# Supply Chain in Digital Operation Model for Student Loan Fund Management for Higher Education in Thailand

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Abstract— The research aims to design supply chain in digital operation model for student Loan Fund management for higher education in Thailand, and the developed model. The research procedures divide into two phases. The first phase is to design supply chain in digital operation model for student Loan Fund management for higher education in Thailand and the second phase is to evaluate the developed model. The sample group in study consists of ten experts. Selected by purposive sampling. Data were analysed by arithmetic mean and standard deviation. The research result are seven main components, namely Su-components, Suppliers , Service provider, education customers, Consumers, satisfaction and feedback. All experts agree supply chain in digital operation model for student loan fund management for higher education in Thailand is high level of appropriateness.

**Keywords**— supply chain in digital operation model, student Loan Fund management, higher education in Thailand

## 1. Introduction

Since the commencement of its first university about a hundred years ago. Many developments observed during this long journey to meet the contemporary needs of the country. At the very beginning, Thai higher education institutes

were built as an elitist organization to train the government officials which later turned into a method to educate mass people to develop the nation. The Royal Decree of National Education, 1999 and The Royal Thai Constitution, 2007 clearly mention that all Thai citizens have the right to access the education provided by the Thai government. Moreover, every

National Education and Social Development Plans emphasize on the development of education facility and quality all over the nation [7]. Increasing government spending on education is one of the steps governments take to implement education development plan. Addition of student loan fund is one such development; the purpose of student loan fund is to give the access to higher education to the students from underprivileged families. The university in Thailand is a part of world community, it needs to urgently develop its

education system for development country and enhance academic excellence Some researcher in late seventies studied the impact of developing human capital through education and training and found that investing in human capital increases the GDP significantly. This is also called the New Growth Theory of economics. Some other also believe that spending in education increases the income of the person and the society and increase in the income of the society is more than that of person. In 2015 there was about 4 million labor force shortage estimated by the Office of National Economic and Social Development Board, Thailand and it is forecasted to grow 5.4 million by next 10 years. The current model of employing low wage migrant workers from neighbouring countries is becoming obsolete as the demand for and cost of such labor force is increasing everywhere. So, Thailand has to eye on more sustainable labor force by investing in the technology based production process and improving human capital [9]. Although student loan fund helps the students as well as the economy to flourish, it also has some drawbacks If the loan fund is not efficiently managed it can only increase government spending and system loss of the loan sometimes exceeds its benefit. Deferred debt is one of the major issues faced by a subsidized loan which significantly impact on the efficiency of loan fund. application. of concept of supply chain and digital for student Loan Fund student Loan Fund to increase. This is because the higher education 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 digital system to ensure that the organization operates smoothly and effectively based on the determined strategies.

Based on this realization,[1] the researcher had an idea to design supply chain in digital operation model for student Loan Fund management for higher education in Thailand for application to increase values of society

# 2 Methodology

## 2.1The first phase

Supply chain in digital operation model for student Loan Fund management for higher education in Thailand

- 2.1.1 Analyze and synthesize researches relevant to the elements supply chain in digital operation model for student Loan Fund management for higher education in Thailand
- 2.1.2 Study about supply chain in digital operation model for student Loan Fund management for higher education in Thailand by interviewing consultant in order to synthesize the data.
- 2.1.3 Design the supply chain in digital operation model for student Loan Fund management for higher education in Thailand.
- 2.1.4 Present the model to the advisors for consideration and revision.
- 2.1.5 Present the model to the experts for consideration by in-depth interview.
- 2.1.6 Create the evaluation tools for evaluate the model's suitability.
- 2.2 The Second Phase
- 2.2.1 Present the designed model to ten experts
- 2.2.2 The model is modified according to the experts' suggestions.
- 2.2.3 After modification, presenting the model in the form of diagram with report.
- 2.2.4 Analyze the results of evaluation of the model by arithmetic mean and standard deviation consisting of 5 criteria for evaluation according to the idea of Likert scale.

# 3. Results

3.1. supply chain in digital operation model for student Loan Fund management for higher education in Thailand is shown in figure 1.

