# Social Networks and Maintaining Service Quality in a Total Quality Management (TQM) Context: The Case of a Sri Lankan Service Sector Organization

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## Abstract

This paper presents a study on the influence of social networks among employees over service quality of an organization in Sri Lanka. The most effective quality management approach is considered to be Total Quality Management (TQM), which is all about managing quality with the participation of everybody of the organization. TQM studies pay attention on how employees voluntarily participate in accomplishing work but not on how they collectively behave towards quality. Social network studies capture such collective behaviors. Tendency to study implications of social networks among people is increasing. This study focuses on how social networks among operating employees influence service quality outcomes. This investigation was carried out from theoretical lenses of Organizational Role Theory (ORT) adopting the phenomenological tradition and by way of an instrumental case study. Interviews with managers and operational workers were the main sources of data. The research field was a leading automobile service provider in Sri Lanka having its mother company in Japan. The mother company is famous for introducing various TQM initiatives to the world. TQM practices and informal social networks are found in operation of this company creating quality implications. Findings were analyzed using ORT and reveal that social networks produce positive implications towards quality maintenance when a TOM environment exists. This research produces two outcomes with; (i) an extension to ORT theory and (ii) a message to the quality management practice.

Keywords. Service quality, Social network, Total Quality Management, Organizational Role Theory

## **1. Introduction**

Attention on studying service quality practices is less compared to manufacturing. In contrast, importance of service sector in economies is greater. For instance, in the Sri Lankan economic context service sector carries a greater contribution than manufacturing. In 2014, share of services in GDP was 57.6% whereas manufacturing showed only 17.2% (Central Bank of Sri Lanka, 2014). This study concentrates on and contributes to service quality knowledge.

Quality management practices in manufacturing organizations are different from service organizations (Prajogo, 2005; Yasin, Kunt, & Zimmerer, 2004). Managing quality of manufacturing or services occurs at two levels: at the design stage (Quality of Design) and at the production stage (Quality of Conformance). Quality of design is handled by a specific designated group in an organization, while quality of conformance is maintained by the people who are involved in various processes and from top to bottom of the organization. Service operations are in

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general, more labour intensive and therefore service quality largely depends on human involvements. Involvement of everybody in the organization to quality is recognized in Total Quality Management (TQM) (Mohanty & Behera, 1996). TQM, for its focus on obtaining participation of employees, is highly relevant for service operations because of more human involvement in the service production process. This study investigates how social networks among co-workers of a service organization interact with its Total Quality Management effort.

Many TQM studies pay attention on interrelation between managers and workers. In particular, how managers of an organization obtain maximum participation of employees towards the quality of the output. Some sociological studies, draw attention on how interactions among peers create implications on behaviors of others in a group (Mora, Pont, Casado, & Iglesias, 2015). Such interactions and interrelations among employees are recognized as social networks. Mora et al. (2015) shed lights on managing social networks in the educational process. Educational social networks enrich the teaching–learning process by means of building a platform where users can interact with each other to share experiences, difficulties, results, materials, comments, documents, etc. (Greenhow, cited in Mora et al., 2015). As per quality management studies there is a natural tendency that employees develop networks which help them to adhere to fulfill quality concerns in operations (Broderick, 1998; Wickham & Parker, 2007).

Interrelations among members in a social network are explained in Organizational Role Theory (ORT). According to ORT interrelations among members of a social network create obligations on individuals to fulfill operational requirements of peers in the network. Thus, the individual obligation of employees towards their peers in the network compels the employees maintain quality of operations. This study inquires whether this inference is applicable to the quality management practice of the selected service organization in Sri Lanka.

The study has two objectives; firstly, to understand the appearance of TQM culture in the selected organization, because Yapa (2012) reveals the ambiguity of understanding the existence of TQM context. Secondly, it is to understand the implications of social networking among employees on TQM outcomes. The reason is that some studies (for instance, Venkataramani, Labianca, & Grosser, 2013) indicate possible positive as well as negative outcomes of social networks on organizational outcomes.

Rest of the paper is structured as follows. The next section provides a literature review on service quality and quality management, social networking and, ORT. This is followed by the presentation of methodology of the research. Next to this section is presentation of data of the research followed by analysis. Finally conclusion of the research is provided.

#### 2. Literature Review

Quality can be a "magic bullet", which provides lower cost, higher customer service, better products and services, and higher margins. Without managing quality, assuring and adding value has become an impossible proposition" (Peters, 1999). Nature of service quality is different from manufacturing quality, mainly because service provision is a process carried out in presence of the customer to satisfy needs. "If a

service is truly fit for purpose, has had a specification set out and followed accurately; if we can do so consistently, know when something goes wrong, and know how to put it right and also fix the problem so the same error does not keep occurring, then we can probably say that we are managing service quality". (Peters, 1999, p. 7). Thus, quality could be provided only when specifications are set out and when they are followed constantly. The latter requires quality of conformance, which is to make sure that the product or service is produced according to the design (Talha, 2004). Quality is finally what can delight the customer.

