

# The Determinants of Customer Satisfaction with Damco Supply Chain Management Service

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## ABSTRACT

*This quantitative research is conducted to identify factors influencing customer satisfaction in Damco Supply Chain Management Service. Data are collected by delivering survey questionnaires to customers currently using Damco Vietnam's supply chain management service. The research resulted in seven dimensions for customer satisfaction – Tangibles, Reliability, Assurance, and Empathy, Perceived Price, Relationship Service and Relationship Quality spreading out in 21 measurement items. Being one of the leading service providers, Damco has been known by its standard service quality well beyond Vietnam market. However, throughout the economic downturn period several key customers restructured their supply chain and switched to other service providers, customer intimacy emerged as the most concerned issue. Figuring out factors driving customer satisfaction may help the company to build up a foundation of customers' understanding and improve its service to enhance its customer satisfaction.*

Keywords: customer satisfaction, supply chain management, Vietnam

## 1. INTRODUCTION

Vietnam has seen a robust economic recovery after being adversely impacted by the 2008 global financial crisis. In spite of fluctuations in foreign exchange rate and gold markets, as well as a double-digit inflation rate, GDP for the first time surpassed US\$100 billion in 2010 (<http://thuongmai.vn>). Both GDP and export growth were far beyond forecast and expectations (respectively 6.78% and 25.5% - <http://www.gso.gov.vn>). Within this context, logistics market in general and supply chain management service in particular is not left behind. Michael Porter suggested to strategically position HCMC as a logistics center in the first Vietnam Competitiveness Report in 2011 and the field was identified as the main focus in 2010 ASEAN Summit. An intensive investment in logistics infrastructure system and information technology has been continuously carried out from both government and leading service providers like Schenker, Damco, Agility, UPS. More than 20% of yearly growth rate (<http://www.sggp.org.vn>) is really an achievement, and it was estimated to continue that pace in the future. In such a dynamic and promising environment, customer retention and satisfaction is one of the bottom-line strategies to which every business has been giving priority. Customer satisfaction has been proved to be a key driver for long-term profitability, shareholder value and sustainability of a business. Thus, enhancing customer satisfaction has now become a mission of Damco supply chain management service.

## 2. RESEARCH PROBLEM STATEMENT

From 2009 Damco Supply Chain Service (DSCS, or Damco for short) has designed the customer satisfaction survey and conducted annually to evaluate Damco supply chain management performance in terms of customer service quality, process efficiency and system functionality. The customer satisfaction results varied across all criteria. Customer service quality and document timeliness/accuracy had 98% and 95% customer satisfaction. Less than 95% of customers were satisfied with invoicing process and system. Less than 90% of customers were happy with counter service. In general, it achieved 94.6% customer satisfaction, and 0.4% under the target (at least 95% level of customer satisfaction across all three criteria). Therefore, a question was raised, “what are the factors influencing the customer satisfaction?” The answer could provide a foundation of customers’ understanding for further analysis of customer satisfaction for Damco.

Being one of the leading service providers, Damco has been well known by its standard service quality well beyond Vietnam market. However, throughout the economic downturn period, when several key customers restructured their supply chain and switched to other service providers, customer intimacy emerged as the most concerned issue. Furthermore, side-by-side competition from international groups and the agility of local players have posed more pressure than ever before on the company's strategy on how to retain and extend its customer base. And as the starting point on the way to gain sustainable customer loyalty, insight into customer satisfaction should be the first issue in the agenda. Figuring out customer expectations toward the service, how customers perceive and evaluate Damco's service and what are service quality factors driving customer satisfaction will help the company to build a foundation of customers' understanding and from there position its service to better satisfy the customers. Therefore, the research was conducted to identify elements influencing customer satisfaction and recommend measures to enhance customer satisfaction level of Damco supply chain management service.

### **3. OVERVIEW OF DAMCO VIETNAM AND SUPPLY CHAIN MANAGEMENT SERVICE**

Damco Vietnam, as a part of A.P. Moller – Maersk Group (APMM) and previously named Maersk Logistics, is one of the largest third party logistics service providers in Vietnam specializing in international supply chain management, freight forwarding services, and domestic warehousing and distribution. Being present in Vietnam since 1995, today it operates in six main distribution centers/warehouses nationwide with total area of 40,000sqm and employs over 400 workers. So far its customer base has developed to about 1,000 local shippers and more than 200 global customers. Supply chain management is one of Damco's core products, accounting for 70% of the whole business revenue, equivalent to about 95,000 twenty-foot equivalent units (TEU) of export and import cargo annually (Damco Internal Reports 2011).

