Journal of Research Administration
Society of Research Administrators International

ACQUIRE KNOWLEDGE: THE CASE OF LOGISTICS FIRMS

Le Quang Trung
University of Labour and Social Affairs, Vietnam

Pham Van Hieu
Hanoi University of Business and Technology, Vietnam

Nguyen Thi Mai Anh
Corresponding Author, East Asia University of Technology, Vietnam; Email: nmaianh86@gmail.com

Abstract

Thanks to the huge contribution from infrastructure investment in the logistics industry, most importantly ports, which serve as international trade points, Vietnam's logistics industry has great potential to become one of the country's key economic sectors, contributing to the sustainable and comprehensive development of Vietnam. The recovery of the world and domestic economies will be the driving force behind helping the logistics industry benefit in the coming years. The purpose of the study was to discuss acquiring knowledge of logistics firms in Hanoi and neighboring provinces. The study aimed to show an evaluation of the differences in acquiring knowledge in logistics firms with participants of different genders and ages. The study relied on a data collection tool. The questionnaire was designed based on the opinions of experts and the results of previous studies. A group of employees in logistics firms in Hanoi and neighboring provinces represented the population of the study. 250 questionnaires were distributed, and 175 were retrieved, representing a 70.0% response rate. SPSS was utilized for a comparative evaluation of acquiring knowledge in logistics firms between respondents. Multiple statistical techniques were employed for data analysis, including SPSS via descriptive statistics, independent t-tests, and ANOVA. The study's results indicate that there is no difference in assessing knowledge acquisition in logistics firms between different subjects in terms of genders and ages. This study offers theoretical and practical implications for improving knowledge acquisition in logistics firms, thereby improving business performance. Based on this result, the study proposes some recommendations for logistics firms.

Keywords: Acquire knowledge, logistics firms, economics, business administration, business performance

JEL codes: M10, D80, O15, B55, E23

1. INTRODUCTION

Through the process of circulation and supply of goods, logistics firms contribute to linking the economies of localities, regions, and countries as a whole, making the country a link in the price chain of global governance, linking the national economy with the world economy.

Business manufacturers who want to dominate and expand the market for their products must have

© 2024 The Authors

the support of logistics services. Logistics firms are a bridge for moving goods on new routes to new markets in accordance with set time and location requirements. Developing logistics enterprises has a great effect on exploiting and expanding business markets for firms, especially by improving consumer enjoyment and contributing to economic restructuring.

Market research plays an extremely important role in firms' business activities. Understanding the target market, consumers, and competitors helps firms make more accurate business strategic decisions, thereby optimizing business performance.

Market research helps firms avoid unnecessary risks, reduce the waste of financial resources, and strengthen their competitive position in the market. Therefore, market research not only helps firms compete in the market but also helps them develop and achieve sustainable success in the future.

One of the goals of sustainable logistics is to minimize the environmental impact of transportation activities. This process can be anything from carbon emissions to noise pollution and other related consequences. Therefore, the logistics industry has been interested in harmonizing industry growth, meeting customer needs, and maintaining high environmental awareness.

Logistics is the process of planning, implementing, and controlling the flow of goods or information related to raw materials (inputs) and finished products (outputs) from one source to another. Current logistics activities are not only related to transportation logistics activities but also related to planning and organizing the transportation of raw materials from suppliers to manufacturers and promoting the process of transporting goods from final production to delivery to consumers. Connect with the entire community for optimization that reduces processing and storage costs.

The logistics industry, in addition to being based on resources, facilities, etc., is also based on knowledge. Therefore, by participating in a network of relationships as well as links with other organizations, being aware of the conditions and nature of the market will allow a company to quickly acquire knowledge to compete well in that market (Suseno & Raden, 2007). Therefore, the topic of knowledge acquisition by firms requires research with both theoretical and practical significance.

2. LITERATURE REVIEW

According to the Knowledge-Based View (KBV), which describes companies as repositories of knowledge and capabilities, knowledge is one of the key factors that create firm success (Spender & Grant, 1996). According to this perspective, knowledge is a solid foundation and an extremely valuable resource for firms to maintain their competitive advantage. Furthermore, knowledge contributes to the analysis, evaluation, and creation of new products, services, and processes to implement activities more conveniently.

