Factors affecting retail b2b relationship quality in Egypt

Ahmed Hussein; Mohamed Hassan
Arab Academy for Science and Technology and Maritime Transport, Egypt.

Mohamed Abdel Kader Adel Hamid
Arab Academy for Science and Technology and Maritime Transport, Egypt and Dar Al Uloom University, KSA

Keywords
Supply Chain Management, Logistics, Logistics Service Quality, Retailing, Distribution channels, Service Quality, Relationship Quality

Abstract
Purpose - logistics service quality is becoming a vital tool for delivering superior logistics service performance and creating customer satisfaction. This paper examined the influence of logistics service quality dimensions (LSQ) on supplier's retailer satisfaction. While highlighting the importance of relationship quality with retailers satisfaction on improving the performance on suppliers – retailers relationship.

Design/methodology - literature review was highlighted from many different approaches and perspectives for logistics service quality, customer satisfaction and Relationship quality, these approaches were used to derive the hypotheses that was used in the research. A quantitative analysis that had been done through using self administrative questionnaire collected 143 retailers - distributed in Alexandria - discovered the differences and particularities linked to the importance and perceived characteristics of logistical services.

Findings - The results identified two dimensions of logistics service quality (Personnel Contact quality and timeliness) have a great effect on retailers' satisfaction, it was clear that a higher level of retailer satisfaction leads to high relationship quality. The validity and reliability tests were tested.

Research limitations/implications - In this study the sample was only collected from Alexandria city which limit the generalisability of the research results.

Originality/value - This paper presented a framework of logistics service quality dimensions on supplier's retailer satisfaction while highlighting the importance of relationship quality with retailers satisfaction on improving the performance on suppliers – retailers relationship in the supply chain from business to business perspective.

Introduction
The Market is continuing a period of dynamic change. To achieve a change in its business environment, each party in supply chain need to understand customer requirements (Dawson, 2001). This is critical point to establishing and maintaining a competitive advantage in the market place. The power has been shifted from manufactures to the retailers in supply chain because of the growth of discounting and the big box retailing (Srinivasan, 2004). Retailers are considered one of the most important customers in the supply chain who are responsible to deliver the products to the end user (Defee et al., 2009). There are a number of challenges facing retail management such as retaining customer responsiveness keeping in touch and supplier relationships (Dawson, 2001).

Literature review
Today’s organizations face a serious levels of international competition like customers requirements, new rivals, reduction of the product life cycles, and decreasing acceptable...
response times. Businesses continue to identify the role of Supply Chain Management (SCM) in creating and maintaining a strategic competitive advantage through close customer relationship, increased satisfaction and improved business profitability (Mentzer, 2001), there are a number of definitions are proposed and the idea is discussed from many perspectives. From 1991 to 2005 there are various definitions of supply chain management (SCM) definitions. Ganeshan and Harrison (2006) defined SCM as a network of parties and entities that buy raw materials, convert them into semi finished products and then final goods, and reach the products to consumers through a distribution system. Researches defined SCM from many perspective highlighting the importance of (coordination, integration, collaboration, long term relationship, and more about linking among all parties in supply chain. Accordingly, supply chain management can be defined broadly as the entire value chain that can be transferred to the end users via integrated business organizations. Distribution channel is one of the most important part in the supply chain.

The role of distribution channels is to achieve the companies' mission to deliver products to customers in right time, at right place, in the right condition and at a minimum cost (Bucklin, 1966). Moreover, Rosenbloom, (2004) defined distribution channel as a combination of functions which provides the right transfer of goods and services, from producers to customers, the distribution includes along with the goods and commodity flow transactional, informational, financial, monetary, risks flows. Retailers are the core they are considered the backbone in supply chain for any company. Retailers are taking the essential role, as they are considered the main connection between producers and consumers and it also has a critical role and ability to influence demand and drive efficiencies in the supply system. Relationships between retailers and suppliers are important to consider for understanding the determinants of quality, variety and prices (Dobson, 2005). Retail industry is becoming more complex and changing at an ever-increasing speed. The industry quickly adjust and modify existing models, approaches and processes to satisfy the needs of future customers in order to be successful and profitable. Retailing will become an industry that realizes, more and more, that it must adapt its offerings to select customers, in order to win over customers and promote greater customer loyalty.

