

The Service Agile Supply Chain Information System Model for ASEAN University Network Quality Assurance at Institution Level

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Abstract— The research title The service agile supply chain information system model for ASEAN University Network Quality Assurance at institution level. The objectives of research to study the model and to study method including, to assess The service agile Supply chain information system model for ASEAN University Network Quality Assurance at institution level. A sample group consisted of ten in field of 5 expert in supply chain ,two expert in information system and three experts in the field Quality Assurance . All totalling ten experts. The research tool was questionnaire about The service agile Supply chain information system model for ASEAN University Network Quality Assurance at institution level. The findings reveal that The service agile Supply chain information system model for ASEAN University Network Quality Assurance at institution level is consisted of five key elements which are 1) main elements 2) suppliers /services 3) university 4) customers 5) consumer. The model development process has 5 components that This model develop to information system .As the overall model was shown at a very good level, the experts agreed.

Keywords— The service agile Supply chain . information system model, ASEAN University Network Quality Assurance at institution level

1. Introduction

Service in the University in Thailand is to leverage its knowledge and expertise to create new value for society through collaboration and societal commitment the University in Thailand have different experiences from collaborations with industry and government agencies and institutions contribute to realising this ambition, among other things through a strong commitment to providing consultancy services. In order to develop university in Thailand have jointly prepared general framework for the quality assurance of University in Thailand research-based consultancy services. It is based on the experience, procedures and paradigms which already exist at departments which have been involved in research-based consultancy . The description of a general quality assurance system at faculty level is to establish a common framework and ensure learning and

improvements across departments and faculties in the University in Thailand The quality assurance system builds on in university practices [12]. The awareness of an agile supply chain information system model for quality assurance can be practical as a method to accomplish work procedures, actions and affairs within the organization. Agility is the ability of a supply chain to respond quickly to changing market and customer demands and is considered a competitive advantage in today's business world. The need for agility has traditionally been associated with supply chains in high-tech industry products. However, traditional industries face similar challenges in terms of speed, flexibility, increased diversity and product customization. Due to the uncertainties arising from a turbulent and dynamic market and the competitive forces of competition, an organization needs agility in its supply chain as a competitive advantage, providing a high capacity to respond to the needs of consumers. Product and technology lifecycles are getting shorter, competitive pressures are forcing more frequent product changes, and consumers are demanding more variety than ever before. To respond to this challenge, organizations must focus their efforts on achieving greater agility that can respond in shorter timeframes, both in terms of volume and variety of changes. For a truly agile business, the organizational structure, internal and external processes with partners in the supply chain must be ready to meet any demands placed on it. Based on this realization,[11] thus the researchers had an idea to study the model and to study the method including, to assess The service agile Supply chain information system model for ASEAN University Network Quality Assurance at institution level for adding values to consumer.

2 Related Literature

An information systems in agile supply chains for ASEAN University Network Quality Assurance at institution level applies the concept of mass customisation to information systems. In agile supply chains, it must be possible to easily connect and disconnect information systems needed to

achieve a specific value proposition. It must be possible to design and instantiate new or adjusted supply chain configurations rapidly . The main challenge in achieving is to combine flexible customization with efficient.[9] [10]

Agility in university is a concept. It means that university have a ability to respond quickly, adapt to their environment, and maintain momentum while doing so. One area where agility is particularly important is in the supply chain. Agile supply chains rely on real-time data to help make decisions in day-to-day operations, as well as projected data in supply forecasts. Combined, it creates a more robust process that saves businesses and consumers money, eliminates waste of excess inventory, foresees potential shortages, and does it all quickly.[8]

3 Research Methodology

3.1 Study literature review about the service agile Supply chain information system model for ASEAN

University Network Quality Assurance at institution level.

3.2. Design the service agile Supply chain information system model for ASEAN University Network Quality Assurance at institution level.

