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Lean Supply Chain Operational Model Applied to Halal Education Industry

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Abstract

This paper aims to conceptually contribute to ideas about implementing Lean Supply Chain (LSC) approach in halal education industry as continuous improvement key for quality excellence to achieve sustainable competitive advantage. The method used for this conceptual paper is based from literature reviews from reputable journal articles. Halal education is literally a new concept in halal industry which defined as Islamic Education Service Provider (IESP) where in its supply chain consists of integrated business activities that giving services to the input (students) in order to have deliverable output (outcome, impact and benefits). Halal education takes Islamic value as the supreme and guiding tools in education processes. LSC operational model applied base on five lean principles in the supply chain: specifying value, identifying value stream, redesigning the process to eliminate waste, implementing and evaluating the updated processes and manage toward perfection. It was discovered that through the five principles of lean in supply chain, waste occurred in operational activities of IESP supply chain could be defined and eliminated. 7Ps chainpreneur, a new approach, consist of people, policy, performance, product, path, process and philosophy are linked and used as key quality excellence in halal education. LSC operational model could be applied to IESP industry which willing to improve the service quality and sustain in the industry by strengthening its brand with halal or Islamic value.

Keywords

Halal Education, Lean Supply Chain, Continuous Improvement, Quality Excellence, 7Ps Chainpreneur

1. Introduction

Halal industry is interpreted as activities of processing product (good and service) using facilities and equipment by Islamic sharia (Bank Indonesia, 2020). Following that definition, Islamic education as a service provider is included in the area of Islamic or halal service industry where in its supply chain consists of integrated halal or Islamic activities or business processes that giving services to the input (students) to generate deliverable (output, outcome, benefits and impact) graduate students.. This opinion also supported by (Randeree, 2020), who stated that today, in stark contrast to these earlier practices, the Islamic economy and halal industry comprises a broadening range of identifiable sectors. According to him, Islamic economic sectors are Islamic finance; halal food; halal travel and tourism; halal pharmaceuticals; halal cosmetics (halal beauty); Islamic (or modest) fashion; Islamic media and recreation; health care; and education, with developing areas in the Islamic digital economy; sport; philanthropy and charity; and Islamic culture, arts, architecture and heritage

As an industry, Islamic Education Service Provider (IESP) has a unique added value that differs from conventional education service provider. Most of the researchers in the area of brand management, agree that the brand is designed

to add value to the product and give it a personality that must be positively perceived by the customers (Mourad & Karanshawy, 2013). Halal education takes Islamic value as the supreme and guiding tools in education processes. Unlike the conventional education, Islamic education involves values, spirituality and ethical aspects of the receiver. Halal education refers to any input that makes the individual a better person, be it in the form of *tarbiyah* (educate), *ta'dib* (refinement or discipline) and *ta'lim* (giving knowledge; teach). It involves deeply in the behavior, attitude and value formation of the person. An educated person in Islam therefore, becomes a better person in all aspects; his action, thought, lifestyle, decision making and approach to issues that affect and influence life as a whole. Islamic education may include implementation of knowledge in general which involves the teacher, the student, the school, and the curriculum that complies the Islamic values and teachings (Sudan, 2017).

Likewise, as a type of business or industry, IESP is included as service industry which also unique and differs from manufacturing industry. Service organizations aim to provide quality services, reducing waste, delivering cost-effective services, offering a broad and distinct range of services while being sustainable. Services are customer-centric and high customer involvement is present and to satisfy the customer, their involvement is highly desirable (Akbari & McClelland, 2020). Due to high consumer participation, the services are less structured and therefore require the flexible and customizable processes (Nagariya et al., 2021). Education has a mixture between customized and standardized services, which might result in the inconsistent quality of the education provided. Inseparability is another characteristic of the education service that makes the students involvement in the delivery of the education service an important feature that is difficult to control. Based on these arguments, it is clear that the education service is a professional service that has unique features, which should be considered when developing its marketing strategy. It signals how the education institution satisfy students' needs through delivering high quality education, unique identity in the market, employability of its graduates, social image, sports facilities, and overall reputation (Mourad & Karanshawy, 2013).

The service supply chain is the network of suppliers, service providers, consumers and other supporting units that performs the functions of transaction of resources required to produce services; transformation of these resources into supporting and core services; and the delivery of these services to customers. These definitions indicate that final product or service delivered to customer provide benefit to the customer and also termed as "core service" (Baltacioglu et al., 2007). IESP is included in Service only supply chain (SOSC), where products are pure services. Effective IESP requires both governing and responding to the service expectation of service users by concerning on the Islamic Value. The desired benefits and improvement can be achieved by appropriate implementation of lean tools and techniques, practices and principles (Ugochukwu et al., 2012).