"When work became more specialized and departmentalized, there came a new challenge, addressed by a wider notion of quality management called Total Quality Management (TQM)" (Peters 1999, p. 8). Taking the wider perspective necessitates seeing how all the bits of the organization inter-relate as a system, and then assuring the quality of the output (Talha, 2004; Peters, 1999; Mohanty & Behera, 1996; Dotchin & Oakland, 1994; Mohanty & Lakhe, 1998). All the levels of organizational hierarchy are involved in quality of conformance, starting from top management to the operational level (Mohanty & Behera, 1996). "The only way to achieve "total quality" orientation is by unifying the organization"s employees" belief systems around some unifying values. By doing this, people will naturally use their intelligence and effort to gravitate towards a best outcome within these self-managed boundaries" (Peters, 1999, p. 9). Simply, TQM is a quest for excellence, creating a "right first time" attitude, zero defects, and delighting the customer (Mohanty & Behera, 1996) by increasing the efficiency and effectiveness (Mohanty & Behera, 1996). TQM outcomes are evidenced in terms of improved teamwork, company morale and harmonious organizational climate (Dotchin & Oakland, 1994; Mohanty

& Lakhe, 1998; Mohanty & Behera, 1996).

Service quality is different from manufacturing quality (Prajogo, 2005; Yasin, et. al., 2004; Hartline & Jones, 1996) and the former requires more human involvement. According to Parasuraman, Zeithaml, and Berry (1985) and Ladhari (2009) elements such as intangibility, inseparability, heterogeneity and perishability differentiate service quality from manufacturing quality. Service quality is the overall assessment of a service by the customers, or the extent to which service meets customer's needs or expectations (Parasuraman et al., 1985). If expectations are greater than performance, then perceived quality is less than satisfactory and hence customer dissatisfaction occurs (Parasuraman et al., 1985). Consumer"s expectation is a critical component in service quality and is influenced by consumer"s personal needs, past experience, word-of-mouth and service provider"s communications (Parasuraman et al., 1985). This necessitates individual attention of service providers, (Peters, 1999) which may be influenced by general conditions developed within a service situation such as tangibles provided, empathy, reliability, responsiveness, and assurances (Reimer & Kuehn, 2005; Suleyman & Kara, 2009; Dotchin & Oakland, 1994). These conditions illuminate the gravity of human involvements in a service situation.

Identifying a TQM situation is subjective. One can claim that Quality Guru Edward W. Deming"s 14 principles are in the core, but the practice of TQM is not something he has introduced. TQM was a concept, which Deming "did not use, nor tolerate use of the term "total quality management". (Petersen, 1999, p. 468). The ambiguity is further reflected in some studies. For instance, Yapa (2012) referring to Sri Lankan service sector claims that although there is a grown enthusiasm among managers to

implement TQM, lack of thorough understanding on TQM philosophy has become a limitation. Even though some organizations do not have simple TQM techniques managers think that they have TQM within the organization (Yapa, 2012).

Most of Deming"s 14 principles of quality management emphasize the importance of maintaining an organization wide human involvement in quality. For instance, maintaining constancy towards improvement of product and service, adopting the new philosophy, ceasing dependency on mass inspection, ending the practice of awarding the business on the basis of price tag alone, improving constantly and forever the system of production and service, instituting training on the job, instituting leadership, driving out fear, breaking down barriers between departments, eliminating slogans, avoiding targets to the workforce, eliminating work standards on the factory floor, removing barriers for workmanship, instituting vigorous program of education and self-improvement and making transformation is everybody"s job. However, Deming"s principles focus on organizational members as individuals and are about measures that could be taken by management in order to ensure the involvement of employees. An alternative view is the possibility of collective involvements of employees.

Social network is a perspective, which is being increasingly adopted in understanding behavioral implications of people in a given social context today. Social network is an array of people in a given situation, showing "structural characteristics and inherent relationships" (Wichmann & Koufmann, 2016). A social network contains a group of actors and interrelations that link these actors (Brass, Galaskiewicz, Greve, & Tsai, 2004). The investigation of a social network can involve dyads (i.e. two actors and their relationship), triads (i.e. three actors and their relationship), or larger relationships, including entire networks (Wasserman & Faust cited in Wichmann & Kaufmann, 2016, p. 742). Social network analysis or network theory has contributed to organizational studies with (i) emergence of a network approach to inter- organizational behavior and strategy (ii) reconceptualization of internal social structure of an organization in terms of networked relationships and (iii) emergence of an approach to individual and organizational performance in which social relations play a preponderant role (Borgatti & Halgin, 2011). Persons and organizations actively are engaged in network relations (enacting them, neglecting them, choosing to keep them or dissolving them) (Lizardo & Pirkey, 2014). The interconnectedness of parts of these networks cause network effects. Employees' centrality in the networks ties positively as well as negatively at work and it may influence employees' organizational attachment (Venkataramani et al., 2013).

