The Influence of ERP Implementation and Organization IT Strategy on Supply Chain Performance through Logistic Management : a Case Study of Food Industry in Thailand

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บทคัดย่อ—อุตสาหกรรมให้ความสำคัญต่อการดำเนินงานโดยระบบ ERP เพื่อประยุกต์ใช้ในการบริหารจัดการองค์กรในการเพิ่มประสิทธิภาพให้เกิดประโยชน์สูงสุดในการดำเนินงาน และเป็นการลดความซับซ้อนของข้อมูลจำนวนมากของแต่ละแผนก รวมไปถึงการตัดค่าใช้จ่ายที่ไม่จำเป็นซึ่งจะนำไปสู่ผลประโยชน์ระยะยาวขององค์กร การดำเนินงานโดยระบบ ERP และการวางกลยุทธ์ทางด้านสารสนเทศ จะต้องมีการ บูรณาการเพื่อสำหรับใช้งานให้มีประสิทธิภาพสูงสุดในการวิจัยครั้งนี้มีวัตถุประสงค์ที่จะศึกษาเกี่ยวกับผลกระทบของการดำเนินงานโดยระบบ ERP และการดำเนินกลยุทธ์ขององค์กรทางด้านสารสนเทศ บนประสิทธิภาพของห่วงโซ่อุปทาน

ผลการวิจัยเกิดจากการให้คะแนนจากทัศนคติที่เกิดจากการใช้ระบบ ERP และการวางกลยุทธ์ทางด้านสารสนเทศขององค์กรโดยใช้เป็นตัวแปรอิสระ โดยผ่านตัวแปรกลางคือการบริหารจัดการด้านโลจิสติกส์ ส่วนตัวแปรตามคือประสิทธิภาพของห่วงโซ่อุปทาน โดยใช้กลุ่มตัวอย่างคือกลุ่มอุตสาหกรรมอาหารในประเทศไทย ที่มีขนาดกลาง และขนาดใหญ่ จำนวน 325 บริษัท ตอบแบบสอบถามโดยตัวแทนที่เป็นผู้เชี่ยวชาญทางด้านไอทีของแต่ละบริษัท หลังจากนั้นนำข้อมูลที่รวบรวมได้มาทำการวิเคราะห์โดยใช้ SEM สำหรับตรวจสอบรูปแบบของความถูกต้องและความน่าเชื่อถือจากสมการโครงสร้างที่ถูกวางไว้เพื่อทดสอบรูปแบบของสมมุติฐานที่ได้วางไว้และผ่านเกณฑ์ด้านความสอดคล้องของข้อมูลเชิงประจักษ์รวมไปถึงสนับสนุนยืนยันผลของการศึกษาอย่างมีนัยยะสำคัญจากความสอดคล้องของน้ำหนักในสมการเชิงถดถอยในทุกสมมุตฐาน

จากการทดสอบสมมุติฐานพบว่าการดำเนินงานโดย ERP ไม่มีความสัมพันธ์เชิงบวกต่อประสิทธิภาพของห่วงโซ่อุปทานและการวางกลยุทธ์ทางด้านสารสนเทศในองค์กรพบว่ามีความสัมพันธ์เชิงบวกต่อประสิทธิภาพของห่วงโซ่อุปทาน นอกจากนั้นยังแสดงถึงความสัมพันธ์เชิงบวกทางอ้อมอย่างเท่าเทียมโดยผ่านการจัดการด้านโลจิสติกส์ ซึ่งชี้ให้เห็นว่าบริษัทที่ใช้ ERP ไม่ได้มีผลกระทบทางตรงใด ๆ ต่อประสิทธิภาพของห่วงโซ่อุปทานแต่มีผลกระทบทางอ้อม โดยผ่านตัวแปรกลางคือโลจิสติกส์ และในส่วนของการวางกลยุทธ์ด้านสารสนเทศในองค์กรนั้นมีผลกระทบทั้งทางตรง และทางอ้อมต่อประสิทธิภาพของห่วงโซ่อุปทาน โดยผ่านตัวแปรกลาง

คำสำคัญ: การดำเนินงานด้วย ERP, กลยุทธ์ด้าน IT ในองค์กร, ประสิทธิภาพของห่วงโซ่อุปทาน, การบริหารจัดการโลจิสติกส์

Abstract— Industries give importance to the Enterprise Resource Planning (ERP) system applying in the organizational management for the utmost effectiveness in the operation. This is to reduce the overlapping of a lot of information in each department

and help in the resources management and cut off the unnecessary cost that will lead to the organizational benefits in the long run. ERP implementation and Organization IT strategy in the food supply chain shall be integrated for the best effective use. The objectives of this research were to study on the impact of ERP implementation and Organization IT strategy over the Supply Chain Management Performance.