Omar (1999) defined Retail as “Any business that directs its marketing efforts towards satisfying the final consumer based upon the organisation of selling goods and services as a means of distribution”. The interaction between retailers and their customer would not be effective without a good service presented to the retailers. This service exist in Logistics service quality that presented from suppliers to the retailers, logistics service quality is a key that can measure the relationship between retailers and suppliers.

Service quality became a major field that the researcher start to focus on in their studies, because it has an essential and great influence on business performance, lower costs, customer satisfaction, customer loyalty and profitability (Guru, 2003). Researchers also indicated that service quality is considered the main tool to make any business successful. According to Parasuraman et al., (1988) service quality is a general tool to measure perceived service quality that clear the degree of difference between consumers’ perceptions and expectations. Thus, service quality as perceived by consumers, comes from evaluation of what they think service providers present. The high quality in products and service is the main tool in market place and the quality in service will be reflected on the performance that does produce considerable benefits in incomes, cost savings, and market share (Anderson et al., 1994). Logistics is the tool that can support these factors by different logistic activities. Logistics excellence has become a

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powerful source of competition between companies (Shet et al., 2006). Moreover, Tilanus (1997) defined logistics as the process of forecasting customer requirements and desires; owning the capital, materials, people, technologies, and information necessary to satisfy their requirements and desires; optimizing the goods- or service-producing network to carry out customer requests; and utilizing the network to fulfill customer requests in the right time.

According to this definition logistics is considered the most essential part to make customer satisfied. Service Quality is the tool used to support logistics activities, and to present the service in a right way, both definitions support customer needs, so the integration between logistics and service quality will achieve customer benefits. Logistics Service quality was addressed by different researchers such as Gomes, and Krapfel (1989), Mentzer, Flint, and Kent (1999), Mentzer, Bienstock, and Kahn (1993), Christopher, Bienstock ,Mentzer, and Bird (1997), Emerson and Grimm (1998), Elram, Mentzer et.al (2001), Forslun, Gustafsson (2003),Jaafar (2006) and Bouzaaibia(2013) All previous studies adopted logistics service quality (LSQ) with different models. Most of them examined it using the operational measurements where the customer perspective was used . Deriving from the work of (Gronross 1984) technical quality referred to the service outcomes and functional quality refers to the process of service delivery. Both associate the physical distribution aspects as the technical service parameter and customer service aspects act as the functional service parameter leading to the development of an instrument to measure the "physical distribution service quality" (PDSQ) (Bienstock, Mentzer, and Bird 1997). The according to Mentzer et al., (2001) , the nine dimensions constructed for evaluating logistics service quality are as follows: information quality, ordering procedures, order release quantities, personnel contact quality, order quality, order condition, order accuracy, order discrepancy handling and timeliness. Mentzer et al., (2001).

One of the different roles of marketing is to establish, enhance and extend relationships with customers. The quality of business relationships between suppliers and customers has been investigated and measured in many ways, According to Klee (1997, P.751) relationship quality is defined as the "point of suitability of a relationship to satisfy the requirements of customers associated with such relationship". Furthermore, Jafaar (2006) used LSQ model to link it with relationship quality and consider customer loyalty as an outcome of the model. There are number of studies that have been adopted using Relationship quality model (Hausman, 2001; Morgan and Hunt, 1994; Odekerken et al., 2003). In these studies the strong relationships provide significant benefits to both parties (Grönroos, 1996). Although, previous studies of relationship quality proved this relationship (Crosby et al., 1990; Bejou, Wray and Ingram, 1996; Kumar et al.,1995; Storbacca et al., 1994;Hennig Thurau and Klee, 1997 ;Dorsch et al., 1998; de Wulf et al., 2003;Walter et al., 2003; Ivens (2004); Palmatier (2006); Ivens and pardo 2007; Palmatier 2008; Walsh et al., 2010; Vesel and Zabkar, 2010;Liu et al., 2011; Gabriela 2013), other researchers have developed models of relationship quality based on linking service quality, customer satisfaction, relationship strength, relationship longevity and relationship profitability .Trust and commitment increase long term benefits to both participants, as an outcome of being in the relationship(Gefen et al., 2003).