Lean is a paradigm and powerful methodology of process improvement. As a technique, it can simplifies operations, emphasizes value-added activities, removes non value-added activities and better aligns all operations activities to create more value (Chen et al., 2010). On its development, lean could be combined with any kind of sectors and techniques. Lean principles have been adapted and adopted in various public sector organizations, although the way that they have been implemented differs depending on the organization (Radnor et al., 2010). Lean synthesized with services become lean services (Gupta & Sharma, 2016), combined with six sigma become lean six sigma , blended with construction become lean construction (Xing et al., 2021), mixed with healthcare become lean healthcare (Ilangakoon et al., 2021), fusion with supply chain become lean supply chain (Moyano-Fuentes et al., 2021). The application of lean along the supply chain (SC) to optimize all activities and information, material and financial flows from the point of view of the end customer is known as Lean Supply Chain (LSC).

The main aim of Lean Supply Chain (LSC) is to eliminate waste along the supply chain. According to (Danese et al., 2018) eliminating waste could deliver high-quality products and services fast and timely at the lowest cost. Waste (Muda in Japanese) is defined as any activity that increases the cost but does not add any value from the customers' perspective (NVA non-value adding activity). Some advantages of implementing LSC reviewed by (Ugochukwu et al., 2012) are customer satisfaction, optimized efficiency, high quality, high flexibility and reduced cost. Insight from (Wu, 2007) showed LSC give benefit on cost reduction, quality enhancement and lead time reduction. LSC help Higher Education Institution to achieve quality excellence like manufacturing and other services (Sunder M, 2016). The study of (Zighan & El-qasem, 2021) found that the application of lean thinking in the business school helped in developing the school curriculum to get rid of many superfluous and non–value-added activities and also emphasizes and reinforces the value-added activities. LSC also has been implemented in a privately run chain of secondary schools that challenges some of the prevailing norms and practices of state-run schools (Åhlström, 2004).

1.1 Objective

Assessing the importance of IESP as a form of service industry, the present study tries to model LSC approach in IESP as continuous improvement key for quality excellence to achieve sustainable competitive advantage. The importance of this paper is twofold. First, it describes the power of LSC to improve service quality. It fills knowledge gap in the existing literature about LSC in IESP. In particular, it provides a model of LSC operational model in IESP. Second, this paper advances the existing understanding about continuous improvement for quality excellence to achieve sustainable competitive advantage in IESP.

2. Literature Review

Lean Management can be determined from many perspectives such as a philosophy, a way of thinking, a process, a set of principles, a set of tools and techniques, an approach, a concept, a practice, a system, a program, a manufacturing paradigm, a model (Vanichchinchai, 2015). The origins of lean thinking can be found on the shop-floors of Japanese manufacturers and, in particular, innovations at Toyota Motor Corporation. Today, the lean concept is applied across various industrial sectors and beyond the shop floor of single companies (Hines et al., 2004). Several experienced lean authors on (Ahlstrom et al., 2021), independently provide their views about lean. On this article Par Ahlstrom argued that lean as a practice-based umbrella concept. Pamela Danese opined lean as a socio-technical system and a scientific method. According to Peter Hines lean as an evolutionary perspective. Torbjørn Netland noted that lean as a business phenomenon and Desiree van Dun argued lean as a context or a collection of theories.

The application of lean along the supply chain (SC) to optimize all activities and information, material and financial flows from the point of view of the end customer is known as Lean Supply Chain (LSC). The purpose of LSC is to reduce waste and achieve efficiency. LSC enables the elimination of waste, improvements to quality, cost reductions, and increased flexibility throughout the supply chain (Garcia-buendia et al., 2021). In a simple term, LSC can be defined as an application of LM principles to SC to integrate the activities of all the stakeholders involved in the SC network and provide 'value' to the customers by eliminating wastes (Anand, 2008). In line with service organizations aim to provide quality services, reducing waste, delivering cost-effective services, lean movement has identified seven categories of waste or muda as the Japanese call it. These were originally identified for a manufacturing environment (Ohno, 1988): waiting, defects, overproduction, transportation, inventory, unnecessary motion and overburden. Other form of waste introduced by (Lemahieu et al., 2017): motion waste, delay, inefficient conveyance, correction or reworking mistakes, over processing, excess inventory, overproduction and wasted talent or knowledge. For the service industries, (Radnor et al., 2010) categorized the eight wastes for services: delay, duplication, unnecessary movement, unclear communication, incorrect inventory, opportunity lost, errors and people.

