees.

Table (3.5): Education Frequency and Percentage.

		Frequency	Percent
Education	High School	3	2.5
	Diploma	15	12.6
	Bachelor	60	50.4
	Master or Higher	41	34.5
	Total	119	100.0

Division: Table (3.6) shows that the respondents from Human Resources and Customer Service were 22 (18.5%), followed by Sales and Accounting were 20 (16.8%), and then the others were 35 (29.4%).

Table (3.6): Division Frequency and Percentage.

		Frequency	Percent
Division	Sales	20	16.8
	Human Resource	22	18.5
	Accounting	20	16.8
	Customer Service	22	18.5
	Others	35	29.4
	Total	119	100.0

Experience: Table (3.7) shows that most respondents were between 5-10 years 56 (47.1%), followed by between 10-15 years 46 (38.7%), then above 15 years 14 (11.8%), after that less than 5 years 3 (2.5%). That is because the years of experience increase with the age.

Table (3.7): Experience Frequency and Percentage.

		Frequency	Percent
Experience	Less than 5	3	2.5
	Bet. 5-10	56	47.1
	Bet. 10-15	46	38.7
	Above 15	14	11.8
	Total	119	100.0

Chapter Four: Data Analysis

Introduction:

This chapter includes three sections: descriptive analysis, correlation between variables and multiple regressions to test the relationship between independent variables and dependent variable.

Descriptive Analysis:

This section includes the means, standard deviation, t-value, ranking and importance of each sub-variable and each item. The importance is divided into three categories: low, medium, and high, based on the following equation:

Total range divided by three: 5-1/3 = 4/3 = 1.33

Low: 1 to 2.33

Medium: 2.34 to 3.66

High: 3.67 to 5

Independent Variable (Total Quality Management):

Table (4.1) shows that the means of the respondents' perception of the degree of implementing of the total quality management sub-variables range from 3.882 to 4.524, with standard deviation that ranges from 0.679 to 0.787. This indicates that there is an agreement on high implementation of total quality management sub-variables. The average mean of the total quality management sub-variables is 4.270 with standard deviation 0.659, which indicates that there is an agreement on high implementation of these sub-variables. Finally, the overall result indicates that there is a significant implementation of the total quality management among Qatar Telecommunication companies, where (t=21.038>1.980). This indicates that

the managers and supervisors working at Qatar Telecommunication companies are aware of the importance of the implantation of the total quality management.

Table (4.8): Means, Standard Deviation, t-Value, Ranking and Importance of TQM.

No.	Variable	Mean	Std. Dev.	t-Value	Sig.	Ranking	Importance
1	Top Management Commitment	4.193	0.780	16.697	0.000	5	High
2	Employee Training	4.241	0.787	17.318	0.000	4	High
3	Employee Involvement	4.126	0.679	18.103	0.000	6	High
4	Employee Empowerment	3.882	0.691	13.921	0.000	7	High
5	Rewarding and Recognition	4.472	0.784	20.475	0.000	2	High
6	Continuous Improvement	4.524	0.740	22.471	0.000	1	High
7	Customer Focus	4.452	0.775	20.432	0.000	3	High
	Total Quality Management	**4.270**	**0.659**	**21.038**	**0.000**		**High**

t-tabulated value=1.980

Top Management Commitment:

Table (4.2) shows that the respondents' perception means regarding the implementation of top management commitment items range from 4.08 to 4.40 with standard deviation that ranges from 0.829 to 0.903. This indicates that there is an agreement on high implementation of top management commitment items. The average mean of the total top management commitment items is 4.19 with standard deviation 0.780, which indicates that there is an agreement on high implantation of this variable. Finally, the overall result indicates that there is a significant degree of implantation of the top management commitment at Qatar Telecommunication companies, where

(t=16.697>1.98). This indicates that the managers and supervisors working at Qatar Telecommunication are aware about the importance of top management commitment.

Table (4.9): Means, Standard Deviation, t-Value, Ranking and Importance of Top Management Commitment.

No.	Items	Mean	Std. Dev.	t-Value	Sig.	Ranking	Importance
1	Top management develops clear total quality goals.	4.08	0.865	13.563	0.000	4	High
2	Top management communicates all quality goals to employees.	4.08	0.835	14.048	0.000	4	High
3	Top management develops policies based on the concept of total quality.	4.08	0.903	12.987	0.000	4	High
4	Top management acts as guiding example for quality.	4.18	0.889	14.433	0.000	3	High
5	Top management allocates the required resources for quality.	4.35	0.829	17.794	0.000	2	High
6	Top management rewards the quality achievement action.	4.40	0.847	18.076	0.000	1	High
	Top Management Commitment	**4.19**	**0.780**	**16.697**	**0.000**		**High**

t-tabulated value=1.980

Employee Training:

Table (4.3) shows that the respondents' perception means regarding the implementation of Employee Training items range from 4.01 to 4.45 with standard deviation that ranges from 0.810 to 1.054. This indicates that there is an agreement on high implementation of Employee Training items. The average mean of the total Employee Training items is 4.240 with standard deviation 0.781, which indicates that there is an agreement on high implantation of this variable. Finally, the overall result indicates that there is a significant degree of implantation of the Employee Training at Qatar Telecommunication companies, where (t=17.318>1.98). This indicates that

the managers and supervisors working at Qatar Telecommunication are aware of the importance of Employee Training.

Table (4.10): Means, Standard Deviation, t-Value, Ranking and Importance of Employee Training.

No.	Items	Mean	Std. Dev.	t-Value	Sig.	Ranking	Importance
7	The organization defines the needs for training.	4.09	0.854	13.961	0.000	5	High
8	The organization sets clear objectives for training.	4.24	0.810	16.637	0.000	4	High
9	The organization chooses the suitable training methods.	4.34	0.905	16.113	0.000	2	High
10	The organization offers the suitable resources for training.	4.45	0.945	16.683	0.000	1	High
11	The organization gives the quality training to all employees at all levels.	4.01	1.054	10.441	0.000	6	High
12	The organization evaluates training based on objective criteria.	4.33	0.865	16.751	0.000	3	High
	Employee Training	**4.240**	**0.781**	**17.318**	**0.000**		**High**

t-tabulated value=1.980

Employee Involvement:

Table (4.4) shows that the respondents' perception means regarding the implementation of Employee Involvement items range from 4.00 to 4.30 with standard deviation that ranges from 0.708 to 0.834. This indicates that there is an agreement on high implementation of Employee Involvement items. The average mean of the total Employee Involvement items is 4.126 with standard deviation 0.678, which indicates that there is an agreement on high implantation of this variable. Finally, the overall result indicates that there is a significant degree of implantation of the Employee Involvement at Qatar Telecommunication companies, where (t=18.103>1.98). This indicates that

the managers and supervisors working at Qatar Telecommunication are aware of the importance of Employee Involvement.

Table (4.11): Means, Standard Deviation, t-Value, Ranking and Importance of Employee Involvement.

No.	Items	Mean	Std. Dev.	t-Value	Sig.	Ranking	Importance
13	The organization correlates constantly with employees.	4.08	0.708	16.701	0.000	3	High
14	The organization provides open discussions based on objective criteria.	4.04	0.807	14.091	0.000	4	High
15	The organization listens to employees suggestions.	4.29	0.772	18.173	0.000	2	High
16	The organization values employee's inputs.	4.30	0.798	17.810	0.000	1	High
17	The organization uses effective participation system.	4.04	0.807	14.091	0.000	4	High
18	The organization provides internal communication platform.	4.00	0.834	13.086	0.000	5	High
	Employee Involvement	**4.126**	**0.678**	**18.103**	**0.000**		**High**

t-tabulated value=1.980

Employee Empowerment:

Table (4.5) shows that the respondents' perception means regarding the implementation of Employee Empowerment items range from 3.39 to 4.27 with standard deviation that ranges from 0.778 to 1.001. This indicates that there is an agreement on medium to high implementation of employee empowerment items. The average mean of the total Employee Empowerment items is 3.88 with standard deviation 0.691, which indicates that there is an agreement on high implantation of this variable. Finally, the overall result indicates that there is a significant degree of implantation of the Employee Empowerment at Qatar Telecommunication companies, where (t=13.921>1.98). This indicates that the managers and supervisors working at

Qatar Telecommunication are aware of the importance of Employee Empowerment.

Table (4.12): Means, Standard Deviation, t-Value, Ranking and Importance of Employee Empowerment.

No.	Items	Mean	Std. Dev.	t-Value	Sig.	Ranking	Importance
19	The organization defines the needs for empowering employees.	3.49	0.964	5.514	0.000	5	Medium
20	The organization authorizes employees to make substantive decisions.	3.39	1.001	4.213	0.000	6	Medium
21	The organization trains the employees on being responsible.	4.13	0.823	15.044	0.000	3	High
22	The organization employees are accountable for their action results.	4.18	0.911	14.188	0.000	2	High
23	The organization offers information access to employees.	3.83	0.816	11.117	0.000	4	High
24	The organization gives rewards based on company performance.	4.27	0.778	17.796	0.000	1	High
	Employee Empowerment	**3.88**	**0.691**	**13.921**	**0.000**		**High**

t-tabulated value=1.980

Rewarding and Recognition:

Table (4.6) shows that the respondents' perception means regarding the implementation of Rewarding and Recognition items range from 4.33 to 4.55 with standard deviation that ranges from 0.778 to 1.009. This indicates that there is an agreement on high implementation of Rewarding and Recognition items. The average mean of the total Rewarding and Recognition items is 4.47 with standard deviation 0.784, which indicates that there is an agreement on high implantation of this variable. Finally, the overall result indicates that there is a significant degree of implantation of the Rewarding and Recognition

at Qatar Telecommunication companies, where (t=20.475>1.98). This indicates that the managers and supervisors working at Qatar Telecommunication are aware of the importance of Rewarding and Recognition.

