

# An Information System Model for Online Driver's License for Department of Land Transport in Thai Supply Chain

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**Abstract**—The chapter aim to develop an information system model for online driver's license for department of land transport in Thai supply chain and an evaluation of the model. Samples are ten experts in the field of information system and supply chain. Ten experts are selected by purposive sampling method. The obtained data are analysed using mean and standard deviation. The research result demonstrates the model consists of five elements namely main components, Supplier, Department of land transport, Finished person, Customers. The data analysed by using arithmetic mean and standard deviation an information system model for online driver's license for department of land transport in Thai supply chain using Back-Box technique. The results from ten experts have evaluated the model and commented that the developed model showed high suitability which mean The model can develop information system,

**Keywords**— *Supply Chain Information System Model, Curriculum Management, Project Production the New Breed of Graduate for Higher Education in Thailand*

## 1. Introduction

Anyone planning to drive a car in Thailand must apply for a Thai driver's license. This is the only way to ensure that you are legal to drive in the country and fully covered by your car insurance. It can be used as a government-issued ID card. Also, a Thai driver's license can be obtained in one day for him, costs a few hundred baht, and is valid in 10 ASEAN countries. To obtain a Thai driver's license, you must be at least 18 years of age, in good physical and mental condition, and hold a valid non-immigrant visa. You need to prove that you live and work in Thailand or live in Thailand on a retirement visa, but some people can get a Thai driver's license on a tourist visa, but they can get a driver's license reported needing to travel to [21] Application of supply chain management

information system concepts. This is because companies need to be highly competitive both domestically and internationally. To remain competitive, industry organizations are Having employees with the knowledge, skills and abilities to work efficiently to improve performance. Therefore, organizations must have sufficient information and resources to add value and meet customer demands. The supply chain management process is therefore a critical process that supports the entire system of activities of an organization from upstream to downstream. [1] Thus, the researcher had an idea to develop an information system model for online driver's License for department of land Transport in Thai supply chain.

## 2. Related work

2.1 Supply chain management needs to consider various elements. Which has a relationship between various organizations with a clear goal of reducing the operational process of the system Increase service levels leading to efficiency Meet the needs of customers In general, the supply chain consists of important points, namely 1. Suppliers mean those who send raw materials to service units such as producing quality graduates to society etc. 2. The unit (Manufacturer) means the person who is responsible for transforming the raw materials received from the supplier. To have higher value 3. Distribution Center (Distribution Centres) means the point that serves to distribute products to the consumer or the customer at the centre. One product distribution may have products from many agencies, such as higher education institutions. There will be graduates graduating from many institutions. 4. Retailers or customers means the end of the supply chain. Which is where the products or services must be used until the value is

exhausted and without adding value to that product or service.[20]

Chansamut& Piriyasurawong( 2014) said that conceptual framework of supply chain management Information system for curriculum management based on Thailand Qualifications Framework for Higher Education The objectives of this research are (1) to synthesize a conceptual framework of supply chain management information system for curriculum management based on Thailand Qualifications Framework for Higher Education; and (2) to evaluate the conceptual framework of supply chain management information system for curriculum management based on Thailand Qualifications Framework for Higher Education. The research sample totalling 10 experts consisted of five experts on supply chain management, two experts on curriculum, and three experts on information technology. The employed research instrument is a questionnaire. Statistics employed for data analysis are mean and standard deviation. The research methodology consisted of six phases: (1) the studies and syntheses of related documents, research studies, and articles; (2) the drafting of preliminary conceptual framework; (3) the identification of experts; (4) the development of an evaluation form to assess appropriateness of the conceptual framework; (5) the data collection and analysis; and (6) the final improvement of the conceptual framework based on suggestions of the experts.

Research findings show that the synthesized conceptual framework of supply chain management information system for curriculum management based on Thailand Qualifications Framework for Higher Education comprises four main components, namely, Suppliers, University (Manufacturer), Education Customers, and Consumer. Evaluation results by the experts show the evaluation rating mean of 4.07 with standard deviation of 1.10 indicating that the conceptual framework is considered to be at the good level. Furthermore, evaluation results of appropriateness for sub-components are as follows:

1. The appropriateness rating mean for sub-components of the Supplier component is 4.15, which can be interpreted to be at the good level.
2. The appropriateness rating mean for sub-components of the University component is 4.20, which can be interpreted to be at the good level. This is because the University component contains the sub-components at the decision making level of the educational supply chain.
3. The appropriateness rating mean for sub-components of the Education Customers component is 4.20, which can be interpreted to be at the good level. This is because the Education Customers component contains the sub-components of direct service receivers.

4. The appropriateness rating mean for sub-components of the Consumer component is 4.10, which can be interpreted to be at the good level. This is because the Consumer component contains the sub-component of customers as the end-of-supply chain process that affect the quality of graduates to be delivered to the society.

The overall evaluation result for the synthesized conceptual framework of supply chain management information system for curriculum management based on Thailand Qualifications Framework for Higher Education shows the overall rating mean of 4.14 and standard deviation of 1.00, which means that the synthesized conceptual framework is appropriate at the high level and can be appropriately applied in actual work settings. [1]

Supply chain management is the integration of key business processes from the end user to the original supplier to provide customers and products, services, and information that add value to them. Other interested parties [19]

### 3. Research Methodology

The conceptual framework about an information system model for Online Driver's License for Department of Land Transport in Thai supply chain. , As seen in figure 1.

