

Digital Supply Chain Model for Humanitarian Management in Thailand

Artaphon Chansamut

*Office of Dean, Faculty of Home Economic Technology, Rajamangala University
of Technology Krungthep, Thailand*

artaphon.c@mail.rmutk.ac.th

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Abstract—The purpose of paper were to study and to evaluate digital supply chain model for humanitarian management in Thailand. The samples in the research study consisted of ten purposively selected experts consisted of ten experts on supply chain management, five experts on Digital Technology, Data were analysed by arithmetic mean and standard deviation. The research findings model eight elements namely main components, Donors, Beneficiaries, Suppliers, Humanitarian organizations, Consumers aid Recipients Satisfaction and Feedback. The ten experts agree that digital supply chain model for humanitarian management in Thailand was high suitability that mean digital supply chain model for humanitarian management in Thailand to may be appropriately applied in support the tasks.

Keywords— *Digital Supply Chain Model, Humanitarian Management T in Thailand*

1. Introduction

At present, Thailand is a country rich in natural resources, which have played a significant role in supporting local livelihoods and driving economic growth. Forests, watersheds, marine environments, and mineral resources have all been instrumental in supporting the Thai manufacturing, export, and tourism industries. However, rapid economic development over the past several decades has often occurred through the unsustainable exploitation of these natural resources. Economic priorities have often taken precedence over conservation in many cases. Thailand faces increasing environmental degradation in many regions, including the loss of biodiversity and declining wildlife populations, deforestation, desertification, water scarcity, climate change, and air and water pollution. [8] Especially in Thailand, every province experiences flood disasters. Researchers recognize the importance of humanely applying care and digital concepts. It works efficiently and can meet the demands of the 'beneficiaries'. Researchers therefore had the idea to study a digital supply chain model for humanitarian management in Thailand [1],[2],[3],[4],[5],[6]

2. Related work

2.1 Supply Chain Management
Kham Nai (2012) said that education 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 Centers) means the point that serves to distribute products to the consumer or the customer at the center. 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.

Douglas and Matias (2017). Supply Chain Management is the integration of key business processes from end user through original suppliers that provides products, services, and information that add value for customers and other stakeholders.

Felea and Albastroi, (2013) suggested the business enterprise networks include manufacturers, raw material, suppliers, transportation, providers, wholesalers, retailers as well as other intermediaries including customers. Verma and Boyer (2010) pointed out that business organizations in the supply chain will work together to turn raw materials into products and deliver to customers. between organizations which will be linked in both physical, data and money circulation.

Chansamut and Piriyastrawong (2014) suggested 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 consists of six phases: (1) research and synthesis of relevant documents, research studies and articles; (2) development of a preliminary conceptual framework; (3) Identification of Experts. (4) development of an evaluation form to assess the adequacy of the conceptual framework; (5) Data collection and analysis. (6) final refinement of the conceptual framework based on expert suggestions;

The study results indicate that an integrated conceptual framework of a supply chain management information system for curriculum management based on the Thai Qualifications Framework for Higher Education includes suppliers, universities (manufacturers), educational customers, and consumers. It shows that it contains four main components: Expert evaluation results show an average rating of 4.07 with a standard deviation of 1.10, which suggests that the conceptual framework is at a good level. In addition, the validity evaluation results of the subcomponents are as follows.

1. The average adequacy rating for the subcomponents of the supplier component is 4.15, which can be interpreted as a good level.
2. The average value of validity evaluation for the subcomponents of the university component is 4.20, which can be interpreted as a good level. This is because the University component includes the decision-making level subcomponent of his Chain of Educational Supply.
3. The average adequacy rating for the subcomponent of the Education Customer component is 4.20, which can be

interpreted as a good level. This is because the Education Customer component contains a Direct Service Recipient subcomponent.

4. The consumer component's subcomponent validity rating average is 4.10, which can be interpreted as a good level. This is because the consumer component includes the customer subcomponent as an end-of-supply chain process that influences the quality of graduates delivered to society.

The overall evaluation result of the Integrated conceptual Framework of supply chain management information system for curriculum management based on the Thai higher education qualification Framework shows an overall evaluation average of 4.14 and a standard deviation of 1.00, indicating that the integrated conceptual framework high level and practical application.

Digital and supply are essential procedures for assisting the educational system in all activities, from upstream suppliers to downstream customers. This enables businesses to quickly assess their supply chains and digitization to make sure they are operating according to set strategies. Suppliers and customers of manufacturing made up the process.

3. Research Methodology

3.1 Analyzing and synthesizing documents and previous research related to elements of a digital supply chain model for humanitarian management in Thailand

3.2 Interview 10 experts for study a digital supply chain model for humanitarian management in Thailand

3.3. Models are developed based on data received from experts

3.4 The model will be submitted to experts for review and amended in accordance with their guidance.

3.5 Forms for evaluating the suitability of the digital supply chain model for humanitarian management in Thailand i.e. Key Components, Donors, Beneficiaries, Suppliers, Humanitarian Organizations, Consumer Assistance Recipients, Satisfaction and Feedback and submit it to 10 experts for evaluation. To get an opinion on the validity of the model, we analyzed the expert responses to find the mean and standard deviation.