In general, supply chain management is the management of all movement and storage of [raw materials](#), work-in-process inventory, and finished goods from point of origin to point of consumption. At Damco, the service is specifically offered to both domestic and oversea cargo flows, where the supply chain might cover local areas or span from domestic origin to overseas destination for consumption through sea transportation. In details, the service starts from a document called Standard Operating

Procedure (SOP). As a bottom line of the supply chain management service, SOP is an agreement between Damco and a specific customer, clearly stating the service scope and activities mutually signed off. Thus the service could be customized to satisfy individual customer's requirements and demands.

The whole process then follow from purchase order level. Customer can send (upload) purchase order details to Damco operation system, then Damco will have visibility of all purchase order information like supplier details, quantity, destination, and expected cargo delivery time, etc. Upon receipt of supplier's booking, Damco will verify with the uploaded purchase order and manage the discrepancy if any (called exception handling) according to respective SOP. Then it comes to the consolidation step, where accepted cargos can be consolidated at Damco warehouse. Damco will arrange the transportation to make sure that cargo could be delivered to customer at the requested time. This involves in doing customs house brokerage, coordination with carriers, shipping documents handling. All the shipment milestones are recorded in the operation system and transferred to customer and other parties per agreed timeline in SOP. Both cargo flows and information flows are monitored to ensure customer is updated of the shipment latest status in real time. Any deviation or ad-hoc incident will be informed immediately to customer via Online Communication Tool (OCT) – a communication channel specifically built for correspondence between customer and Damco.

Being a value added service in supply chain management, Damco is responsible to manage suppliers/carriers on a range of specific criteria. Key Performance Index (KPI) will be set up, maintained and reported to customer as required. Supply chain development and consultancy is considered as a high level of supply chain management service. Depending on customer's demand, SOP will be reviewed at least twice a year to seek for possibility of development and improvement in the customer supply chain system.

## **4. LITERATURE REVIEW**

### **- Definition of customer satisfaction**

Zineldin (2000) and Oliver 1999 defined satisfaction as an emotional reaction to the difference between what customers anticipate and what they receive, regarding the fulfillment of some need, goal or desire. Kotler (2001) elaborated more, the customers

will be dissatisfied when they perceive that a product or service performance falls short of their expectations; they are satisfied if the performance and their expectations match with each other; when the performance exceeds what customers expect, they become highly satisfied or delighted.

### **- Service quality and customer satisfaction**

There are many conceptualizations of service quality. According to Zeithaml (1988) and Parasuraman et al. (1988), service quality is defined as a form of attitude – a long-run overall evaluation. Perceived service quality portrays a general and overall appraisal of service (Sureshchandar et al., 2002). Lehtinen & Lehtinen (1982) assumed that service quality included process quality and output quality while similarly, Gronroos (1984) looked at service quality from two angles – technical quality (output quality) and functional quality (process quality). Parasuraman et al. (1988), Juwaheer and Ross (2003), and Walker et al. (2006) pointed out the main service quality aspects as tangibles, reliability, responsiveness, assurance and empathy, in which:

+ *Tangibles* could be understood as appearance or physical elements of a service. They might be either modern equipment or visually appealing facilities and premises. Customer service employees who have a neat and professional appearance/uniform contribute to the Tangibles aspect. Tangibles are also all visually appealing materials and products associated with the service.

+ *Reliability* refers to the capability of a service provider to deliver the promised service accurately and dependably. This reflects how trustworthy the business is in service delivery, whether it provides the service as promised – in terms of good and right quality, at the right time and in the right way. It also shows the business dependability in handling customer service problems and maintaining error-free records.

+ *Responsiveness* is the willingness of service provider to provide service quickly and accurately. It is to proactively keep customers notified of when the service will be performed. Beyond that, how fast the business is in responding to customers' requests to provide the prompt service and how flexible it is to help customers with optimal solution for ad-hoc problems.