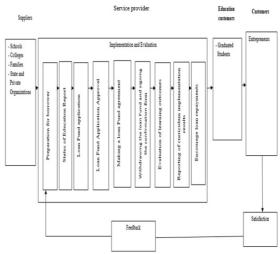


Figure 1: Supply chain in digital operation model for student Loan Fund management for higher education in Thailand

3.2 Elements and principles supply chain in digital operation model for student Loan Fund management for higher education in Thailand

## 1 Suppliers

The suppliers mean the organizations that supply raw materials to the **University**. Raw materials in this case are personnel who candidated from schools, college, family or state and private organizations, or personnel who receive special quotas. suppliers analysis service by applying in a digital model.

## 2 Service provider

Service provider is regarded as university (manufacturer) that produces graduated students. It performs the duty to transform entering students, into the finished products of qualified graduated students. The university will perform its duty of student development and evaluation of each activity, namely, preparation for borrower, Status of Education Report, Loan Fund application, Loan Fund Application Approval, Making a loan Fund agreement, Withdrawing the loan Fund and signing the confirmation form, Evaluation of learning outcomes, Reporting of curriculum implementation results and encourage loan repayments, ie. Graduates with desirable quality outcomes are delivered to the society.

# 3 Education customers

Education customers mean graduate students from the university.

#### 4. Consumers

The Consumers mean society who receive graduate students from the university. Finally, they will provide added value to the supply chain.

# 5. Satisfaction

Satisfaction refer to an important factor in doing any prosperous work. To generate satisfaction for

entrepreneur, the evaluation of satisfaction in the products and services with the customers or to evaluate the satisfaction of graduates in terms of qualifications are assigned.

#### 6. Feedback

Feedback is the Information obtained from satisfaction analysis with the relationship between productivity and customers which will be feedback to a borrower. [1,2,3,4,5,6,8,10].

**Table 1:** Results of evaluation of model suitability

| Evaluation Lists    | $\overline{X}$ | S.D. | Appropr<br>iateness |
|---------------------|----------------|------|---------------------|
| Main components     | 3.61           | 0.64 | High                |
| Suppliers           | 3.62           | 0.68 | High                |
| Service provider    | 3.70           | 0.48 | High                |
| Education customers | 3.60           | 0.51 | High                |
| Consumers           | 3.70           | 0.48 | High                |
| Satisfaction        | 3.70           | 0.48 | High                |
| Feedback            | 3.60           | 0.84 | High                |
| Summary             | 3.64           | 0.58 | High                |

Table 1: The experts found that supply chain in digital operation model for student Loan Fund management for higher education in Thailand was suitable at high level (x = 3.64, S.D. = 0.58). In terms of suitability of main components is suitable at high level (x = 3.61, S.D. = 0.64). Suppliers is suitable at high level (x = 3.62, S.D. = 0.68). Service provider Suppliers is suitable at high level (x = 3.70, S.D. = 0.48). Education customers is suitable at high level (x = 3.60, S.D. = 0.51). Consumers is suitable at high level (x = 3.70, S.D. = 0.48). Satisfaction is suitable at high level (x = 3.70, S.D. = 0.48) and Feedback is suitable at high level (x = 3.60, S.D. = 0.48).

# **4 Conclusion**

According to evaluation the overall elements supply chain in digital operation model for student Loan Fund management for higher education in Thailand . All experts agree supply chain in digital operation model for student loan fund

management in for higher education in Thailand is high level of appropriateness.

## **5 Discussion**

Supply chain in digital operation model student Loan Fund management for higher education in Thailand is suitable at high level. This is because the development of this model applied the concepts of supply chain management. This corresponds to the research of Chansamut and Piriyasurawong has studied supply chain and information system about educational [1],[2] In addition, with the study of Kaewngam, Chatwattans and Piriyasurawong [8] recommended that supply chain and digital quality assurance for ASEAN university network quality Assurance (AUN-QA) are supports educational also, the results are in accordance to those of chansamut [3,4,5,6] as well.

## 7 Recommendations

Supply chain in digital operation model for student Loan Fund management for higher education in Thailand should be implemented in university.

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