Table (4.13): Means, Standard Deviation, t-Value, Ranking and Importance of Rewarding and Recognition.

No.	Items	Mean	Std. Dev.	t-Value	Sig.	Ranking	Importance
25	The organization uses rewards program based on quality performance.	4.47	0.832	19.286	0.000	4	High
26	The organization develops clear performance criteria for rewarding.	4.49	0.832	19.496	0.000	3	High
27	The organization communicates the criteria to employees.	4.47	0.862	18.614	0.000	4	High
28	The organization uses both financial and non-financial rewards.	4.55	0.778	21.802	0.000	1	High
29	The organization rewards good performance in the moment.	4.33	1.009	14.350	0.000	5	High
30	The organization applies faire reward system.	4.52	0.882	18.822	0.000	2	High
	Rewarding and Recognition	**4.47**	**0.784**	**20.475**	**0.000**		**High**

t-tabulated value=1.980

Continuous Improvement:

Table (4.7) shows that the respondents' perception means regarding the implementation of Continuous Improvement items range from 4.60 to 4.40 with standard deviation that ranges from 0.774 to 0.810. This indicates that there is an agreement on high implementation of Continuous Improvement items. The average mean of the total Continuous Improvement items is 4.52 with standard deviation 0.739, which indicates that there is an agreement on high implantation of this variable. Finally, the overall result indicates that

there is a significant degree of implantation of the Continuous Improvement at Qatar Telecommunication companies, where (t=22.471>1.98). This indicates that the managers and supervisors working at Qatar Telecommunication are aware of the importance of Continuous Improvement.

Table (4.14): Means, Standard Deviation, t-Value, Ranking and Importance of Continuous Improvement.

No.	Items	Mean	Std. Dev.	t-Value	Sig.	Ranking	Importance
31	The organization defines improvement goals.	4.40	0.785	19.512	0.000	6	High
32	The organization establishes processes necessary to improvement.	4.45	0.810	19.569	0.000	5	High
33	The organization relies on quality tools to improve performance.	4.54	0.800	20.961	0.000	4	High
34	The organization compares improvement process outcomes with goals.	4.57	0.809	21.201	0.000	3	High
35	The organization adjusts improvement plans according to feedbacks.	4.58	0.776	22.219	0.000	2	High
36	The organization monitors all processes continuously.	4.60	0.774	22.511	0.000	1	High
	Continuous Improvement	**4.52**	**0.739**	**22.471**	**0.000**		**High**

t-tabulated value=1.980

Customer Focus:

Table (4.8) shows that the respondents' perception means regarding the implementation of Customer Focus items range from 4.35 to 4.51 with standard deviation that ranges from 0.759 to 0.862. This indicates that there is an agreement on high implementation of Customer Focus items. The average mean of the total Customer Focus items is 4.45 with standard deviation 0.775, which indicates that there is an agreement on high implantation of this variable. Finally, the overall result indicates that there is a significant degree of implantation of the Customer Focus at Qatar Telecommunication

companies, where (t=20.432>1.98). This indicates that the managers and supervisors working at Qatar Telecommunication are aware of the importance of Customer Focus.

Table (4.15): Means, Standard Deviation, t-Value, Ranking and Importance of Customer Focus.

No.	Items	Mean	Std. Dev.	t-Value	Sig.	Ranking	Importance
37	The organization asks customers for feedback continuously.	4.35	0.809	18.249	0.000	5	High
38	The organization uses customers' feedback to define their requirements.	4.49	0.852	19.036	0.000	3	High
39	The organization designs services according to customer requirements.	4.50	0.862	18.922	0.000	2	High
40	The organization keeps customer's database on track.	4.49	0.812	19.991	0.000	3	High
41	The organization implements customer satisfaction survey continuously.	4.51	0.862	19.137	0.000	1	High
42	The organization stays in close contact with its customers.	4.38	0.759	19.807	0.000	4	High
	Customer Focus	**4.45**	**0.775**	**20.432**	**0.000**		**High**

t-tabulated value=1.980

Dependent Variable (Competitive Priorities):

Table (4.9) shows that the means of the respondents' perception of the degree of implementing of the Competitive Priorities sub-variables range from 3.93 to 4.53, with standard deviation that ranges from 0.676 to 0.840. This indicates that there is an agreement on high implementation of Competitive priorities sub-variables. The average mean of the Competitive Priorities sub-variables is 4.15 with standard deviation 0.634, which indicates that there is an agreement on high implementation of these sub-variables. Finally, the overall result indicates that there is a significant implementation of the Competitive Priorities among Qatar Telecommunication companies, where

(t=19.711>1.980). This indicates that the managers and supervisors working at Qatar Telecommunication companies are aware of the importance of the implantation of the Competitive Priorities.

Table (4.16): Means, Standard Deviation, t-Value, Ranking and Importance of Competitive Priorities.

No.	Dimension	Mean	Std. Dev.	t-Value	Sig.	Ranking	Importance
1	Cost	3.96	0.676	15.446	0.000	4	High
2	Quality	4.22	0.688	19.316	0.000	2	High
3	Time/Speed	4.09	0.705	16.830	0.000	3	High
4	Flexibility	4.54	0.840	19.943	0.000	1	High
5	Innovation	3.93	0.686	14.819	0.000	5	High
	Competitive Priorities	**4.15**	**0.634**	**19.711**	**0.000**		**High**

t-tabulated value=1.980

Cost:

Table (4.10) shows that the respondents' perception means regarding the implementation of Cost items range from 3.63 to 4.39 with standard deviation that ranges from 0.734 to 1.024.

Table (4.17): Means, Standard Deviation, t-Value, Ranking and Importance of Cost.

No.	Items	Mean	Std. Dev.	t-Value	Sig.	Ranking	Importance
43	The organization's servicing costs are lower than competitor.	3.71	0.933	8.254	0.000	5	High
44	The organization's employees are well trained on multi tasks.	3.63	1.024	6.714	0.000	6	Medium
45	The organization overall cost of labor is reduced.	3.76	0.929	8.877	0.000	4	High
46	The organization operating cost is reduced.	4.11	0.734	16.485	0.000	3	High
47	The organization transactions cost suits the industry parameters.	4.14	0.773	16.121	0.000	2	High
48	The organization gets suitable prices from suppliers.	4.39	0.750	20.280	0.000	1	High
	Cost	**3.95**	**0.675**	**15.446**	**0.000**		**High**

t-tabulated value=1.980

This indicates that there is an agreement on medium to high implementation of Cost items. The average mean of the total cost items is 3.95 with standard deviation 0.675, which indicates that there is an agreement on high implantation of this variable. Finally, the overall result indicates that there is a significant degree of implantation of the Cost at Qatar Telecommunication companies, where (t=15.466>1.98). This indicates that the managers and supervisors working at Qatar Telecommunication companies are aware of the importance of Cost.

Quality:

Table (4.11) shows that the respondents' perception means regarding the implementation of Quality items range from 3.64 to 4.65 with standard deviation that ranges from 0.718 to 1.087.

Table (4.18): Means, Standard Deviation, t-Value, Ranking and Importance of Quality.

No.	Items	Mean	Std. Dev.	t-Value	Sig.	Ranking	Importance
49	The organization provides services that meet the international standards.	4.65	0.879	20.440	0.000	1	High
50	The organization introduces services quality superior to that of competitor.	3.64	1.087	6.408	0.000	6	Medium
51	The organization offers consistent quality with low errors.	4.10	0.718	16.731	0.000	5	High
52	The organization's employees are trained to help customer promptly.	4.18	0.724	17.841	0.000	4	High
53	The organization has modern facilities.	4.51	0.790	20.874	0.000	2	High
54	The organization's customers are satisfied with its quality of services.	4.23	0.838	15.970	0.000	3	High
	Quality	**4.21**	**0.688**	**19.316**	**0.000**		**High**

t-tabulated value=1.980

Time/Speed:

Table (4.12) shows that the respondents' perception means regarding the implementation of Time/Speed items range from 3.98 to 4.13 with standard deviation that ranges from 0.691 to 1.033. This indicates that there is an agreement on high implementation of Time/Speed items.

Table (4.19): Means, Standard Deviation, t-Value, Ranking and Importance of Time/Speed.

No.	Items	Mean	Std. Dev.	t-Value	Sig.	Ranking	Importance
55	The organization serves customers in appropriate time.	4.11	0.745	16.231	0.000	3	High
56	The organization completes service schedules as planned.	4.13	0.754	16.289	0.000	1	High
57	The organization provides fast service delivery.	4.06	0.751	15.376	0.000	4	High
58	The organization reduced the waiting time between order and service delivery.	4.12	0.691	17.643	0.000	2	High
59	The organization trains employees on delivering service quickly.	4.13	0.758	16.320	0.000	1	High
60	The organization Launches new services faster than competitors do.	3.98	1.033	10.381	0.000	5	High
	Time/Speed	**4.08**	**0.705**	**16.830**	**0.000**		**High**

t-tabulated value=1.980

The average mean of the total Time/Speed items is 4.08 with standard deviation 0.705, which indicates that there is an agreement on high implantation of this variable. Finally, the overall result indicates that there is a significant degree of implantation of the Time/Speed at Qatar Telecommunication companies, where (t=16.830>1.98). This indicates that the managers and supervisors working at Qatar Telecommunication are aware of the importance of Time/Speed.