Networks among people are theorized by Actor Network Theory (ANT) and Social Role Theory (SRT) and Organisational Role Theory (ORT) etc. ANT (Latour, 2005, 1996) offers a fresh approach to study corporate environments, challenging implications of conventional hierarchical relations (Luoma-aho & Paloviita, 2010). ANT emphasizes that what matters are not actors" identities or categories they fit, but rather their interrelations and stake they hold (Luoma-ano & Paloviita, 2010). ANT is particularly useful for its emphasis in understanding the process of translation, where actors convince others to join their cause (Latour, 1996). Thus, the ANT focuses on seeing how one or a group of actors take others into a network to defuse an idea. This is different from the view point of SRT and ORT about social networks. According to SRT, social networks emerge from a situation as a voluntary social action. It

considers that everybody in the society has a defined role such as mother, teacher, husband, wife or clergy and accordingly derived rights, duties, expectations, norms and behaviors (Broderick, 1998; Wickham & Parker, 2007). This phenomenon is applied to members in an organization and is explained by ORT, which focuses on the roles that individuals enact in a social system in an organizational context. Thus, within an organization every employee has a role to play (Wickham & Parker, 2007). The role of each employee may be pre-planned, task-oriented, and in line with their hierarchical positions (Wickham & Parker, 2007). As per ORT those specific roles of each employee are expected by others in the institution and each actor knows the possibility of repercussions against any unexpected behavior within the organization (Broderick, 1998; Wickham & Parker, 2007).

Those enacted roles of each employee may reflect organizational culture and norms (Wickham & Parker, 2007). An organization to function effectively, the ordered arrangement of roles must be effectively communicated, fully understood, and accepted by its employees (Katz & Kahn, 1966). The point in relation to quality management drawn from the ORT is the influence of peers on others to maintain work standards. Thus, organizational role may stimulate work within social networks among employees.

## 3. Methodology

In selecting a research strategy, the nature of the perceived connection between the theory and the research implies the underlying epistemological and ontological stances (Bryman, 2004). In this research, the authors perceive the connection between ORT and its involvement within a social network as the theory. The authors accordingly are interested to understand how such a social network among employees form behavior as far as the service quality is concerned, because the latter is highly influenced by human involvement compared to manufacturing situations. Authors have a subjectivist ontology, where they believe that the reality is constructed by the involvements of actors as perceived by the researchers. Hence, epistemologically this research needs to be an interpretive study and thereby requiring qualitative research strategy to be adopted.

The study was carried out as an instrumental case study. Case study approach involves an empirical inquiry to investigate contemporary events within a real-life context, especially, when the boundaries between the phenomenon and context are not clearly evident and the investigator has limited control (Yin, 2003). A case study may be carried out either as a holistic study or an instrumental study. In a holistic study the case is studied in detail to understand the formation of the phenomenon under investigation. However, in an instrumental case study only the phenomenon under investigation is studied, locating within the context of the case (Stake, 2000). Since, the focus of this research is to investigate how social network among employees create implications on quality performance, the research took the form of an instrumental case study.

This research focuses on exploring how social network among employees create implications on service quality in a large scale private sector business establishment. For this, the Husserl's phenomenological tradition (Eagleton, 1996) is adopted. The phenomenological tradition of research explores "lived experience" of a phenomenon. Martin Heidegger (1889 – 1976), a student of Husserl explored the "lived-world" in

terms of an average existence in an ordinary world (Schwandt, 1997). A phenomenological inquiry can use interviews to gather the participants' descriptions of their experience, or the participants' written or oral self-report, or even their aesthetic expressions (e.g. art, narratives, or poetry). This method encourages the relevant participants to give a full description of their experience, including their thoughts, feelings, images, sensations, and memories - their stream of consciousness - along with a description of the situation in which the experience occurred. Boyd (2001) regards two to ten participants or research subjects as sufficient to reach saturation and Creswell recommends "long interviews with up to 10 people" for a phenomenological study (Groenewald, 2004, p. 46).

Without proper access to the selected organization, doing an in-depth study would be impossible. The company was selected as a result of a personal contact with senior management of the organization. For the purpose of this research a main branch of the company was selected which is engaged in vehicle maintenance and repair services. The selected company is a well-known brand for quality vehicles, spare parts as well as for quality service. At the initial preparation for the data collection, a desk research was conducted to gather historical and background information of the company and the research context. For the desk research, the authors referred to related documents from the internet, web page of the company and employee handbook. The authors conducted a pilot study by way of interviews. This interviews were held with the General Manager - HR & Administration and Senior Executive HR of the company. After the pilot study, the authors decided the area of the organization, the study should focus on and persons or groups to be interviews.