+ *Assurance* is defined as credibility, competence and security in delivering services. Customer service employees play a key role here to assure customers about the service to be delivered. With their profound knowledge and professional attitude,

they can make customers feel safe and confident during the transaction, showing their courtesy and wise consultancy to customers. This is the expectation from any business in all service industries to maintain the best assurance attribute in service quality.

+ *Empathy* is the customer needs of caring, attention and understanding along with the service delivered by the service provider. One obvious example of empathy is convenient working hours and easy access to customer service employees and facilities whenever customers need. Again, customer service employees are the main players to deliver this concept, including but not limit to give customers individual attention, have thorough understanding of customer requirements, give the first priority to customers interests, deal with customers in a caring fashion and customize the service to their various demands.

Many research findings indicated a significant impact of service quality on customer satisfaction, such as Gronroos (1984), Parasuraman et al. (1988), and Walker et al. (2006). If a service possesses perceived value which meets or goes beyond customer needs, that service is said to meet or exceed customer satisfaction (Parasuraman et al., 1988; Foster, 2004; Walker et al., 2006). Bitner (1990) studied 145 tourists and discovered that service quality is an antecedent of customer satisfaction. Doing personal interviews of 80 customers of an audit firm, Caruana et al. (2000) revealed a positive correlation of service quality and perceived value and customer satisfaction. Eggert and Ulaga (2002) researched on 301 employees in US organizations and found that well performing service quality dimensions (i.e. tangibles, reliability, responsiveness, assurance and empathy) increased perceived value about the quality features leading to higher satisfaction.

#### **- Price and customer satisfaction**

Anderson, Fornell and Lehmann (1994) did highlight perceived price as one critical factor of customer satisfaction, while Zeithaml and Bitner (1996) proved that the customer satisfaction was not only linked with service quality assessment but also subject to several factors, such as quality of related products, price, situation, and personal attributes. It was also noted by Lee and Cunningham (1996) that service quality alone was not a sufficient condition to obtain customer satisfaction and establish customer loyalty because customers were always conscious of cost/benefit trade-off relationships. In general, the lower the perceived price is, the more customers are satisfied with the product/service price and the whole transaction (Zeithaml, 1988).

On the other side, Oliver (1997) argued that customers usually judged price and service quality by the concept of equity, then generated their satisfaction or dissatisfaction level, therefore, a lower monetary price or perceived price does not guarantee higher satisfaction.

#### **- Relationship service, relationship quality and customer satisfaction**

Good relationship service is a prerequisite for maintaining the customer relationship. It “covers all sequences of service provision, i.e. service actions that take place before, during and after a purchase” (wikipedia.org). It also can be defined as a range of activities to enhance customer satisfaction level (Turban, 2002). Peck (1997) identified certain activities of relationship service like personalized support, responsiveness, speaking to appropriate people, follow-up after a sale, knowledge of the customer's business, product knowledge, and new product information.

Relationship quality, on the other side, has been understood generally as the overall depth and climate of a relationship (Johnson, 1999). According to Levitt (1986) it is a bundle of intangible values which augment products or services and result in an expected interchange between buyers and sellers. In other words, relationship quality refers to a consumer's perceptions of how well the whole relationship fulfills the expectations, predictions, goals and desires the consumer has concerning the whole relationship (Jarvelin and Lehtinen, 1996). Henning-Thurau and Klee (1997) defined relationship quality between consumers and service providers as the degree of appropriateness of a relationship to fulfill the needs of the customer associated with the relationship. Gummeson (1987) saw relationship quality in two dimensions - professional relations and social relations. Dwyer, Schurr, and Oh (1987) and Crosby, Evans, and Cowles (1990) mentioned trust and relationship satisfaction as two indicators of relationship quality and Henning-Thurau and Kelley (1998) further argued to add relationship commitment as another dimension.

Storbacka et al. (1994) noticed that a satisfactory customer holds a strong relationship with the business, resulting in relationship longevity, i.e. the length of a relationship. Relationship longevity with customers is considered an important indicator of efficiency and profitability performance of a business, and above all, it is an implication of customer satisfaction and loyalty. Griffin (1995) pointed out that building a lasting relationship is the bottom line as customers are keen to be satisfied and even become loyal once they have developed a “personal relationship” with

customer service employee. This relationship can be symbiotic and beneficial for both the customer and the supplier.