Flexibility:

Table (4.13) shows that the respondents' perception means regarding the implementation of Flexibility items are ranging from 4.52 to 4.55 with standard deviation that ranges from 0.841 to 0.881. This indicates that there is an agreement on high implementation of Flexibility items. The average mean of the total Flexibility items is 4.53 with standard deviation 0.840, which indicates that there is an agreement on high implantation of this variable.

Table (4.20): Means, Standard Deviation, t-Value, Ranking and Importance of Flexibility.

No.	Items	Mean	Std. Dev.	t-Value	Sig.	Ranking	Importance
61	The organization offers different types of services.	4.52	0.872	19.031	0.000	4	High
62	The organization makes rapid service design changes.	4.54	0.871	19.254	0.000	2	High
63	The organization customizes services according to customer's needs.	4.53	0.881	18.931	0.000	3	High
64	The organization offers a large number of service features and variety.	4.55	0.841	20.173	0.000	1	High
65	The organization launches many new services at the same time.	4.55	0.851	19.816	0.000	1	High
66	The organization develops more comprehensive services lines.	4.53	0.881	18.931	0.000	3	High
	Flexibility	**4.53**	**0.840**	**19.943**	**0.000**		**High**

t-tabulated value=1.980

Finally, the overall result indicates that there is a significant degree of implantation of the Flexibility at Qatar Telecommunication companies, where (t=19.943>1.98). This indicates that the managers and supervisors working at Qatar Telecommunication are aware about the importance of Flexibility.

Innovation:

Table (4.14) shows that the respondents' perception means regarding the implementation of Innovation items range from 3.33 to 4.24 with standard deviation that ranges from 0.745 to 1.222. This indicates that there is an agreement on medium to high implementation of Innovation items. The average mean of the total Innovation items is 3.93 with standard deviation 0.685, which indicates that there is an agreement on high implantation of this variable.

Table (4.21): Means, Standard Deviation, t-Value, Ranking and Importance of Innovation.

No.	Items	Mean	Std. Dev.	t-Value	Sig.	Ranking	Importance
67	The organization launches new services more than competitors do.	3.75	0.993	8.213	0.000	4	High
68	The organization introduces new productive processes.	4.09	0.781	15.258	0.000	2	High
69	The organization gained many intellectual property rights.	3.33	1.222	2.926	0.004	5	Medium
70	The organization developed new technologies to serve customers.	4.24	0.745	18.099	0.000	1	High
71	The organization applies new electronic administrative applications.	4.24	0.792	17.140	0.000	1	High
72	The organization's employees are considered creative.	3.94	0.905	11.348	0.000	3	High
	Innovation	**3.93**	**.685**	**14.819**	**0.000**		**High**

t-tabulated value=1.980

Finally, the overall result indicates that there is a significant degree of implantation of the Innovation at Qatar Telecommunication companies, where (t=14.819>1.98). This indicates that the managers and supervisors working at Qatar Telecommunication companies are aware of the importance of Innovation.

Relationships between Variables:

Table (4.15) shows that the relationships between total quality management sub-variables are strong to very strong, where r ranges between 0.613 and 0.881. The table also shows that the relationships between competitive priorities dimensions are strong to very strong, since r ranges between 0.555 and 0.848.

Table (4.22): Bivariate Pearson Correlation (r) Matrix between Independent and Dependent Variables.

No.		1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Top Management Commitment														
2	Employee Training	.850**													
		.000													
3	Employee Involvement	.781**	.812**												
		.000	.000												
4	Employee Empowerment	.626**	.625**	.642**											
		.000	.000	.000											
5	Rewarding and Recognition	.741**	.780**	.717**	.613**										
		.000	.000	.000	.000										
6	Continuous Improvement	.760**	.772**	.736**	.636**	.867**									
		.000	.000	.000	.000	.000									
7	Customer Focus	.730**	.755**	.723**	.630**	.787**	.881**								
		.000	.000	.000	.000	.000	.000								
8	**Total Quality Management**	**.893****	**.910****	**.875****	**.769****	**.897****	**.919****	**.896****							
		.000	**.000**	**.000**	**.000**	**.000**	**.000**	**.000**							
9	Cost	.515**	.574**	.602**	.653**	.605**	.622**	.639**	.681**						
		.000	.000	.000	.000	.000	.000	.000	.000						
10	Quality	.753**	.718**	.684**	.683**	.748**	.735**	.767**	.827**	.757**					
		.000	.000	.000	.000	.000	.000	.000	.000	.000					
11	Time/Speed	.649**	.662**	.648**	.730**	.725**	.724**	.723**	.788**	.721**	.848**				
		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000				
12	Flexibility	.691**	.721**	.604**	.556**	.788**	.784**	.791**	.804**	.555**	.761**	.753**			
		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000			
13	Innovation	.570**	.544**	.588**	.706**	.587**	.582**	.590**	.674**	.714**	.798**	.784**	.576**		
		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		
14	**Competitive Priorities**	**.724****	**.734****	**.708****	**.750****	**.788****	**.786****	**.800****	**.858****	**.839****	**.941****	**.929****	**.840****	**.869****	
		.000	**.000**	**.000**	**.000**	**.000**	**.000**	**.000**	**.000**	**.000**	**.000**	**.000**	**.000**	**.000**	

The relationships between total quality management sub-variables and competitive priorities dimensions are strong to very strong, since r ranges from 0.515 to 0.827. The relationships between each total quality management sub-variables with total competitive priorities are strong to very strong, since r ranges from 0.724 to 0.800. Finally, the relationship between total quality

management and total competitive priorities is very strong, where r equals 0.838.

This indicates that the correlation between the total quality management and total competitive priorities is very strong and can affect each other.

Testing Study Hypothesis:

Multiple Regressions:

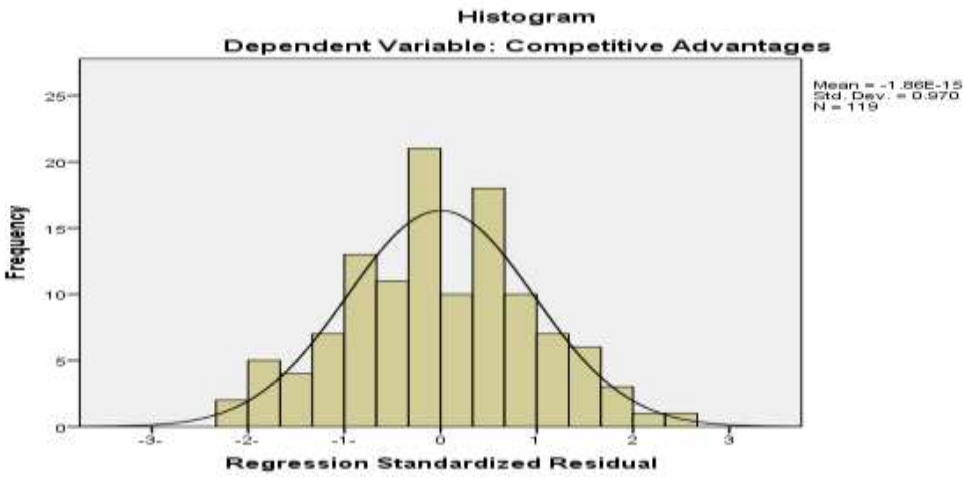
The multiple regressions are used to test the effect of the total quality management on the competitive priorities.

After confirming normality, validity, reliability and relationships between variables the following tests should be carried out to be able to use multiple regressions: normality, linearity, independence of errors, and multi-colleanearity. Finally, R^2 indicates the fitness of the model (Sekaran 2003).

Normal Distribution (Histogram):

The histogram in figure (4.1) shows that the data were normality distributed, since the residuals do not affect the normal distribution.

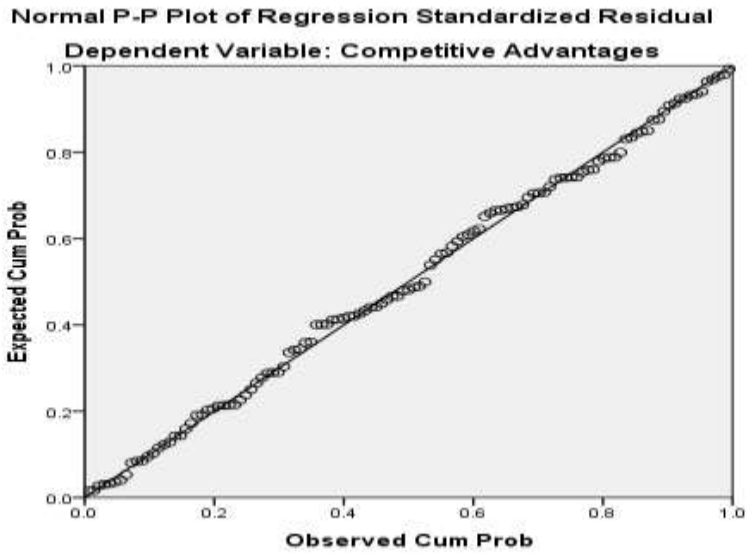
Figure 1: Normal Distribution



Linearity Test:

Figure (4.2) shows that the relationship between independent and dependent variables is linear.

