

An Impact of the Right Logistics Management of an Automotive Aftermarket Spare Part Distributor on the Retailers' Satisfaction and Behavioral Intention

Nucharee Supatn

Management Department, Martin de tours School of Management and Economics, Assumption University
E-mail: nuchareespt@au.edu

ABSTRACT

Automotive aftermarket spare parts business is one sector of the automotive industry in which spare parts are sold directly to the end customers who are car users and/or car mechanics. Regardless of the manufacturing process, its upstream supply chain begins with the products supplied from the manufacturers in many countries to the major distributors in Thailand. Then, they are distributed to the local retailers throughout the countries. As the products are various, the local retailers select some particular product and introduce them to the end customers where most customers buy the products based on the retailers' offers and encouragements. Retailers' behavior is very important to the supply chain. This study focuses on the retailers' satisfaction and their behavioral intention. The eight-right logistics management model is emphasized as the main influencing factor on the retailers' behavior. A survey of 304 spare part retailers was conducted. Retailers' perception on the eight-right logistics performance of the distributor was measured together their satisfaction and behavioral intention. The structural equation modeling was performed. The results showed that right quantity, right time, right condition and right documents of the distributor's logistics performance affected retailers' satisfaction and behavioral intention.

KEYWORDS: Behavioral intention, Eight-right logistics performance, Satisfaction, Supply chain Management

บทคัดย่อ

ตลาดชิ้นส่วนอะไหล่รถยนต์จัดเป็นส่วนหนึ่งของอุตสาหกรรมรถยนต์ ซึ่งเจาะจงเฉพาะการขายชิ้นส่วนอะไหล่ให้กับลูกค้าซึ่งอาจจะเป็นช่าง เจ้าของอู่ซ่อมรถ หรือเจ้าของรถยนต์เอง เพื่อซ่อมแซมหรือซ่อมบำรุงหากไม่ใช้บริการของบริษัทผู้จำหน่ายรถยนต์ ถ้าไม่นับกระบวนการผลิตซัพพลายเชนของอะไหล่รถยนต์ก็จะเริ่มต้นจากตัวสินค้าซึ่งส่งมาจากผู้ผลิตทั้งในและต่างประเทศมายังบริษัทตัวแทนจำหน่าย จากนั้นบริษัทฯ ก็จะจัดส่งชิ้นส่วนไปให้กับร้านอะไหล่รถยนต์ ซึ่งเป็นร้านค้าปลีกที่ตั้งอยู่ทุกพื้นที่ทั่วประเทศเนื่องจากชิ้นส่วนอะไหล่รถยนต์มีความหลากหลาย และแต่ละชิ้นส่วนก็มาจากผู้ผลิตหลายราย ใช้ได้กับรถรุ่นเดียวกัน แต่มีคุณภาพต่างกัน ราคาต่างกัน ความทนทานต่างกัน ส่วนใหญ่ไม่ว่าจะเป็นช่างหรือเจ้าของรถก็ไม่น่าจะรู้จักสินค้าทั้งหมด ดังนั้นจึงเป็นหน้าที่ของร้านค้าที่จะให้ข้อมูลกับลูกค้าว่าชิ้นส่วนไหนเป็นอย่างไร และลูกค้าส่วนใหญ่ก็มักจะตัดสินใจเลือกสินค้าตามคำแนะนำของร้าน การแนะนำสินค้าของทางร้านจึงมีบทบาทสำคัญอย่างยิ่งต่อซัพพลายเชนของอุตสาหกรรมนี้ การวิจัยครั้งนี้มุ่งเน้นไปที่การศึกษาความพึงพอใจของผู้บริหารร้านค้าปลีกความตั้งใจที่จะเลือกให้ข้อมูลหรือแนะนำสินค้าตัวใดกับลูกค้าและการรับรู้ประสิทธิภาพของบริษัทตัวแทนจำหน่ายตามทฤษฎีความถูกต้องแปดประการในการจัดการโลจิสติกส์โดยทำการวิจัยเชิงสำรวจจากผู้บริหารร้านค้าปลีกอะไหล่รถยนต์จำนวน 304 ราย และนำข้อมูลมาวิเคราะห์สมการโครงสร้าง ผลพบว่าความถูกต้องในเรื่องจำนวนสินค้าที่จัดส่งเวลาในการจัดส่งสภาพความเรียบร้อยของสินค้าเมื่อจัดส่ง และความถูกต้องของเอกสารที่เกี่ยวข้องมีผลกระทบอย่างมีนัยสำคัญต่อความพึงพอใจและพฤติกรรมของร้านค้า