Increasing customer demands and competitive pressures have forced businesses to restructure themselves (Chen et al., 2019). Many institutions have adapted Lean for continuous improvement (Sunder M, 2016). One of the supply chain trends in particular are converging to create an increasingly complex business environment is the utilization of lean processes (Mollenkopf et al., 2010). Lean is applicable in many supply chains, particularly those seeking to improve performance by reducing waste (Arif-Uz-Zaman & Ahsan, 2014). Nowadays, the end customer puts pressure on the retailer to reduce the price, so supply costs need to be reduced to satisfy end customer requirements. Thus, cost reduction must be passed on from the suppliers of raw materials and components to the manufacturer, distributor, wholesaler and retailer. This means that it is necessary to involve the entire supply chain in reducing the final price. Since the suppliers and customers are in the same boat in wishing to meet end customer needs, all tools and techniques that help to reduce cost and waste should be applied among all suppliers and customers (Manzouri, 2013).

According to (Marodin et al., 2017) owing to an increasing competitive pressure for shorter lead times, lower costs and better quality, the principles of lean were incorporated into the SC approaches. The key to adopting and implementing LSC is that each SC member adopts lean internally and makes inroads into its implementation. These internal lean systems must be connected and work with each other to operate in a "seamless" environment in which all flows are streamlined and synchronised (Danese et al., 2018). The lean approach for SC moves away from the current "trading mentality", where profit targets are short term and highly dependent on market prices and the ability to negotiate strongly with suppliers or customers, to a strategy based on a long-term commitment to supply chain partners, with cooperative and systematic waste elimination along the chain (Agarwal et al., 2006). The lean concept seems to fit well with the service supply chain management concept since they are both concerned with creating customer value through cost-effective processes (Arlbjørn et al., 2011).

Although widely discussed, integrating lean principles and practices into SC has yet to evolve to understand better adaptation need (Tortorella et al., 2018). But, some advantages of implementing LSC has been reviewed by (Ugochukwu et al., 2012) are customer satisfaction, optimized efficiency, high quality, high flexibility and reduced cost. Insight from (Wu, 2007) showed LSC give benefit on cost reduction, quality enhancement and lead time reduction. LSC help Higher Education Institution to achieve quality excellence like manufacturing and other services (Sunder M, 2016). The study of (Zighan & El-qasem, 2021) found that the application of lean thinking in the business school helped in developing the school curriculum to get rid of many superfluous and non–value-added activities and also emphasizes and reinforces the value-added activities. LSC also has been implemented in a privately run chain of secondary schools that challenges some of the prevailing norms and practices of state-run schools (Åhlström, 2004). (Molina, 2020) highlight lean's applicability for improving university academic and administrative processes. The benefits that come from the application of Lean in the administrative management processes are more variable and extend from an improvement in library book cataloging processing times to an improvement to personnel hiring processes. Large number of the problems found in universities can be classified according to the type of lean waste and this also shows the multiplicity of wastage that can be eliminated or minimized with the use of lean.

Services refer to intangible economic activities that produce temporal, spatial, morphological and psychological benefits. A main feature of services is intangibility, which means that the output of most services may be the function or a process. Three other features of services include heterogeneity, perishability and simultaneous production and consumption (Balouei Jamkhaneh & Safaei Ghadikolaei, 2020). In line with that (Brien et al., 2008) also opined in service industry there are four characteristics that differ services from goods which are unique: intangibility; inseparability; heterogeneity; and perishability. Intangibility refers to services by their very nature are physically intangible, they cannot be touched, tasted, smelt or seen. Inseparability refers to service is essentially inseparable from the source that it provides. Production and consumption occur simultaneously, unlike a product which exists whether or not its source is present (Kotler, 1982). Heterogeneity concerns the potential for high variability in the performance of services. The quality and essence of a service can vary from producer to producer, from customer to customer, and from day to day. Perishability Unlike physical goods, services cannot be stored for future sale and consumption. As mentioned earlier, they must be consumed at the point of production and sale.

(Arlbjørn et al., 2011) also opines about the typical characteristic of service industry. He argues that pure services are intangible, labour intensive, difficult to resell, difficult to automate, heterogeneous, not able to be stored and transported due to production and consumption at the same time, are often perishable (unused capacity is capacity lost forever) and have a quality dimension that is difficult to evaluate. According to (Vauterin et al., 2011), services are interactive processes, not products It follows that customers do not evaluate service quality based solely on the outcome (technical features) of the process, but also evaluate the process (functional features) of the service delivery. Slightly different with manufacturing supply chain, service supply Chain (SSC) is defined as a network of suppliers, service providers, customers and other support units operating to exchange the resources required for service supply (Baltacioglu et al., 2007). Service elements dominate the value chain as primary activities creating the majority of value for the customer (He et al., 2016). In service industries, the supply chain management (SCM) refers to the ability of an organization to approach its customers by improving supply chain processes (Kathawala & Abdou, 2003). By managing a supply chain effectively, institutions can benefit from reduced costs, boosted revenues, increased customer satisfaction, improvements in delivery and service quality (Baltacioglu et al., 2007).