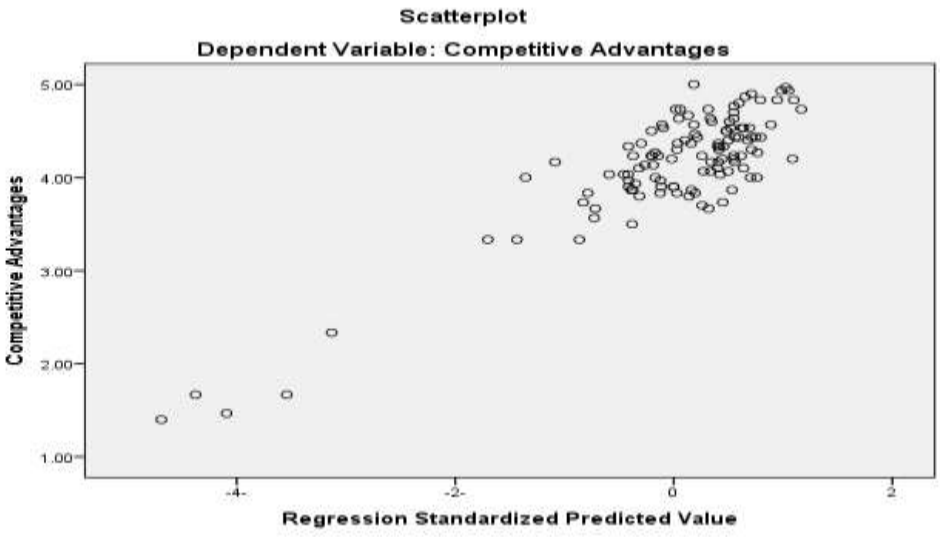
Figure 2: Linearity Test



Independence of Errors:

Figure (4.3) shows that the errors are scattered around the mean, therefore independence of errors is assumed.

Figure 3: Scattered Plot



Durbin-Watson used to ensure independence of errors, If Durbin-Watson test value is about 2 the model does not violate this assumption. Table (4.16) shows that Durbin Watson value is (d=2.018), which is about two and shows that the residuals are not correlated to each other; therefore, the independence of errors is not violated.

Multi-Collinearity:

While, VIF (Variance Inflation Factor) and tolerance are used to test multi collinearity. If VIF is less than 10 and tolerance is more than 0.1, the multi-collinearity model does not violate this assumption

Table (4.23): Multicollinearity and Durbin-Watson Test.

Sub-Variables	Collinearity Statistics		Durbin-Watson
	Tolerance	VIF	
Top Management Commitment	0.235	4.256	2.018
Employee Training	0.194	5.144	
Employee Involvement	0.282	3.545	
Employee Empowerment	0.510	1.960	
Rewarding and Recognition	0.216	4.630	
Continuous Improvement	0.139	7.188	
Customer Focus	0.205	4.885	

Table (4.16) shows that the VIF values are less than 10 and the tolerance values are more than 0.10. This indicates that there is no multi-collinearity within the independent variables of the study.

Multiple Regressions:

H_{01}: Total quality management practices have no effect on competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

Table (4.17) shows that when regressing the seven independent variables of total quality management together against dependent variable competitive priorities. R^2 shows the fitness of the model for multiple regressions and explains the variance of independent variable on dependent variable. Since R^2 is 77.7% then the independent variable can explain 0.777% of variance on dependent variable, since (R^2=0.777, F=55.338, Sig.=0.000).

Consequently, the null hypothesis is rejected and the alternative hypothesis is accepted, which states that the total quality management practices affect competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

Table (4.24): Results of Multiple Regressions Analysis (ANOVA[a]): Regressing Total Quality Management Sub-Variables against Competitive Priorities.

Model	R	R^2	Adjusted R^2	F	Sig.
1	0.882[a]	0.777	0.763	55.338	0.000[b]

a. Dependent Variable: Competitive Priorities

b. Predictors: (Constant), Customer Focus, Employee Empowerment, Top Management Commitment, Employee Involvement, Rewarding and Recognition, Employee Training, Continuous Improvement

Table (4.18) shows the effect of each independent sub-variable on dependent variable.

Table (4.25): Results of Multiple Regressions Analysis (Coefficients[a]): Regressing Total Quality Management Sub-Variables against Competitive Priorities.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.539	0.194		2.781	0.006
	Top Management Commitment	0.058	0.075	0.071	0.772	0.441
	Employee Training	0.011	0.082	0.013	0.131	0.896
	Employee Involvement	0.015	0.079	0.016	0.190	0.850
	Employee Empowerment	0.300	0.058	0.327	5.220	0.000
	Rewarding and Recognition	0.228	0.078	0.281	2.920	0.004
	Continuous Improvement	-0.022-	0.103	-0.026-	-0.215-	0.831
	Customer Focus	0.263	0.081	0.322	3.250	0.002

t-tabulated value=1.980

Sub-Hypothesis:

$H_{01.1}$: Top management commitment has no effect on competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

Table (4.18) shows that there is no significant effect of top management commitment on competitive advantage, since (Beta=0.071, t=0.772, sig.=0.441, p>0.05). Therefore, the null hypothesis is accepted which states that top management commitment does not affect competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

$H_{01.2}$: Employee training has no effect on competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

Table (4.18) shows that there is no significant effect of employee training on competitive advantage, since (Beta=0.013, t=0.131, sig.=0.896, p>0.05). Therefore, the null hypothesis is accepted which states that employee training does not affect competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

$H_{01.3}$: Employee involvement has no effect on competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

Table (4.18) shows that there is no significant effect of Employee Involvement, since (Beta=0.016, t=0.190, sig.=0.850, p>0.05). Therefore, the null hypothesis is accepted which states that employee Involvement does not affect competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

$H_{01.4}$: Employee empowerment has no effect on competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

Table (4.18) shows that there is significant effect of employee empowerment, since (Beta=0.327, t=5.220, sig.=0.000, p<0.05). Therefore, the null hypothesis rejected and the alternative is accepted, which states that employee empowerment affect competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

$H_{01.5}$: Reward and recognition has no effect on competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

Table (4.18) shows that there is significant effect of reward and recognition on competitive priorities, since (Beta=0.281, t=2.920, sig.=0.004, p<0.05). Therefore, the null hypothesis is rejected and the alternative is accepted, which states that reward and recognition affect competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

$H_{01.6}$: Continuous improvement has no effect on competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

Table (4.18) shows that there is no significant effect of Continuous improvement, since (Beta=-0.026, t=-0.215, sig.0.831, p>0.05). Therefore, the

null hypothesis is accepted, which states that continuous improvement does not affect competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

$H_{01.7}$: Customer focus has no effect on competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

Table (4.18) shows that there is significant effect of customer focus on competitive priorities, since (Beta=0.322, t=3.250, sig.=0.002, $p<0.05$). Therefore, the null hypothesis is rejected and the alternative is accepted, which states that customer focus affect competitive priorities of Telecommunication companies, at ($\alpha \leq 0.05$).

In summary, the multiple regressions analysis shows that the total quality management sub-variables together affect the competitive priorities, where (R^2=0.777, F=55.338, Sig.=0.000). In addition, it shows that only employee empowerment (Beta=0.327, t=5.220, sig.=0.000, $p<0.05$), reward and recognition (Beta=0.281, t=2.920, sig.=0.004, $p<0.05$), and customer focus (Beta=0.322, t=3.250, sig.=0.002, $p<0.05$) have positive significant effect on competitive priorities. However, top management commitment (Beta=0.071, t=0.772, sig.=0.441, $p>0.05$), employee training (Beta=0.013, t=0.131, sig.=0.896, $p>0.05$), employee involvement (Beta=0.016, t=0.190, sig.=0.850, $p>0.05$), and continuous improvement (Beta=-0.026, t=-0.215, sig.0.831, $p>0.05$) do not have significant effect on competitive priorities.

Chapter Five: Results Discussions, Conclusions, and Recommendations

Results Discussions:

Results of this study show that there is an agreement on high implementation of TQM variables in Telecommunication companies in Qatar and there is an agreement on high implementation of each total quality management sub-variables. This indicates that the managers working at Qatar Telecommunication companies are aware of the importance of the implantation of the total quality management variables. Results also show that the continuous improvement has the highest implementation, followed by rewarding and recognition, then customer focus, employee training, top management commitment, employee involvement and employee empowerment, respectively. In-addition, results shows that there is an agreement on high implementation of the competitive priorities dimensions and there is an agreement on high implementation of each competitive priorities variable among the Telecommunication companies in Qatar. This indicates that the managers working at Qatar Telecommunication companies are aware of the importance of the implantation of the competitive priorities dimensions. The results also show that flexibility has the highest implementation, followed by quality, then time/speed, cost, and innovation, respectively.

The results also indicate that the relationships among TQM sub-variables are strong to very strong; the relationships between competitive priorities dimensions are strong to very strong. Moreover, the relationships between each total quality management sub-variables and competitive priorities are strong to very strong, which means that the correlation between

the total quality management and total competitive priorities is very strong. This result is supported by the following previous studies: Choi and Eboch (1998), Douglas and Judge (2001) Ardestani and Amirzade (2014), Geraie and Rad (2015), and Chaghooshi, et. al. (2015).