The attitude rating of ERP implementation and Organization IT strategy was used as the independent variable whereas the logistic management was the mediator variable and the dependent variable here was the supply chain management performance. There were 325 sample firms from IT leaders or IT professionals represented for the medium and large sizes of food industry in Thailand. The data as gathered from the researcher were analyzed using SEM for the model's validity and reliability determination. A structure equation model was placed here for the hypothesized model test and to assess for the total fit. It was confirmed by the results of the study the significant support from the goodness of fit and regression weight to every of hypotheses.

From the hypotheses testing, ERP implementation was found without the direct positive relationship with the performance of supply chain and Organization IT strategy was found the direct positive relationship with the performance of supply chain, In addition, it also presented the equally indirect positive relationship with the logistic management in which indicated that the firm shall implementation ERP and Organizational IT strategy when having good logistic management. This showed that ERP implementation and Organizational IT strategy did not have any direct effect on the supply chain management but must go through mediator respectively.

Keywords- ERP Implementation, Organization IT Strategy, Supply Chain Performance and Logistics Management

I. INTRODUCTION

One of the most important industrial businesses is food industry. It can be mentioned that the food here in is very concrete and crucial for human and other creatures as it can help them survive [1]. The food industries in many countries have recently expanded significantly. They have adopted various strategies such as supply chain management, logistics, information technology or cold chain to assist and achieve their management [2], it also includes Thailand. Thai food industry has increasing numbers of production and exportation in order to respond increasing amounts of domestic and international consumption. At present, Thai food services industry can have a good growth and a great potential in producing products for both export and domestic consumption. This is because of the reason that Thailand has a solid background in agricultural production as well as agriculturists are also specialized in doing agricultural activities. Furthermore, Thailand also has modern technology to develop product variations so that they can successfully meet the needs of the market.

The main food industry of Thailand are processed fishery group such as shrimp and tuna fish; processed grains and starches group, processed livestock group; processed fruits and vegetables; processed sugar group and other processed products domestically consumed such as milk, vegetable oil, animal feed and so forth. In terms of food industry trend, it is found that the trend of food importation is continuously increasing. During the past 10 years, the country's average import value are approximately 400 billion baht per year. Sixty percent of goods imported raw materials such as tuna, frozen seafood, wheat, wheat flour and bean pulp from animal feeds industry and other forty six percent imported directly consumed products such as vegetables, fresh fruit, meats and snack as well as food for patients. The export value of the Thai food industry is about 970,000 million baht, increasing 6.2 percent compared to 2014. This is because of satisfied economic conditions in partner countries including the USA, Japan and European Union and also increasing exportation of Thai food products to ASEAN region according to the collaboration of economic agreement. (Bureau of Logistics , Department of Primary Industries and mines Thailand) From the trend of severer food business competition, the food industry itself has to enhance their ability in all aspects to be ready to conduct business in changing ways in order that they can survive. Enhancements of the food industry can include is necessary. Moreover, participating into ASEAN is also another factor forcing the industry to develop and improve their enhancement and ability. Enhancement can include better management and strategies. At present, logistics and supply chain management is increasingly important and its role can improve efficiency of business operation [2]; reduce the cost of raw materials and production, increase efficiency of inventory, warehouse, storage, products shipping management and retain customers royal to the organization and service in long term [3]. Implementation of enterprise resource planning (ERP) assisting in the management of human resources can enhance operational efficiency of former supply chain, which starts from management of raw material delivered to process and products sent to the customer [4]. In adopting ERP into use, there are many factors including internal organization factors such as top management commitment; user involvement; project management; information quality and business, are needed to be considered so that the business can achieve its goals [5, 6] . When implement ERP is completely installed, the organization can then measure the performance of supply

chain management [7]. So that, the organization can determine the direction and strategy of the organization. In addition, there are 2 more variables to enhance the success of organization, these include cold chain and logistics which are the key tools to increase the value of products in the industry [8].