3. Methods

This paper is a conceptual paper which modeling lean thinking concept that encompasses five principles in the IESP supply chain. Lean thinking concept was interpreted to lean technique that focuses on waste or "muda" identification and subsequent elimination (Balzer et al., 2016) (Randhawa, 2015) (Radnor et al., 2010) (Anand, 2008) (Womack & Jones, 2007), that are shown on figure 1.

4. Data Collection

4.1 Specifying Value

Specify what creates value from the customers perspective, identify all the steps along the process chain, make those processes flow, make only what is pulled by the customer, strive for perfection by continually removing wastes. Customers have expectations when choosing the education institution. Those who choose Islamic school or Islamic institution expect there would be Islamic value in education activities. This step is become very important, the reason

is very logical, if customers feel that their expectation is fulfilled by Islamic Institution which organizing Islamic education, customers will get the maximum value (benefit and impact). In this step, voice of customer (VOC) and literature review are conducted to get data about value that customer want as dimension of quality. The result is shown on table 1.

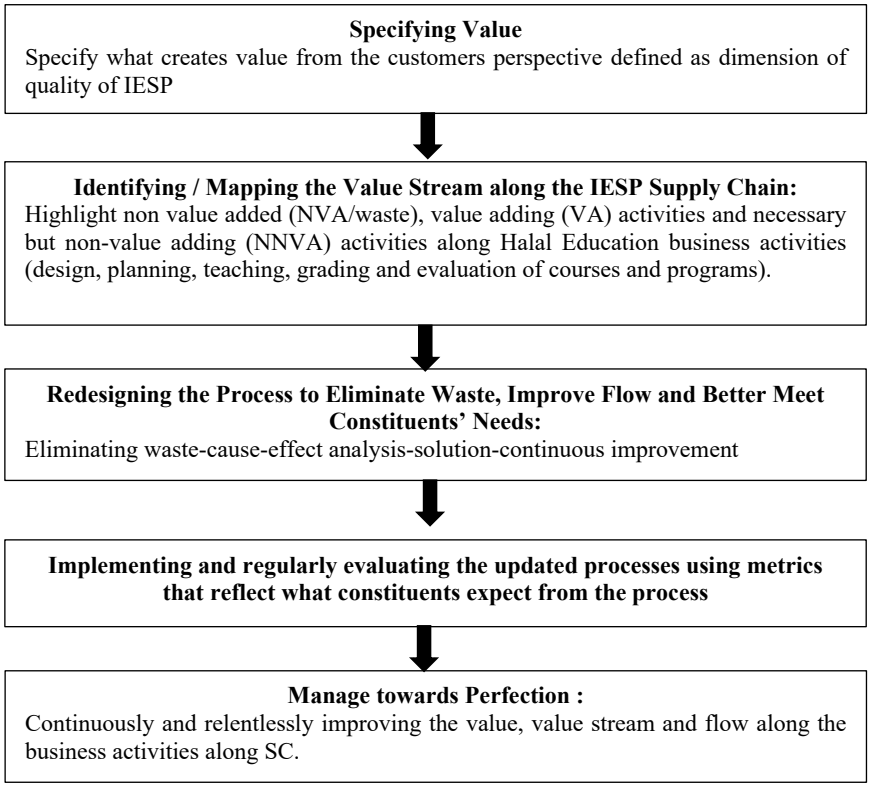

Figure 1. Five-stages of LSC Technique on IESP

Table 1. IESP Dimension of Quality

No	Activities	Value as Dimension of Quality	Sources of Dimension of Quality
1	Curriculum design	Course design Management /reputation Figure	Asnawi & Fanani, 2019
2	Teaching & Learning	Teacher capability &competence Teaching method Campus Environment	Asnawi & Fanani, 2019 ; Rafik & Priyono, 2018
3	Student evaluation	Fairness	VOC, 2022
4	Counseling & advising	Teacher capability & competence	VOC, 2022
5	Administration & library	Staff reliability Empathy of employees Responsiveness	Asnawi & Fanani, 2019

6	Other activities	Parents involvement Outside parties	VOC, 2022

4.2 Identifying / Mapping the Value Stream along the activities in IESP Supply Chain

This practice is conducted to highlight NVA (waste), value adding (VA) activities and necessary but non-value adding (NNVA) activities along operational or education avtivities (Balzer et al., 2016). The technique that was implemented is Value Stream Mapping (VSM). Type of wastes that occur in services are: delay, duplication, unnecessary movement, unclear communication, incorrect inventory, opportunity lost, errors and people. Before mapping the value stream, it was presented the IESP supply chain on figure 2.

