Abstract - The study analyzes the mediating impact of supply chain management (SCMG) on the relationship among service quality (SRQL), drinking water quality (DRQL), food quality (FDQL) and corporate performance (CRPR). The target respondents of this research work were employees of water and food supply corporations situated in Thailand. The focused participants for the survey were the main managing directors, executives, CEOs and other high-positioning officials responsible for supply network exercises in firms. 75 firms were casually selected for the collection of data. After the information assortment, only 137 affirmed review structures were settled for examination. Path analysis using PLS-SEM is conducted to analyze the impact. CRPR and SCMG are used as dependent and mediating variables, respectively. SRQL, DRQL and FDQL are used as independent variables. The results of the study show that SRQL, DRQL and FDQL have significant positive impact on CRPR and SCMG. SCMG also has positive impact on CRPR. Moreover, the study also finds that SCMG mediates the association between SRQL and CRPR. It signifies that SRQL and SCMG together cause 21.7% changes in CRPR. SCMG also fully mediates the positive link between DRQL and CRPR. It reports that DRQL and SCMG collectively cause to change in CRPR by 9.4%. Moreover, SCMG also fully mediates the linkage between FDQL and CRPR as both SCMG and FDQL cause 13.2% variation in CRPR. From the findings, the study summarizes that better SCMG rises the services, food and drinking water quality of services, water and food supply corporations of Thailand which ultimately improves the corporate performance.

Keywords: Services Quality, Drinking Water Quality, Food Quality, Supply Chain Management, Corporate Performance.

1. Introduction

Guaranteeing access to safe drinking water represents a challenge for world water frameworks. Different communities over the nation have been affected by late instances of hindered water quality. No place does the connection between human wellbeing and nature; showing itself more firmly than our dependence on crisp hygienic drinking water. The executives and treatment of waste produced from human exercises comprising of commercialization, agribusiness, logging and development in cities, have to a great extent been unimportant in keeping contamination from influencing earth drinking water quality (DRQL) on all nearby and worldwide scales [1]. All level of administrations assumes the liability for making procedures to guarantee the assurance of our water possessions and for giving apparatuses to the achievement of these plans. The arrangements of governments and global offices straightforwardly sway ecological and human wellbeing and the monetary, social and traditional aspects of our lives. Water quality board ought to be founded on our logical comprehension of wellbeing and natural dangers, related budgetary expenses, and cultural acknowledgment of these dangers.

Most of the natural-source water is portrayed as raw water we get from streams, rivers and lakes that water come into use of people for different objectives. Completed water is what is conveyed to purchasers in the wake of accepting treatment. Typically, least treatment incorporates sanitization. Improved drinking water is at last characterized as that is satisfactory for drinking and cooking [11, 20]. Subjectivity related with such an all-encompassing definition has driven to the useful division of water quality into three quantifiable standards; water liberated from illness causing life forms, water with destructive synthetic concoctions underneath characterized limits. Other sub orders can incorporate tastefully satisfying viewpoints, which is of worry to water spreaders in the light of consumer water security observations.

Easily accessibility of water is one of the critical matters across the globe. Need for water had seriously enhanced with the growth in world population. In the same time, water availability and goodness are likewise facing big pressure from ecological and climate up downs, land use results, energy shortage, minerals dispensation and the needs of the business [24]. In ongoing decades, the food handling industry has been stood up with expanded worldwide rivalry and progressively stringent client requests. The focus at the nourishment markets, extended components of nourishment quality esteemed by
buyers, separation in corporations and particularly the lopsided dispersion of marketplace forces inside the Agri-nutrition item chains and its effect on members at various phases of these chains had proven as subjects that are frequently examined in the area of horticultural financial matters.

The food business is an industry that works in a unique business condition, where food dependability is the concern of every customer and government, and the expanding interest for food was created reasonably [3]. Food related organizations must discover approaches to expand the client's trust and store network accomplices. Close cooperation with inventory network accomplices can upgrade the organization's capacity to react to ecological changes, which toward the end can improve organization execution. For a few organizations, sharing data both inside the organization itself and with its store network accomplices is the key for their organizations and production network to endure and flourish in a unique business condition [12]. In the scholarly world, scientists likewise perceive the significance of data in the inventory network, where this is the beginning stage to incorporate arranging of the creation, action's synchronization, joint dynamic, etc. Accordingly, the capacity to get and share data along with the store network is characterized as combination of production network data [13].