In the food industry, supply chain management has been used in ERP systems and supply chain management itself uses logistics module to help organization success especially in terms of distribution process, because for food products, there are many different procedures and processes ranging from raw materials to production, storage, distribution and delivery to customers [9]. So in the process of moving food products, logistics in terms of cold chain is necessary. The cold chain can assist to maintain the quality and standards of freshness and product duration which finally can add value to the ended products [10].

With its significance of logistics management towards business success, careful planning and preparation by using ERP systems should comply with well planning ranging from selection of carrier modes (transported by land, marine, air, rail, and pipeline procurement), transportation purchasing, shipment tracking system, delivery routes of transportation including returned routes, waste management and expiration[11]. Nevertheless, the planning should recently also comply with temperature variables in all process as well since the temperature now becomes more important [12]. Thus, the industry must evaluate the cost and break-even point [13] so that the organization can find appropriate technology and computer system with ERP system to apply into supply chain management in order to create the most beneficial to the transport system of the organization [6]. Recently, food industry sector in Thailand has expanded and is likely to be more important according to opening of free trade area. Various organizations need to adapt themselves in order to increase competitiveness capability in the market. One way to increase competitiveness can include implementation enterprise resources planning (ERP) system which it also encompasses supply chain management and logistics. ERP system is a system applying computer and information technology systems to help increase efficiency of business operations. ERP can help collect, analyze and present data which is essential to organizations. In other way, internal variable within the food industry can also be an indicator linking relationship between implementation of ERP and supply chain management. For example, top management commitment, user involvement and information quality can influence business performance of organization. To understand whether each organization in the food industry will be successful needs the link of supply chain management including logistics and cold chain with organizational variables is very interesting. Knowledge of this factor success can guide organization to make a decision-making to operate their business.

II. RESEARCH OBJECTIVE

- To examine the effect of ERP system and organization IT strategy on supply chain performance in the food industry business of Thailand.
- To examine the effect of ERP implementation and organization IT strategy on logistics management in the food industry business of Thailand.
- To investigate the effect of ERP implementation and organization IT strategy on supply chain performance through logistics management in the food industry business of Thailand.

III. RESEARCH FRAMWORK AND HYPOTHESIS

A. *Reseach Framework*

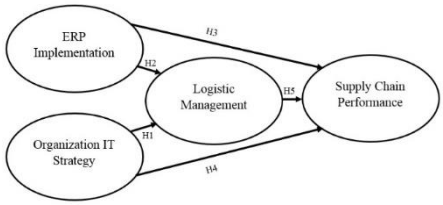

Figure 1. Research Framwork

B. *Reseach Hypothesis*

- H1: ERP Implementation has a positive effect on logistics management
- H2: Organization IT Strategy has a positive effect on logistics management.
- H3: ERP implementation has a positive effect on supply chain performance.
- H4: Organization IT strategy has a positive effect on supply chain performance.
- H5: Logistics management has a positive effect on supply chain performance.

IV. THEORY AND LITERATURE REVIEW

A. *ERP Implementation*

The large business organization that operates to deliver the product or service to customers; the activity has generated the business values and submitted the values to customers with the processes that can be broken into parts. Each part composed by the kind of any part of activities in the organization [14, 15]. Bringing technology into part of strategic development to help in the organizational management and operation is one of a choice to cope with the rising problems [16]. This is because of the organization becomes larger with the more complex management and a lot of information technology.ERP system is the information technology system of the organization that brings the concept and the

management approaches from the former organization to integrate with the core business into the systems such as recruiting, production, sales, accounting, and human resources management with the relationship and real time connection. While bringing ERP software into the operation, it requires for the implementation in order to study and layout the system to meet with the need of organizational operation for the appropriateness in the operation and the understanding of the real needs both on the amount and ability of the existing resources [17]. It should be the best coordination between ERP system, the resources strategic and the organizational process.