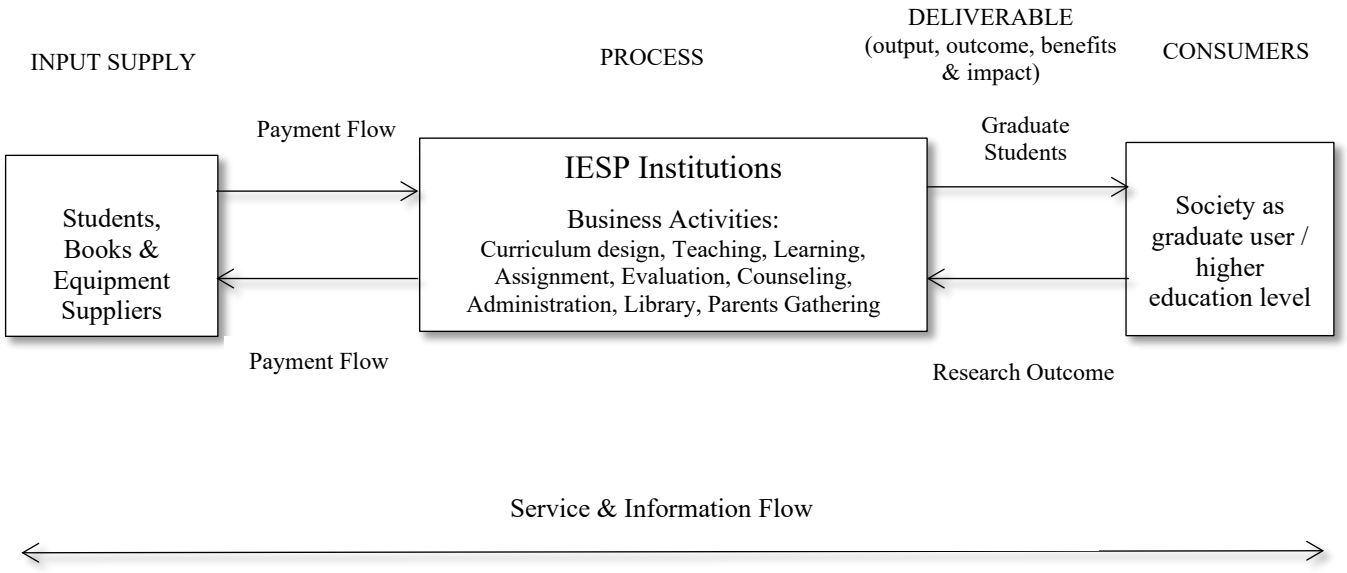

Figure 2. Islamic Education Service Provider Industry Supply Chain

VSM is a visualization method that helps to get consensus on the actual process flow (Riezebos & Huisman, 2021). VSM is a widely used and proven method that enables the mapping and analysis of process chains and helps to derive potentials for improvement (Meudt et al., 2017). The main objective is to identify the different processes and to distinguish among them into two categories: those that create value-added (VA) and those with no value added (NVA), which allows identifying the sources of wastes that must be eliminated for objective to transform the current process into a future process more optimized (Saad et al., 2017). If NVA work is eliminated, processes will become more efficient and customer- focused; this enables organizations to be more responsive in fulfilling business-to-business customers' requirements effectively (Ghosh & Lever, 2020). In this study, VSM was described per activities in IESP and exemplified for teaching and learning activities, as shown in figure 3.

4.3 Redesigning the Process to Eliminate Waste, Improve Flow and Better Meet Constituents' Needs

In order to avoid waste in the future the root cause of the waste should be found. Root caused analysis using Ishikawa (fish-bone) diagram was applied to get over it. The Ishikawa diagram is intended to identify the variability of a quality characteristic as an effect or consequence of multiple causes (Suárez-Barraza & Rodríguez-González, 2019) After finding the root cause of the problem, suggestions for improvement will be proposed towards education activities in the supply chain. Improvement suggested addressed to increase efficiency and quality excellence along the supply chain. Fish-bone diagram was established per activities and in this study was exemplified for teaching and learning activities, as shown in figure 4. For example, there was problem in teaching and learning activities that causing course material did not deliver well to the students (unclear communication).

4.4 Implementing and regularly evaluating the updated processes using metrics that reflect what

constituents expect from the process

Efficiency is a key performance factor in measuring the performance of the process. The objective of assessing efficiency through a defined process is to achieve better performance by focusing on value creation and non-value elimination. Metric in measuring process efficiency is Process Cycle Efficiency (PCE) (Al-sudairi, 2007).

$$\text{PCE} = \frac{\text{Time for value adding activities}}{\text{Total cycle time/ lead time}} \text{ x } 100\% \quad (1)$$

Time for value adding activities, cycle time or lead time was determined from VSM.