Relationship service, through effective interactions with customers, also helps enhance customer satisfaction. Such interactions assist the business to find out what are customers' real needs and demands then reduce the risk of misunderstanding customers. There are many scenarios that dissatisfaction originates from the fact that the business does not tell correctly what is important to the customers. Thoroughly understanding customer expectations is the first step reaching customer satisfaction, and the best way to do is through mutual interactions.

It is more than critical to reinforce excellent relationships with existing customers, which requires enormous effort and creativity in such a competitive market nowadays. Smith (1999) strongly indicated that a good relationship through frequent interactions with customers is essential to increase sales, retain customers and keep them continuously satisfied.

## **5. RESEARCH MODEL AND RESEARCH DEVELOPMENT**

### **a. Customer Satisfaction Model:**

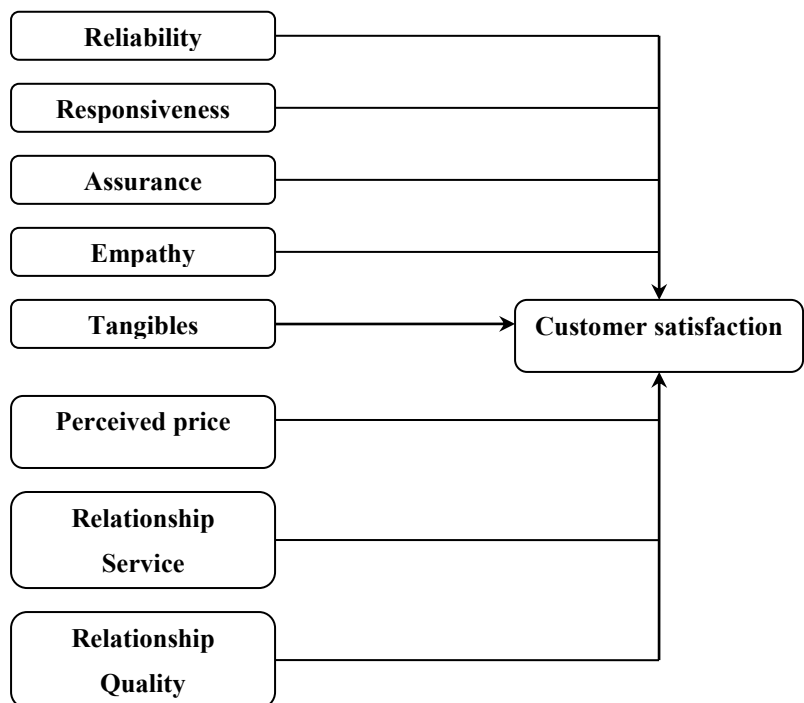
Customer satisfaction theories and previous research findings proved that customer satisfaction has a close relationship with different factors, from service quality, service attributes to service price. Customer relationship has been also taken into consideration as one factor affecting customer satisfaction. Parasuraman et al. (1988), Gronroos (1984), Walker et al. (2006) and Sureshchandar et al. (2002) all agreed that service quality possesses a strong association with customer satisfaction. Perceived price has been affirmed as one critical driver of customer satisfaction by Anderson, Fornell and Lehmann (1994), Zeithaml and Bitner (1996) and Lee and Cunningham (1996). Generally speaking, customers become more satisfied with lower price they perceive. A strong relationship service and good relationship quality contribute to high customer satisfaction level according to Griffin (1995), Smith (1999) and Storbacka et al. (1994). They help boost customer satisfaction in the way to deepen customer intimacy, gain insight into customer expectations and retain existing customers with the business.

Given aforementioned factors driving customer satisfaction, the dimensions of service quality with five attributes of tangible, reliability, responsiveness, assurance and empathy; perceived price; relationship service and relationship quality were



considered in association with customer satisfaction. The illustration is in Figure 1. Proposed hypotheses also were developed as follows:

- H1: Tangibles is in association with customer satisfaction significantly.
- H2: Reliability is in association with customer satisfaction significantly.
- H3: Assurance is in association with customer satisfaction significantly.
- H4: Empathy is in association with customer satisfaction significantly.
- H5: Responsiveness is in association with customer satisfaction significantly.
- H6: Perceived price is in association with customer satisfaction significantly.
- H7: Relationship service is in association with customer satisfaction significantly.
- H8: Relationship quality is in association with customer satisfaction significantly.