The implementation process of ERP system software shall be established and indicated in procedure to create understanding in the overview of any current work systems. This is to indicate the procedure that results directly to the customers' need or the organization goal. After that there will be the information gathering to state the objectives of each procedure and seek for the core of those procedures. Next step is the interview in order to point the details of each procedure. This information come from the real operators and will be analyzed to check whether which procedure requires for the improvement for the best effectiveness in the operation [18].

The operation by ERP system consists of Module that work on the core functions of the organization which are sales management, production management, purchasing management, accounting, financial, management accounting, and human resources management. Each module can work independently but connecting together with the information by get parameter to select the forms of business process or business rules that response to the organizational goals. ERP has the high capability module for the core work of business with variety in management and operation. It supports for the cross organizations task and for the growth and business expansion in the future [19]. It is flexible and its structure can be adjusted according to the changes in environment and economic conditions. It is also the standard information technology system which is an Open system that leads toward the effective coordination with other organizations.

B. Organization IT Strategy

At recent the business organizations process by bringing ERP technology to manage the organization form the effectiveness and increase the competitive advantage for the companies and to support for any changes in the economic and social environment including new technologies. To process the business strategy by using ERP system toward the organizational operation to cover in the activities of each division either internal or external of the organization thus, there are several factors in which can be estimated that ERP system installation whether it has the effectiveness. Also, it is the indicator whether the organization can make the best use of ERP system. Bringing ERP system to use in the operation management of each sub-unit to response to the need to complete the goal either in policy, objectives, and goals as required by the project management guideline in order to reform the relationship of any data from each unit to be in the same form [20].

Normally, the organizational management structure will divide by function of responsibility such as, accounting department, financial, marketing, sale, production and human resources. The management in each department will manage on any basis system that independent from each other with the methods to store and present the information in form of the division. The problem can result from the management that cannot consider on the overall picture of the organization therefore, it cannot be determined to make the analysis and solving the problem [21]. Project management is to consider the overall picture on the aspect of the operation, information conformance then becomes the key variable that can set whether how far the goal can be achieved. Therefore, communication to reduce the gap of mistake can result on the effectiveness of the organization in the operation and adding the higher competitive opportunities [22]. Organization has the suitable information technology that suite to use and meet with the needs of users by producing from the reality information that up to date and result from the reliable sources with the apparent meaning. There shall be the effectively accessing to the information technology with the easy forms of presentation and good quality and reach to the users on time. This conforms to the process of information technology measurement that can be divided into two steps. First, the information technology production step and second the step to access into information technology. There are three main factors toward information technology quality 1) acknowledgement of the users, 2) the nature of the information technology 3) information technology accessing process [23]. However, information technology can change according to the context and objective of use. Therefore, the information technology production shall address clearly who will be the user and use it for what/ the good characteristic of information technology shall be considered on at least 4 dimensions which are 1) the dimension of content that precise and reasonably complete with the conformance to the task and full meaning in itself, reliable, and can be checked for the accuracy. Also, there shall be the processing procedure and information analysis that correct and appropriate [24]. 2) On the aspect of time, it should arrive to the user on time; it should be up to date and present for us to see the trend or development of information technology in time period. 3.) On the aspect of presentation form, it must be clear and simple to understand with the form and details that suite with the group of users and not too high cost [25]. 4.) On the process to access into information

technology, there shall be easy access into any database that must be connected and safe [26].

Therefore, to get the good information technology system, we shall consider at least on the above four dimensions and clearly state about the user whether who bring it to use for what in which conform to the information technology management process. In which it shall consider on the need, the correctness of information and easy access, convenience, safe, and present the information that suit with the needs of users.