Methodology

Deductive approach is adopted for this study. A self-administrated questionnaire was adopted from the previous literature based on previous related studies. In this study non-probability sampling technique called Snowball was used .This type of sampling was engaged for quantitative results. The questionnaire was used to study the relationship between retailers and suppliers. The questionnaire was distributed in Arabic as it is the main language of the Egyptian retailers. 200 questionnaires were distributed on potential and targeted retailers who
have classifications and specifications, 143 responses were collected in 3 months which
represents 71.5% response rate of the distributed questionnaire. The questionnaire included
fifteen questions divided into three sections. Statements of the questionnaire aimed at testing
variables under study.

**Research hypotheses**

Mentzer et al. (2001) investigated whether different groups of customers of a particular
organization with multiple market segments might place various degrees of importance on
LSQ components. Mentzer's study determined the degree of importance of each LSQ component
in the four customer segments of a large logistics organization in third party organization.
Moreover, Jafaar (2006) tested LSQ across industrial sectors in the UK and measured the impact
of LSQ on RQ in the business field. Jafaar study investigated the effects of relationships among
logistics service quality, customer satisfaction and relationship quality. The following hypothesis
were derived from LSQ literature and previous studies.

\( H_1: \) Logistics service quality dimensions has a positive effect on retailers' Satisfaction

- \((H_{1a})\) Personnel Contact Quality Positively affect Retailer Satisfaction.
- \((H_{1b})\) Order release quantities positively affect Retailer Satisfaction.
- \((H_{1c})\) Information Quality Positively affects Retailer Satisfaction.
- \((H_{1d})\) Order Procedures Positively affects Retailer Satisfaction.
- \((H_{1e})\) Order accuracy positively affects Retailer Satisfaction.
- \((H_{1f})\) Order Condition Positively affects Retailer Satisfaction.
- \((H_{1g})\) Order Quality Positively affects Retailer Satisfaction.
- \((H_{1h})\) Timeliness positively affects Retailer Satisfaction.
- \((H_{1i})\) Order Discrepancy Handling positively affects Retailer Satisfaction.

Jafaar (2007) measured the effect of industrial Satisfaction with Logistics Service Quality on
Relationship Quality, It was indicated in previous studies that satisfaction with service quality
have some effects on relationship quality dimensions in business to business field. This study
investigates the impact of satisfaction of LSQ on relationship quality based on the result from
logistics service quality on retailer satisfaction.

\( H_2: \) A higher level of retailer satisfaction leads to high relationship quality

The following hypotheses are derived from the main one:

- \((H_{2a})\): A higher Level of Retailer Satisfaction Leads to Higher Level of Trust.
- \((H_{2b})\): A higher Level of Trust Leads to Higher Level of Commitment.
- \((H_{2c})\): A higher Level of Trust Leads to Higher Level of Repurchase Intention.
The hypothesized structural model was tested using AMOS 18, the first evaluation of the structural model indicated that there is weak relationship between some variables that have been tested to be directed relationship on satisfaction. Figure 1.1 shows the proposed Model that has been tested. Figure 1.2 shows the actual model after analysis.