3.3. The model is presented to advisor for consideration .

3.4. Create a tool for assessing the model.

3.5 The model is submitted to the experts for review and evaluate suitability..

3.6 Analyze the output data by using 5-point Likert Scale

4 Results

4.1 The study results about the service agile Supply chain information system model for ASEAN University Network Quality Assurance at institution level were presented in figure 1

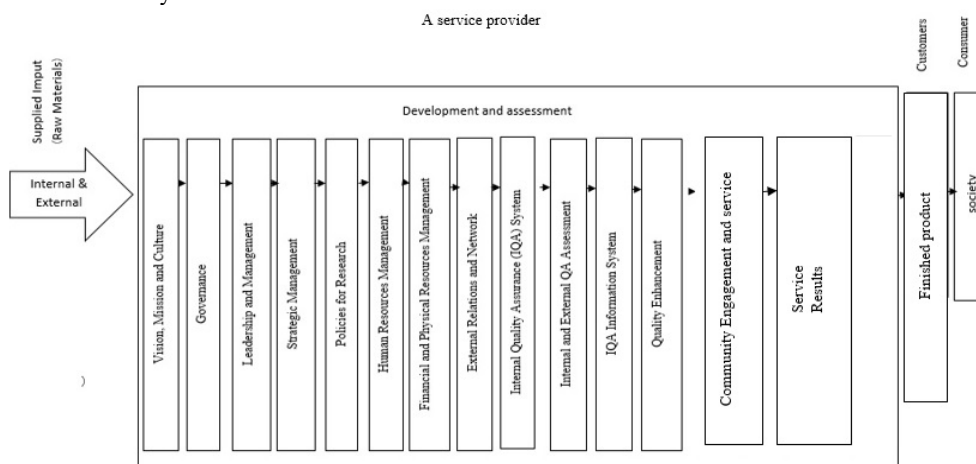


Figure 1: The service agile Supply chain information system model for ASEAN University Network Quality Assurance at institution level.

Table 1: Stakeholders each process is related to the following activities:

Stakeholders	Activities in supply chain	Needs for agile Supply chain
1. Suppliers 1. University -Suppliers of Internal Research Projects 2. State and Private Organizations - External Research Projects	Submit a raw materials, parts and components	Increased flexibility
2. university Development and Evaluation 1 Vision, Mission and Culture	1 Senior leaders ensure that the vision and mission meet stakeholders' needs and to their satisfaction.	- Prevent the loss of information.

Stakeholders	Activities in supply chain	Needs for agile Supply chain
	2 Senior Leaders foster culture including a set of values to align with the vision and mission of the institution. 3 The vision, mission and culture are articulated, cascaded and demonstrated for implementation. 4. Review of the vision, mission and culture is carried out to meet stakeholders' needs and to their satisfaction.	

Stakeholders	Activities in supply chain	Needs for agile Supply chain
6 Human Resources Management	<p>meet stakeholders' needs and to their satisfaction.</p> <p>1 Human resource planning (considering succession, promotion, redeployment, termination, and retirement) is carried out to fulfill the needs for service.</p> <p>2. Recruitment and selection criteria including ethics and academic freedom for appointment</p>	- To be easily accessible.

Table 1: (Continued)

Stakeholders	Activities in supply chain	Needs for agile Supply chain
2. A service provider Development and Evaluation 6 Human Resources Management	<p>deployment and promotion are determined and communicated.</p> <p>3. Competences including leadership skills of various staff categories are identified and established.</p> <p>4. Training and developmental needs of staff are identified and activities are implemented to fulfill them.</p> <p>5. Performance management system including rewards, recognition and coaching/mentoring schemes is implemented to motivate and support service.</p> <p>6 Review of the human resource plans, policies, procedures, and schemes is carried out.</p> <p>7. The human resource plans, policies, procedures, and schemes are improved to support service.</p>	<p>- reduction of time wastage.</p> <p>Responsive and resilient to sudden changes.</p> <p>Responsive and resilient to sudden changes.</p>

Table 1: (Continued)

Stakeholders	Activities in supply chain	Needs for agile Supply chain
2. A service provider Development and Evaluation 7. Financial and Physical Resources	1 System to plan, implement, audit and improve the financial resources of the institution to support its vision, mission and	The greater visibility

Stakeholders	Activities in supply chain	Needs for agile Supply chain
Management	<p>strategic goals in service is established and implemented.</p> <p>2 System to plan, maintain, evaluate and improve the physical facilities and infrastructure such as teaching and learning facilities, laboratories, equipment and tools etc. to meet the needs of service is established and implemented.</p> <p>3 System to plan, maintain, audit and improve the IT facilities and infrastructure such as computers, networks, backup, security and access rights to meet the needs of service is established and implemented.</p>	- Anticipate and remove pain points before they can become an issue.