#### 4. Discussion

#### 4.1 The Organization

The selected company is a subsidiary 100% owned by its parent company in Japan. The Sri Lankan subsidiary is a trading arm. The Group of companies is one of the world"s largest auto manufacturers of the world. It has around 348,000 employees worldwide. The Sri Lankan company operates with 3 types of branches; Service I, Service II, and Service III. For the purpose of this study, one of main branches in Category III was selected which is located within Colombo metropolitan. The selected branch is the most famous idol for the motor car service stations among all the branches in Sri Lanka. Other than providing automaker service, the branch is engaged in spare part selling and vehicle selling. For the purpose of this study, we have selected its service section. The branch operates with 120 total number of employees. The service section is comprised of 2 main service lines: vehicle maintenance and vehicle body painting. Out of the total operational employees, the majority is employed in the vehicle maintenance section. For this reason, we have selected

"vehicle maintenance" section because our focus in this study is about social networking among employees. The number of operational level employees deployed in the vehicle maintenance section is 50.

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## **4.2 The TQM Environment**

As Peters (1999) elucidated, TQM environment influences people to be unified towards best outcomes within self-managed boundaries. Hence, the first attempt of this study was made on understanding the existence of TQM environment within the selected organization. A conventional quality environment may not allow or support networking among operators mainly due to existence of competing quality targets among employees. This may hinder development of participation among employees but only the development of rivalry among employees. The inquiry about the existence of a TQM environment of this organization was made referring to major TQM characteristics (also known as critical success factors) (Ahire, Golhar, & Waller, 1996; Zeitz, Johannesson, & Ritchie, 1997), such as top management commitment, quality measurement and benchmarking, process management, product design, employee training and empowerment, supplier quality management, customer involvement and customer driven quality approach. Investigations were carried out by way of interviews referring to these identified TQM characteristics.

Top management's commitment is implied in the statement by the General Manager HR:

In our organization, we value not only the quality of vehicles and parts, but also the quality of the service we deliver. Simply, quality gives the priority over the cost.

This statement implies the top management understands of quality and the importance of quality. Top management"s understanding leads to their policies and actions towards maintaining the intended quality.

Perception of operational level employees could be simulated to their action towards maintaining quality. Customer orientation in operations was illuminated in a statement made by Manager Service operations:

Here the quality concept not only enhance the public's perception or image of the organization, but also pay off in greater customer loyalty and increased sales and profit.

With the intention of maintaining quality, the management has limited the volume of operations to be carried out per a working day. Through this initiative, the management hopes workers to concentrate on the quality rather than quantity to be completed. According to Service Manager;

The average Customer Paid Units (CPU) per day is approximately 90. And another 5 vehicles with warranty would be delivered with a free service. Finally the throughput per day would be 95 vehicles.

Another TQM characteristic is doing right first time without relying on inspections. The company emphasizes on this. According to the Operations Manager;

The company has set an international standard award called; Fix It Right (FIR). Here we check on each job whether the award conditions have been met. And we have won the Gold medal for the FIR award continuously four times.

As another practice towards TQM, the company considers the priority on customer satisfaction leaving no room for disappointment for any type of customer. The company serves two types of customers namely, appointment customers and walk-in customers. Appointment customers are those who come for services with a prior arrangement. Walk-in customers are customers who expect the service without prior appointment. Despite the company has customer orders for the full capacity, its policy is not to turn any walking-in customer back with no service provided. Hence, at the designing phase, the company has kept adequate capacity reserved for such customers. Thus, as per the company policy, customer service is maintained with no disappointments. The Manager (Service Operations) explained;

In the appointment register we keep 30% blank space for walk-in customers.

As another initiative towards maintaining customer satisfaction, practice of overpromising to the customer is avoided. Unlike in manufacturing, in service processes managers starts with identifying ways to improve customer satisfaction by setting internal and external performance goals (Reijers, 2003). These goals are known as service level agreements (SLAs). According to SLAs service provider should undertake services only for the extent to which the capacity of the company allows. This practice avoids overpromising to customers taking the risk of creating customer dissatisfaction. As per the Manager (Service Operation);

We are trying in our level best to do the job according to work strength and the capacity of the workstation. Then the real purpose of the appointment register will be served.

Customer participation by way of observing the process is facilitated in this organization. The company intentionally provides facilities for customers to observe how the service process is carried out. This is different from the practice at their Head Office in Japan, where customers are not interested in observation of the service process. This company has changed the practice considering the culture in the Sri Lankan context.