**Analysis**

Figure 1.1 Hypothesized Model

OrQs = Order release quantities, ORA = Order accuracy, OrQu = Order Quality, OrP = Order Procedures, OrC = Order Condition, PQ = Personnel Quality Contact, InQ = Information Quality, Time = Timeliness, OrHD = Order Handling Discrepancy, SAF = Satisfaction, Com = Commitment, Rel = Repurchase Intention
In order to determine the capabilities for the variable to explain the variance for another variable, there are two ways first P (Probability) indicates significant regression path when (P<.001), Second the path is considered as significant when the C.R.(Critical Ratio) is at 0.5 level or more, Maximum Likelihood (ML) was used to test the study’s proposed model. As a result, findings revealed that "order release quantities" didn’t explain the variance in "Satisfaction" (P<.944, C.R =.70). In the same line, "Order Accuracy" didn't explain the variance in the "Satisfaction" (P<.126, C.R =1.529), "order quality" considered a weak predictor to explain the variance of "Satisfaction" (P<.684, C.R =.407) As for "order Procedures" had a weak contributions to explain the variance of "satisfaction", (P<.256, C.R =1.135), In contrast, "order condition" turned out to have a negative effect on "Satisfaction"(P <0.005, C.R= -.461), "Personnel Contact Quality" figured as a high and strong predictor to explain the variance of "satisfaction"(P<.001, C.R =6.088). Moreover the capability of "information quality" to explain the variance in the "Satisfaction" is very low(P<.680, C.R =.412), "Timeliness" significantly explain the variance of "satisfaction" (P<.094, C.R =1.301), "satisfaction" was examined as a predictor for the "Trust" construct in which it played a major role in explaining the variance in the "Trust" (P<.001, C.R =11.387), On the other hand, "Trust" construct was examined as a predictor for the two variables "commitment and repurchase intention" the results showed that these variables played a major role in explaining the variance "commitment" (P<.001, C.R =6.492), and repurchase intention"(P<.001, C.R =15.511) constructs. as Figure (1.2) shows the Hypothesized Model that used in this study. Based on the results that, there are some variables eliminated and neglected from the model to be fitted, as shown in Figure (1.2) some important modifications were done to enhance the goodness of fit for the proposed model.

Figure (1.2) Hypothesized Modified Model

There were some modifications done in the model to have model fit. Order release quantities, Order Quality, Order condition, information quality, and Order handling discrepancy were removed to make the model fit, "Personnel Contact Quality" figured as a high and strong predictor to explain the variance of "satisfaction"(P<.001, C.R =6.088). In the same line, "Timeliness" significantly contributes to explaining the variance of "satisfaction" (P<.094, C.R =1.301), "satisfaction" was examined as a predictor for the "Trust" construct in which it played a major role in explaining the variance in the "Trust" construct (P<.001, C.R =11.387), On the other hand, "Trust" construct was examined as a predictor for the two variables "commitment and repurchase intention" the results show that these variables played a major role in explaining the
v variance "commitment (P<.001, C.R =6.492), and repurchase intention"(P<.001, C.R =15.511) constructs.

**H1: Logistics Service Quality Dimensions has a Positive Effect on Retailer Satisfaction**

Although hypotheses cannot be proved as true or wrong, hypotheses are statistically accepted or rejected based on levels of significance and critical ratio (CR). Therefore, in this study the results were based on critical ratio (C.R) and P (Probability) when (P<.001),

**H1a: Personnel Contact Quality positively affect Retailer Satisfaction. (Supported)**
The findings of testing H1a cleared that there is a highly significant relation between personnel Contact Quality and Retailer Satisfaction the result of the hypothesis also yields a high significant P value. (P<.001, CR=7.747).

**H1b: Order release quantities positively affect Retailer Satisfaction. (Not supported)**
Testing the relation between the two variables; Order release quantities and Retailer Satisfaction achieved unacceptable P value (P <.944, C.R. = .070).

**H1c: Information Quality positively affects Retailer Satisfaction. (Not supported)**
Testing the relation between information Quality and Retailer Satisfaction, resulted in a weak relationship (P <.680, C.R. = .412).