คำสำคัญ: ความตั้งใจในการทำพฤติกรรมความถูกต้องในการจัดการโลจิสติกส์แปดประการความพึงพอใจการจัดการซัพพลายเชน

Introduction

Automotive assembling capacity in Thailand was ranked as the largest automotive production in ASEAN and the ninth globally in 2012 (Thailand Board of Investment, 2014). The automotive industry has a significant contribution to the Thai economy, i.e. about 10-11% of the Thai gross domestic product (GDP). There are more than 700 first-tier and 1,700 second- and third-tier suppliers that supply the auto-parts to the industry. The production capacity was more than 2.5 million units per year, half for local used and another half for export (Office of Industrial economy, 2014). The export value of the cars and parts was more than two thousand million USD in 2013 (The Federation of Thai Industries, 2014). For the local market, the numbers of the new registered vehicles in the country was about a million units per year. In

2014, the number of the total registered vehicles in Thailand was more than 35 million units, about 15 million cars and 20 million motorcycles (Department of Land Transport, 2015).

Extended from the automotive assembling industry, automotive aftermarket has been gradually growing for decades. This industry carries all activities to maintaining and repairing a car from initial sale throughout its lifecycle. All replacement parts, accessories, lubricants as well as services are encompassed. However, most car users do not perform a car repair or maintenance on their own since the product and technological knowledge are limited. The services from car mechanics are required. The car mechanics do not only perform the maintaining and repairing works but also select the relevant spare parts for the car users. However, the buying of those parts can be done



by either car mechanics or car users.

The car maintaining and repairing services are provided by two main service providers; the car manufacturers and the independent service providers. Most car manufacturers provide several branches of the service centers to provide the services to its cars. However, service charges are explicitly higher than that of the independent service centers but the service quality is guaranteed by the car manufacturer. All spare parts are standard parts used in the car assembling process where the price is not negotiable. Regarding the high price of services and parts, it is more popular for the car users to use the maintaining and repairing services from the independent car service centers that are available in various sizes throughout the country. The quality of service is depending on the car mechanic who owns or works for the service center. The spare parts and accessories are usually bought from the nearby auto parts retailers that are also located throughout the country.

Not only standard parts but there are also several substitute products available in the market. Some are imported from Japan, Europe, the US, and other countries while some are local products with lower price. The spare parts and accessories in the aftermarket are highly competitive in price, quality, durability, and technology. Some brands claim that the quality of their product is even higher than the standard products. The car users can request for their favorite brands and series of the parts. In addition, new products are continuously launched to the market since market barriers are low. Thus, high competitive environment is illustrated in this industry. The supply chain of the aftermarket spare parts is concluded graphically in Figure 1.



Source: Author

Figure 1 Supply Chain of Automotive Aftermarket Spare Parts

A retailer, commonly, sells many brands of the auto parts. Car users or car mechanics have various choices of the same products to select. Technical knowledge of the car mechanics seems to be insufficient to help them to select an appropriate product on their own since lots of brands and series of the same parts are available. It is common that they ask for suggestion from the retailers at least to compare the products and update the new product information. Suggestion and encouragement from the retailers have a high impact on the decision of the customers to select the products. It is more likely that the products with price and quality guaranty from the retailers are selected. As such, the retailers' behaviors are very important. Their selling behaviors affect both customers' decision and sales volume of the distributors.

The retailers' decision to introduce a product and encourage a customer to buy that particular product is not only based on the benefits obtaining from the distributors only but also on their satisfaction toward the distributor's operations and services such as product quality, sales service quality, price and promotion, and especially logistics service quality. This research aims to study the factors that affect the retailers' satisfaction and their behavior to promote the products, encourage the customers to buy, and maintain relationship with the distributors.