Employee training is a fundamental critical success factor in TQM. This organization maintains training as a fundamental requirement in improving performance and managers are of the view that in reaching performance goals training is a compulsory element for each and every employee at any process whether operational or administrative. According to the Manager in Service Operations:

The training is considered as a goal in performance appraisal of each employee. There are 4 levels of the training; technician, Pro technician, Master technician, & Diagnostic Master Technician. Management and technicians are trained in Japan, Bahrain, and in Dubai for hybrid training, diagnostic training, and for automatic transmissions. In order to get the training to employees verified, we contacted few employees. Each employee we contacted has had a formal training in Japan conducted by the Head Office of the company. A training manager explained their rational basis of providing training to employees;

We analyze the skill gap of technicians with a matrix and send required technicians to training sessions.

An employee (a Technician) expressed the enthusiasm of training received.

I have been given an adequate training to complete tasks here. I was sent for one week training in Bahrain once. Other than that there are around 2 training sessions we have to go through each year.

The company's quality consciousness is further demonstrated in their changed supply policy. Maintaining single supplier policy is another initiative adopted in TQM environments. Vendor selection in this company is also based on quality of supplies rather than cost minimization. The Manager, service operation mentioned that they had the policy of procuring 60% of materials locally and the balance 40% from imports. However, responding to customer and employee suggestions for quality improvement the company has changed the policy moving towards a more expensive option. Accordingly, now total supplies are obtained from selected supplier from the United Kingdom. As per the manager, although cost is higher, these materials are not hazardous to employees and the environment.

Avoiding individual competing operational targets is another emphasis of TQM as contained in Deming's 14 points. In the organization being investigated, no individual targets to be met on a daily basis are seen. However, a daily work volume to be achieved is laid down. This ensures the minimum standard of works by individual employees. Manager (Service Operations) explained;

In-built quality of a service needs to be checked by the technician himself while achieving monthly targets given for them. Saved labour hours are paid with a bonus incentive scheme.

In automobile service industry, it is a common practice that customers provide "tips" to service operators. Management of the organization observes that this practice can lead to create competition among employees and which may hinder the TQM culture. The managers of the service operation revealed that such situations are avoided through attractive compensation policies:

Our employees are passionate; they do not entertain tips here. Because we look after our employee well, so they do not need tips.

Essence of TQM outcomes is the voluntary participation and engagement of employees in maintaining customer satisfaction. As we observed in this TQM environment employees have developed loyalty and entrepreneurship towards the service operations. Expressions of employees imply their personal interests towards customer quality so that the company operations could be preserved. On the other hand labour turnover among employees is very less. Workers we met have been working for the company for more than five years depending on their date of recruitment. Some employees work for more than ten years. Managers explained their efforts to maintain employee satisfaction;

You know we have made each and every employee to earn a good remuneration depending on their service performance. Everybody is drawing at least Rs. 70,000 per month. They can nowhere earn this much of a salary. For this we don't give tough targets. If they work achieving the allocated work target for the day they are eligible for the monthly incentive. Naturally they all do it. We know they don't think of leaving our company because they will not find any place to have this kind of benefits.

Having observed the existence of a TQM culture in this company, we next investigated the extent to which social networking among employees exists and how it contributes to the maintenance of quality.

### 4.3 Social Networking among Employees

Managers of the company are aware of the potential positive implications of social networks among employees. Having this idea, they have made workplace arrangements so that ties between employees and accordingly informal networks among them are formed and encouraged. For example, for this purpose, although individual tasks are assigned, employees are allowed to be involved in helping others depending on the needs of the situation. In order to encourage the formation of such informal networks among employees, managers schedule work break times for groups together focusing on promoting their interrelationships. This enables employees, who are engaged in interrelated operations at different work centers in the service process to get together and communicate or discuss their issues.

The training process of employees is another point, where managers have arranged to promote social networking among employees. An employee expressed his view of the network formation at the training and positive implications of the network in relation to work outcomes.

The relationship we built in the training made us fearless and made us confident, that we can do any sort of complex job here together as a team. We face together any issue of any sort.

The Manager (service operations) expressed his view on implications of networking as being experienced in the process.

Higher the bond of the network, the complaints are hidden among employees and do not reach the management.

Furthering on this statement the manager expressed that as an implication of the social networking among employees. When any defective in the service process is detected at any work center or with an employee, in most circumstances others in the network come and get together to rectify rather than taking it to the notice of the management. Managers allow such actions as way of continuous improvement. This also implies the level of empowerment provided to employees.

The manager further expressed that if one in the service process is late in completing the task for any reason, others in the network quickly gather and support their colleague to complete the task on time so that the overall service process is not affected.

