

Supply Chain Management Information System Operation Model for Service Management in the Library in Thailand

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Abstract— The paper about supply chain management information system operation model for service management in the library in Thailand is important for the effectiveness of the model as well as the application in actual work settings. Literature on supply chain management and information was reviewed. The object of this paper was to develop study the efficiency development of supply chain management information system operation model for service management in the library in Thailand. A sample groups were five experts in supply chain management, five experts in Information Science and Library Science. The paper sample totaling ten experts. The paper tool was evaluation form to evaluate supply chain management information system operation model for service management in the library in Thailand comprises four components, namely main elements, Publishers, Libraries, Users of the library. The data analysed by using arithmetic mean and standard deviation. supply chain management information system operation model for service management in the library in Thailand using Back-Box technique. The overall evaluation result an supply chain management information system operation model for service management in the library in Thailand shows the overall rating mean of 3.65 which means that supply chain management information system operation model for service management in the library in Thailand is appropriate at the high level and can support sustainable information system development.

Keywords— *Supply chain management information system operation model, service management, library in Thailand*

1. Introduction

Libraries have existed in Thailand since the thirteenth century. Until the midnineteenth century, most libraries were either in temples or royal courts. Modern libraries were introduced into the country in 1950s when Thailand began to open its doors to western influences and trades. The Thai libraries, like any other libraries in the world, play a major role in providing information, education and knowledge to the society. They also act as a cultural and recreational center, and as a life-long learning center. There are five types of libraries, namely public library, school library, academic library, special library, and the National Library. Each type of libraries has its own ways to collect,

organize, and preserve materials collected for the information needs of its users. However, all types of libraries have some similarities. In terms of materials collected, there are two major types: print and non-print materials. Electronic books and digital images are increasingly collected and obtained by most libraries. Some libraries may collect manuscripts, stone inscriptions, and other formats as well. The libraries obtain their information resources through purchase, subscription, exchange, donation, and self - development. The two major classification systems are Dewey Decimal Classification Scheme and the Library of Congress Classification System. NLM and UDC are used in some libraries. [1] Due to the advancement of technology, and innovation some libraries especially supply chain system because because the business and industrial sector needs to be highly competitive due to increasingly high competitions from both within and outside the country. In order to be highly competitive, organizations in the sector need to have personnel with knowledge, ability and skills who can work efficiently to increase output and products. The organizations, therefore, need to have sufficient information and resources to increase their values and respond to the demand of their clients. Thus, the supply chain management process is a key process to support the organization's whole activities system from upstream to downstream. It enables the organization to promptly check the information system to ensure that the organization operates smoothly and effectively based on the determined strategies.[2] Based on this realization, the researcher has decided to develop supply chain management information system operation model for service management in the library in Thailand for application to Increase an Organization's Value.

2. Related work

Supply chain and information system are a tool that can managing library and It is ability to effectively and economically deliver services and information that users value. A supply chain and digital is to coordinate the focal firm's processes and activities with those of its suppliers and

customers, such that the firm’s delivered products and services meet or exceed customer requirements. It thus seemed appropriate to analyze a library from a supply chain perspective to assess and improve its ability to serve its users. , with the goal of improving division products and services in library .[13]

3 Research Methodology

3.1 Analyze and synthesize document and research studies related of supply chain management information system operation model for service management in the library in Thailand

3.2. Develop supply chain management information system operation model for service management in the library in Thailand

3.3.Evaluate supply chain management information system operation model for service management in the library in Thailand. The statistics utilized in study were rate means and standard deviation following the weighing criteria of Appropriateness of the design using five rating scales of Likert.

4 Research Findings

4.1 Research findings about supply chain management information system operation model for service management in the library in Thailand are presented in Figure 1

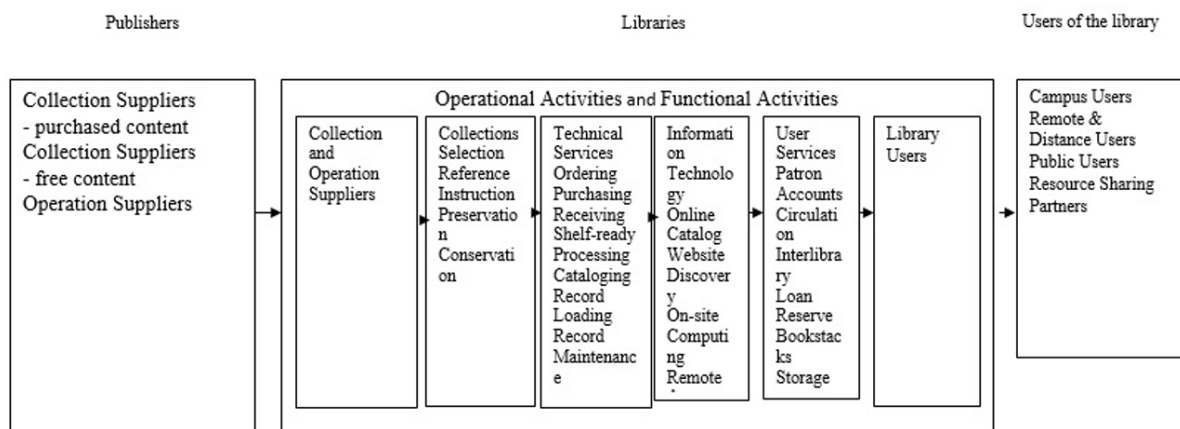


Figure 1: Supply chain management information system operation model for service management in the library in Thailand [9],[10],[13] and [15]

4.2 Explanation on Components of supply chain management information system operation model for service management in the library in Thailand

1.Publishers

Publishers mean suppliers to the library are content suppliers, which include authors, publishers, serials subscription agents and database vendors. Libraries also occasionally receive collections at low or no cost, which include government documents, gifts, and an increasing number of free digital collections. They can send for admission via the computer system that can process and store the data systematically.