Retailers' satisfaction and intention to maintain their relationships with the distributors can be developed if the products are good in price and quality. Moreover, the "right" service quality of the distributors could also impact retailers' satisfaction. Product delivering at the right time that the retailers want, the right product items as expected with a good condition, correct quantity, correct billing, and so on would facilitate the retailers to be able to respond to their end customers efficiently. This would, in turn, enhance the competitive advantage over their competitors. The eight-right logistics management performance is of interest. Products delivering with the right product items, right quantity, right condition, right place, right time, and right price, from the right sources with the right documents are covered in the 8Rs model. The eight rights in logistics performance are emphasized as the key factors that influence factors of the retailers' satisfaction and behavioral intention on the distributors. However, the product quality, promotional campaigns and other marketing strategies are not included in this research. The emphasis is on the logistics service quality only. Thus, the question, "How the eight-right logistics performance influences satisfaction and behavioral intention of the automotive spare part retailers?" is focused in this research.

Research Objectives

To understand the influence of the eight-right logistics performance, three objectives are proposed as follows:

- 1) To identify the influence of the eight-right logistics performance on retailers' satisfaction.
2. To identify the influence of the eight-right

logistics performance on retailers' behavioral intention.

3. To identify the relationship of the retailers' satisfaction and their behavioral intention.

Literature Review

To explain the performance of the logistics management, the Five Rights model has been mentioned for decades. The Five Rs indicates that the logistics performance could be verified from the right in five aspects which are right product quality in right quantity and right condition, at the right place, and the right time. Then, another two rights were included and made the "Seven Rs" model i.e. from the right source, at right cost. Recently, another one right, "right documents" was added and made this model become an "Eight-Right Logistics" model. The Eight-Right theory explains the expected performance of the logistics management. "Right" here means "right" in the customers' perspective, not that of the manufacturers or suppliers or distributors. As there are many parties in a supply chain, customers here, in the automotive aftermarket, include the retailers, car mechanics, and the car users.

The demands of the end customers are complicated and sophisticated by nature. If the products are out of retailer's stock and the salesperson says that products can be delivered to the retailer's place within a week, the customer may decide not to wait. The distributor and salesperson may perceive that only one week waiting is acceptable but in the car users' point of view, waiting for parts for a week means having no car to use for a week or more. If the car is used daily, waiting for a week would disturb the car users' life a lot. Thus, it is undoubtedly that the car



users would not only select the other products, maybe substitute products, but they may also develop a negative attitude towards brand and intend not to use this particular brand in the future or provide the negative word of mouth about the brand to others. Thus, right logistics performance is said to be important.

The right logistics performance in all eight aspects explicitly indicates the performance of the suppliers (Marien, 2005) which would affect all stakeholders in the downstream supply chain. The right in product quality, quantity, condition, and from the right source would ensure that the products are good enough and ready to be used and sufficiently available for the customers. Right on place and time would facilitate the end customers to obtain the products at any time they need from the channel that is convenient for them. Right price, in the end customer point of view, is important since the money they have to pay is worth for the quality and property of the products that they choose. In the retailer's point of view, the right cost of the products would help them compete in the market since the price of the product is affordable and does not higher than that of the competitors. Thus, it is more possible for them to sell the products and earn more sales volume and profit.

Finally, the documents from the suppliers such as purchasing orders, invoices, financial invoices, delivery order, and so on that have correct and sufficient details in item codes, product description, product quantity, price per unit, total price, VAT, and so on are also important. The retailers can keep record, check-recheck all relevant details and use the information for their internal operation. Wrong documents may cause

lots of operation and financial problems, especially on the outstanding financial balances, wrong price offering, incorrect inventory, and so on, if the incorrectness is not verified. In contrast, if the incorrectness is aware by the retailers, it would cause the dissatisfaction and, maybe, unwilling to keep their business relationship with the distributors. Thus, the influence of the eight-right logistics performance of the distributors on the retailers' satisfaction and behavioral intention are proposed.

Satisfaction developed based the eight-right logistics performance of the distributor would lead the retailers to develop a good business relationship with the distributor. It is more likely that the retailers would promote the products from that distributor to the customers and encourage customers to buy. As such, the relationship between retailers' satisfaction and their behavioral intention is proposed. The relationships among eight-right logistics performance, retailer's satisfaction and retailer's behavioral intention are proposed as the research framework and presented in Figure 2 as follows:

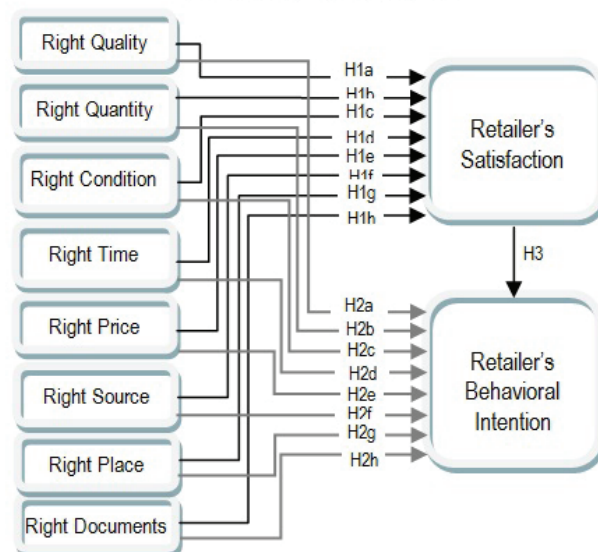


Figure 2 Research Framework

Hypothesis

Three hypotheses are proposed as:

Hypothesis 1: Eight right logistics performance i.e. right product quality (a), right product condition (b), right product quantity (c), right time (d), right price (e), right source (f), right place (g), and right documents (h) influence retailer's satisfaction.

Hypothesis 2: Eight right logistics performance i.e. right product quality (a), right product condition (b), right product quantity (c), right time (d), right price (e), right source (f), right place (g), and right documents (h) influence retailer's behavioral intention.

Hypothesis 3: Retailer's satisfaction influences retailer's behavioral intention

Benefit of Research

Even though the right logistics performance has been mentioned for decades, it seemed to be overlooked by the business operators. Product, promotion, and pricing strategies are mainly emphasized by current automotive aftermarket distributors. However, all parties of the supply chain would gain benefits if the logistics performance is improved. Knowledge and understanding of the logistics performance obtaining from this study would help the distributors to aware of the importance of the logistics performance and come up with the relevant logistics management strategies that could satisfy the customers, i.e. retailers, car mechanics and car users. Apart from the automotive aftermarket business, the supply chain members in other industries may apply this knowledge to improve their logistics performance. Moreover, the right logistics performance model may be extended or tightened to fit well with the nature of the contexts that are different across business.

Research Process

As each distributor has its own selling and logistics management strategies, only one distributor, the ABC Company was selected as a case study. Target populations were the retailers that the ABC supplied the products survey. Questionnaire was designed.

The ABC is one of the biggest automotive aftermarket companies in Thailand. More than 20,000 product categories are imported from many countries. The ABC assigns a salesperson to take care of the retailers in each area. The retailers can place order every day. The salesperson transfers the purchasing orders to the sales department of the company. Related documents are processed and sent to the financial, warehouse, and logistics office. The products delivering are, then, planned. The logistics department sets up the transportation plan for the product delivering in Bangkok and nearby provinces and appoints the external transportation companies to deliver products to the retailers in other provinces. The flows of the product delivering process can be seen in Figure 3.

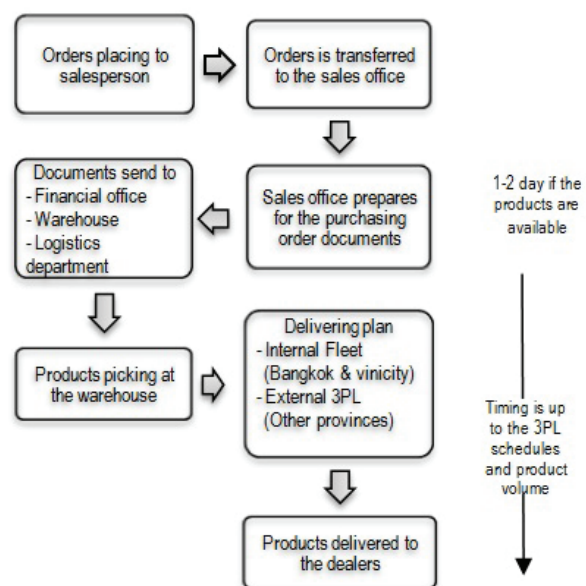


Figure 3 Product Delivering Process



Products supplied by the ABC are premium with high quality and high price comparing to the competitors. The brands of the products are well-known and the products warranty is usually given to the end customers. Sales promotions are usually offered. However, product shortage problem has illustrated periodically since there are a large number of the product categories and the inventory stocks are not updated. Retailers, sometimes, have to wait for the products for weeks or months. Moreover, the delivering date cannot be appointed in advance when the orders are placed especially for the retailers who are not in Bangkok and vicinity since the delivering dates are controlled by the external third party logistics service providers. Even though the retailers can place orders everyday but the products can be delivered to each customer in different delivering lead time, from three days to a month. The lead time is dependent on the retailer location, the order size, and the availability of the product in the warehouse. Perception, satisfaction and behavioral intention of the retailers are measured in the survey.