**Figure 1: Proposed Research Model**

#### **b. Measurement:**

In-depth interviews were carried out and resulted in 25 items and measured on five-point Likert scales from one (strongly disagree) to five (strongly agree). In order to validate the measurement scale reliability, the questionnaire firstly was sent to 30 selected customers via email as a pilot test. Then reliability analysis was performed to limit the irrelevant parameters, from there the questionnaire would be modified accordingly for the official survey.

*Tangibles* dimension has four items with Corrected Item-Total Correlation above 0.3 and total alpha of 0.715, thus passes reliability test. Upon testing *Responsiveness* attribute alone, its two items were not correlated. But when mixing with *Reliability* dimension, it has found a positive average covariance among all items, except item RES1 with Corrected Item-Total Correlation below 0.3. Therefore, it is decided to leave out item RES1 and incorporate dimension *Responsiveness* into *Reliability* with Cronbach's alpha of 0.782 for five items. All three *Assurance* items have Corrected Item-Total Correlation over 0.3 and total alpha of 0.700. They were kept in the measurement scale for official survey. Cronbach's alpha of *Empathy* dimension meet the test's requirement at 0.634 while all three items have Corrected Item-Total Correlation more than 0.3. We have the same result for *Perceived Price* attribute – total alpha is 0.719 and Corrected Item-Total Correlation of three items is all beyond 0.3. As for *Relationship Service* and *Relationship Quality*, total alpha are 0.833 and 0.896 respectively, all Corrected Item-Total Correlation are over 0.3.

From the Reliability test results, the measurement scale was modified with seven dimensions Tangibles, Reliability, Assurance, Empathy, Perceived Price, Relationship Service and Relationship Quality as follows:

**Table 1: Measurement Scale**

No.	Code	Items
<b>TANGIBLES</b>		
1	TAN1	<i>Counter design is convenient and supporting customers' pick-up of document.</i>
2	TAN2	<i>The Damco E-booking system (M*Power Shipper) is user-friendly.</i>
3	TAN3	<i>It is easy to use Damco E-document system.</i>
4	TAN4	<i>Damco website can provide full visibility of customers'</i>

*shipments.*

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**RELIABILITY**

5	RES2	<i>I always receive timely guidance and support in case I have problem with the shipments.</i>
6	REL1	<i>Damco staff always provides clear, accurate and timely feedback to your questions or requests related to shipping procedure.</i>
7	REL2	<i>I trust Damco to provide timely and accurate documents.</i>
8	REL3	<i>Shipments are arranged/delivered in timely manner.</i>
9	REL4	<i>I receive draft Invoice for verification timely and accurately.</i>

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**ASSURANCE**

10	ASS1	<i>Damco has flexible policies for special/ad-hoc requests from customers.</i>
11	ASS2	<i>Damco staff demonstrates the required skills and knowledge when attending to ad-hoc services/requests.</i>
12	ASS3	<i>Damco staff handles customers on phone politely and professionally.</i>

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**EMPATHY**

13	EMP1	<i>Damco staff is willing to handle my ad-hoc request/query after working hours.</i>
14	EMP2	<i>Damco staff always notifies and informs customers of any issues occurred with their shipments (delayed departure, late arrival, etc.)</i>
15	EMP3	<i>Damco staff proactively keeps you informed of all changes related to shipment process such as new requirements, contact points, timeline etc.</i>

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**PERCEIVED PRICE**

16	PRI1	<i>Damco offers competitive price for basic services.</i>
17	PRI2	<i>Damco's rates of additional services are reasonable.</i>
18	PRI3	<i>One-off requests are charged with reasonable offers.</i>

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**RELATIONSHIP SERVICE**

19	RELSER1	<i>Damco staff keeps frequent contact with customers via meeting, visit, workshop, etc.</i>
20	RELSER2	<i>In the event of complaint, I am satisfied with how Damco staff handles it.</i>
21	RELSER3	<i>Damco takes into consideration my comments and give prompt feedback and/or take proper action.</i>
<b>RELATIONSHIP QUALITY</b>		
22	RELQUA1	<i>Damco staff has good understanding of customers' needs and demands.</i>
23	RELQUA2	<i>Damco keeps constant care about customers' best interests.</i>
24	RELQUA3	<i>Damco appears to be a trustworthy partner.</i>

### c. Data Collection and Analysis:

#### *Respondent profile*

The customers in this report are defined as all customers currently using Damco Vietnam's supply chain management service. The customer database is frequently updated with the active customers with repeated transactions and stable volume throughout the year. Survey sample was taken from the 2010 customer list of 300 customers. With an effort to obtain reliable and objective responses, the respondents have been picked up from various industries like retail, footwear, apparel, jewelry and accessories, furniture and hardware and different seniority of business relationship with Damco (less than one year, from one to three years, three to five years and longer than five years).