The multiple regressions analysis shows that the total quality management affects the competitive priorities. In addition, it shows that only employee empowerment, reward and recognition and customer focus have positive significant effect on competitive priorities on Telecommunication companies in Qatar. However, top management commitment, employee training, employee involvement and continuous improvement do not have significant effect on competitive priorities on Telecommunication companies in Qatar. In addition, the results show that the employee empowerment has the highest effect, followed by customer focus, then rewarding and recognition. Safiullah (2014) study found that rewarding and recognition affect competitive priorities, and Nzuve and Bakari study (2012) found that employee empowerment has a significant effect on competitive priorities, which agreed with the current study results. Samat, et. al. (2006) agreed the current study with the significant effect of top management commitment and customer focus on competitive priorities but disagree the current study result that showed no significant effect of continuous improvement. Priya (2015), Sari and Firdaus (2015), and Long, et. al. (2015) support the current study results in that there is significant effect of employee empowerment, reward and recognition and customer focus but they also found that there is significant effect for the other TQM variables (top management commitment, employee training, employee involvement, and continuous improvement) while the current study didn't find any significant effect of that variables. In

additional, Gemina, et. al. (2015) study found that customer focus has no significant effect on competitive priorities, which disagree with the current study results that show significant effect of customer focus on competitive priorities.

Conclusions:

The result shows that there is a significant implementation of TQM among Telecommunication companies in Qatar. This indicates that the managers and supervisors working at Telecommunication companies in Qatar are aware of the importance of the implantation of TQM variables.

The results also show that the relationships among TQM sub-variables are strong to very strong; the relationships between competitive priorities dimensions are strong to very strong. Moreover, the relationships between each total quality management sub-variables with competitive priorities together are strong to very strong which means that the relationship between the total quality management and total competitive priorities dimensions is very strong.

Finally, the multiple regressions analysis shows that the total quality management sub-variable together affect the competitive priorities. Nevertheless, not each sub-variable of TQM affects the competitive priorities, only employee empowerment, reward and recognition, and customer focus have positive significant effect on competitive priorities. However, top management commitment, employee training, employee involvement and continuous improvement have no positive significant effect on competitive priorities. The employee empowerment has the highest effect, followed by customer focus, then rewarding and recognition.

Recommendations:

Based on the current study results, the study presents the following recommendations for Telecommunication companies in Qatar:

1. The current study recommends the companies to continue using total quality management as a tool and technique to gain and maintain competitive priorities.

2. The study shows that the employee empowerment is the important factor of TQM practices while it is the last one in the degree of implementation list in Qatari Telecommunication companies. Therefore, the companies are advised to give employee empowerment more attention according to the value of its implementation.

3. The study recommends the companies to implement employee empowerment, rewarding and recognition and customer focus together.

For Academics and future research, the study recommends the following:

4. The study recommends adding strategic planning or more to TQM variables in further studies.

5. The study is directed to Telecommunication industry. Further studies are needed to investigate whether the study findings can be generalized to other industries.

6. Finally, this study was conducted on Qatar companies, which makes generalizing its findings to other countries questionable. Therefore, similar studies in different countries are recommended to be carried out especially in Arabs countries.

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Appendices:

Appendix 1: Thesis Questionnaire

Questionnaire of the effect of TQM practices on competitive priorities.

Dear Sir

My Best Regards:

The researcher is conducting a study titled "**The Effect of Total Quality Management Practices on Competitive Priorities: A Field Study at Tel-Communication Companies in Qatar**".

Therefore, the researcher is asking you to complete the attached questionnaire (72 questions) in order to be able to achieve the study objectives.

Note: All information and opinions you provide will be treated confidently, and will not be disclosed to any person or party except for the academic purposes.

We appreciate your participation in this research. If you have any question or comment, please call (0097433535538).

Thank you for your fruitful cooperation.

Researcher: Naiyf Yousef Alaoun

Supervisor: Dr. Abdel-Aziz Ahmad Sharabati

Questionnaire

Part one: Demographic information

Company Name:

Gender: □Male □Female

Age (years): □less than 25 □ 25 – 35 □36 - 45 □above 45

Education: □High School □Diploma □Bachelor □Master or higher

Division: □ Sales □HR □ Accounting □Customers service □Others

Experience: □Less than 5 □ 5 – 10 □ 10 – 15 □Above 15

Part two: The following 72 question tap into your perception about the total quality management variables and competitive priorities variables.
[1 = strongly not agree, 2 = not agree, 3 = neutral, 4 = agree, 5 = strongly agree] based on how you feel about the statement.

Total Quality Management

Top Management Commitment:

1.	Top management develops clear total quality goals.	1	2	3	4	5
2.	Top management communicates all quality goals to employees.	1	2	3	4	5
3.	Top management develops policies based on the concept of total quality.	1	2	3	4	5
4.	Top management acts as guiding example for quality.	1	2	3	4	5
5.	Top management allocates the required resources for quality.	1	2	3	4	5
6.	Top management rewards the quality achievement action.	1	2	3	4	5

Employee Training:

7.	The organization defines the needs for training.	1	2	3	4	5
8.	The organization sets clear objectives for training.	1	2	3	4	5
9.	The organization chooses the suitable training methods.	1	2	3	4	5
10.	The organization offers the suitable resources for training.	1	2	3	4	5
11.	The organization gives the quality training to all employees at all levels.	1	2	3	4	5
12.	The organization evaluates training based on objective criteria.	1	2	3	4	5

Employee Involvement:

13.	The organization correlates constantly with employees.	1	2	3	4	5
14.	The organization provides open discussions based on objective criteria.	1	2	3	4	5
15.	The organization listens to employees suggestions.	1	2	3	4	5
16.	The organization values employee's inputs.	1	2	3	4	5
17.	The organization uses effective participation system.	1	2	3	4	5
18.	The organization provides internal communication platform.	1	2	3	4	5

Employee Empowerment:

19.	The organization defines the needs for empowering employees.	1	2	3	4	5
20.	The organization authorizes employees to make substantive decisions.	1	2	3	4	5
21.	The organization trains the employees on being responsible.	1	2	3	4	5
22.	The organization's employees are accountable for their action results.	1	2	3	4	5
23.	The organization offers information access to employees.	1	2	3	4	5
24.	The organization gives rewards based on company performance.	1	2	3	4	5

Rewarding and Recognition:

25.	The organization uses rewards program based on quality performance.	1	2	3	4	5
26.	The organization develops clear performance criteria for rewarding.	1	2	3	4	5
27.	The organization communicates the criteria to employees.	1	2	3	4	5
28.	The organization uses both financial and non-financial rewards.	1	2	3	4	5
29.	The organization rewards good performance in the moment.	1	2	3	4	5
30.	The organization applies fair reward system.	1	2	3	4	5

Continuous Improvement:

31.	The organization defines improvement goals.	1	2	3	4	5
32.	The organization establishes processes necessary to improvement.	1	2	3	4	5
33.	The organization relies on quality tools to improve performance.	1	2	3	4	5
34.	The organization compares improvement process outcomes with goals.	1	2	3	4	5
35.	The organization adjusts improvement plans according to feedbacks.	1	2	3	4	5
36.	The organization monitors all processes continuously.	1	2	3	4	5

Customer Focus:

37.	The organization asks customers for feedback continuously.	1	2	3	4	5
38.	The organization uses customers' feedback to define their requirements.	1	2	3	4	5
39.	The organization designs services according to customer requirements.	1	2	3	4	5
40.	The organization keeps customer's data base on track.	1	2	3	4	5
41.	The organization implements customer satisfaction survey continuously.	1	2	3	4	5
42.	The organization stays in close contact with its customers.	1	2	3	4	5

Competitive Priorities

Cost

43.	The organization's servicing costs are lower than competitor.	1	2	3	4	5
44.	The organization's employees are well trained on multi tasks.	1	2	3	4	5
45.	The organization's overall cost of labor is reduced.	1	2	3	4	5

46.	The organization's operating cost is reduced.	1	2	3	4	5
47.	The organization's transactions cost suits the industry parameters.	1	2	3	4	5
48.	The organization gets suitable prices from suppliers.	1	2	3	4	5

Quality

49.	The organization provides services that meet the international standards.	1	2	3	4	5
50.	The organization introduces services quality superior to competitor.	1	2	3	4	5
51.	The organization offers consistent quality with low errors.	1	2	3	4	5
52.	The organization's employees are trained to help customer promptly.	1	2	3	4	5
53.	The organization has modern facilities.	1	2	3	4	5
54.	The organization's customers are satisfied with its quality of services.	1	2	3	4	5

Time/Speed

55.	The organization serves customers in appropriate time.	1	2	3	4	5
56.	The organization completes service schedules as planned.	1	2	3	4	5
57.	The organization provides fast service delivery.	1	2	3	4	5
58.	The organization reduced the waiting time between order and service delivery.	1	2	3	4	5
59.	The organization trains employees on delivering service quickly.	1	2	3	4	5
60.	The organization Launches new services faster than competitors.	1	2	3	4	5

Flexibility

61.	The organization offers different types of services.	1	2	3	4	5
62.	The organization makes rapid service design changes.	1	2	3	4	5
63.	The organization customizes services according to customer's needs.	1	2	3	4	5
64.	The organization offers a large number of service features and variety.	1	2	3	4	5
65.	The organization launches many new services at the same time.	1	2	3	4	5
66.	The organization develops more comprehensive line of services.	1	2	3	4	5