Population and Sample

Automotive aftermarket spare parts retailers were targeted as the population of the study. The pretest showed that the standard deviation of the eight-right logistics performance was 0.441 out of 5-point rating scale where the mean score was 3.892. As suggested by Zikmund et al (2013), the formula; $n=(ZS/E)^2$ can be used to determine the sample size. The 300 sample size was get ($Z_{95\%}=1.96$; S =standard deviation=0.441; E =accepted error=5%).With the help of the logistics managers and salespersons of the ABC, four

hundred sets of questionnaires were, randomly, sent to retailers throughout the country. The owner or manager of the retail shops were asked to complete the questionnaire and return it directly to the researcher. Small souvenirs were given to the retailers who returned the questionnaire back. A total of 351 sets were returned. However, 47 sets were incomplete and were discarded. Only 304 data sets were usable. This yielded the response rate of 76%.

The profiles of the samples are presented in Table 1. Most respondents were male (84.2%) with the age of 41-50 years old (45.7%) and 31-40 years old (35.5%). Most of them held Bachelor's (36.5%) and less than Bachelor's degree (50.0%). Mostly, the business owners answered the questionnaires on their own (95.7%). Most of the respondents were sole suppliers i.e. selling the products from ABC only (62.4%), and key suppliers i.e. ABC products were the major products of the shop (29.4%). Most of them had 5-10 years (42.4%) and more than 10 years (30.0%) relationship with the ABC.

Instruments

The eight-right logistics scales were developed based on the theory of eight-right logistics management concepts (e.g. Marien, 2005; Graeml & Peinado, 2009; Ozalp, Suvaci, & Tonus, 2010). Initially, 45 statements measuring eight rights were gathered from the brainstorming of ten retailers. Then, three experts, one university lecturer teaching supply chain management and two managers of the logistics departments screened those items. Thirty-two items were selected. The wordings of some items were modified.

First, three items were designed to measure right product items (quality) i.e. "products

Table 1 Sample Profiles

	Profiles	%
Gender	Male	84.2
	Female	15.8
Age (Years Old)	Less than 30 years old	3.7
	31-40 years old	35.5
	41-50 years old	45.7
	More than 50 years old	15.1
Educational Level	Less than Bachelor's	50.0
	Bachelor's	36.5
	Higher than Bachelor's	13.5
Position	Business Owner	95.7
	Spouse	1.0
	Manager or Key staff	3.3
Type of Retailer	Sole Supplier	62.4
	Key Supplier	29.4
	Multiple Suppliers	8.3
Length of Relationship	Less than 1 year	3.6
	1-2 years	4.6
	3-5 years	19.1
	5-10 years	42.4
	More than 10 years	30.3

delivered are high quality, correct items, accurate available-to-promise, and valid in the multiple / complicated orders were used. Then, six items on “products delivered with good condition of the product and package, ready to sell, no loss from the batch, no damage, right identification signs, and easy to inspect” were developed to measure right condition. Another four items designed to measure right quantity were “the numbers of products delivered are correct as ordered, orders can be done in either large or small order size, products are always available, and no shortage for the good sales items.” For the right source, five items were included i.e. the products were produced by the reputed, trustworthy, credible manufacturers and

the shipments were efficient and not too costly. Four items were used to measure right place i.e. “the distributor has correct information on the stock of the products in term of the warehouse location, quantity, condition, and lead time to be delivered.” For the right time, four items were emphasized on the product delivering as on time, at anytime customers need, quick respond to the customer, and the delivering lead time is not too long. Another three items, on reasonable price, negotiable price, and competitive price were used to measure right price. Finally, three items were used to measure the right documents of the pasttransmissions. The items are “the related documents such as purchasing order, tax invoice, invoice, delivery order, etc. are always correct, reliable, and processed timely. In addition, three items measuring satisfaction were modified from Anderson and Srinivasan (2003) i.e. “You feel satisfied with overall services provided by the ABC,” “You are happy doing business with the ABC,” “The quality of the products provided by theABC is satisfactory.” The last three items measured behavioral intention i.e. “You usually promote the products from the ABC to the customers,” “You try to encourage the customers to buy the ABC products,” “You intend to maintain business relationship with The ABC.” Five-Likert scales varying from 1(strongly disagree) to 5 (strongly agree) were utilized for all items.

