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# HALALAN TOYYIBAN SUPPLY CHAIN THE NEW INSIGHTS IN SUSTAINABLE SUPPLY CHAIN MANAGEMENT

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## Introduction

In today's business environment companies are seeking to find the key successful strength in the organization to remain competitive. Therefore, logistics is an activity which can be considered by the industry players. As a result of the expansion of logistics and purchasing activities which have grown universally since the 1980s, it formed the supply chain management. In the supply chain management, it involves integration between channel members. Indeed, this supply chain integration is also essential in gaining more investment to the company which returns better quality and higher profits. Recently, numerous companies have started realizing that supply chain integration creates value added to the company. Therefore, the key objective and policy of the company has been changed to deliberating final customer's requirements. (Wisner, 2005). Lately, customers' do not only require the food safety but also further transparency of the food chain in ensuring the food is good to consume. As a result, activities in the supply chain management which involve food product are also essential to the customers.

## Supply Chain Management

To begin this discussion about halal food supply chain it will help to define supply chain at as an introducing part of this paper. A widely accepted definition would be the following:

Authors	Definition
Bowersox (1969)	In describing several benefits of <b>integrating various functions</b> surrounding physical distribution.
Jones and Riley (1985)	An <b>integrative</b> approach to dealing with the <b>planning and control</b> of the material flow from suppliers to end-users.
Ellram (1991)	A network of firms interacting to deliver product or service to

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Authors	Definition
	the end customer, <b>linking</b> flows from raw material supply to final delivery.
Christopher (1992)	<b>A network</b> of organizations that are involved, through upstream and downstream linkages, in the different processes and activities that produce value in the form of products and services in the hands of the ultimate consumer.
Lee and Billington (1992)	<b>Networks</b> of manufacturing and distribution sites that procure raw materials, transform them into intermediate and finished products, and distribute the finished products to customers
Berry et al. (1994)	Supply chain management aims at building <b>trust</b> , exchanging <b>information</b> on market needs, developing new products, and reducing the supplier base to a particular OEM (original equipment manufacturer) so as to release management resources for developing meaningful, <b>long term relationship</b>
Saunders (1995)	External Chain is the <b>total chain of exchange</b> from the original source of raw material, through the various firms involved in extracting and processing raw materials, manufacturing, assembling, distributing and retailing to ultimate end customers.
Kopczak (1997)	The set of <b>entities</b> , including suppliers, logistics service providers, manufacturers, distributors and resellers, through which materials, products and information flow.
Lee and Ng (1997)	<b>A network of entities</b> that starts with the suppliers' supplier and ends with the customers' custom the production and delivery of goods and services.
Tan et al. (1998)	Supply chain management encompasses materials/supply management of the supply of basic raw materials to final product (and possible recycling and re-use). Supply chain management focuses on how firms <b>utilize</b> their suppliers' processes, technology and capability to enhance competitive advantage. It is a management philosophy that extends traditional intra-enterprise activities by bringing trading partners together with the common goal of optimization and efficiency.
Mentz (1998)	Is the logical <b>progression of developments</b> in logistics management.
CSCMP	Supply chain management encompasses the <b>planning and management</b> of all activities involved in sourcing and procurement, conversion, and all Logistics Management activities. It also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third-party service providers, and customers.

Table 1. Definition of Supply Chain Management

Adopted from Croom, Romano, & Giannakis (2000) and Larson, Poist, & Halldórsson (2007)

These are remarkable definitions. First, the focus is on integration within the process rather than "benefits to customer". This has been indicated since the year 1969 to 1992 by several authors Bowersox (1969); Jones and Riley (1985); Ellram (1991); Christopher (1992) and Lee and Billington (1992).

On the other hand, in the Table 1, the supply chain management definition from the year 1994 until the year 1998, still focus on the network entities with value added during the development of logistics management in relation to the total chain. So we need to realize that the concept of the supply chain is also concerning the consumer benefits (that is, user good to consume), rather than about buyer benefits (which may include non-users).