**Table 2: Profile of the Survey Respondents**

Industry \ Relationship duration	Less than 1 year	1-3 years	3-5 years	More than 5 years	Total
<i>Retail</i>	3	5	10	6	24
<i>Footwear</i>	6	10	9	11	36
<i>Apparel</i>	0	4	8	8	20

<i>Jewelry and Accessories</i>	4	5	3	0	12
<i>Furniture</i>	4	4	4	13	25
<i>Hardware</i>	4	1	7	1	13
<b>Total</b>	<b>21</b>	<b>29</b>	<b>41</b>	<b>39</b>	<b>130</b>

### *Factor analysis*

Factor analysis was made with all 24 variables grouped with extraction method of Principal Component Analysis and rotation method as Varimax with Kaiser Normalization. The results met all requirements with seven factors extracted with 21 items, and factor Responsiveness was deleted (see Table 3).

**Table 3: Factor Analysis Result**

<b>Rotated Component Matrix<sup>a</sup></b>							
<b>Items</b>	<b>Component</b>						
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
TAN1						.673	
TAN3						.835	
TAN4						.760	
RES2		.723					
REL2		.816					
REL3		.662					
REL4		.792					
ASS1				.783			
ASS2				.806			
ASS3				.702			
EMP2							.853

Extraction Method: Principal Component Analysis.  
Rotation Method: Varimax with Kaiser Normalization.

Pearson Correlation Coefficient tells us if there exists linear correlation between dependent variable and independent variables. If it is the case, then multivariate regression analysis should be tested afterwards to see how strength the association is among all variables.

Factors	Tangibles	Reliability	Assurance	Empathy	Perceived price	Relationship service	Relationship quality	Satisfaction
Tangibles	1							
Reliability	-.164	1						
Assurance	.101	-.172	1					
Empathy	.094	-.061	-.057	1				
Perceived Price	.125	.205*	-.185*	-.163	1			

Relationship Service	-.296**	-.062	-.096	.043	-.165	1		
Relationship Quality	-.265**	-.093	-.062	-.139	-.183*	.601**	1	
Satisfaction	.251**	.223*	.152	.210*	.271**	.246**	.301**	1

The test showed that *Assurance* has no correlation with *Customer Satisfaction* ( $\beta = 0.152$ ,  $p > .05$ ). *Reliability*, *Relationship Service* and *Relationship Quality* have negative correlation, because *Tangibles* are related to e-procurement without the involvement of staff, otherwise reliability and relationship between supplier and its customers resulted from its staff performance. The more customers prefer using e-procurement, the less Damco staff involves in paper-based procurement. *Empathy* and *Reliability* have a correlation with *Customer Satisfaction* at the significance level of 0.05 with  $\beta = 0.210$ , and 0.223, respectively. *Tangibles*, *Relationship Service*, *Relationship Quality*, and *Perceived Price* have a correlation with *Customer Satisfaction* at the significance level of .01 with  $\beta = 0.251$ , 0.246, 0.301, and 0.271, respectively. However, to further verify the relationship between *Customer Satisfaction* and the seven attributes in a proper manner the research continued with regression analysis.

#### *Regression test*

Stepwise regression can be used to find the best regression model without testing all possible regressions. The selection process will stop upon getting the best fitted model where no variable can be added to or removed from the selected model. It is recommended in dealing with multiple independent variables at the same time. With entry criterion 0.05 and removal criterion 0.1, stepwise regression run on SPSS gives the results shown in Table 5.