2.Libraries

The Libraries is the focal member of the supply chain. Within the Library are library operational and functional activities, which collectively are the library’s internal supply chain. The internal library supply chain begins with identifying and selecting content and operations suppliers, purchasing products, scheduling deliveries, and receiving the products. Collection development is responsible for most of the selection and purchase of resources, although increasingly, library patrons are also

driving collection purchases in the form of patron-driven acquisitions. Purchased resources are received by the library, to be delivered to the customer. Delivery includes all the steps necessary for receiving and storing orders. Receiving and storage activities involve record loading, shelving and storage (this includes traditional book stacks and storage facilities like automated storage and retrieval systems (ASRS)), physical processing (which includes preservation and conservation), and knowledge base maintenance.

Within supply chain and information system .It performs the duty to store as collections and manage the databases and information repositories. Record creation involves cataloguing, digital collection creation, and institutional repositories. Services include reference and research support, library instruction, and access and delivery functions such as interlibrary loan, which represents a blend of product and service. The final element of the internal supply chain is the returns. A library return is generated when customers borrow physical materials from the library and then

return them for re-shelving. Interlibrary loan and deselection activities can also be counted as returns. Other activities provide the necessary support for the library’s primary activities. These activities include providing technology, human resources management, customer support, collection management, preservation, and security.

3 Users of the library

Users of the library mean customers with desirable quality from the library namely, Campus Users Remote & Distance Users Public Users Resource Sharing Partners Finally, Library expands the amount of available information resources it offers through resource sharing partners.

[8],[9],[10],[11],[12] [13]and [14]

Table 1 : Suitability of main elements about supply chain management information system operation model for service management in the library in Thailand

| No. | Items | \bar{X} | S.D. | Suitability |
|-----|----------------------|-----------|------|-------------|
| 1 | Main elements | 3.60 | 0.51 | High |
| 2 | Publishers | 3.70 | 0.67 | High |
| 3 | Libraries | 3.70 | 0.48 | High |
| 4 | Users of the library | 3.60 | 0.51 | High |
| | Total | 3.65 | 0.54 | High |

From the table 1, it can be seen that all of the main components of supply chain management information system operation model for service management in the library in Thailand are rated to be appropriate at the high level. ($\bar{X} = 3.65$, S.D. = 0.54).

Table 2 : Suitability of the Sub-component of the Publishers

| No. | Items | \bar{X} | S.D. | Suitability |
|-----|----------------------|-----------|------|-------------|
| 1 | Collection Suppliers | 3.70 | 0.48 | High |
| 2 | Collection Suppliers | 3.60 | 0.69 | High |
| 3 | Operation Suppliers | 3.60 | 0.51 | High |
| | Total | 3.63 | 0.56 | High |

From the Table 2, it can be seen that the sub-component in terms of the Publishers is rated to be appropriate at the high level. ($\bar{X} = 3.63$, S.D. = 0.56).

Table 3 : Suitability of the Sub-component of the Libraries

| No. | Items | \bar{X} | S.D. | Suitability |
|-----|--------------------------|-----------|------|-------------|
| 1 | Collection and Operation | 3.70 | 0.48 | High |
| 2 | Collections Selection | 3.70 | 0.67 | High |
| 3 | Technical Services | 3.70 | 0.48 | High |

| | | | | |
|---|-------------------------------|------|------|------|
| 4 | Information Technology Online | 3.70 | 0.67 | High |
| 5 | User Services | 3.70 | 0.67 | High |
| 6 | Library Users | 3.60 | 0.51 | High |
| | Total | 3.68 | 0.58 | High |

From the table 3, it can be seen that the sub-component in terms of the libraries is rated to be appropriate at the high level. ($\bar{X} = 3.68$, S.D. = 0.58).

Table 4 : Suitability of the Sub-component of the users of the library

| No. | Items | \bar{X} | S.D. | Suitability |
|-----|---------------------------|-----------|------|-------------|
| 1 | Campus Users | 3.60 | 0.69 | High |
| 2 | Remote & Distance Users | 3.60 | 0.84 | High |
| 3 | Public Users | 3.70 | 0.67 | High |
| 4 | Resource Sharing Partners | 3.70 | 0.48 | High |
| 5 | Total | 3.65 | 0.67 | High |

From the table 4, it can be seen that the sub-component in terms of the users of the library is rated to be appropriate at the high level. ($\bar{X} = 3.65$, S.D. = 0.67).

Table 5: Results for evaluation of supply chain management information system operation model for service management in the library in Thailand

| No. | Items | \bar{X} | S.D. | Suitability |
|-----|----------------------|-----------|------|-------------|
| 1 | Main element | 3.65 | 0.54 | High |
| 2 | Publishers | 3.63 | 0.56 | High |
| 3 | Libraries | 3.68 | 0.58 | High |
| 4 | Users of the library | 3.65 | 0.67 | High |
| | Total | 3.65 | 0.58 | High |

From the table 5, that ten experts found that supply chain management information system operation model for service management in the library in Thailand is highly appropriate ($\bar{X} = 3.65$, S.D. = 0.58).

5 Discussion

According to evaluation supply chain management information system operation model for service management in the library in Thailand is considered to be high appropriate ($\bar{X} = 3.65$, S.D. = 0.58), 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

Supply chain management information system operation model for service management in the library in Thailand is appropriate at the high level development ($\bar{X} = 3.65$, S.D. = 0.58). It can support sustainable information system.

Recommendation

supply chain management information system operation model for service management in the library in Thailand is considered to be high appropriate if possible it should create database for the developed model.

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