Most activities that take place in firms require knowledge. Therefore, knowledge is the guiding principle for most activities in firms (Kogut & Zander, 1992). Knowledge is considered the unique know-how of each enterprise that is difficult for other organizations to imitate. Therefore, it helps firms achieve sustainable competitive advantage. Knowledge, unlike other resources, is regularly updated and researched to discover new knowledge. Each enterprise has a different way of

© 2024 The Authors

perceiving and applying knowledge to practical operations, so it is considered quite complex and difficult to imitate.

Absorbing external knowledge also shortens product development cycles; firms will pioneer in introducing new products to the market as well as increase the rate of new product introduction (Yli-Renko et al., 2001).

Knowledge acquisition is the first process in knowledge development that firms or supply chains need to wisely achieve (Hult et al., 2007). The knowledge acquisition scale was implemented by Hult et al. (2007) in the study of improving supply chain efficiency through competitive culture and knowledge development.

Knowledge acquisition allows firms to develop new products while increasing product competitive advantage and controlling customer unfamiliarity, leading to a higher likelihood of success (Zhang et al., 2015).

Table 1: Observed variables: acquiring knowledge of logistics firms in Hanoi and neighboring provinces

Code	Scale
Acquiring knowledge (AK)	
AK1	Employees of logistics firms conduct a lot of internal research on new services that customers may need in the future.
AK2	Employees of logistics firms quickly detect changes in customer preferences regarding services.
AK3	Employees of logistics firms poll customers at least once a year to evaluate service quality.
AK4	Employees of logistics firms quickly detect fundamental changes in the transport industry environment.

Source: Prepared by the authors (2023)

3. RESEARCH METHODS

Sample Selection

This paper uses a sample of logistics firms in Hanoi and neighboring provinces from 2022 to 2023. The criteria for the sample used in this paper are firms that are doing business. We narrowed down our sample to 100 logistics firms and surveyed employees of these 100 firms (see Table 2).

Variable Measurement

We based it on the results of previous studies and expert opinion and tailored it to the context of logistics firms. The acquisition of knowledge by logistics firms in Hanoi and neighboring provinces includes four observed variables (scales), including AK1, AK2, AK3, and AK4 (see table 1).

Analysis tools

Quantitative research method through SPSS software with descriptive statistics, independent T-test accreditation, and ANOVA analysis.

Table 2. Respondents by genders and ages

	Frequency	Percent	Cumulative

© 2024 The Authors

			Percent
Genders			
Female	65	37.1	37.1
Male	110	62.9	100.0
Ages			
From 22 to 30 years old	48	27.4	27.4
From 30 to 35 years old	47	26.9	54.3
From 35 to 45 years old	42	24.0	78.3
45 years old or older	38	21.7	100.0
Total	**175**	**100.0**	

Source: Prepared by the authors (2023) and SPSS software.

Information on the data collected is shown in Table 2. It shows that among the respondents, 37.1% were female and 62.9% were male. Of these, 48 participants are from 22 to 30 years old, accounting for 27.4%; 47 participants are from 30 to 35 years old, accounting for 26.9%; 42 participants are from 35 to 45 years old, accounting for 24.0%; and the remaining respondents are 45 years old or older, accounting for 21.7%.

4. RESULTS

Descriptive Statistics

Table 3 indicates that the respondents agree with the variable of acquiring knowledge of logistics firms, where four attributes were quite high. All five attributes were rated at an average of 4.05 or higher.

The analysis results also show that the skewness and kurtosis coefficients are in the range of -1 to 1, so the survey data ensures a relatively standard distribution. Therefore, the evaluation levels of the employees participating in the survey are relatively uniform and concentrated, with little dispersion, so the analysis results have high statistical significance.

Table 3. Descriptive analysis of attributes

Code	N	Mini	Max	Mean	Std. Deviation	Skewness		Kurtosis	
						Statistic	Std. Error	Statistic	Std. Error
Acquire knowledge of logistics firms (AK).									
AK1	175	2.0	5.0	4.05	0.764	-0.312	0.184	-0.592	0.365
AK2	175	2.0	5.0	4.18	0.749	-0.551	0.184	-0.236	0.365
AK3	175	2.0	5.0	4.11	0.718	-0.267	0.184	-0.709	0.365
AK4	175	2.0	5.0	4.19	0.761	-0.411	0.184	-0.910	0.365
Valid N (listwise)	**175**			**4.13**					

Source: Prepared by the authors (2023) and SPSS software.