Table 1: (Continued)

Stakeholders	Activities in supply chain	Needs for agile Supply chain
2. A service provider Development and Evaluation 7. Financial and Physical Resources Management	<p>4 System to plan, maintain, evaluate and improve the academic resources such as library resources, teaching aids, online databases, etc. to meet the needs of service is established and implemented</p> <p>5 System to plan, implement, evaluate and improve the environment, health and safety and access to people of special needs is established and implemented.</p> <p>1 Plan for external relations, networks and partnerships is established to achieve the vision, mission and strategic goals of the institution.</p> <p>2 Policies, procedures and agreements to foster external relations, networks and partnerships are implemented.</p> <p>3 Review of the external relations, networks and partnerships is carried out.</p>	- The greater visibility
8. External Relations and Networks		- To be easily accessible.

Table 1: (Continued)

Stakeholders	Activities in supply chain	Needs for agile Supply chain
2. A service provider Development and Evaluation 8. External Relations and Networks	4. External relations, networks and partnerships are improved to achieve the vision, mission and strategic goals of the institution.	- The greater visibility
9 Internal Quality Assurance (IQA) System	1 Structures, roles and responsibilities and accountability of IQA are established to meet the strategic goals and quality assurance of the institution. 2. Strategic QA plan encompassing strategies, policies, stakeholders' engagement and activities as well as QA promotion and training is established to meet the strategic goals and quality assurance of the institution. 3. The strategic QA plan is cascaded and translated into long and short term action plans for implementation. 4 System to document, review and communicate QA policies, systems, processes and procedures is implemented.	Responsive and resilient to sudden changes

Table 1: (Continued)

Stakeholders	Activities in supply chain	Needs for agile Supply chain
2. A service provider Development and Evaluation 9 Internal Quality Assurance (IQA) System	5 Key performance indicators and targets are established to measure the performance of the quality assurance in the institution. 6. The strategic QA planning process and key performance indicators and targets are improved to meet the strategic goals and quality assurance of the institution.	Responsive and resilient to sudden changes
10 Internal and External QA Assessment	1 Plan for internal and external QA assessment is established. 2. The internal and external QA assessment is regularly carried out by trained and independent staff and/or experts. 3 The findings and results of the internal and external QA assessment are reviewed.	

Stakeholders	Activities in supply chain	Needs for agile Supply chain
	4. The internal and external QA assessment processes are improved to meet the strategic goals of the institution.	Responsive and resilient to sudden changes

Table 1: (Continued)

Stakeholders	Activities in supply chain	Needs for agile Supply chain
2. A service provider Development and Evaluation 11 IQA Information Management	1 Plan for IQA information management including collection, processing and reporting data and information to and from stakeholders in supporting service is established. 2 IQA information including data analytics is relevant, accurate and readily available to stakeholders in a timely manner that aid decision making while assuring integrity, confidentiality and security of them. 3 Review of IQA information management system, and the quantity and quality of data and information as well as the integrity, confidentiality and security of them is carried out. 4. The management of IQA information and their plans processes and policies are improved to support service.	Responsive and resilient to sudden changes

Table 1: (Continued)

Stakeholders	Activities in supply chain	Needs for agile Supply chain
2. A service provider Development and Evaluation 12 Quality Enhancement	1 Plan to continually enhance institutional quality including policies, systems, processes, procedures and resources to seek best practices in service is established. 2 Criteria for selecting comparative and benchmarking information and partners to improve performance are established. 3. Comparative and benchmarking information to enhance QA practices and encourage innovation is carried out. 4 Review of the process for selection and use of comparative	Responsive and resilient to sudden changes

Stakeholders	Activities in supply chain	Needs for agile Supply chain
	and benchmarking information is carried out. 5 The process for selection and use of comparative and benchmarking information is improved to continually seek best practices in service	- To be easily accessible.