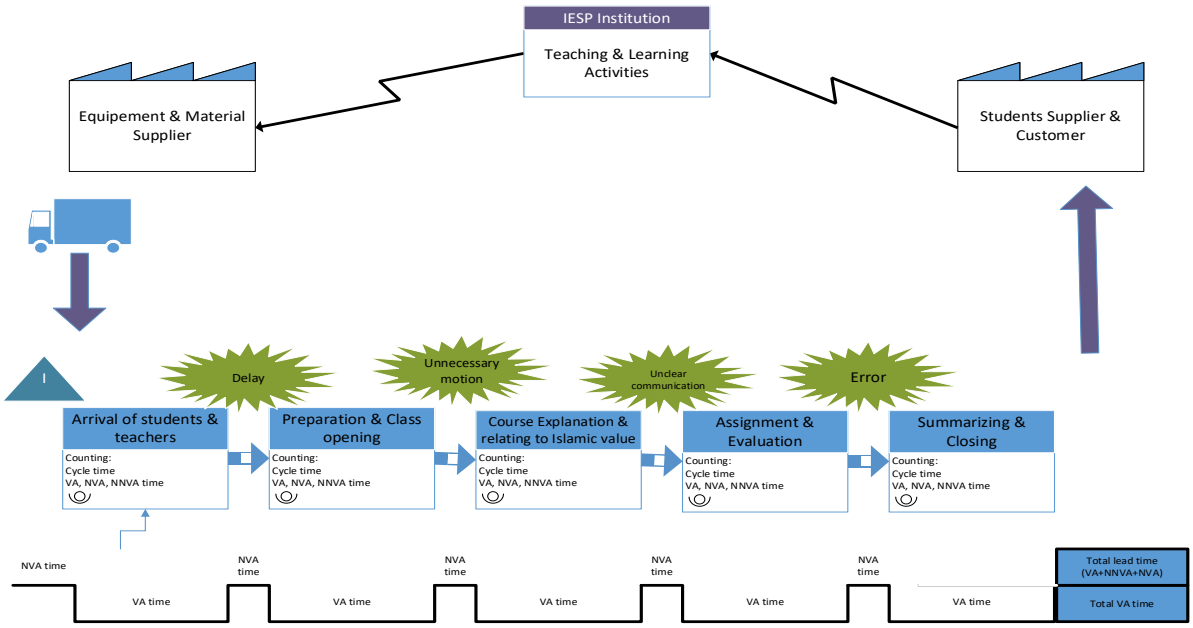

Figure 3. VSM for Teaching and Learning Activities in IESP

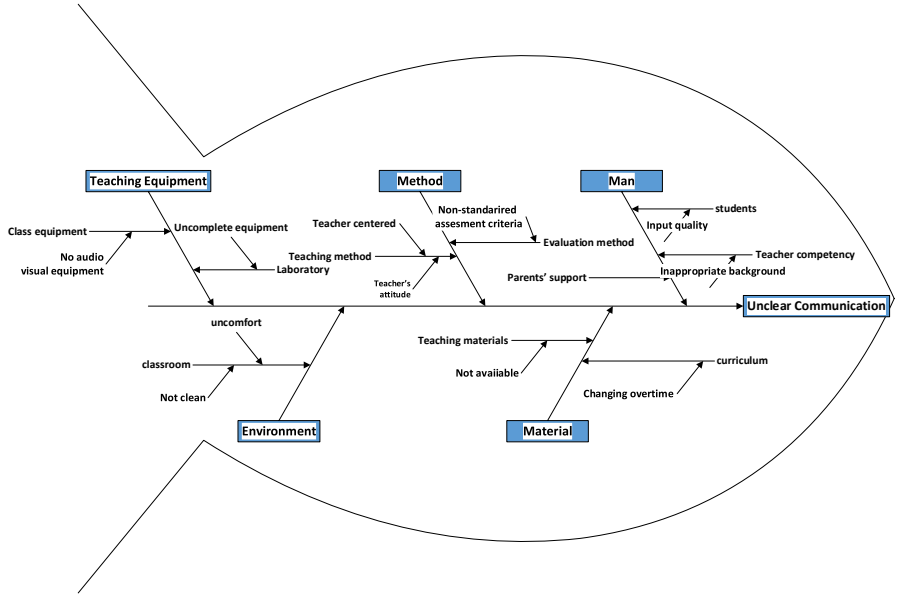

Figure 4. Fish-bone Diagram for Unclear Communication

4.5 Manage towards Perfection

It refers to continuously and relentlessly improving the value, value stream and flow along the business activities along SC. 7Ps chainpreneur concept could be used to continuous improvement to achieve quality excellence in IESP. 7Ps halal chainpreneur is a part of Tetrapreneur which is a new approach to describe the condition of entrepreneurship by using the philosophy of supply chain. The supply chain consists of all parties involved directly or indirectly to meet customer demand. This concept is very appropriate to IESP which based on Islamic value. The concept of 7Ps halal chainpreneur consist of people, policy, performance, product, path, process and philosophy, as seen on Figure 5, that are interacting and linking each other in the SC. The goal of any supply chain should be to maximize the overall value generated (Fatimah, 2018).