## 5. Analysis

In the investigation, we attempted first to verify whether a TQM culture exists compelling employees to be quality conscious and customer satisfaction. We found that mainly, top management commitment towards quality, customer satisfaction and orientation, employee training and satisfaction, and employee quality orientation through avoiding competing targets and competition among employees. Hence, we initially established the existence of TQM culture to a satisfactory level in this organization enhancing employee participation to quality of operations. The situation allows networking among employees towards quality maintenance.

In our observation of networking, it was revealed that the most notable implication of the networking among employees in this company is "mutual caring" among individuals of their network. This is not found in relevant literature.

The Organizational Role Theory (ORT) pays attention on employee networking. It highlights that in a social network, each and every individual has a defined or understood role, which is expected by others in the network for smooth operations (Broderick, 1998; Wickham & Parker, 2007). Accordingly, when employees have formed network relationships, each individual in the network considers that the maintenance of quality in their individual task is their obligation towards others in the network. In such a situation employees tend to work with care to the task so that their task outcomes would not create unfavorable remarks among their counterparts of the network. This illuminates the individualist perspective towards employee behavior in a social network. ORT seemingly has neglected the collective actions among the individuals in the network.

However, our observation in the investigation is different. In contrast to the assertion of ORT, we observed that the network promotes team spirit among individuals in the network in meeting overall quality requirements. In this situation, quality is maintained as a team and individuals in the network take care of peers in order to make sure that they collectively meet quality objectives.

The team spirit among employees is further promoted by the company policy of equality among employees, cleanliness and tidiness, communication and career management. Equality among each and every category of employees is maintained by the organizational management and has given rise to team spirit among individuals in the employee network. Employees feel less alienated and instead a needed element of the organization. Such employees are more inclined to embrace the organization''s quality goals (Flynn, Schroeder, & Sakakibara, 1994). An Executive in HR explained the intentional effort to promote equality among employees:

The equality has been maintained among employees throughout the day. The food and the tea provided for operational employees are in exact quality where executives are provided. Sanitization facilities (washing rooms, dressing rooms) for operational level employees also provided in equal condition as for executives. All the operational level employees are given the same Christmas hamper which all the executives are given. This is valued around Rs. 8000-10000.

Team spirit is supported when positive attitudes are inculcated by favorable working conditions prevailing in the organization. The provision of inadequate equipment and adverse working conditions can badly affect employee commitment and intention to stay with the organization (Leblebici, 2012). In the organization we studied, management considers that workplace cleanliness and safety of the premises are fundamental conditions. The Manager Service Operations explained:

Each employee is responsible for the cleanliness and tidiness of the green workstation which will influence their performances as well since the cleanliness of the workstation makes a steady work environment.

An Assistant Manager HR and Administration added that:

There are separate washing machines and staff to wash the uniforms of the technicians.

Career management provides equal opportunities for all employees and thereby can contribute to promote team spirit among employees. Career management and prospects available for employees is a major supportive condition prevailing in this organization.

Possibility of direct communication helps creating feelings of equality among employees giving rise to positive implications of social networking among employees. The company maintains open door policy where not only managers but also the CEO, MD or president leaves their office door "open" in order to encourage openness and transparency with the employees. Many companies use this policy to increase the levels of communication among employees. An Assistant Manager HR and Administration explained the open-door-policy of the organization.

Open-door policy is highly encouraged here. Any employee can meet even the CEO, but requested to inform the immediate senior regarding the issue.

The workers revealed how the peers in the group take care of each other at work. Accordingly, if any employee finds difficulties in completing any daily assigned task, others in the network comes to the particular workstation and helps to finish the task. Similarly, if any error has occurred at a work center, the employees, who work in other work centers gather and rectify the error without taking it to the notice of management. Thereby, the network of employees by helping each other maintains the final quality requirements of the company.

### 6. Conclusion

This study investigated the implications of social networking among employees engaged in service operations on service quality management. In the service situation, human involvement is relatively higher compared to manufacturing situation. Hence, the potential for networking among employees is high in service situations. Positive implications of social networking could reasonably be envisaged only when a TQM environment exist, where employees are empowered, adequately trained, adequately remunerated and top management involvement by way of supportive policy environment is available. In order to understand the implications of social networking, this research used Organizational Role Theory (ORT), where emphasis is made on the individual obligation that each individual finds for peers in the social network resulting in improvements in performance.

The study was carried out as a qualitative case study and investigated as an instrumental case. Adopting phenomenological research tradition, this study conducted adequate number of interviews to understand the phenomenon. Data were analyzed using ORT as the theoretical lens.

For this study, an organization engaged in providing vehicle services was selected. This organization operates at a large scale and has policy directions from its Parent company in Japan. In order to study the operation of social networks within the organization, literature suggests that there should be a TQM context prevailing. This is because only in a TQM environment employees are empowered and trusted as well as their loyalty to the organization is purposefully built up. When employees genuinely need to carry out the work at a higher standard, the implication of the social networking among the employees could be investigated.