**H1d: Order Procedures positively affects Retailer Satisfaction. (Not supported)**
Examine if there is a positive relation between Order Procedures and Retailer Satisfaction, the relationship cleared that (P <.256, C.R. = 1.135).

**H1e: Order accuracy positively affects Retailer Satisfaction. (Not supported)**
The findings for this hypothesis indicated that the relationship between Order accuracy and Retailer Satisfaction was not strong (P <.126, C.R. = 1.529).

**H1f: Order Condition positively affects Retailer Satisfaction. (Not supported)**
Testing the relation between Order Condition and Retailer Satisfaction cleared that there was a weak relationship between the two variables (P <.645, C.R. = -.461).

**H1g: Order Quality positively affects Retailer Satisfaction. (Not supported)**
Examine if there is a positive relation between Order Quality and Retailer Satisfaction reflected a very weak relationship (P <.126, C.R. = .407).

**H1h: Timeliness positively affects Retailer Satisfaction. (Supported)**
Examine if there is a positive relation between Timeliness and Retailer Satisfaction this relationship achieve (P <.001, C.R. = 2.694).

**H1i: Order Discrepancy Handling positively affects Retailer Satisfaction. (Not supported)**
Examine if there is a positive relation between Order Discrepancy Handling and Retailer Satisfaction reflects a very weak relationship (P <.094, C.R. =.1675).

**H2: A higher Level of Retailer satisfaction Leads to High Relationship Quality.**

**H2a: A higher Level of Retailer Satisfaction Leads to Higher Level of Trust. (Supported)**
Testing H2a revealed that higher Level of Retailer Satisfaction significantly explains the variance Trust. It reflects a good relationship (P <.001, C.R. = 11.362).

**H2b: A higher Level of Trust Leads to Higher Level of Commitment. (Supported)**
Testing H2a revealed that a higher Level of Trust had a big role to reach to Higher Level of Commitment, this relation explained in (P <.001, C.R. = 6.492).

**H2c: A higher Level of Trust Leads to Higher Level of Repurchase Intention. (Supported)**
Testing H2c revealed that Trust significantly explained the variance in Repurchase Intention, this relation explained in (P <.001, C.R. = 15.508).
**Table (1.1) Summary of Accepted Hypotheses**

<table>
<thead>
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<th>Hypothesis</th>
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<tbody>
<tr>
<td>(H1a) Personnel Contact Quality Positively affects Retailer Satisfaction.</td>
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<tr>
<td>(H1i) Timeliness positively affects Retailer Satisfaction.</td>
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<tr>
<td>(H2a) A higher Level of Retailer Satisfaction Leads to Higher Level of Trust.</td>
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<tr>
<td>(H2b) A higher Level of Trust Leads to Higher Level of Commitment.</td>
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<tr>
<td>(H2c) A higher Level of Trust Leads to Higher Level of Repurchase Intention.</td>
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**Table (1.2) Summary of rejected Hypotheses**

<table>
<thead>
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<th>Hypothesis</th>
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<tbody>
<tr>
<td>(H1b) Order release quantities positively affect Retailer Satisfaction.</td>
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<tr>
<td>(H1c) Information Quality Positively affects Retailer Satisfaction.</td>
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<tr>
<td>(H1d) Order Procedures Positively affects Retailer Satisfaction.</td>
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<tr>
<td>(H1e) Order accuracy positively affects Retailer Satisfaction.</td>
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<td>(H1f) Order Condition Positively affects Retailer Satisfaction.</td>
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<td>(H1g) Order Quality Positively affects Retailer Satisfaction.</td>
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<tr>
<td>(H1h) Order Discrepancy Handling positively affects Retailer Satisfaction.</td>
</tr>
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</table>