[17] perceived SRQL as a tactical tool for positioning as well as source of attaining operational efficiency and improving business performance. Thus, organizations regard of quality as a source of competitive advantage which they always strive to achieve. [8] concluded excellent service raises customer retaining and leads to repeat customer purchase behavior which ultimately increases the market share of the companies and generates high revenues.

SCMG is measured as a planned factor for growing organizational efficiency and better achievement of corporate objectives such as enhanced effectiveness, improved customer service and improved productivity. Such a large number of associations all through the world are consuming the lean standards and strategies to diminish the expenses, improve item greatness and upswing in client responsiveness. Lean worldview endeavors to recognize and evacuate all non-esteem included exercises, or waste, engaged with any sort of business process.

The collaboration in the supply chain accepts a satisfactory activity for improving an association's exhibition and expanding upper hand. To utilize the supply chain at its most outrageous exhibition level, associations should consolidate its targets and practices at same time [12]. Right now, it is portrayed as the methodology of cooperation internal supply chain players that administer bury and intra-association exercises to achieve proficient progression of items, administrations and data to give most offensive incentive to the client in the ideal spot at a sensible expense [30].

As to the concern of performance of the services business, an inquiry identified with the principle deciding variables emerges. For the most part, two methodologies coincide concerning the general significance of industry or firm-explicit issues as the wellsprings of contrasts in association outcomes. From a traditional perspective, for example from the point of view of mechanical association, firm execution is on a very basic level as a component of the auxiliary attributes of the business in which firms work. Along these lines, the goal of this examination is to check the role of SCMG, a key administration in service quality and the exhibition of the water and food supply of the researched organizations situated in Thailand. The study attempts to achieve the following objectives:

- To test the affiliation between SRQL and CRPR.
- To analyze the relation between SCMG and CRPR.
- To study the linkage between SRQL and SCMG.
- To examine the association between DRQL and CRPR.
- To analyze the association between DRQL and SCMG.
- To explore the association between FDQL and CRPR.
- To identify the association between FDQL and SCMG.
- To test whether SCMG mediates the relation between (a) SRQL & CRPR, (b) DRQL & CRPR and (c) FDQL and DRPR.

2. Literature Review

[28] examined the affiliation between employee's loyalty and service quality (SRQL) in association with corporate performance (CRPR), data were gathered from employs of service sectors. Total 317 questionnaires were distributed among the employees of 100 service-related companies in Serbia and Bosnia. The empirical findings of this study revealed that employee loyalty and SRQL was directly related with CRPR. [25] examined the mediating impact of SRQL in the association with staff performance and customer loyalty. For collection of data, they approached 342 front desk employees of various services related industries and collected data about organizational means, engagement, and service environment. Additionally, they contacted 1140 customers to gain facts about performance and loyalty. They found that there was negative connectivity between SRQL and customer loyalty. [6] checked the influence of satisfaction model on better long term SRQL in Taiwan. They developed quality characteristics of service requirements after more than two meetings of discussion and professional consultations. They managed the final survey into three parts: a need
investigated the impact of SCMG and quality management on overall organizational chart. They used cross-sectional survey to analyze the projected research equation. The examination shows the significance of SCMG as a fundamental authoritative factor with a noteworthy positive direct impact on corporate CRPR. The exploration likewise showed that SCMG was a bridge between administration and estimation, examination and information board that impacted hierarchical outcomes.

A great work of research examined the impacts of SCMG on CRPR. A successful SCMG practice was estimated to improve the relationship between upper level suppliers and lower level consumers, and thereby raise the client satisfaction and CRPR. [18] studied the SCMG activities and their influence on financial and non-financial CRPR. Their finding indicated that SCMG was an important indicator of CRPR. [5] they conducted a study to check the influence of customer behavior on SCMG in Italy. Finding of this investigation was that customization level and the product value were directly related. To illustrate, companies having better SCMG were found allowing their customization and customer involvement at higher level. An increase in SRQL also boosts up the supply chain of water and food supply companies which fulfilled the buyer perceptions and raises the CRPR.

