

# Supply Chain Management System Model in Digital for Electric Power Management in Thailand

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**Abstract**—The article was conducted to study and evaluate supply chain management system model in digital for electric Power management in Thailand. The samples in the research study consisted of ten purposively selected experts consisted of five experts on supply chain management, five experts on Digital Technology, Data were analysed by arithmetic mean and standard deviation. The research findings model ten elements namely main components, Suppliers, Power plant generates electricity, Substation, Transmission, Substation, Power Lines satisfaction, Return and consumers. The assessment supply chain management system model in digital for electric Power management in Thailand using Black-Box technique and The results from experts agreement supply chain management system model in digital for electric Power management in Thailand was a high level and can be appropriately applied in actual work settings.

**Keywords**— Supply chain management system model in digital, electric Power management, Thailand

## 1. Introduction

Power Development Plan are required to standardize control supply framework soundness and obligation, to serve higher request on control in all parts of the nation as well as to productively interfacing residential and abroad control plants to zap producing specialist of Thailand is power framework. Control supply and enhancement or alter of hardware to preserve progression of control supply and In the mean time control supply will be a part in each perspectives of individuals life as well as organizational life. Thai Individuals require control to run their homes, cars, computers, etc. To be able to control is crucial to today's society. [19] The concept approximately supply chain administration and computerized is connected to an electric control . It'll be discretionary, agreeing to the criteria or the imperatives within the community's resources and innovation. Since the trade ought to be profoundly competitive due to progressively tall competitions from both inside

and exterior the nation. In arrange to be profoundly competitive, organizations within the division ought to have faculty with information, capacity and skills who can work effectively to extend yield and items. The organizations, subsequently, ought to have adequate data and assets to extend their values and react to the request of their clients. In this way, the supply chain administration handle may be key handle to back the organization's entirety exercises framework from upstream to downstream. It empowers the organization to expeditiously check the data framework to guarantee that the organization works easily and viably based on the decided methodologies. [1] The researcher has decided to study and evaluate supply chain management system model in digital for electric Power management in Thailand.

## 2. Related research

Ref. [20] refers that The deployment of power management systems (PMS) for generating electricity on ships, particularly tanker ships, is expanding. As the primary electrical provider for all electric equipment. The system contains a role to operate and monitor all generators aboard the ship. The rate of the load itself, which would also be read in the PMS, determines how much total load is given by the generator. It helps the operator choose how many turbines to run, either concurrently or separately, to provide the required power. It is vital to separate these loads into important and unnecessary burdens. A group will cover the maximum load at 306.67 kw under the conditions that will have an influence on the generators' efficiency. only offers the same quantity of electricity when used at 253.88 kw of maximum load. The power generators would provide the full demand of 306.6 kw by using only 52.72 k of generate electricity in the worst case scenario (overall parallel operation effectiveness at 70%). [20]

A digital in supply chain is a tool for managing electricity and has the capacity to efficiently and affordably deliver services and information that

customers value. A supply chain and digital are used to coordinate an organization's operations with those of its suppliers and clients, ensuring that the goods and services it delivers meet or exceed client expectations. So, it was appropriate to examine electricity from a supply chain viewpoint in order to gauge and enhance its capacity to serve its.[7]

### 3. Research Methodology

3.1 Study the documents and research relevant about supply chain management system model in digital for electric Power management in Thailand .

3.2 Interview with the experts about supply chain management system model in digital for electric Power management in Thailand .

3.3. To design supply chain management system model in digital for electric Power management in Thailand

3.4 Introduce the model to the advisors for consideration and revision.

3.5 Introduce the model to the experts for consideration by in-depth interview.

3.6. Make the evaluation tools to determine the applicability of the model.

3.7 Provide the ten experts the designed the pattern.

3.8 Supply chain management system model in digital for electric Power management in Thailand is modified according to the experts' suggestions.

3.9 Analyse the results of evaluation of the model by mean and standard deviation consisting of 5 criteria for evaluation according to the idea of Likert scale.

3.10 With advice from the experts, the pattern was finally improved.

### 4. Results

Results about supply chain management system model in digital for electric power management in Thailand are shown in figure 1.

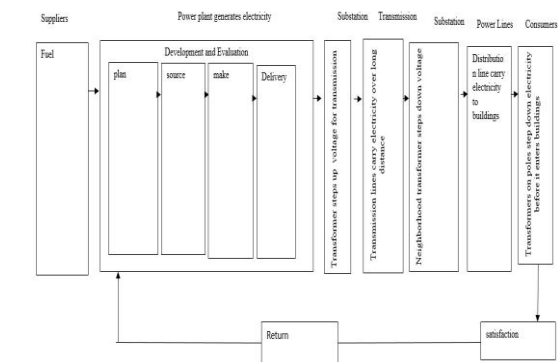


Figure 1: Supply chain management system model in digital for electric Power management in Thailand

Supply chain management system model in digital for electric power management in Thailand shown in Figure 1, is made up of electricity-producing generating units. It fulfils the responsibility of converting raw materials into final goods. The power plant will carry out its responsibility for planning and assessing each action, namely plan, source, make, and deliver. High-voltage transmission lines, distribution lines, substations, and energy control centres are included in the portion. Transmission lines carry electricity over large distances, while distribution lines give it to users. A display about supply chain management system model in digital for electric power management in Thailand. It can check the information system to ensure that the organization operates smoothly and effectively.[1],[2],[3],[4],[5],[6] [7] [8],[9],[10],[11],[12],[13],[14],[15],[16],[17],[18]

Table 1: Results for evaluation supply chain management system model in digital for electric Power management in Thailand

No	Evaluation Lists	$\bar{X}$	S.D.	Suitability
1	Main components	3.64	0.67	High
2	Suppliers	3.70	0.48	High
3	Power plant	3.60	0.69	High
4	Substation	3.60	0.84	High
5	Transmission	3.70	0.48	High
6	Substation	3.70	0.67	High
7	Power Lines	3.60	0.51	High
8	Customers	3.60	0.84	High
9	Satisfaction	3.70	0.48	High
10	Return	3.60	0.51	High
	Total	3.64	0.61	High

The model's appropriateness evaluation was done by ten experts as presented in Table 1 and, they

agreed with the value of overall suitable on the list that had grad results ( $\bar{X} = 3.64$ , S.D. = 0.61).

## 5. Discussion

The model of supply chain management system in digital for electric power management in Thailand is considered to be high appropriate ( $\bar{X} = 3.64$ , S.D. = 0.61), and the design was corresponds to the research of chansamut suggesting that supply chain and information system.[2],[3],[4],[5],[6] and study of Chansamut and Piriyasurawong has studied supply chain and information system about curriculum may be applied to support the tasks. [1]

## 6. Conclusion

According to the evaluation about supply chain management system model in digital for electric Power management in Thailand is appropriate at the high level development The rating mean of 3.64 and standard deviation of 0.61 and can be appropriately applied in actual work settings.

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