The organization was observed to have major conditions required to maintain a TQM environment. Such conditions include TQM characteristics such as top management involvement in quality, adequate training to employees, employee empowerment, customer orientation and participation for quality and quality based vendor selection.

Then investigations revealed that existing conditions promote formation of social network among employees. A major condition is the promotion of equality among employees. High morale and loyalty among employees and equality favorably influence the network behavior among employees. In addition conditions such as maintenance of cleanliness and tidiness of the organization, career management for employees and open-door policy of communication etc. support morale improvement, which supports mutual cooperation among employees. Another necessary condition prevailing within this organization to support social networking is the avoidance of competition among employees. Operational policies involving target setting in a way employees are put in a competition for rewards, would not support any networking, but rivalry among employees (Deming, 1981). However, the policy of this company, such as limited daily work load, incentives based on the achievement of their individual minimum work target. Everybody is entitled for the same incentive if they could complete the daily target. This situation stimulates any person who has spare time to help the other to complete the target. This condition encourages employees to get together to help each other so that overall quality is maintained. This supports the network behavior among employees.

Within such a context, where total quality is maintained, employees are empowered and employee collective behavior is encouraged, we examined how social network among employees operate. The management of the organization intentionally allows and encourages formation of informal social networks among employees at different work stations of an identified service line. Formation of informal social network begins when the employees get initial training. Management intentionally supports the networking among employees by means of setting daily work break times for employees.

The social network among operating level employees of this organization operates creating positive implications. Mainly the network operates for caring among peers. Whenever there is a delay or any error occurred at any workstation, peers in the network come to help and save the colleague. In this manner quality is assured to the final customer. On the other hand issues in operations are sorted out by the employees together by themselves rather than taking to the notice of managers. This enables quality improvements on a voluntary basis among employees.

This study finds that social networks operate for improvements differently from ORT. As per ORT, individuals in a network attempt to avoid errors in order to maintain better relations among peers in the network. Thus, ORT has not captured the collective behavior among people in a social network in an organization. However, we find that when employees work in an informally constructed social network, with the support of the management and other supportive conditions of the organization, the individuals in a social network create a caring relationship so that they collectively support each other resulting in the maintenance of organizational quality plans. The ORT does not consider the existence of a TQM culture and collective interactions of employees of a social network in an organization.

Hence, we conclude that social networks in organizations, if supported by Total Quality culture with employee empowerment, training and with no individual competing performance targets, can work positively towards enhancement of quality avoiding delays and wastes. In another way, we suggest that social network among employees is a supportive element for TQM.

We have few suggestions for further research to investigate different issues such social networks experience, when operates within organizational circumstance. This is because, in the current context network relations rather than hierarchical relations effectively work within organizational contexts. On the other hand, social networks emerge among employees naturally without managerial involvements. The network observed was also such a voluntary one with implied support of managers. However, when conditions are not up to the level mentioned in this study, implications of such networks could be different. Yapa (2012) referring to Sri Lankan context, has found that TQM is not in existence as an identifiable category of practice. Instead, different elements supporting TQM could exist in different degree among different organizations. Hence, further research is needed to identify different organizational contexts and conditions referring to TQM requirements and to understand how informal social networks (if applicable) operate.

#### References

- Ahire, S. L., Golhar, D. Y., & Waller, M. A. (1996). Development and validation of TQM implementation constructs. *Decision Sciences*, 27(1), 23–56.
- Borgatti, S. P., & Halgin, D. S. (2011). Analyzing affiliation networks. *The Sage Handbook of Social Network Analysis*, 1, 417–433.
- Boyd, C. O. (2001). Philosophical foundations of qualitative research. In P. Munhall (Ed.), *Nursing research. A qualitative perspective* (pp.65–90).