**Table 5: Regression Analysis**

Model	Coefficients <sup>a</sup>					Collinearity Statistics	
	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Tolerance	VIF
	B	Std. Error	β				
(Constant)	-4.139	.667		-6.203	.000		
RELATIONSHIPQUALITY	.327	.055	.457	5.899	.000	.590	1.694
RELIABILITY	.376	.066	.370	5.701	.000	.841	1.189
PRICE	.338	.064	.331	5.248	.000	.893	1.119
TANGIBLES	.321	.061	.330	5.270	.000	.901	1.109
EMPATHY	.261	.044	.381	5.891	.000	.847	1.181
ASSURANCE	.291	.059	.306	4.918	.000	.914	1.095
RELATIONSHIP SERVICE	.150	.065	.179	2.326	.000	.598	1.672

a. Dependent Variable: SATISFACTION

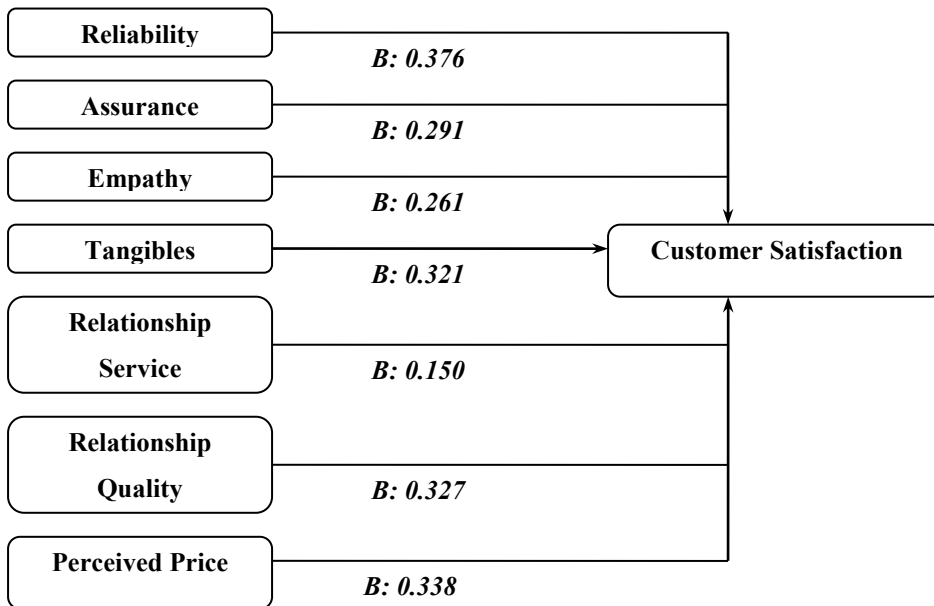
The seven independent variables - Tangibles, Reliability, Assurance, Empathy, Perceived Price, Relationship Service and Relationship Quality explain 54.3% of variations in customer satisfaction.

#### **d. Findings Discussion and Implementation:**

After performing data analysis, there are seven dimensions for customer satisfaction – *Tangibles, Reliability, Assurance, and Empathy, Perceived Price, Relationship Service and Relationship Quality* spreading out in 21 measurement items. The proposed hypotheses are all accepted. Relationship between seven variables and customer satisfaction is proved through the regression function:

Customer Satisfaction = -4.139 + 0.376 Reliability + 0.338 Perceived Price + 0.327 Relationship Quality + 0.321 Tangibles + 0.291 Assurance + 0.261 Empathy + 0.150 Relationship Service





**Figure 2: Determinants of Customer Satisfaction**

The service quality attribute is more critical in such a field with unique nature of seasonality like supply chain management where supply and demand are fluctuating from time to time. Showing competency and stable performance in service delivery is exactly what customers are expecting from their logistic partner. It is also realized from the qualitative discussion that *Reliability* is one of the preconditions customers take into consideration upon selecting supply chain management service provider, thus customer satisfaction level is highly attached with this factor. This is the first element of trustworthiness which every service provider tries to build up with customers.

A reliable service, from the customers' perspective, has been traditionally interpreted as the one in which shipments are arranged in good order and timing. However, it is not only that respect. Customer service is now an essential part embedded in a reliable service – where customers require a constant care to their shipment along the way. This is translated into swift response and support during the transaction, real-time update of the shipment status and last but not least, accurate

related documentation. Failing to take note of such requirements will definitely worsen customer satisfaction.