4 Research Findings

Research findings digital supply chain model for humanitarian management in Thailand in figure 1 as shown below.

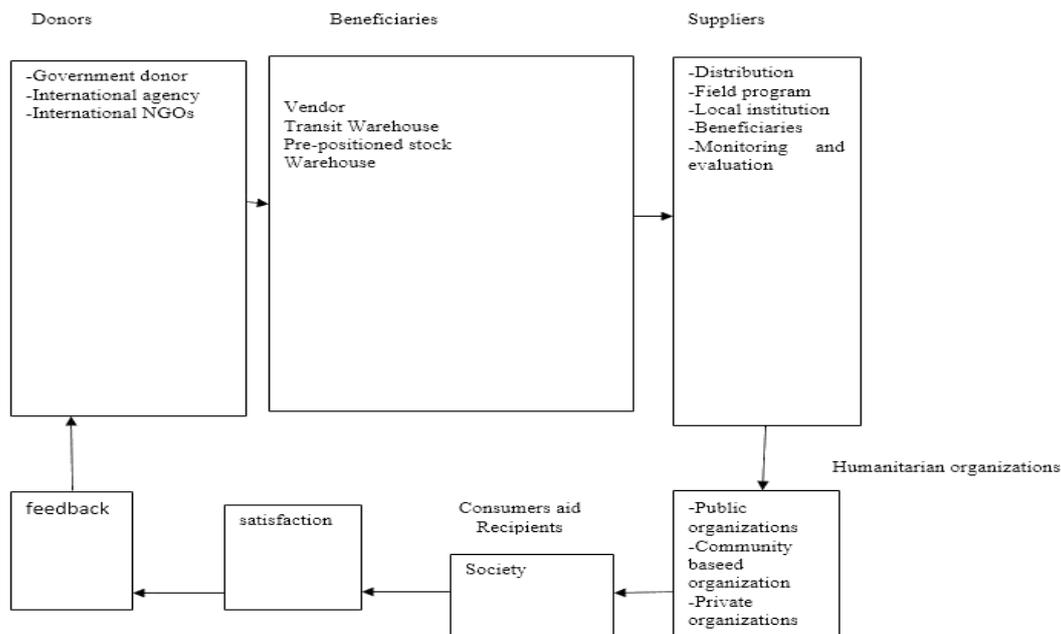


Figure 1 : Digital supply chain model for humanitarian management in Thailand

Digital supply chain model for humanitarian management in Thailand is the flow of services Digital supply chain model for humanitarian management in Thailand is benefit flow, Supply, data and subsidizing among different units of benefactors, recipients, suppliers and helpful organizations to supply physical help to customers. Digital supply chain model for humanitarian management in Thailand is called the method of arranging, conveying and overseeing help in an successful and cost-effective manner.i.e., materials, products, administrations, reserves, data, drugs, clothing, nourishment, etc., from the point of utilization, expecting to meet a require for help. offices, areas, stock administration, transportation, etc.) and moved forward customer fulfillment. [1],[2],[3],[4],[5],[6],[7] and [13]

Table 1: Results for evaluation of model by 10 experts comprising 5 experts on supply chain management, 5 experts on digital Technology are shown in Tables 1 below:

No	Evaluation Lists	\bar{X}	S.D.	Suitability
1	Main element	3.61	0.77	High
2	Donors	3.63	0.78	High
3	Beneficiaries	3.67	2.36	High
4	Suppliers	3.64	0.71	High
5	Humanitarian organizations	3.63	0.72	High
6	Consumers aid Recipients	3.70	0.48	High
7	Satisfaction	3.60	0.84	High
8	feedback	3.70	0.16	High
	Summary	3.64	0.85	High

Table 1, The experts found that digital supply chain model for humanitarian management in Thailand is highly appropriate ($\bar{X} = 3.64$, S.D. = 0.85).

5. Discussion

Digital supply chain model for humanitarian management in Thailand is considered to be high appropriate ($\bar{X} = 3.64$, S.D. = 0.85) and the design was corresponds to the research of Chansamut and Piriyasurawong has studied supply chain and information system about educational [2] In addition, with the study of chansamut suggesting that supply chain and information system also. [3],[4],[5],[6] ,[7]

6. Conclusion

In conclusion, Digital supply chain model for higher certificate management in Thailand shows the overall rating mean of 3.68 and standard deviation of 0.59, which means that Digital supply chain model for higher certificate management in Thailand is appropriate at the high level and can be appropriately applied in support the tasks.

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