- Brass, D. J., Galaskiewicz, J., Greve, H. R., & Tsai, W. (2004). Taking stock of networks and organizations: A multilevel perspective. Academy of Management Journal, 47(6), 795–817.
- Broderick, A. J. (1998). Role Theory, role management and service performance. *Journal of Service Marketing*, 12(5), 348–361.
- Bryman, A. (2004). Integrating quantitative and qualitative research: How is it done? *Qualitative Research*, *6*(1), 97–113.
- Central Bank of Sri Lanka (2014). Annual report. Colombo: Author.
- Deming, W. E. (1981). Improvement of quality and productivity through action by management. *Global Business and Organizational Excellence*, 1(1), 12–22.
- Dotchin, J. A., & Oakland, J. S. (1994). Total quality management in services. International Journal of Quality & Reliability Management, 11(3), 27 – 42.
- Eagleton, T. (1996). *Literary theory: An introduction* (2<sup>nd</sup> ed.). Minneapolis, MN: The University of Minnesota Press.
- Flynn, B. B., Schroeder, R. G., & Sakakibara, S. (1994). A framework for quality management research and an associated measurement instrument. *Journal of Operations Management*, *11*(4), 339–366.
- Groenewald, T. (2004). A phenomenological research design illustrated. *International Journal of Qualitative Methods*, *3*(1), 42–55.
- Hartline, M. D., & Jones, K. C. (1996). Employee performance cues in a hotel service environment: Influence on perceived service quality, value, and word-of-mouth intentions. *Journal of Business Research*, *35*, 207–215.
- Katz, D., & Kahn, R. L. (1966). The social psychology of organizations. New York, NY: Wiley.
- Ladhari, R. (2009). A review of twenty years of SERVQUAL research. *International Journal of Quality and Service Sciences*, 1(2), 172–198.
- Latour, B. (1996). On actor-network theory: A few clarifications. *Soziale Welt*, 369–381.
- Latour, B. (2005). Reassembling the social: An introduction to actor-network-theory. Oxford university press.
- Leblebici, D. (2012). Impact of workplace quality on employee's productivity: Case study of a bank in Turkey. *Journal of Business Economics and Finance*, 1(1), 38-49.
- Lizardo, O., & Pirkey, M. F. (2014). How organizational theory can help network theorizing: Linking structure and dynamics via cross-level analogies. In D. J. Brass, G. Labianca, A. Mehra, & D. S. Halgin (Eds.), *Contemporary perspectives on oganizational social networks* (pp. 33–56). Emerald Group Publishing Limited.
- Luoma-aho, V., & Paloviita, A. (2010). Actor-networking stakeholder theory for today's corporate communications. *Corporate Communications: An International Journal*, 15(1), 49–67.
- Mohanty, R. P., & Behera, A. K. (1996). TQM in the service sector. *Work Study*, 45(3), 13–17.
- Mohanty, R. P., & Lakhe, R. R. (1998). Factors affecting TQM implementation: Empirical study in Indian industry. *Production Planning & Control*, 9(5), 511–520.
- Mora, H. M., Pont, M. T. S., Casado, G. D. M., & Iglesias, V. G. (2015). Management of social networks in the educational process. *Computers in Human Behavior*, *51*, 890–895.

- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49, 41–50.
  - Peters, V. J. (1999). Total service quality management. *Managing Service Quality: An International Journal*, 9(1), 6–12.
- Petersen, P. B. (1999). Total quality management and the Deming approach to quality management. *Journal of Management History*, 5(8), 468–488,
- Prajogo, D. I. (2005). The comparative analysis of TQM practices and quality performance between manufacturing and service firms. *International Journal of Service Industry Management*, 16(3), 217–228.
- Reijers, H. A. (2003). Design and control of workflow processes: Business process management for the service industry. Springer-Verlag.
  - Reimer, A., & Kuehn, R. (2005). The impact of services cape on quality perception. *European Journal of Marketing*, 39(7/8), 785–808.
- Schwandt, T. A. (1997). Qualitative inquiry: A dictionary of terms. Sage Publications, Inc.
- Stake, R. E. (2000). Case studies. In N. Denzin, & Y. Lincoln (Eds.), Handbook of qualitative research (pp. 435–455).
- Suleyman, M. & Kara, Y. A. (2009). The PESPERF scale: An instrument for measuring service quality in the School of Physical Education and Sports Sciences (PESS). *Quality Assurance in Education*, 17(4), 393–415.
- Talha, M. (2004). Total quality management (TQM): An overview. The Bottom Line. *Managing Library Finances*, 17(1), 15–19.
- Venkataramani, V., Labianca, G. J., & Grosser, T. (2013). Positive and negative workplace relationships, social satisfaction, and organizational attachment. *Journal of Applied Psychology*, 98(6), 10–28.
- Wichmann, B. K. & Kaufmann, L. (2016). Social network analysis in supply chain management research. *International Journal of Physical Distribution & Logistics Management*, 46(8), 740–762.
- Wickham, M., & Parker, M. (2007). Re conceptualizing organizational role theory for contemporary organizational contexts. *Journal of Managerial Psychology*, 22(5), 440–464.
  - Yapa, S. (2012). Total quality management in Sri Lankan service organizations. *The TQM Journal*, 24(6), 505–517.
- Yasin, M. M., Kunt, J. A. M. & Zimmerer, T. W. (2004). TQM practices in service organizations: An exploratory study into the implementation, outcome and effectiveness. *Managing Service Quality: An International Journal*, 14(5), 377–389.
- Yin, R. (2003). Case study methodology. New York: Sage.
- Zeitz, G., Johannesson, R., & Ritchie, J. E. (1997). An employee survey measuring total quality management practices and culture development and validation. *Group & Organization Management*, 22(4), 414-444