Innovation

67.	The organization launches new services more than competitors.	1	2	3	4	5
68.	The organization introduces new productive processes.	1	2	3	4	5
69.	The organization gained many patents.	1	2	3	4	5
70.	The organization developed new technologies to serve customers.	1	2	3	4	5
71.	The organization applies new electronic administrative applications.	1	2	3	4	5
72.	The organization's employees are considered creative.	1	2	3	4	5

Appendix 2: Panel of Referees Committee:

No.	Name	Qualification	Position	University or Company
1	Dr. Obay Aldewachi	Prof. Dr	University president	University of Mosul
2	Dr. Zena Alqasim	Prof. Dr	Marketing Department Director	The University of Jordan
3	Dr. Adel Bena	Prof. Dr	Prof. Dr. in finance department	The University of Jordan
4	Dr. Aiman Abdullah	Prof. Dr	Prof. Dr. in business faculty	The University of Jordan
5	Dr. Ahmed Ali Saleh	PHD degree	Associate Professor in business faculty	MEU
6	Dr. Abdulaziz Alsayma	Prof. Dr	Prof. Dr. in accounting and finance department	MEU
7	Dr. Lauy Maani	PHD degree	Associate Professor in business faculty	MEU
8	Dr. Abdul-Rahem Al-Qadumi	PHD degree	Associate Professor	MEU
9	Mawahib Yousif	Master degree	Customer service manager	Batelco Telecommunications co
10	Hamidy Bekhit Bargan	Bachelor degree	HR manager	Ooredoo Telecommunications co

Appendix 3: Original Data Analysis Report

Reliability:

Top Management

Reliability Statistics

Cronbach's Alpha	N of Items
.956	6

Training:

Reliability Statistics

Cronbach's Alpha	N of Items
.930	6

Involvement:

Reliability Statistics

Cronbach's Alpha	N of Items
.930	6

Empowerment:

Reliability Statistics

Cronbach's Alpha	N of Items
.872	6

Reward and Recognition:

Reliability Statistics

Cronbach's Alpha	N of Items
.955	6

Continuous Improvement:

Reliability Statistics

Cronbach's Alpha	N of Items
.971	6

Customer Focus:

Reliability Statistics

Cronbach's Alpha	N of Items
.973	6

Total Quality Management:

Reliability Statistics

Cronbach's Alpha	N of Items
.951	7

Cost:

Reliability Statistics

Cronbach's Alpha	N of Items
.873	6

Quality:

Reliability Statistics

Cronbach's Alpha	N of Items
.896	6

Time/Speed:

Reliability Statistics

Cronbach's Alpha	N of Items

.945	6

Flexibility:

Reliability Statistics

Cronbach's Alpha	N of Items
.987	6

Innovation:

Reliability Statistics

Cronbach's Alpha	N of Items
.839	6

Competitive priorities:

Reliability Statistics

Cronbach's Alpha	N of Items
.926	5

Demographics:

Frequency Table

Com

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	77	64.7	64.7	64.7
	2	42	35.3	35.3	100.0
	Total	119	100.0	100.0	

Gen

	Frequency	Percent	Valid Percent	Cumulative Percent

Valid	1	87	73.1	73.1	73.1
	2	32	26.9	26.9	100.0
	Total	119	100.0	100.0	

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	.8	.8	.8
	2	53	44.5	44.5	45.4
	3	52	43.7	43.7	89.1
	4	13	10.9	10.9	100.0
	Total	119	100.0	100.0	

Edu

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	2.5	2.5	2.5
	2	15	12.6	12.6	15.1
	3	60	50.4	50.4	65.5
	4	37	31.1	31.1	96.6
	5	4	3.4	3.4	100.0
	Total	119	100.0	100.0	

Div

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	20	16.8	16.8	16.8
	2	22	18.5	18.5	35.3
	3	20	16.8	16.8	52.1
	4	22	18.5	18.5	70.6
	5	35	29.4	29.4	100.0
	Total	119	100.0	100.0	

Exp

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	2.5	2.5	2.5
	2	56	47.1	47.1	49.6
	3	46	38.7	38.7	88.2
	4	14	11.8	11.8	100.0
	Total	119	100.0	100.0	

Descriptive Analysis:

Means, Standard deviation and t-value

T-Test

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Top Management Commitment	119	4.1933	.77962	.07147
Employee Training	119	4.2409	.78164	.07165
Employee Involvement	119	4.1261	.67855	.06220
Employee Empowerment	119	3.8824	.69140	.06338
Rewarding and Recognition	119	4.4720	.78424	.07189
Continuous Improvement	119	4.5238	.73974	.06781
Customer Focus	119	4.4524	.77543	.07108
Total Quality Management	119	4.2701	.65858	.06037
Cost	119	3.9566	.67560	.06193
Quality	119	4.2185	.68812	.06308
Time/Speed	119	4.0882	.70538	.06466
Flexibility	119	4.5364	.84041	.07704
Innovation	119	3.9314	.68561	.06285
Competitive Priorities	119	4.1462	.63435	.05815

One-Sample Test

	Test Value = 3				
	T	df	Sig. (2-tailed)	Mean Differenc	95% Confidence Interval of the Difference

				e	Lower	Upper
Top Management Commitment	16.697	118	.000	1.19328	1.0518	1.3348
Employee Training	17.318	118	.000	1.24090	1.0990	1.3828
Employee Involvement	18.103	118	.000	1.12605	1.0029	1.2492
Employee Empowerment	13.921	118	.000	.88235	.7568	1.0079
Rewarding and Recognition	20.475	118	.000	1.47199	1.3296	1.6144
Continuous Improvement	22.471	118	.000	1.52381	1.3895	1.6581
Customer Focus	20.432	118	.000	1.45238	1.3116	1.5931
Total Quality Management	21.038	118	.000	1.27011	1.1506	1.3897
Cost	15.446	118	.000	.95658	.8339	1.0792
Quality	19.316	118	.000	1.21849	1.0936	1.3434
Time/Speed	16.830	118	.000	1.08824	.9602	1.2163
Flexibility	19.943	118	.000	1.53641	1.3839	1.6890
Innovation	14.819	118	.000	.93137	.8069	1.0558
Competitive Priorities	19.711	118	.000	1.14622	1.0311	1.2614

T-Test

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Top management develops clear total quality goals.	119	4.08	.865	.079

Top management communicates all quality goals to employees.	119	4.08	.835	.077
Top management develops polices based on the concept of total quality.	119	4.08	.903	.083
Top management acts as guiding example for quality.	119	4.18	.889	.082
Top management allocates the required resources for quality.	119	4.35	.829	.076
Top management rewards the quality achievement action.	119	4.40	.847	.078
Top Management Commitment	119	4.1933	.77962	.07147
The organization defines the needs for training.	119	4.09	.854	.078
The organization puts clear objectives for training.	119	4.24	.810	.074
The organization choses the suitable training methods.	119	4.34	.905	.083
The organization offers the suitable resources for training.	119	4.45	.945	.087
The organization gives the quality training to all employees in all levels.	119	4.01	1.054	.097
The organization evaluates training based on objective criteria.	119	4.33	.865	.079
Employee Training	119	4.2409	.78164	.07165
The organization correlates constantly with employees.	119	4.08	.708	.065
The organization provides open discussions based on objective criteria.	119	4.04	.807	.074
The organization listens to employees suggestions.	119	4.29	.772	.071
The organization values employee’s inputs.	119	4.30	.798	.073
The organization uses effective participation system.	119	4.04	.807	.074
The organization provides internal communication platform.	119	4.00	.834	.076
Employee Involvement	119	4.1261	.67855	.06220
The organization defines the needs for empowering employees.	119	3.49	.964	.088

The organization authorizes employees to make substantive decisions.	119	3.39	1.001	.092
The organization trains the employees on being responsible.	119	4.13	.823	.075
The organization's employees accountable for their action results.	119	4.18	.911	.084
The organization offers information access to employees.	119	3.83	.816	.075
The organization puts rewards based on company performance.	119	4.27	.778	.071
Employee Empowerment	119	3.8824	.69140	.06338
The organization uses rewards program based on quality performance.	119	4.47	.832	.076
The organization develops clear performance criteria for rewarding.	119	4.49	.832	.076
The organization communicates the criteria to employees.	119	4.47	.862	.079
The organization uses both financial and non-financial rewards.	119	4.55	.778	.071
The organization rewards good performance in the moment.	119	4.33	1.009	.093
The organization applying faire reward system.	119	4.52	.882	.081
Rewarding and Recognition	119	4.4720	.78424	.07189
The organization defines improvement goals.	119	4.40	.785	.072
The organization establishes processes necessary to improvement.	119	4.45	.810	.074
The organization relies on quality tools to improve performance.	119	4.54	.800	.073
The organization compares improvement process outcomes with goals.	119	4.57	.809	.074
The organization adjusts improvement plans according to feedbacks.	119	4.58	.776	.071
The organization monitors all processes continuously.	119	4.60	.774	.071
Continuous Improvement	119	4.5238	.73974	.06781
The organization asks customer for feedback continuously.	119	4.35	.809	.074