Table 1: (Continued)

Stakeholders	Activities in supply chain	Needs for agile Supply chain
2. A service provider Development and Evaluation	.	.
13 Community Engagement and service	1 Plan to engage community and to provide service to meet the vision and mission of the university is established 2 Policies and guidelines for community engagement and service are implemented 3 System to measure and monitor the community engagement and services is carried out 4 The provision of community service and community engagement is improved to meet stakeholders' needs and to their satisfaction	Responsive and resilient to sudden changes

Table 1: (Continued)

Stakeholders	Activities in supply chain	Needs for agile Supply chain
2. A service provider Development and Evaluation 14. Service Results	1 The type and volume of community engagement and service; and contribution to society are established, monitored and benchmarked for	Responsive and resilient to sudden changes

Stakeholders	Activities in supply chain	Needs for agile Supply chain
	improvement 2 The societal impact and achievement of the community engagement and service; and contribution to society are established, monitored and benchmarked for improvement 3 Impact on students and staff of community engagement and service is established, monitored and benchmarked for improvement 4 The satisfaction of stakeholders in community engagement and service; and contribution to society is established, monitored and benchmarked for improvement	- The greater visibility

Table 1: (Continued)

Stakeholders	Activities in supply chain	Needs for agile Supply chain
Customers Finished product	- Useful finished product	Responsive and resilient to sudden changes
Consumers Society	The satisfaction of stakeholders in community engagement and service; and contribution to society [7]	Responsive and resilient to sudden changes

4.2 The study method about the service agile Supply chain information system model for ASEAN University Network Quality Assurance at institution level.

1 Suppliers /services

The supplier is a person or business that provides a product to another entity. The role of supplier in a higher education is to provide high-quality products from a manufacturer at a good price to a distributor or retailer for resale. A supplier in a higher education is someone who acts as an intermediary between the manufacturer and

retailer, ensuring that communication is forthcoming and stock is of sufficient quality.

2 University

A service provider is a university .It performs the duty to transform raw materials into the finished products. A service provider will perform its duty of product development and assessment .It is based on the consideration that all supply chain tasks and activities.

3 Customer

Customers mean finished product from the university

4. Consumers

The consumers mean entrepreneurs or the end-of-process component of the model. They include the society in general and entrepreneurs who sended finished product from the university. Finally, the end product of product will add value Of enterprises and increase satisfaction of consumers.

[1],[2],[3],[4],[5],[6].

Table 2: Results of appropriateness evaluation about the service agile Supply chain information system model for ASEAN University Network Quality Assurance at institution level.

No.	Items	\bar{X}	S.D.	Suitability
1	Main elements	3.62	0.50	High
2	Suppliers /services	3.70	0.48	High
4	University	3.72	0.46	High
5	Customers	3.72	0.64	High
6	Consumers	3.63	0.67	High
	Total	3.68	0.55	High

From table 2, that ten experts found that the service agile Supply chain information system model for ASEAN University Network Quality Assurance at institution level is highly appropriate ($\bar{X} = 3.68$, S.D. = 0.55).

5. Conclusion

According to evaluation the service agile Supply chain information system model for ASEAN University Network Quality Assurance at institution level is considered to be high appropriate ($\bar{X} = 3.68$, S.D. = 0.55), and the design was corresponds to the research of Chansamut and Piriyasurawong has studied supply chain and information system about educational [1] In addition, with the study of chansamut suggesting that supply chain and information system also. [2],[3],[4],[5],[6]

6. Discussion

The service agile Supply chain information system model for ASEAN University Network Quality Assurance is considered to be high

appropriate ($\bar{X} = 3.68$, S.D. = 0.55) and can be appropriately applied in actual work settings.

7. Recommendation

The service agile Supply chain information system model for ASEAN University Network Quality Assurance at institution level is considered to be high appropriate if possible it should be implemented in university.

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