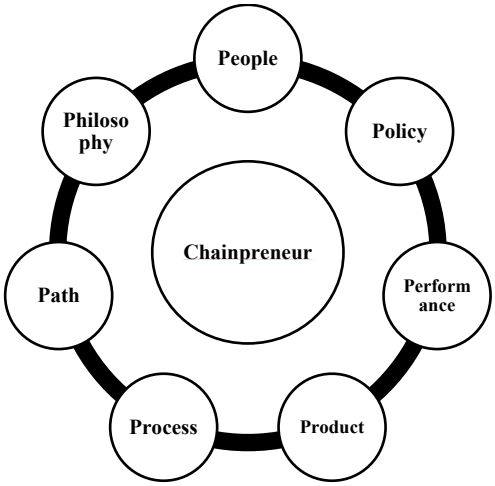

Figure 5. *7Ps* Halal Chainpreneur Model (source: Fatimah, 2018)

Table 2 shows the interrelationship among 7Ps chain that occurs in every activity in IESP. Interaction among people, policy, performance, product, path, process and philosophy could take place in curriculum design, teaching and learning, student evaluation, counseling, advising, administration, library and other activities that supporting IESP.

Table 2. 7Ps Chainpreneur linkage among activities in IESP

No	Activities	Interactions among 7Ps Chain
1	Curriculum design	Teacher – management (people, policy, philosophy, path, process)
2	Teaching & learning	Teacher – student – environment (people, performance, process, product)
3	Assignment & evaluation	Teacher – student (people, process, performance)
4	Counseling & advising	Teacher – student (people, performance, product)
5	Administration & library	Student – staff (people, performance, policy, process)
6	Other activities	Teacher-management-parents-alumni-other parties (people, policy, process)

5. Results and Discussion

As explained in the previous section, the benefits of implementing LSC are cost reduction, lead time reduction and quality enhancement. A quality outcome is achieved when the right things are done right (Kennedy, 2019). Quality is a relative concept, that different interest groups or "stakeholders" in education have different priorities and their focus of attention may be different. (Sunder, 2016) argued the need for quality has become more significant for education institutions across the globe, over the passage of time. Excellence in quality is not merely delivering the required output to the customers, but a management strategy to enhance and align the processes in a way that excellence becomes inherent part of the ways of working (Sunder & Antony, 2018).

a. People

Service industries are labour intensive. People or human resource playing an important role in IESP Hence, the impact of the human aspect in service operations is remarkable accompanying the complexity it creates. Significant human involvement in the process requires a diverse approach in the study of service supply chains. In IESP context, the role of human resources should be redefined as a core function.

In operational activities along IESP SC contain group of people who interacting each other to produce a better people (graduate students with value added) in all aspects; knowledge, behaviour, action, thought, lifestyle, decision making and approach to issues that affect and influence life as a whole. Important issue that should be realized in many education institutions, especially IESP, students are a group of people act as customers. But at the same time, it is quite different from typical business; in education institution often admit students based on certain academic standards and requirements. S,o besides customers have requirements and expectation, they also must obey to some standards and requirements. It is showing the unique characteristic of SSC named inseparability.

Teachers and staffs as facilitator and organizer of the education process in IESP must be a qualified people in order to serve and deliver all the noble value of halal education to the customers. To find qualified, most talented and right teachers and staffs, the selection and recruitment should not be careless. Likewise in the process of training, motivating and salary system must really pay attention. Empowering teachers and staffs are key position in IESP to ensure the operational activities running as expected. Training and motivating the service delivery workforce to interact positively with these users along with the design of services that require simultaneous production and consumption with the presence of user as a co-producer (Gupta & Sharma, 2016).