The organization uses customers' feedback to define their requirements.	119	4.49	.852	.078
The organization designs services according to customer requirements.	119	4.50	.862	.079
The organization keeps customer's database on track.	119	4.49	.812	.074
The organization implements customer satisfaction survey continuously.	119	4.51	.862	.079
The organization stays in close contact with its customers.	119	4.38	.759	.070
Customer Focus	119	4.4524	.77543	.07108
The organization's servicing costs are lower than competitors are.	119	3.71	.933	.086
The organization's employees are well trained on multi tasks.	119	3.63	1.024	.094
The organization overall cost of labor reduced.	119	3.76	.929	.085
The organization operating cost reduced.	119	4.11	.734	.067
The organization transactions cost suits the industry parameters.	119	4.14	.773	.071
The organization gets suitable prices from suppliers.	119	4.39	.750	.069
Cost	119	3.9566	.67560	.06193
The organization provides services that meet the international standards.	119	4.65	.879	.081
The organization introduces services quality superior to competitors.	119	3.64	1.087	.100
The organization offers consistent quality with low errors.	119	4.10	.718	.066
The organization's employees trained to help customer promptly.	119	4.18	.724	.066
The organization has modern facilities.	119	4.51	.790	.072
The organization's customers are satisfied with its quality of services.	119	4.23	.838	.077
Quality	119	4.2185	.68812	.06308
The organization serves customers in appropriate time.	119	4.11	.745	.068
The organization completes service schedules as planned.	119	4.13	.754	.069

The organization provides fast service delivery.	119	4.06	.751	.069
The organization reduced the waiting time between order and service delivery.	119	4.12	.691	.063
The organization trains employees on delivering service quickly.	119	4.13	.758	.070
The organization Launches new services faster than competitors do.	119	3.98	1.033	.095
Time/Speed	119	4.0882	.70538	.06466
The organization offers different types of services.	119	4.52	.872	.080
The organization makes rapid service design changes.	119	4.54	.871	.080
The organization customizes services according to customer's needs.	119	4.53	.881	.081
The organization offers a large number of service features and variety.	119	4.55	.841	.077
The organization launches many new services at the same time.	119	4.55	.851	.078
The organization develops more comprehensive services lines.	119	4.53	.881	.081
Flexibility	119	4.5364	.84041	.07704
The organization launches new services more than competitors do.	119	3.75	.993	.091
The organization introduces new productive processes.	119	4.09	.781	.072
The organization gained many intellectual property rights.	119	3.33	1.222	.112
The organization developed new technologies to serve customers.	119	4.24	.745	.068
The organization applies new electronic administrative applications.	119	4.24	.792	.073
The organization's employees considered creative.	119	3.94	.905	.083
Innovation	119	3.9314	.68561	.06285

One-Sample Test

	Test Value = 3

	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Top management develops clear total quality goals.	13.563	118	.000	1.076	.92	1.23
Top management communicates all quality goals to employees.	14.048	118	.000	1.076	.92	1.23
Top management develops polices based on the concept of total quality.	12.987	118	.000	1.076	.91	1.24
Top management acts as guiding example for quality.	14.433	118	.000	1.176	1.02	1.34
Top management allocates the required resources for quality.	17.794	118	.000	1.353	1.20	1.50
Top management rewards the quality achievement action.	18.076	118	.000	1.403	1.25	1.56
Top Management Commitment	16.697	118	.000	1.19328	1.0518	1.3348
The organization defines the needs for training.	13.961	118	.000	1.092	.94	1.25
The organization puts clear objectives for training.	16.637	118	.000	1.235	1.09	1.38
The organization choses the suitable training methods.	16.113	118	.000	1.336	1.17	1.50
The organization offers the suitable resources for training.	16.683	118	.000	1.445	1.27	1.62
The organization gives the quality training to all employees in all levels.	10.441	118	.000	1.008	.82	1.20
The organization evaluates training based on objective criteria.	16.751	118	.000	1.328	1.17	1.48
Employee Training	17.318	118	.000	1.24090	1.0990	1.3828
The organization correlates constantly with employees.	16.701	118	.000	1.084	.96	1.21
The organization provides open discussions based on objective criteria.	14.091	118	.000	1.042	.90	1.19
The organization listens to employees suggestions.	18.173	118	.000	1.286	1.15	1.43

The organization values employee's inputs.	17.810	118	.000	1.303	1.16	1.45
The organization uses effective participation system.	14.091	118	.000	1.042	.90	1.19
The organization provides internal communication platform.	13.086	118	.000	1.000	.85	1.15
Employee Involvement	18.103	118	.000	1.12605	1.0029	1.2492
The organization defines the needs for empowering employees.	5.514	118	.000	.487	.31	.66
The organization authorizes employees to make substantive decisions.	4.213	118	.000	.387	.20	.57
The organization trains the employees on being responsible.	15.044	118	.000	1.134	.99	1.28
The organization's employees accountable for their action results.	14.188	118	.000	1.185	1.02	1.35
The organization offers information access to employees.	11.117	118	.000	.832	.68	.98
The organization puts rewards based on company performance.	17.796	118	.000	1.269	1.13	1.41
Employee Empowerment	13.921	118	.000	.88235	.7568	1.0079
The organization uses rewards program based on quality performance.	19.286	118	.000	1.471	1.32	1.62
The organization develops clear performance criteria for rewarding.	19.496	118	.000	1.487	1.34	1.64
The organization communicates the criteria to employees.	18.614	118	.000	1.471	1.31	1.63
The organization uses both financial and non-financial rewards.	21.802	118	.000	1.555	1.41	1.70
The organization rewards good performance in the moment.	14.350	118	.000	1.328	1.14	1.51
The organization applying faire reward system.	18.822	118	.000	1.521	1.36	1.68
Rewarding and Recognition	20.475	118	.000	1.47199	1.3296	1.6144
The organization defines improvement goals.	19.512	118	.000	1.403	1.26	1.55

The organization establishes processes necessary to improvement.	19.569	118	.000	1.454	1.31	1.60
The organization relies on quality tools to improve performance.	20.961	118	.000	1.538	1.39	1.68
The organization compares improvement process outcomes with goals.	21.201	118	.000	1.571	1.42	1.72
The organization adjusts improvement plans according to feedbacks.	22.219	118	.000	1.580	1.44	1.72
The organization monitors all processes continuously.	22.511	118	.000	1.597	1.46	1.74
Continuous Improvement	22.471	118	.000	1.52381	1.3895	1.6581
The organization asks customer for feedback continuously.	18.249	118	.000	1.353	1.21	1.50
The organization uses customers' feedback to define their requirements.	19.036	118	.000	1.487	1.33	1.64
The organization designs services according to customer requirements.	18.922	118	.000	1.496	1.34	1.65
The organization keeps customer's database on track.	19.991	118	.000	1.487	1.34	1.63
The organization implements customer satisfaction survey continuously.	19.137	118	.000	1.513	1.36	1.67
The organization stays in close contact with its customers.	19.807	118	.000	1.378	1.24	1.52
Customer Focus	20.432	118	.000	1.45238	1.3116	1.5931
The organization's servicing costs are lower than competitors are.	8.254	118	.000	.706	.54	.88
The organization's employees are well trained on multi tasks.	6.714	118	.000	.630	.44	.82
The organization overall cost of labor reduced.	8.877	118	.000	.756	.59	.93
The organization operating cost reduced.	16.485	118	.000	1.109	.98	1.24

The organization transactions cost suits the industry parameters.	16.121	118	.000	1.143	1.00	1.28
The organization gets suitable prices from suppliers.	20.280	118	.000	1.395	1.26	1.53
Cost	15.446	118	.000	.95658	.8339	1.0792
The organization provides services that meet the international standards.	20.440	118	.000	1.647	1.49	1.81
The organization introduces services quality superior to competitors.	6.408	118	.000	.639	.44	.84
The organization offers consistent quality with low errors.	16.731	118	.000	1.101	.97	1.23
The organization's employees trained to help customer promptly.	17.841	118	.000	1.185	1.05	1.32
The organization has modern facilities.	20.874	118	.000	1.513	1.37	1.66
The organization's customers are satisfied with its quality of services.	15.970	118	.000	1.227	1.07	1.38
Quality	19.316	118	.000	1.21849	1.0936	1.3434
The organization serves customers in appropriate time.	16.231	118	.000	1.109	.97	1.24
The organization completes service schedules as planned.	16.289	118	.000	1.126	.99	1.26
The organization provides fast service delivery.	15.376	118	.000	1.059	.92	1.20
The organization reduced the waiting time between order and service delivery.	17.643	118	.000	1.118	.99	1.24
The organization trains employees on delivering service quickly.	16.320	118	.000	1.134	1.00	1.27
The organization Launches new services faster than competitors do.	10.381	118	.000	.983	.80	1.17
Time/Speed	16.830	118	.000	1.08824	.9602	1.2163
The organization offers different types of services.	19.031	118	.000	1.521	1.36	1.68
The organization makes rapid service design changes.	19.254	118	.000	1.538	1.38	1.70

The organization customizes services according to customer's needs.	18.931	118	.000	1.529	1.37	1.69
The organization offers a large number of service features and variety.	20.173	118	.000	1.555	1.40	1.71
The organization launches many new services at the same time.	19.816	118	.000	1.546	1.39	1.70
The organization develops more comprehensive services lines.	18.931	118	.000	1.529	1.37	1.69
Flexibility	19.943	118	.000	1.53641	1.3839	1.6890
The organization launches new services more than competitors do.	8.213	118	.000	.748	.57	.93
The organization introduces new productive processes.	15.258	118	.000	1.092	.95	1.23
The organization gained many intellectual property rights.	2.926	118	.004	.328	.11	.55
The organization developed new technologies to serve customers.	18.099	118	.000	1.235	1.10	1.37
The organization applies new electronic administrative applications.	17.140	118	.000	1.244	1.10	1.39
The organization's employees considered creative.	11.348	118	.000	.941	.78	1.11
Innovation	14.819	118	.000	.93137	.8069	1.0558