C. Logistics Management

Transporting products and raw materials between the producers and consumers is one of the crucial steps in production process. Cost becomes the critical part in the production process. The rising cost is so importantly unavoidable for price setting. The effective products transportation and distribution can partly help reducing the cost of production and product price [27]. The effective transportation and distribution of products will partly reduce the cost of production and products price in which directly affected on the consumers and country's economics. Understanding the transportation principle and the raw materials quality preservation according to cold chain in food and beverage industry will facilitate for business completive advantages [28]. At present, the food and beverage industry in Thailand tends to enlarge a lot with the highly competitive condition either in importing or exporting. There are more transportation of raw materials and products to support for the order from customers. Thus, the industrial organization still required to consider on the characteristics of the transporting items which are food and beverages with the expiration date. Therefore, Cold Chain then comes in to have the crucial role in the transportation. Bringing logistics to apply results from the products distribution which is the transportation and inventory management from the processes of production until the consumption. Distribution can also divided into the distribution for purchasing, production and for sales. In general, it is related to three types of work which are warehouse inventory, products packaging, and products transportation. The scope of logistics that be the role in products transportation begins from raw material transportation into the manufacturing and pass through the distributors, sellers until the consumers. It can be clearly seen on the values added to the products when moving from one to another procedure [29]. Logistic management system is the management on any tasks in the activity system of logistic for the operation according to the designed in which must mixing between the engineering and management knowledge. That is to manage on transportation, inventory management and warehouse controlling system, order management, raw materials purchasing, recruiting and sellers evaluation, planning for the needs of packaging, and human resources management. Information from these operational managements can be quickly processed and conform to all management aspects by bringing the organization information technology to use.

Therefore, the main goals for information technology management when receiving any information from the logistic system management of the organization can be separated into two things. Firstly, managing to have the information technology in the required forms in required the place and time and there must be the regularly coordination to seek for the information technology that meets with the need to use. Secondly, managing for the reliable and up to date information technology system with no error; therefore, technological tools are bringing to use to manage information technology system according to the main goal such as ERP, EDI, and RFID [30].

D. Supply Chain Performance

Supply Chain Management is the combination between the business procedures from the raw materials supplier through the production procedure or industrial production to the consumers.[31] These procedures have passed along the information technology and products together and lead to the values added to those products before presenting to the consumers. It can be seen that the scope of Supply Chain management system has covered the entire industrial system. Supply Chain has the critical role toward the companies that emphasize on the advantages in business competition. Company can add the values to the overall products of the company by using the resources throughout the company.[32]

V. RESEARCH METHODOLOGY

A. Research Sample Assumption

Sample size [33] suggested two assumptions for a research sample size. These are guided by conceptual and practical considerations that suggest an adequate sample size can be obtained for the number of variable to be examined. As a general rule, the minimum sample size should be at least five time that of the number of observed variable to be analyzed, and the more acceptable sample size would be a 20:1 ratio. According this theory, the study initially targeted the population with approximately 320 of food industry in Thailand.

B. Research Tool

The Questionnaire is a tool for gathering data from search sample. The Questionnaire was constructed from review of the literature and designs foe meet the research object. The questionnaire comprise of four parts: ERP implementation, Organizational IT strategy Logistic management and Supply chain management Performance. The question use Likert 7 scales to receive the attitude from respondents.

C. Validity and Reliability

1) Content Validity Testings: The content validity was used for assessing the accuracy of the questionnaire. The questionnaire was assessed by five experts in the field of information technology by applying the IOC (Index of item objective congruence) method. The results from the assessment were used to adjust and improve the accuracy of a question .The discriminate validity test by the factor analysis. Usually, there are many questions representing each factor or variable. If the questions represent different variable, it should summarize into different groups by factor analysis. Then, the convergent validity test by the correlation statistic. If the questions represent the same variable, it must have correlation among them.

2) Reliability Testing: The research test the internal consistency of reliability by the Cronbach's alpha after designing the questionnaire. The score ranges from 0 to 1 and the acceptant of the score of this research are more than 0.7.[34] This research is designed to test reliability two times. First before sampling, the 30 questionnaires try out to test and adjust the term if the score is less than 0.7. The second, reliability testing will treat again when all sampling data complete collecting. After model accepted, the result of regression weight will consider for hypothesis testing. If regression weight are significant, it will indicate that the variable at the beginning affect to the end arrow.

VI. Research Result

A. Convergent Validity

This researchers measured Convergent Validity with Confirm Factor Analysis. If the research model is converge, the value of factor loading should be greater than 0.6.[35] The Figure 2 shows the construct model for Convergent Validity testing.