Water is one of the most essential components for life on earth and the planetary ecosystem. Overall, it is extensively documented by both society and the UN as one of the most urgent research problems of the modern age. Water is source of life. The risks in relation to the hydro environment are the major issue in the 21st century. Our world is now confronted with the complexity of water crises and challenges regarding water resources, environments, ecosystems, disasters and resources management. [22] studied the quality of packaged water and water supplied by Municipal Corporation and its impact on CRPR of water supply companies. The finding of this study was the quality of packaged bottles of water was better than Municipal Corporation supply and had fewer bacteria in water and quality of municipal corporation water was better than local water plants. [21] examined the factors that had connection with customer perception with water quality provided by publicly owned or private owned firms in Italy. They collected data from 458 university students. Their finding was that water operator ownership had association with perceived DRQL. Perceived DRQL decreased when the service provider was private person or firm.

[4] conducted a study to understand to what degree industry, year and firm effects had linkage with cost-effectiveness of the businesses functioning in the nutrition handling business. For analysis, they collected 10509 observations from the food sector across the globe. The
findings suggested that there was a little impact of year and industry on performance of food sector.

The food and beverages related sector were the prime source of revenues in terms of business, value addition and job creation in the EU. It was the most significant economic divisions. Food and beverage trade were still the mainstay segment supporting the growth of manufacturing in Thailand. [22] conducted a study to check the impact of SCMG integration on CRPR in food sector of Indonesia. They collected data from the upper level management of food industry. Finding of this study revealed that outer SCMG integration had non linear impact on CRPR. [29] investigated the impact of supply chain information on operational outcomes of business. They used data of 84 listed corporations of China. The results of this study revealed that outside information incorporation resulted in both responsive and practical flexibilities, which further improve operational performance of food sector of China.

The above discussion leads to design the following hypotheses:

H1: There is a direct affiliation between SRQL and CRPR.
H2: there is positive relation between SCMG and CRPR.
H3: There is a direct linkage between SRQL and SCMG.
H4: There is direct association between DRQL and CRPR.
H5: There is positive association between DRQL and SCMG.
H6: There is direct association between FDQL and CRPR.
H7: SCMG mediates the relation between (a) SRQL & CRPR, (b) DRQL & CRPR and (c) FDQL and DRPR.

3. Methodology

The target respondents of this research work were employees of water and food supply corporations situated in Thailand. The focused participants for the survey were the main managing directors, executives, CEOs, high-positioning officials/administrators responsible for supply network exercises in firms who might have an adequate encounter and information on how their organizations keep better their inventory network tasks. For statistical testing, 200 surveys were disseminated and 167 were returned and used for further statistical testing. Survey pool was utilized to gather the information and the reaction rate for study’s oversee was 68.5%. 75 firms were casually selected for the collection of data. After the information assortment, 30 overview structures were confined from the examination because of blemished, one-sided and anomaly matters. Only 137 affirmed review structure were settled for examination. The criteria contrasted and the relative primary members for the past three years the reaction choices, tied down on a seven-point scale with "1 being strongly agree and 7 being strongly disagree" was followed from [10].

Dependent Variable: Corporate Performance (CRPR)

In this research, corporate performance (CRPR) is used as dependent variable comprises of five items. CRPR is a term used to describe the several procedures and policies involved in bringing into line an organization's strategies and goals to its plans and executions in order to control the success of the company.

Independent Variables: Service Quality (SRQL), Drinking Water Quality (DRQL) and Food Quality (FDQL)

SRQL characterized service as an action which can be presented by one party to another, which is primarily immaterial and cannot affect any control. Service might be recognized with considerable item or immaterial product. The procedure of managing with SRQL conveyed to a client as per his requirements is called SRQL Management. It fundamentally evaluates how better a service has been given in order to improve its quality, later on it recognizes issues and right them to enlarge consumer constancy. SRQL administration incorporates the observing and upkeep of the varied services that are given to consumers by an organization. DRQL norms portrays the quality parameters made for drinking water. In spite of reality that each human on this planet needs drinking water to endure and that water may contain numerous fatal constituents. There are no all-around perceived and acknowledged global principles for drinking water. FDQL is the attributes of nutrition that is acceptable to buyers. This includes external components as appearance (size, shape, shading, shine, and consistency), shallow, and taste related features, e.g., administration grade values (for example of eggs), interior, physical and bacteriological compounds.