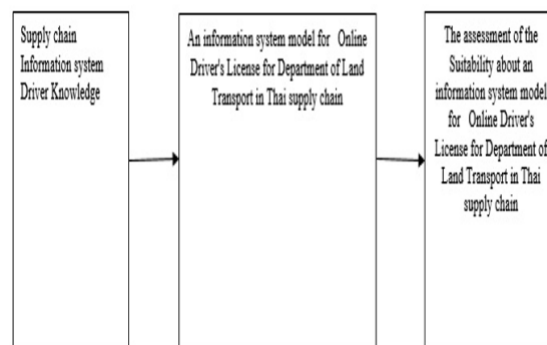


Figure 1. conceptual framework

### 4. Methodology

4.1 Relevant papers and research works are studied, analysed, and synthesized to formulate a concept of an information system model for Online Driver's License for Department of Land Transport in Thai supply chain.

4.2. An information system model for Online Driver's License for Department of Land Transport in Thai supply chain is developed based on the data obtained from the research study used in the formulation of the model development concept.

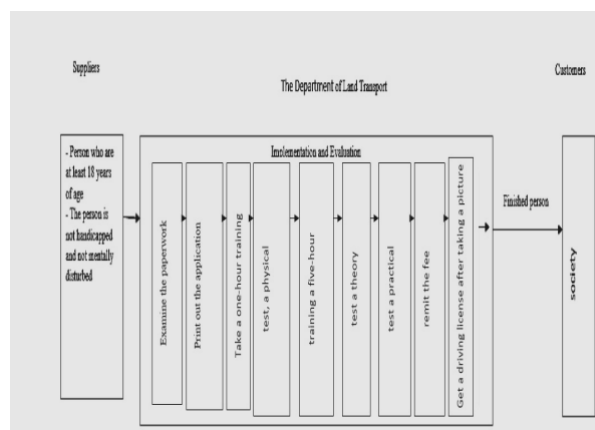
4.3 An information system model for Online Driver's License for Department of Land Transport in Thai supply chain is presented to expert for consideration and modified it as guided.

4.4 Development of a questionnaire for the experts to evaluate the model's suitability .

4.5. Evaluate an information system model for Online Driver's License for Department of Land Transport in Thai supply chain. The five Likert rating scales were used to determine the study's statistical methods, which included rating means and standard deviation.

## 5. Research Findings

Research findings about an information system model for Online Driver's License for Department of Land Transport in Thai supply chain are presented in Figure 2



**Figure 2:** An information system model for Online Driver's License for Department of Land Transport in Thai supply chain

### 5.1 Suppliers

Suppliers are people who are at least 18 years old, are not disabled, and do not have mental health issues. Users can use the computer system that can process and store the data systematically to submit an application for admission.

### 5.2 Department of Land Transport

Service provider is what the Agency of Land Transport means. It fulfils the responsibility of converting raw materials into final goods. In each action, the Department of Land Transportation will carry out and evaluate its duties as a person. Examine the paperwork, Print out the application. Take a one-hour training, test a physical, training a five-hour, test a theory test a practical, remit the fee, Get a driving license after taking a picture.

### 5.3 Finished person

Finished person refers to someone who is competent, especially Take a one-hour training, a physical test, a five-hour training, a theory test, a practical test, remit the fee, Print a driving license after taking a picture.

### 5.4 Customers

Customers refer to the model's end-of-process element, which is the society. [1],[2],[3],[4],[5],[6],[18],[19] and [21]

**Table 1:** Results for evaluation of an information system model for Online Driver's License for Department of Land Transport in Thai supply chain

No	Evaluation Lists	$\bar{X}$	S.D.	Suitability
1	Main components	3.62	0.75	high
2	Suppliers	3.60	0.69	high
3	The department of Land Transport	3.60	0.51	high
4	Finished person	3.70	1.15	high
5	Customers	3.70	0.67	high
	Total	3.64	0.76	high

Table 1 shows the experts' conclusion that an information system model for online driver's License for Department of Land Transport in Thai supply chain is highly appropriate ( $\bar{X} = 3.64$ , S.D. = 0.76).

## 6. Conclusion

An information system model for Online Driver's License for Department of Land Transport in Thai supply chain is appropriate at the high level development which mean that It can develop information system .

## 7. Discussion

According to evaluation an information system model for Online Driver's License for Department of Land Transport in Thai supply chain is considered to be high appropriate ( $\bar{X} = 3.64$ , S.D. = 0.76), and the design was corresponds to the research of Chansamut and Piriyasurawong has studied and information model for educational management in supply chain [1] In addition, with the study of chansamut suggesting that supply chain and information system also. [2],[3],[4],[5],[6],[7],[8],[9],[10],[11],[12],[13],[14],[15],[16],[17]

## 8. Recommendation

An information system model for Online Driver's License for Department of Land Transport in Thai supply chain is considered to be high appropriate if possible it should create database for the developed model.

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