Independent T-test: different genders

A comparison of the results of the evaluation of the differences in acquiring knowledge in logistics firms in Hanoi and neighboring provinces with participants of different genders (male and female)

© 2024 The Authors

can be seen in Table 4. According to the results shown in Table 4, sig Levene's test is 0.737, which is more than 0.05. The variance between males and females is not different. Moreover, the sig value t-test is 0.450, which is more than 0.05, which means that there is no statistically significant difference in acquiring knowledge in logistics firms in Hanoi and neighboring provinces between these different genders (Hoang & Chu, 2008; Hair et al., 2009; Hair et al., 2014).

Table 4. Differences in acquiring knowledge in logistics firms with participants of different genders - Independent Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
AK	Equal variances assumed	0.113	0.737	-0.757	173	0.450	-0.07448	0.09835	-0.26860	0.11965
	Equal variances not assumed			-0.760	135.739	0.449	-0.07448	0.09805	-0.26837	0.11942

Source: Prepared by the authors (2023) and SPSS software.

ANOVA - ages

An ANOVA test was needed to make a comparison of the results of the evaluation of the differences in acquiring knowledge in logistics firms in Hanoi and neighboring provinces between the four subjects, including participants who are from 22 to 30 years old, participants who are from 30 to 35 years old, participants who are from 35 to 45 years old, and participants who are 45 years old or older. Table 5 shows that the sig Levene statistic of 0.077 is greater than 0.05, which means that the hypothesis of homogeneity of variance among the variable value groups (different ages) has not been violated. Table 6 shows that sig. is 0.088, which is more than 0.05, which indicates that there is no statistically significant difference in acquiring knowledge in logistics firms in Hanoi and neighboring provinces between the mentioned four groups of ages (Hoang & Chu, 2008; Hair et al., 2009; Hair et al., 2014).

Table 5. Test of Homogeneity of Variances

Descriptions	Levene Statistic	df1	df2	Sig.
AK				
Based on Mean	2.323	3	171	0.077
Based on Median	2.162	3	171	0.094
Based on Median and with adjusted df	2.162	3	164.425	0.095
Based on trimmed mean	2.251	3	171	0.084

Source: Prepared by the authors (2023) and SPSS software.

© 2024 The Authors

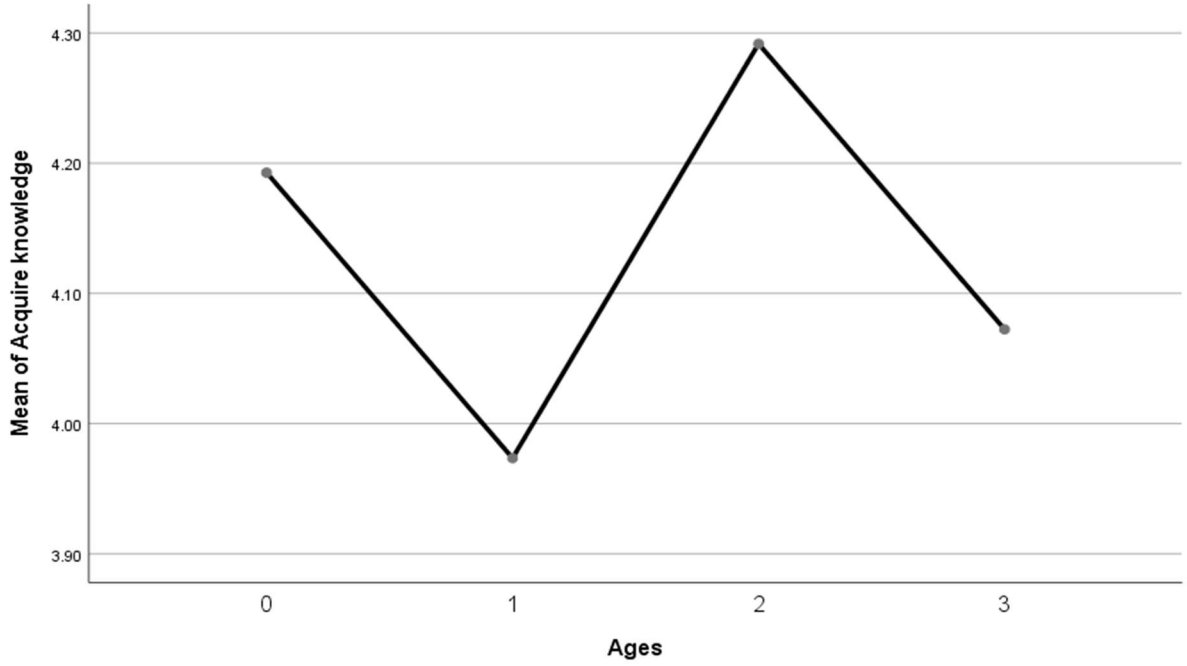
Table 6. ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
AK					
Between Groups	2.565	3	0.855	2.214	0.088
Within Groups	66.037	171	0.386		
Total	68.602	174			