Beside students, teachers and staffs, people who interact in IESP SC are: alumni members, parents who pay tuition fees for their children and government who provides public policy. It clearly shows the complexity of interaction among people in IESP and complexity in standardized the services. Every stakeholder has its own expectation and perception about service quality (heterogeneity).

b. Policy

Policy is a series of concept and principles that serve as guideline and the basis in establishing halal education. IESP leader should set a clear vision, missions, goals, values and break them down into policy and strategy to

achieve and pursue quality excellence. According to (Van Der Wiele et al., 2000) Policy and strategy are based on the present and future needs and expectations of stakeholders. Further, policy and strategy are also based on information from performance measurement, research, learning and creativity related activities. Policy and strategy are developed, reviewed, communicated, implemented and deployed through a framework of key processes.

c. Performance

Shajehan in (Eaidgah et al., 2016) argued performance management can be used to maintain or alter patterns in organisational activities. Performance management is seen as a dynamic and iterative process in which managers work with their employees to define goals, measure and review results and reward a good performance or set corrective actions, to improve employee performance, with the ultimate aim of affecting organisational success positively.

(Neely et al., 1995) defined business performance as a set of metrics used to quantify both the efficiency and effectiveness of actions. Performance measurement employs a quantitative standard to systematically measure an organization's daily operational results as they relate to its overall objectives (Chen et al., 2009). Most performance measurement systems are affected by human expectations and neglected issues such as goals and performance history, resulting in the loss of much important information (Balouei Jamkhaneh & Safaei Ghadikolaei, 2020).

Therefore, in IESP there are two primary objectives of measurement: to assist institution in improving education quality; and to help institution meet customer demands and achieve their responsibilities. Regarding the unique characteristic which are intangible and heterogeneity, each IESP should determine its own key performance indicators that probably different from others.

d. Product

Since IESP is a service industry so it is typical and different from goods. Services are perishable and inseparable. Perishability means services cannot be stored for future sale and consumption, it is produce and simultaneously consumed. Inseparability reflects the fact that customers must be present for the service to be provided. In a service setting the customer usually contributes to the production process. Lehtinen in (Jain et al., 2011) proposed three dimensions of service quality. According to their study, the dimensions are physical quality, corporate quality and interactive quality. Physical quality refers to such items as the condition of facilities needed for teaching-learning activities and enabling equipment. Corporate quality is related with courses (curriculum) that contribute to the Islamic sharia value concepts and further than that related with the organization's image and profile. Regarding the characteristic of heterogeneity, interactive quality is needed and defined as the interaction among people in IESP industry.

e. Process

In its SC IESP consist of several operational activities that bringing and convert input into deliverable (output, outcome, benefit and impact). IESP need to consider innovative ways to arrange their infrastructure and education processes to fully satisfy and generate increasing value for customers and other stakeholders. To be reminding the unique characteristic of services that is inseparable or simultaneous, which mean service produce and consume at the same time. Processes should systematically designed, developed, managed, improved and delivered. Thus, to ensure the continuous process, customer relationships are managed and enhanced. The process along IESP SC, named design, planning, teaching, grading and evaluation of courses and programs should clearly communicate to stakeholder.

f. Philosophy

Philosophy of IESP which takes Islamic value as the supreme and guiding tools in education processes should be maintained. Unlike the conventional education, Islamic education involves values, spirituality and ethical aspects of the receiver. The concept of Islamic education requires the development of the overall human potential including the spiritual, intellectual, emotional and physical aspects (Nor & Malim, 2014). (Azra, 2018) opined that education is more than the mere act of teaching. In fact, education is the process of the change of values and the development of character in all aspects. Continuous improvement is needed to maintain the philosophy of IESP. Institution cannot discontinue and self-complacent in condition that has been achieved, because competitor will always overshadow to be able to win customers.

g. Path

IESP should clearly determine the path in order to sustain. Linking people, policy, performance, product, process and philosophy is a part to determine path of halal education. All elements supporting service quality should be well managed: external partnerships, finances buildings, equipment, materials, technology and Information.

6. Conclusion

LSC operational model could be applied to IESP SC. IESP is a new terminology which describes service innovation industry that has not been widely discussed and researched. Through the five principles of lean in operational activities of IESP SC, waste or "fatness" occurred could be defined and eliminated. Since the "fatness" could be overcome as an effort to continuously improve the performance so operational activities of IESP could be well manage and upgrade. 7Ps halal Chainpreneur consist of people, policy, performance, product, path, process and philosophy could be developed as key quality excellence in managing IESP SC and the industry could achieve sustainable competitive advantage. As this paper is conceptual, further research, both empirical and non-empirical, must be done in order to uncover more issues pertaining to IESP industry. The further research could address the problem or "fatness" occurred in IESP SC, i.e. unsuitable curriculum, under qualified learning and teaching method, under reputation of IESP institution, misperception of Islamic education, remodeling and rebuilding infrastructure of facilities. The main purpose of LSC is to eliminate "fatness" along the supply chain. If the "fatness" has already lean, high-quality services could deliver at the lowest cost, optimized efficiency with high quality and high flexibility as well as customer satisfaction.

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