**Findings**

The concept of logistics service quality is a significant instrument for delivering better logistics service performance (Stock and Lambert, 2001). There were many studies focused on the definitions and descriptions of how logistics creates customer satisfaction and competitive advantage (Jaafar 2006, Mentzer et al, 2001; Novack et al, 1994; Mentzer and Firman, 1994; Mentzer, 1993; Coyle et al, 1992; Mentzer et al, 1989; Ackerman, 1989; Lambert, 1987; Shapiro and Heskett, 1985; La Londe and Zinszer, 1976; Perrault and Russ, 1974). Farid (2012) stated that there is a lack of empirical research into different Arab management practices especially Egyptian. This study is a step forward for enhancing research work and practices in such countries. The aim of this study was to examine the Impact of Logistics Service Quality (LSQ) on relationship Quality (RQ) in business to business (B2B) field. Mentzer et al (2001) highlighted the four constructs that were hypothesized to have direct effects on satisfaction Personnel contact quality (H1a), ordering procedures (H1d), timeliness (H1i) and order discrepancy handling (H1j), these variables have a great effect on satisfaction. Jaafar (2006) resulted that the strongest effect on satisfaction was from personnel contact quality (PQ>SA, .305), followed by ordering procedures (.090) and order discrepancy handling. In this study Personnel contact quality has a strong effect on satisfaction followed by timeliness. On the other hand most previous studies confirmed that satisfaction positively influences trust (Crosby et al, 1990; Anderson and Narus, 1990; Storbacka et al, 1994; Ganesan, 1994; Bendapudi and Berry, 1997; Tax et al, 1998; Selnes, 1998; Narayandas and Rangan, 2004; Jaffar 2006). Strong empirical support was found for a positive path on trust and commitment, which verifies most research findings (Anderson and Weitz, 1989; Achrol, 1991; Moorman et al, 1992; Morgan and Hunt, 1994; Garbarino and Johnson, 1999; Geyskens et al, 1996; Ruyter et al, 2001 and Jaffar 2006). Finally, a strong relationship between Trust and repurchase intention which is inline with Fornell et al., 1987; Oliver, 1993; Anderson and Sullivan 1993 studies in which they confirmed the great relationship between these variables. This study is in line with results of previous studies exist in literature.

**Discussion**

This study used Mentzer et al (2001) LSQ scale for measuring logistic service quality. Relationship elements in the market and the long term relationships in business to business had a great effect on the retailers helping in keeping those retailers effective. By adding the relationship quality dimensions into the LSQ process model (Christopher and Peck, 2004;
Hennig-Thurau, 2000; Hennig-Thurau and Klee, 1997), this study hypothesized its research. Based on the analyses there are some factors affect Retailer satisfaction. It included the nine dimensions (personnel contact quality, order release quantities, information quality, ordering procedures, order accuracy, order condition, order quality, timeliness and order discrepancy handling). As for the relationship between retailer's satisfaction and high relationship quality, findings shows the positive effect of retailer satisfaction on relationship quality. The results suggested that relationship quality dimensions prevent customer's intention from exiting from the business relationships. And it helps to corroborate the deeply relationship between the customers in business field. The contribution of this research linked satisfaction directly with LSQ dimensions, Jaafar (2006) built his model based on Mentzer LSQ Model, this research used a LSQ Model by a different way, and explained the impact of customer satisfaction on Relationship Quality, most of the previous researches were focusing on the relationships between business to customer (B2C), This study investigated relationships in a business to business relationship context viewed from the customers' perspective.

**Recommendations**

Relationships with suppliers, and the quality of the products, improve a retailer’s value delivery network and improve customer satisfaction. Because Egyptian market is currently fragmented, Egyptian retailers must find ways to create relationships with their suppliers that help take advantage of economies of scale, JIT inventory and other Western retailing practices. To compete with retail chains, independent retailers should collaborate together to form cooperatives to increase their buying power with suppliers (Runyan and Droge, 2008).

**Limitations and Future research**

This research introduced the model of Logistics Service Quality and its effect on Relationship Quality to enhance logistic performance. The study sample was drawn from Alexandria city only in which the research lacks generalization on Egypt. The research can be expanded to other product categories to cover the retail sector in general and not just in food sectors only.

**References**