Source: Prepared by the authors (2023) and SPSS software.

The relationship between acquiring knowledge in logistics firms in Hanoi and neighboring provinces - Ages

Next, the line graph shows the relationship between acquiring knowledge in logistics firms in Hanoi and neighboring provinces and each respondent's age (Figure 1). Figure 1 shows that this line tends to go down when the respondents' ages range from 30 to 35 years old and 45 years old or older. But this line tends to slope up when the respondents' ages range from 35 to 45 years old.



Source: Prepared by the authors (2023) and SPSS software.

Figure 1: The line graph shows the relationship between acquiring knowledge in logistics firms in Hanoi and neighboring provinces and each respondent's ages.

5. DISCUSSION AND IMPLICATIONS

Identifying customer needs and providing services according to those needs at maximum cost efficiency is the mission of a logistics firm. Customer service quality, from initial transactions with customers to the appropriate resolution of arising problems, is especially important to retain old customers and attract new customers. Customer service quality will contribute to improving customer satisfaction levels while enhancing the reputation of logistics firms.

Logistics firms carry out the process of additional circulation in the field of supplying goods and services for the needs of production and life. Logistics firms circulate goods created by

© 2024 The Authors

manufacturing firms and add service activities to satisfy customers, such as delivering goods fully, synchronously, promptly, at the right time, place, and price agreed in advance. Services are not only a means of improving the quality of consumer service but also a means of competing effectively with competitors to win customers, expand markets, and improve business performance. To do so, logistics firms must be customer-oriented, innovate all business activities, put customers at the center of their operations, and constantly improve the level of satisfying the increasing needs of consumers through service methods, reasonable prices, and customer service activities. To perform this function well, logistics firms need to link and coordinate with firms operating in other fields such as finance, banking, insurance, etc. to provide customers with the most perfect service. Due to their specialization in performing service activities, logistics firms can use all their strengths to help customers choose suitable products with different qualities and prices and design different types of products. Establish distribution channels to bring goods to consumers according to their requirements.

During the business process, logistics firms often face many difficult decisions in many activities, such as deciding to expand into new markets, deciding to build a competitive pricing strategy, etc. Decisions Lack of a proper basis can cause unwanted consequences, such as loss of revenue or loss of important opportunities. To avoid this risk, firms need to collect important data and information about the market as a basis for making decisions.

Market research plays an important role in the operations of most logistics firms when they want to enter new markets or launch new products and services. This process offers many benefits, including reducing risk, generating creative ideas, and narrowing the horizon. From there, it helps firms achieve high business performance.

Before a firm launches a new investment project or decides to participate in a joint venture, it needs to take time to carefully research the market situation, social needs, and relevant legal regulations and policies. In particular, understanding partners or competitors should also be emphasized. This includes learning about their advantages and disadvantages, pricing, marketing strategies, and their competitors' distribution systems. From there, this research information helps firms make informed and accurate decisions.

By observing customer behavior, logistics firms gain the most intuitive and realistic perspective, allowing them to create hypothetical situations and collect feedback from customers. Therefore, logistics firms will have better-prepared scenarios instead of having to predict problems through pure data.

Grasping customer needs is the process of understanding and meeting customer requirements, desires, and expectations for the products, services, or solutions that logistics firms provide. This requires logistics firms to collect information and clearly understand the target customer group, their problems, needs, and goals.

Logistics firms should perform activities such as market research, customer data analysis, direct interaction and communication with customers, monitoring market trends, building customer relationships, monitoring and evaluating results, using customer analysis tools, monitoring

© 2024 The Authors

competitor activities, using customer research techniques, and collecting customer feedback. Through this research and analysis, logistics firms can provide better solutions, increase responsiveness, and achieve customer satisfaction, thereby creating a competitive advantage and increasing sales.