Most of our local customers are of middle and small size companies, which are known of high price consciousness. Additionally, logistics costs in general and supply chain management costs in particular take a considerable share of a business' total expenditure, especially when the supply chain covers several geographical areas. In the current context where inflation has reached two digital levels, cost cutting is always put as top priority of every business. That is to say customers will seek for balance between a quality service and a reasonable quotation. It's not only the service price to be mentioned, perceived price here should be understood as customers' perception on the whole cost package of core service, additional service and one-off request in ad-hoc situation.

Beside costs, the good relation between customers and the service provider also plays a critical role in their satisfaction. It involves not only the service provider's activities to set up and reinforce relation with customers, but also the service provider's good understandings of customer needs. This is especially obvious in Vietnam business-to-business environment, where local customers practically incline to do business with ones they are acquainted to or have close relationship with. Hence maintaining strong intimacy and association with customers will successfully build a stable foundation for customer retention, customer satisfaction and most importantly, customer loyalty.

While customers recognize Damco's effort in complaint handling and listening to customers, they expect more on customer intimacy and understanding from Damco's employees. Beyond that, customer care is also known as the act of thoroughly considering customers' best interests during the transaction and relationship. That is, customers are at the center of all business-related decisions; and above all, high relationship quality comes from the commitment and pro-activeness of the service provider in maintaining the continuity of that relation throughout the time.

Tangibles here are considered as the physical part of a service, including facility, equipment, system and the most particular one, Information Technology (IT) solution offered to customers. It is commonly known that we cannot control what we do not have visibility, and nowadays, when more and more stakeholders participate in the supply chain which spans over more and more countries, the need of that visibility still

remains a challenge. Thus the advantage comes with service providers who are able to provide customers with transparency and traceability so that they can track back where their shipment is around-the-clock, and become more satisfied with the service/business. For Damco, counter activities and interaction systems are highlighted as two aspects of tangibles. While counter activities involve counter related stuffs like counter design, document release process, counter staff's attitude and productivity, interaction systems include all systems used as tools of communication between Damco and customers throughout the transaction like e-booking, e-document, and Damco website, etc. Both receive customers' attention as they play an interactive role with customers through daily operations. Once the counter activities are not efficient enough or the systems are not working in a stable manner, direct impact on the service transaction is unavoidable. Thus, customers express their concern regarding tangibles attribute as one important and basic element of customer satisfaction.

Assurance and Empathy are the two determinants to customer satisfaction in the model. While Assurance measures the professional and knowledge employees demonstrate to customers, Empathy refers to their attitude and constant care of customers during transaction. Both attributes are delivered by the employee, and perceived by customers, at the same time of service delivery, through day-to-day interaction between employees and customers. Needless to say, customer satisfaction will be adversely impacted when employees neither show their dedication/qualification nor deliver professional service. Not surprisingly, this is more than correct when it comes to unexpected issues or ad-hoc problems by which customers resort to employees' consultancy and flexibility to help them iron those troubles. Showing Empathy towards customers is also a part of building and maintaining positive relationship with them.

The two factors have one common characteristic – strongly bounded by the customer service employees' quality. Whether it is competency and courtesy in service delivery or flexibility in problem solving or pro-activeness and consistence in customer care, it all relies on the customer service staff who demonstrates those to the customers through daily transactions. Their credentials are more than valuable when mishap occurs and service failure recovery is required.

Relationship Service also contributes to customer satisfaction level. As being all activities and investments a company conducts to build up and strengthen relationship with customers, this element reflects its strategy to come closer and closer to its customers. Without proper relationship services being performed consistently, the company cannot have strong and fruitful relationship with its customers. Throughout the survey results, we can see that customers show their concern on how well and in what way the company does all interactive activities with them. And once their expectation is not met, their satisfaction level will be definitely undermined.

In conclusion, customer satisfaction has been a critical concept in both academic literature and marketing practice. Especially in the present environment of fierce competition and globalization, customer satisfaction has been drawing more attention than ever. In that respect, the research has given the readers deeper insights into customer satisfaction in supply chain management service field, one of the young and dynamic services in logistic market in Vietnam.

The study has several limitations. First, the data may not satisfy the assumptions of linear regression relationship. Second, there exists the autocorrelation between factors in the model which can be observed by the relationship between factors “Assurance” and “Customer Satisfaction.” These limitations may reduce the reliability of the estimates in the model■

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