The questionnaire was pre-testing to ensure its quality. Fifty sets of the questionnaire were distributed to the automotive aftermarket spare part retailers. Cronbach’s alpha and item-to-total analysis was performed to verify the reliability of the measurement items. The Cronbach’s alpha results are presented in Table 2.

Table 1 Sample Profiles

Construct	α
Right Quality	0.765
Right Quantity	0.792
Right Condition	0.892
Right Time	0.874
Right Price	0.769
Right Source	0.756
Right Place	0.849
Right Document	0.819
Satisfaction	0.879
Behavioral Intention	0.899

Acceptable reliability was gained since the Cronbach's Alpha coefficients of all construct exceeded 0.7 as suggested by Nunnally (1978). Then, the exploratory factor analysis was conducted to assess the construct validity of the measurement. Satisfactory results were obtained. The KMO of 0.972 with the significant Bartlett's test of Sphericity ($p < 0.001$) indicated that the data was sufficient for the EFA. Coefficients of the all items measuring the same construct were loaded together in the same dimensions. This indicated the construct reliability. Thus, all items were qualified to be used to measure all constructs as proposed. Thus, the hypotheses testing can be done in the further stage.

Data Analysis

The confirmatory factor analysis (CFA) was performed to assess discriminant validity and nomological validity of the constructs. All measurement items were put in the CFA model with 16 latent constructs. Satisfactory results were obtained. The χ^2/df of 1.77 was less than the cutoff point of 3.00. The TFI, IFI, and CFI were all exceeding the required level of 0.9 (IFI=0.939; TLI=0.933;

CFI=0.938) with the RMSEA of less than 0.05 (0.030). All fit indices indicated that model was good fit. All measurement items could measure their relative constructs as proposed. The fit of structural equation model was, then, investigated. The mean score of each right was assigned to be the endogenous construct of the structural equation model. Each right logistics performance was considered as separated independent factor that provided direct influence on satisfaction and behavioral intention which were appointed the mediating variable and dependent variable, respectively. The structural equation modeling was developed using the AMOS 20 statistical program. The structural model can be seen in Figure 4.

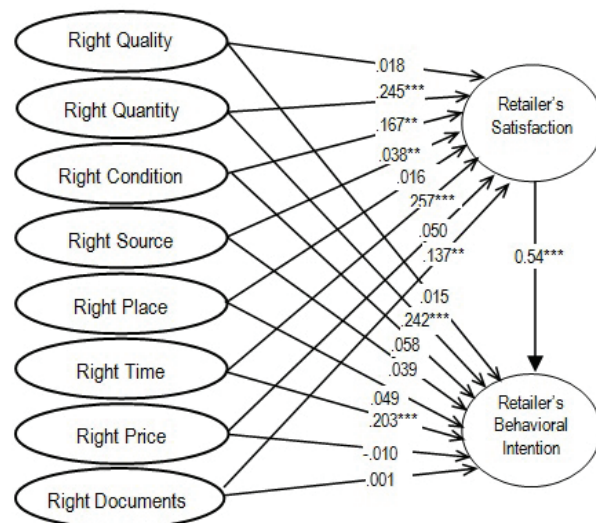


Figure 4 Path Analysis of the Model

Remarks: $\chi^2=82.326$; ,DF=45, $P < .001$; $\chi^2/DF=1.829$; GFI=0.955; IFI=0.968; TLI=0.952; CFI=0.967; RMSEA=0.042

The numbers shown in the figure are standardized coefficients * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

To assess the fit of the model, the same procedures as the confirmatory factor analysis were done. Six major criteria, χ^2/df , GFI, IFI, TLI, CFI, and RMSEA, were considered. All fit indices exceeded the recommended level which showed

the good fit of the hypothesized model ($\chi^2/df=2.759$; $GFI=0.949$; $IFI=0.974$; $TLI=0.967$; $CFI=0.974$; $RMSEA=0.045$). The recommended values and the fit indices of the hypothesized model are shown in Table 3 as follows:

Table 3 Hypothesized Model Fits

Fit Indices	Recommended Level	Model Fits
χ^2/df	<3.00	1.829
GFI (Goodness of fit index)	>.90	0.955
IFI (Incremental Fit Index)	>.90	0.968
TLI (Tucker Lewis index*)	>.90	0.952
CFI (Comparative Fit Index)	>.90	0.967
RMSEA	<.05 (<.08)	0.042

Remarks:* Tucker Lewis index is a Non-normed Fit Index; RMSEA= Root Mean Square Error of Approximation

Since the good fit was illustrated, the hypotheses could be tested. The structural relationships in the SEM model are:

The first section of Table 4 shows the structural paths of the relationship between right logistics performance and retailers' satisfaction (H1). The results showed that structural relationships of some rights affected retailers' satisfaction significantly. Right time was found to have highest influence on satisfaction ($\beta=0.197$, $p<0.001$) followed by right quantity ($\beta=0.245$, $p<0.001$), right condition ($\beta=0.135$, $p<0.01$) and right documents ($\beta=0.105$, $p<0.01$), respectively. Right quality, right source, right place, and right price have no significant influence on retailers' satisfaction ($\beta=0.011$, -0.039 , 0.013 , 0.052 ; $p>0.05$). Thus, Hypothesis 1 was partially supported by the data. Regarding the r^2 , eight rights

Table 4 SEM Relationship Estimated

Hypotheses and Paths in the Model	Estimated beta	t	p
H1: Right Logistics Performance -> Satisfaction ^a			
a Right Quality	0.011 (0.018)	0.342	0.733
b Right Condition	0.135 (0.167)	3.196	0.001
c Right Quantity	0.245 (0.245)	4.697	***
d Right Source	-0.039 (-0.038)	-0.724	0.469
e Right Place	0.013 (0.016)	0.315	0.753
f Right Time	0.197 (0.257)	4.937	***
g Right Price	0.052 (0.050)	0.951	0.341
h Right Documents	0.105 (0.137)	2.623	0.009
H2: Right Logistics Performance -> Behavioral Intention ^b			
a Right Quality	0.010 (0.015)	0.389	0.697
b Right Condition	0.049 (0.058)	1.495	0.135
c Right Quantity	0.250 (0.242)	5.888	***
d Right Source	0.041 (0.039)	1.010	0.312
e Right Place	0.041 (0.049)	1.275	0.202
f Right Time	0.160 (0.203)	4.963	***
g Right Price	-0.011 (-0.010)	-0.267	0.790
h Right Documents	0.000 (0.001)	0.015	0.988
H3 Retailer's Satisfaction -> Retailer's Behavioral Intention			
	0.557 (0.540)	11.128	***

Notes: Unstandardized Estimated Relationship Coefficient are shown. Figures in the brackets are standardized coefficients

***t-values are significant at $p<0.001$; $ab r^2$ of the retailer's satisfaction = 0.177; retailer's behavioral intention = 0.529

could explain satisfaction by 17.7%. The second part of Table 4 shows the structural relations of eight rights and retailers' behavioral intention. Only two relationships were found to be significant. Strongest influence was found from right quantity ($\beta=0.250$, $p<0.01$) followed by right time ($\beta=0.160$, $p<0.01$). Right quality, right condition, right source, right place, right price, and right documents have no significant influence on retailers' behavioral intention ($\beta=0.10$, 0.049 , 0.041 , 0.041 , -0.011 , and 0.000 ; $p>0.05$). Therefore, Hypothesis 2 was partially supported by the data. The third hypothesis



proposed the relationship between retailers' satisfaction and their behavioral intention. Significant relationship was shown ($\beta=0.557$; $p<0.001$). Thus, Hypothesis 3 was supported by the data. Considering the standardized coefficients, retailers' satisfaction had strongest influence on behavioral intention, followed by right quantity and right time. Retailers' satisfaction and eight rights could explain behavioral intention of the retailers by 52.9% ($r^2=52.9$).

Conclusion

Four out of eight rights in logistics performance of the distributor had significant influence on retailers' satisfaction. Among these, right time provided highest influence on satisfaction. This finding was not surprising since the delivering lead time of the ABC could not be forecasted and informed to the retailers. As the product delivering date was unknown, the retailers could not give any promises to the car mechanics or car users or even asks them to wait. Some customers made decisions to buy substitute products with lower price and lower quality while some customers ran away from the retailers and bought the products from the competitors i.e. other retailers in the area. Thus, right time logistics performance played an important role as the factor that influenced retailers' satisfaction.