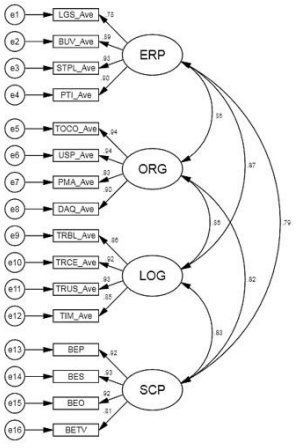

Figure 2. Factor Loading

TABLE I. Factor Loading, Critical Ratio, R^2, Composite Reliability, Average Variance Extracted. (ERP)

Variable	Factor Loading	t	R^2	Composite Reliability	Average Variance Extracted
LGS_Ave	0.78	18.8	0.61	0.93	0.76
BUV_Ave	0.89	22.9	0.78		
STPL_Ave	0.93	24.2	0.85		
PTI_Ave	0.90	23.5	0.81		

TABLE II. Factor Loading, Critical Ratio, R^2, Composite Reliability, Average Variance Extracted. (ORG)

Variable	Factor Loading	t	R^2	Composite Reliability	Average Variance Extracted
TOCO_Ave	0.94	28.6	0.89	0.96	0.86
USP_Ave	0.94	28.4	0.88		
PMA_Ave	0.93	22.2	0.68		
DAQ_Ave	0.90	26.3	0.81		

TABLE III. Factor Loading, Critical Ratio, R^2, Composite Reliability, Average Variance Extracted. (LOG)

Variable	Factor Loading	t	R^2	Composite Reliability	Average Variance Extracted
TRBL_Ave	0.86	29.5	0.74	0.93	0.79
TRCE_Ave	0.92	25.2	0.84		
TRUS_Ave	0.93	25.8	0.87		
TIM_Ave	0.85	22.1	0.71		

TABLE IV. Factor Loading, Critical Ratio, R^2, Composite Reliability, Average Variance Extracted. (SCP)

Variable	Factor Loading	t	R^2	Composite Reliability	Average Variance Extracted
BEP	0.92	26.0	0.84	0.94	0.82
BES	0.93	26.3	0.85		
BEO	0.92	26.1	0.84		
BETV	0.81	20.9	0.66		

B. Discriminant Validity

This process is the testing of the directness on the aspect of discriminant to confirm the right membership of the observed variables and latent variable. The two testing methods of covariance value observation between the latent variables from CFA model and testable coefficient

between the observed variable were used. By considering the Covariance values between the latent variables in CFA model that should not be more than .85 and testable to figure out the relationship between the observed variables with the only high relation within group of latent variables and with the low relation values with the observed variable between groups of latent variables.

C. Multicollinearity Testing

Due to the structural equation model is the base on regression analysis, thus this research must go through Multicollinearity testing. The assumption of regression analysis has a limit that each variable should not highly correlate with other. The Tolerance and Variance Inflation Factor (VIF) measurement used for testing. The Tolerance should more than 0.1 or VIF should less than 10 (VIF = 1 / Tolerance) for to accept that they have no multicollinearity problem. The result of multicollinearity of ITI testing with other has shown in table V.

TABLE V. MULTICOLLINEARITY TESTING

Variable	Collinearity Statistics	
	Tolerance	VIF
Business Vision (BUV_Ave)	0.238	4.199
Strategy Planning (STPL_Ave)	0.175	5.701
Process and Technical (PTI_Ave)	0.198	5.050
Top Management Commitment (TOCO_Ave)	0.146	6.859
User Participation (USP_Ave)	0.149	6.692
Project Management (PMA_Ave)	0.264	3.782
Data Quality (DAQ_Ave)	0.197	5.084
Traceability (TRBL_Ave)	0.206	4.854
Transparency (TRCE_Ave)	0.183	4.454
Trust (TRUS_Ave)	0.170	5.887
Time (TIM_Ave)	0.193	5.170
Planning management (BEP)	0.187	5.358
Resource management (BES)	0.186	5.381
Operation management (BEO)	0.183	5.460
Transportation and Value added (BETV)	0.222	5.508

D. The Construct Model

This model was constructed to measure that ERP implementation and Organization IT Strategy has a positive effect on Supply chain management performance and then to measure that ERP implementation and Organization IT Strategy has a positive effect on Supply chain management performance through Logistic management. The finding shows that ERP implementation and Organization IT Strategy affects to Supply chain management performance through Logistic management.