Relationships between Variables:

Correlations

		Top Management Commitment	Employee Training	Employee Involvement	Employee Empowerment	Rewarding and Recognition	Continuous Improvement	Customer Focus	Total Quality Management	Cost	Quality	Time/ Speed	Flexibility	Innovation	Competitive priorities
Top Management Commitment	Pearson Correlation	1	.850**	.781**	.626**	.741**	.760**	.730**	.893**	.515**	.753**	.649**	.691**	.570**	.724**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	119	119	119	119	119	119	119	119	119	119	119	119	119	119
Employee Training	Pearson Correlation	.850**	1	.812**	.625**	.780**	.772**	.755**	.910**	.574**	.718**	.662**	.721**	.544**	.734**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	119	119	119	119	119	119	119	119	119	119	119	119	119	119

Employee Involvement	Pearson Correlation	.781**	.812**	1	.642**	.717**	.736**	.723**	.875**	.602**	.684**	.648**	.604**	.588**	.708**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	119	119	119	119	119	119	119	119	119	119	119	119	119	119
Employee Empowerment	Pearson Correlation	.626**	.625**	.642**	1	.613**	.636**	.630**	.769**	.653**	.683**	.730**	.556**	.706**	.750**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	119	119	119	119	119	119	119	119	119	119	119	119	119	119
Rewarding and Recognition	Pearson Correlation	.741**	.780**	.717**	.613**	1	.867**	.787**	.897**	.605**	.748**	.725**	.788**	.587**	.788**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	119	119	119	119	119	119	119	119	119	119	119	119	119	119
Continuous Improvement	Pearson Correlation	.760**	.772**	.736**	.636**	.867**	1	.881**	.919**	.622**	.735**	.724**	.784**	.582**	.786**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000
	N	119	119	119	119	119	119	119	119	119	119	119	119	119	119
Customer Focus	Pearson Correlation	.730**	.755**	.723**	.630**	.787**	.881**	1	.896**	.639**	.767**	.723**	.791**	.590**	.800**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000
	N	119	119	119	119	119	119	119	119	119	119	119	119	119	119
Total Quality Management	Pearson Correlation	.893**	.910**	.875**	.769**	.897**	.919**	.896**	1	.681**	.827**	.788**	.804**	.674**	.858**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000
	N	119	119	119	119	119	119	119	119	119	119	119	119	119	119
Cost	Pearson Correlation	.515**	.574**	.602**	.653**	.605**	.622**	.639**	.681**	1	.757**	.721**	.555**	.714**	.839**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000
	N	119	119	119	119	119	119	119	119	119	119	119	119	119	119
Quality	Pearson Correlation	.753**	.718**	.684**	.683**	.748**	.735**	.767**	.827**	.757**	1	.848**	.761**	.798**	.941**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000
	N	119	119	119	119	119	119	119	119	119	119	119	119	119	119
Time/Speed	Pearson Correlation	.649**	.662**	.648**	.730**	.725**	.724**	.723**	.788**	.721**	.848**	1	.753**	.784**	.929**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000
	N	119	119	119	119	119	119	119	119	119	119	119	119	119	119
Flexibility	Pearson Correlation	.691**	.721**	.604**	.556**	.788**	.784**	.791**	.804**	.555**	.761**	.753**	1	.576**	.840**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000
	N	119	119	119	119	119	119	119	119	119	119	119	119	119	119
Innovation	Pearson Correlation	.570**	.544**	.588**	.706**	.587**	.582**	.590**	.674**	.714**	.798**	.784**	.576**	1	.869**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000
	N	119	119	119	119	119	119	119	119	119	119	119	119	119	119

Competitive priorities	Pearson Correlation	.724**	.734**	.708**	.750**	.788**	.786**	.800**	.858**	.839**	.941**	.929**	.840**	.869**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
	N	119	119	119	119	119	119	119	119	119	119	119	119	119	119

**. Correlation is significant at the 0.01 level (2-tailed).

Multiple Regressions:

Regression

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.882[a]	.777	.763	.30867	.777	55.338	7	111	.000	2.018

a. Predictors: (Constant), Customer Focus, Employee Empowerment, Top Management Commitment, Employee Involvement, Rewarding and Recognition, Employee Training, Continuous Improvement

b. Dependent Variable: Competitive Priorities

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	36.907	7	5.272	55.338	.000[b]
	Residual	10.576	111	.095		
	Total	47.482	118			

a. Dependent Variable: Competitive priorities

b. Predictors: (Constant), Customer Focus, Employee Empowerment, Top Management Commitment, Employee Involvement, Rewarding and Recognition, Employee Training, Continuous Improvement

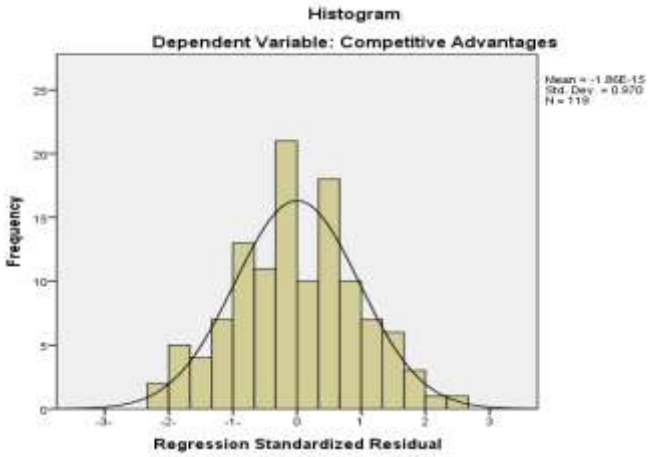
Coefficients[a]

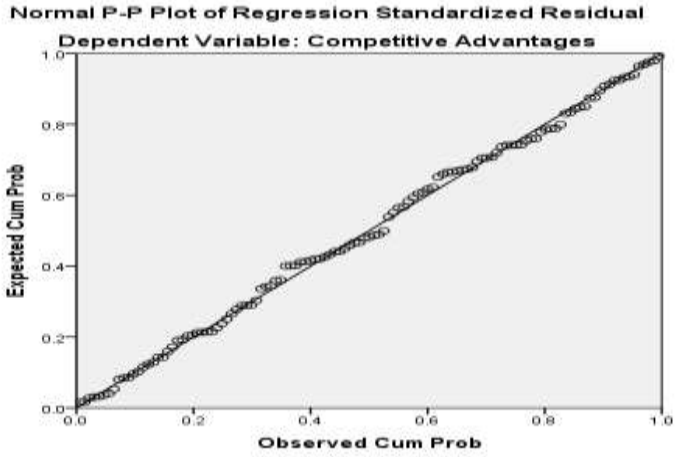
Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.	Collinearity Statistics

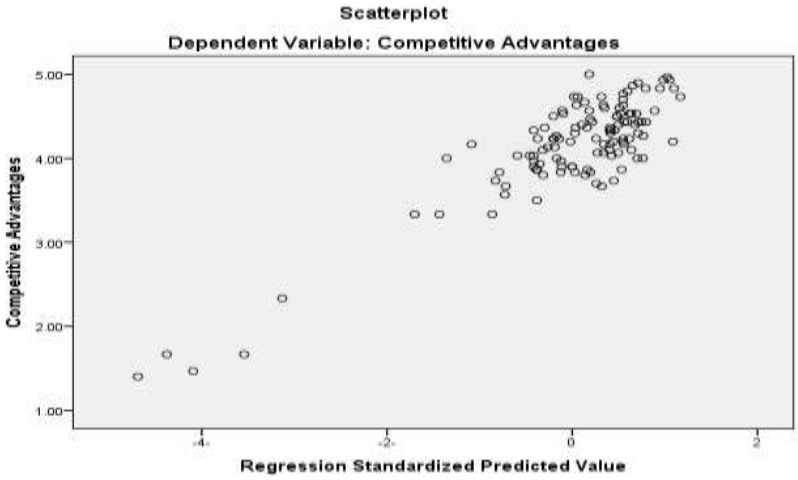
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.539	.194		2.781	.006		
	Top Management Commitment	.058	.075	.071	.772	.441	.235	4.256
	Employee Training	.011	.082	.013	.131	.896	.194	5.144
	Employee Involvement	.015	.079	.016	.190	.850	.282	3.545
	Employee Empowerment	.300	.058	.327	5.220	.000	.510	1.960
	Rewarding and Recognition	.228	.078	.281	2.920	.004	.216	4.630
	Continuous Improvement	-.022-	.103	-.026-	-.215-	.831	.139	7.188
	Customer Focus	.263	.081	.322	3.250	.002	.205	4.885

a. Dependent Variable: Competitive priorities

Charts




Normal P-P Plot of Regression Standardized Residual
Dependent Variable: Competitive Advantages
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0


Scatterplot
Dependent Variable: Competitive Advantages
Competitive Advantages
Regression Standardized Predicted Value
1.00
2.00
3.00
4.00
5.00
-4
-2
0
2