Right quantity was the second highest influencing factor. Too many pieces of product delivered to the retailer means the excessive carrying cost while less-than- order number of products would lead to the products shortage in the short future. Thus, it was undoubtedly that right quantity affected retailers' satisfaction. Right condition was another factor that affected

satisfaction significantly. The products that were delivered in right condition, i.e. products and packages were not damaged would be ready for selling. Even though the new products can be claimed if the delivered products were damaged, it would take some amount of time to wait for the new product items. However, the new products could not be claimed if only packages were damaged. This problem might not be serious in the distributor's perspective but it was important for the retailers and end customers. The end customers would like to get a perfect product since they paid full. They perceived the products with damaged package as old and obsolete. Retailers were the ones who had to face with the customers' emotions and complaints if the products were not in the right condition. Moreover, some customers refused to buy the products with damaged packages. As such right condition would affect retailers' satisfaction. The last right that affected satisfaction of the retailers was the right document. As discussed previously, wrong documents would lead to several problems such as in pricing, accounting, operation, and so on. Previous research findings also supported this issue (e.g. Banomyong & Supatn, 2011; Wilding & Juriado, 2004). The non-significant influence of right quality, right source, and right place on retailers' satisfaction and behavior intention were not surprising for this case since all products supplied by the ABC Company were premium, well known brand and imported from the reliable sources such as Europe, the US and Japan. The quality and sources of the products were assured. In addition, there were only two warehouses so that the places that the product items were kept could be found easily.

Considering the rights that affect retailers'

behavioral intention, only the influences of right time and right quantity were significantly. Both rights were also the first two factors that influence retailers' satisfaction. With the same reasons, right time and right quantity would facilitate the retailers to have sufficient products available for the customers. Retailers' behavior would depend largely on these two rights.

The importance of the right time and right quantity could not be overlooked since they provided highest influence on both retailers' satisfaction and behavioral intention. Right condition and right documents were also important, even if their direct influence on behavioral intention were not shown, their indirect influence were illustrated. Both of them influenced satisfaction and satisfaction strongly influenced behavioral intention.

Managerial Implication

The important findings on the influence of the right time, right quantity, right condition, and right documents on the retailers' satisfaction and behavioral intention would help the product distributors to understand the needs and wants of the retailers and end customers. The findings would make the distributors recognize that focusing on the products, price and sales promotion, only, would be insufficient to remain competitive in this current marketing context. Good products with interesting promotions may attract the customers. However, the inefficient logistics management may result in product shortage, delivering delay, imperfect product condition, wrong documents and so on. These problems may prohibit the retailers and end customers to buy the products. Dissatisfaction may be developed and, finally, terminating of the business relationship may be resulted. As such,

the distributors should create appropriate logistics management strategies to improve their logistics service quality, at least to enhance its right time, right quantity, right condition and right documents.

Moreover, in this digital era, some retailers in Bangkok provide the online services to the end customers. The car mechanics or car users can search for the product information from the website and place order via line application, facebook, or even call. Then the products can be delivered by EMS or EMS cash on delivery. The product could reach the customer, door-to-door, within 1-2 days throughout the country. This may be the competitive alternative to the customers in the short future. The distributors would aware of this new marketing strategy. If the logistics performance does not improve, the product shortage and delay problems still exist, the end customers may stop buying the products from the local retailers in the future. This would affect the whole supply chain in the long run.

Recommendation

Some limitations on the case study design were illustrated. Case study was applicable since it was good to control over the different business context of various distributors. However, some characteristics of the selected case may limit the scope of the study. For the ABC Company, all products had reputed brands and were imported from the reliable manufacturers in the developed countries. Thus, all ABC products were perceived as premium. Retailers and end customers had no doubts on the product quality and reliability of the sources of the products. Moreover, the prices that were higher than the competing products were also acceptable. Thus, the cross comparisons among



distributors might be conducted in the future to verify the impact of all rights when the products are not premium. The influence of eight-right logistics performance on other factors such as the business

performance of the retailers, customers' loyalty, and so on can be planned. Moreover, the researches in other types of business could be designed.

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