Mediating Variable: Supply Chain Management (SCMG)

SCMG is a network among companies and its dealers to create and distribute a specific product for end consumers. This network contains several actions, people, entities, data, and resources. The supply chain also represents the steps it takes to get the product or service from its initial stage to the end consumer.

4. Results

Table 1 shows the loadings (see Figure 1: Measurement Model) and cross loadings of the survey items. As all the loading values are within the desired levels, it confirms the internal consistency of the data. The Table 2 reports the value of CA and CR to check the reliability of the constructs. The values of CA and CR are above the minimum levels, hence indicating that the data are
reliable. Table 3 also shows that all the diagonal values (in bold) are greater than all other value (off diagonal), hence confirming discriminate validity of the constructs. Panel A of Table 3 shows the regression outcomes (see Figure 2: Structural Model) of ARQL, DRQL and FDQL on CRPR. From the Table it is clear that SRQL has significant positive impact on CRPR (Cf. = 0.101, PV = 0.000) at significance level of 1%. It shows that 1% change in SRQL will raise the CRPR by 10.2%. SCMG shows significant positive relationship with CRPR (Cf. = 0.118, PV = 0.000) at the level of 1%. It shows that 1-unit change in SCMG will enhance CRPR by 0.118 units. SRQL shows positive significant association with SCMG (Cf. = 0.041, PV = 0.023) at the level of 5%. Results indicate that one-point change in SRQL will lead to increase SCMG with 0.041 points. DRQL has significant direct impact on CRPR (Cf. = 0.062, PV = 0.000) at significance level of 1%. It can be reported as 1-unit rise in DRQL will increase the CRPR by 0.062 units. DRQL has direct association with SCMG at 1% level (Cf. = 0.094, PV = 0.000) which shows that 1% rise in DRQL will rise SCMG by 9.45%. FDQL has positive influence on CRPR (Cf. = 0.076, PV = 0.030) at 5% level. Results revealed that 1% change in FDQL causes to rise CRPR by 7.6%. FDQL also indicates positive and significant connection with SCMG (Cf. = 0.082, PV = 0.000) at 1% level indicating that 1% shift in FDQL will enhance SCMG by 8.2%.

Table 2: Reliability and Validity

<table>
<thead>
<tr>
<th>Variables</th>
<th>CA</th>
<th>CR</th>
<th>SR QL</th>
<th>DW QL</th>
<th>FD QL</th>
<th>SC MG</th>
<th>CR PR</th>
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<tbody>
<tr>
<td>SRQL</td>
<td>0.8</td>
<td>0.9</td>
<td>0.82</td>
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<td>SUQ</td>
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<td>40</td>
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<tr>
<td>DWQL</td>
<td>0.9</td>
<td>0.8</td>
<td>0.74</td>
<td>3</td>
<td>0.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRPR</td>
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<td>19</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>FDQL</td>
<td>0.8</td>
<td>0.8</td>
<td>0.65</td>
<td>7</td>
<td>0.64</td>
<td>0.81</td>
<td>8</td>
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<tr>
<td>SCMG</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRPR</td>
<td>0.9</td>
<td>0.8</td>
<td>0.69</td>
<td>3</td>
<td>0.38</td>
<td>0.58</td>
<td>0.83</td>
</tr>
<tr>
<td>FDQL</td>
<td>34</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCMG</td>
<td>0.9</td>
<td>0.8</td>
<td>0.69</td>
<td>7</td>
<td>0.38</td>
<td>0.58</td>
<td>0.83</td>
</tr>
</tbody>
</table>

Note: “CA: Cronbach’s Alpha, CR: Composite Reliability.”

Figure 1. Measurement Model

Panel B represents the indirect impact of SCMG on the associations among SRQL, DRQL, FDQL, and CRPR. From the Panel B of Table 3, it is clear that SCMG mediates the association between SRQL and CRPR. It signifies that SRQL and SCMG together cause 21.7% change in CRPR. SCMG also fully mediates the positive link between DRQL and CRPR. It reports that DRQL and SCMG collectively cause to change in CRPR by 9.4%. Moreover, SCMG also fully mediates the linkage between FDQL and CRPR as both SCMG and FDQL cause 13.2% variation in CRPR.