Figure 3 presents the results of the construct model tested. The measurement model for the three latent constructs was assessed by confirmatory factor analysis, in this research, the goodness of fit shown as follows:

Chi-Square = 74.818, df = 52, CMIN/df = 1.493, GFI = 0.966, AGFI =0.941, NFI = 0.985
, CFI = 0.995, RMR = 0.026, RMSEA = 0.037
(PCLOSE = 0.884) and Hoelter = 341 (0.01)

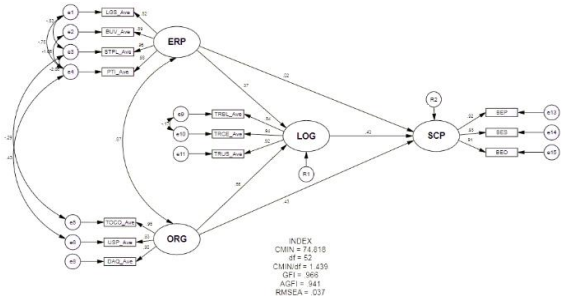

Figure 3. Construct Model

1) Direct and Indirect Effect: The standars indirect, direct and Total effect of model show on Table VI.

TABLE VI. THE STANDARD INDIRECT, DIRECT, AND TOTAL EFFECT

Dependent Variable	R^2	Direct Effect			Indirect Effect			Total Direct Effect		
		ERP	ORG	LOG	ERP	ORG	LOG	ERP	ORG	LOG
ERP										
ORG										
LOG	0.27	0.37	0.55					0.37	0.55	
SCP	0.41	0.02	0.43	0.43	0.16	0.25		0.18	0.68	0.43

2) Hypothesis Testing .

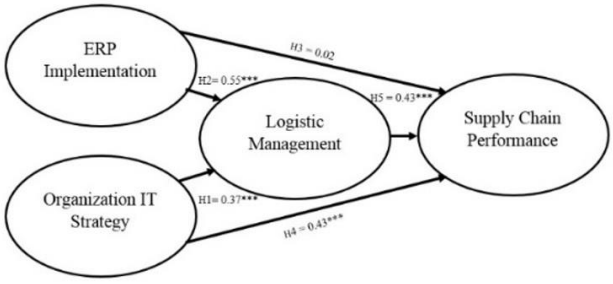

Figure 4. Hypothesis Testing

Considering figuring 4, the result of hypothesis testing show as follows:

- H1: ERP Implementation has a positive effect on logistics management This hypothesis was supported with standard regression weight is 0.55
- H2: Organization IT Strategy has a positive effect on logistics management. This hypothesis was supported with standard regression weight is 0.37
- H3: ERP implementation has a positive effect on supply chain performance. This hypothesis was not supported with standard regression weight is 0.02
- H4: Organization IT strategy has a positive effect on supply chain performance. This hypothesis was supported with standard regression weight is 0.43
- H5: Logistics management has a positive effect on supply chain performance. This hypothesis was supported with standard regression weight is 0.43

VII. CONCLUSTION

This research aims to study to test the influence of ERP system implementation and Organization IT strategy toward the Supply chain management performance with the logistic management variable as the mediator that comes to have role over the Supply chain management performance according to the assumptions made on H1 ,H2, H3, H4 and H5. The investigation will be done with the leading companies in food industry group of Thailand by 325 medium and large sizes companies are selected. From the hypotheses testing in Figure 4 and effect on Table VI, it is found that ERP implementation and organizational IT Strategy in food industry with the Supply Chain Management performance shall consider on the importance of Logistic management factors regarding traceability,transparency, trust and time management for the transportation process However, if food industry pays more attention on the ERP implementation and organizational IT Strategy under the module of logistic management it will result better for the organizational Supply Chain Management performance. In this case, the research has conformed and supported on further study of ERP implementation and organizational IT Strategy toward supply chain management performance in the future.

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