Logistics firms analyze customer data based on available data about customers, including registration information, purchase records, customer feedback, and data from other marketing channels. From there, it helps logistics firms better understand customers' purchasing behavior, preferences, and needs.

Logistics firms should build strong and sustainable relationships with customers to understand their needs. Create opportunities for customers to interact with logistics firms through customer care services, customer events, social networks, or blogs. Acknowledge customer feedback and opinions to improve your firm's products or services.

For road transportation, logistics firms should start implementing sustainable activities such as converting to more efficient and environmentally friendly vehicles. Switching to electric vehicles that ensure less pollution could be the answer being sought. Logistics firms that invest in vehicles using electric fuel will benefit from a more effective and sustainable initial cost compared to using vehicles that pollute the environment.

Sea transport is one of the most effective forms of transport in logistics activities, thanks to freight rates that are 3–4 times cheaper than other transport alternatives. The carbon emission output from sea freight is many times lower than that of air transport and significantly reduces the impact on the environment. Therefore, sea transport plays an important role for logistics firms in reducing carbon emissions to ensure a sustainable supply chain.

Transportation technology is one of the solutions that logistics firms should aim for; it contributes to meeting the needs of logistics firms more effectively. One of those solutions is through the implementation of carbon imprinting software or route tracking and optimization software. This software allows logistics firms to calculate carbon emissions and emissions per vehicle fleet to predict the level of emissions into the environment. The information obtained from this technology then allows logistics firms to plan routes in a smarter and more environmentally friendly way while still ensuring supply chain and transportation needs are met.

Logistics firms evaluate routes that may encounter rough seas or high winds. This will reduce fuel consumption, allowing for fuel cost savings as well as reducing CO2 emissions into the environment. This also ensures firms use the most energy-efficient shipping solutions possible while also reducing shipping costs.

By complying with environmental regulations, sustainable logistics firms can rest assured that the supply chain not only meets government regulations but also helps limit negative impacts on the environment.

Applying new technology: Technology is increasingly advanced, including artificial intelligence, blockchain, IoT, and online. The development of these technologies creates opportunities for

© 2024 The Authors

further innovation in the logistics industry, from inventory management to supply chain management and tracking.

Limited human resources and training: The logistics industry needs human resources with in-depth knowledge and skills to meet general requirements. However, a big challenge is the lack of human resources and difficulties in training human resources.

REFERENCES

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate Data Analysis* (7th ed.). Upper Saddle River, NJ: Prentice Hall International.

Hair, J. F., Henseler, J., Dijkstra, T., Sarstedt, M., Ringle, C., Diamantopoulos, A., Straub, D., Ketchen, D., GTM, H., & Calantone, R. (2014). Common beliefs and reality about partial least squares: comments on Rönkkö and Evermann. *Organizational Research Methods,* 17(2), 182-209.

Hoang, T., & Chu, N. M. N. (2008). *Analyzing researched data with SPSS* (2nd ed.). Ho Chi Minh City, Vietnam: Hong Duc Publishing House.

Hult, G. T. M., Ketchen JR, D. J., Arrfelt, M. (2007). Strategic Supply Chain Management: Improving Performance Through A Culture Of Competitiveness And Knowledge Development. *Strategic Management Journal*, *28*, 1035-1052.

Kogut, B., & Zander, U. (1992). Knowledge of the firm, combinative capabilities, and the replication of technology. *Organization Science*, *3*(3), 383–397.

Spender, J. C., & Grant, R. M. (1996). Knowledge And The Firm: Overview. *Strategic Management Journal*, *17*, 5-9.

Suseno, Y., & Ratten, V.(2007). A theoretical framework of alliance performance: The role of trust, social capital and knowledge development. *Journal of Management and Organization*, *13*(1), 4–23.

Yli-renko, H., Autio, E., & Sapienza, H. J. (2001). Social capital, knowledge acquisition, and knowledge exploitation in young technology-based firms. *Strategic Management Journal*, *22*, 587–613.

Zhang, M., Letticea, F., Zhao, X. (2015). The impact of social capital on mass customisation and product innovation capabilities. *International Journal of Production Research*, 53(17), 5251-5264.

© 2024 The Authors