Table 3. Path Analysis

<table>
<thead>
<tr>
<th>Effect</th>
<th>Cf.</th>
<th>PV.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panel A: Direct Effects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SRQL ➔ CRPR</td>
<td>0.102</td>
<td>0.000*</td>
</tr>
<tr>
<td>SCMG ➔ CRPR</td>
<td>0.118</td>
<td>0.000*</td>
</tr>
<tr>
<td>SRQL ➔ SCMG</td>
<td>0.041</td>
<td>0.023*</td>
</tr>
<tr>
<td>DRQL ➔ CRPR</td>
<td>0.062</td>
<td>0.000*</td>
</tr>
<tr>
<td>DRQL ➔ SCMG</td>
<td>0.094</td>
<td>0.000*</td>
</tr>
<tr>
<td>FDQL ➔ CRPR</td>
<td>0.076</td>
<td>0.030*</td>
</tr>
<tr>
<td>FDQL ➔ SCMG</td>
<td>0.082</td>
<td>0.000*</td>
</tr>
</tbody>
</table>

Note: * represents statistical significance at 5% level.
5. Conclusion

As to the concern of performance of the services business, an inquiry identified with the principle deciding variables emerges. For the most part, two methodologies coincide concerning the general significance of industry or firm-explicit issues as the wellsprings of contrasts in association outcomes. From a traditional perspective, for example from the point of view of mechanical association, firm execution is on a very basic level as a component of the auxiliary attributes of the business in which firms work. Along these lines, the goal of this examination is to check the role of SCMG, a key administration in service quality and the exhibition of the water and food supply of the researched organizations situated in Thailand.

The target respondents of this research work were employees of water and food supply corporations situated in Thailand. The focused participants for the survey were the main managing directors, executives, CEOs, high-positioning officials/administrators responsible for supply network exercises in firms who might have an adequate encounter and information on how their organizations keep better their inventory network tasks. 75 firms were casually selected for the collection of data. After the information assortment, 30 overview structures were confined from the examination because of blemished, one-sided and anomaly matters. Only 137 affirmed review structure were settled for examination. The criteria contrasted and the relative primary members for the past three years the reaction choices, tied down on a seven-point scale. CRPR and SCMG are used as dependent and mediating variables, respectively. SRQL, DRQL and FDQL are used as independent variables.

The results of the study show that SRQL has significant positive impact on CRPR stating that 1% change in SRQL will raise the CRPR by 10.2%; accepted H1. SCMG also shows positive relationship with CRPR showing 1-unit change in SCMG will enhance CRPR by 0.118 units. Here, the H2 is accepted. SRQL shows positive association with SCMG indicating that one-point change in SRQL will lead to increase SCMG with 0.041 points. H3 of the study is supported. DRQL has significant direct impact on CRPR reporting that 1-unit rise in DRQL will increase the CRPR by 0.062 units, it leads to support H4. DRQL has direct association with SCMG which shows that 1% rise in DRQL will rise SCMG by 9.45%, hence supporting H5. DRQL also has positive influence on CRPR. These outcomes revealed that 1% change in FDQL causes to rise CRPR by 7.6%. These outputs support the H6. FDQL also indicates positive link with SCMG indicating that 1% shift in FDQL will enhance SCMG by 8.2%. Here, H7 is accepted. Moreover, the study also finds that SCMG mediates the association between SRQL and CRPR. It signifies that SRQL and SCMG together cause 21.7% change in CRPR. SCMG also fully mediates the positive link between DRQL and CRPR. It reports that DRQL and SCMG collectively cause to change in CRPR by 9.4%. Moreover, SCMG also fully mediates the linkage between FDQL and CRPR as both SCMG and FDQL cause 13.2% variation in CRPR. Hence, our hypothesis H8a, H8b and H8c are accepted.

While breaking down the information and summarizing the discoveries, it was discovered that water and food supply organizations of Thailand requires a superior SCMG to update CRPR. Better supply network execution is the way to client services and CRPR. Better water and food supply organizations can upgrade client expectation to stay with enterprise which has huge impact on execution. It was discovered that key administration practices; SRQL, DRQL and FDQL can improve the SCMG. Better drinking water and FDQL as associated with various water and food supply organizations and improve SRQL underwrite consumer loyalty level, SCMG and corporates execution. Both SCM and consumer loyalty upgrade the constructive outcome on SRQL and DRQL on water and food supply organization's presentation. In this way, Thailand water and food supply firms ensure great quality services and best DRQL and FDQL to help in raising their outcome standards and revenues.

References