Second, the supply chain is considering both upstream and downstream users' benefits. It involves a relationship among the channel members which in short term or long term relationship. It resides in the user's mind that the relationship will contribute to the mutual agreement which result 'win-win' situation.

Third, supply chain commonly refers to the organizational performance has threshold at both upstream and downstream supply chains. This means that consumers' benefits may be neglected as both stream focuses on organization. In addition, the concept of integration and total flow has been defined for supply chain management as in Table 2.

Authors	Definition
Monczka, Trent and Handfield (1998)	SCM requires traditionally separate material functions to report an executive responsible for coordinating the entire materials process, and also requires a joint relationship with suppliers across multiple tiers. SCM is a concept, "whose primary objective is to <b>integrate</b> and manage the sourcing, flow, and control of materials using total system perspective across multiple functions and multiple tiers of suppliers."
La Londe and Masters (1994)	Supply chain strategy includes: "... two or more firms in supply chain entering into a long term agreement;... the development of trust and commitment to the relationship; ... the <b>integration</b> of logistics activities involving the sharing of demand and sales data; ... the potential for a shift in the locus of control of logistics processes."
Steven (1989)	"The objective of managing the supply chain is to <b>synchronize</b> the requirement of the customers with the flow of materials in order to effect a balance between what are often seen as conflicting goals of high customer service, low inventory management, and low unit cost."
Houlihan (1988)	Differences between supply chain management and classical materials and manufacturing control: "1) The supply chain is viewed as a single process. Responsibility for the various segments in the chain is not fragmented and relegated to functional areas such as manufacturing, purchasing, distribution and sales. 2) Supply chain management calls for, and in the ends depends on strategic decision making. "Supply" is a shared objective practically every function in the chain and is of particular strategic significance because of its impact on overall costs and market share. 3) Supply chain management calls for a different perspective on inventories which are used as a balancing mechanism of last, not first, resort. 4) A new approach to system is required - <b>integration</b> rather than interfacing."
Jones and Riley (1985)	Supply chain management deals with the <b>total flow</b> of materials from supplier to end users..."
Cooper et al (1997)	Supply chain management is "... an integrative philosophy to manage the <b>total flow</b> of a distribution channel from the supplier to the ultimate user."

Table 2. Definition of Supply Chain Management

Adopted by (Mentzer et al., 2001)

Although there were various definitions from the authors (Table 1 and Table 2), it can be classified into three groups: a management philosophy, implementation of a management philosophy, and a set of management processes. Hence, numerous activities which are essential to implement SCM philosophy successfully have been recommended in the previous research. The supply chain management activities involve integrated behavior; mutual sharing information; mutual sharing risk and rewards; cooperation, the same goal and the same focus on serving customers; integration of processes, partners to build and maintain long-term relationships (Mentzer et al., 2001). As a result, supply chain management activities

## HALAL AND TOYYIBAN

Halal is an Arabic word which means lawful or permissible by Islamic laws. In Malaysia, the use of the Halal expression is referred to in the Trade Descriptions 1975, people do not know about. So whoever distanced himself from it, he has acquitted himself (from blame). And those who fall into it, he has fallen into a state of the Haram (Jabatan Kemajuan Islam, n.d.).

Consequently, the specific motives of Haram in Islam are to preserve the purity of religion, to safeguard the Islamic which can be applied to food. The term 'Ditanggung halal' or 'Makanan halal' indicates that a Muslim is allowed to consume the products as permitted by Islam. On the one hand, halalan toyyiban means any consumption of products, mentality, to preserve life, safeguard future generations and integrity (Yahya, 2006), to safeguard property, to and to maintain self-respect which are not harmful and are safe to be consumed as Anything that is halal to eat or consume is considered to underline in the Syariah law, and thus is allowable and permissible.

Halal concept is not only for Muslims but also non-Muslims due to the fact that the term 'halalan-toyyiban' means it must be halal and good to be consumed which has been mentioned in the Qur'an . Indeed, the concept of halal is not only introduced to the food sectors, but also to the non-food sectors such as pharmaceuticals, cosmetics, financial services and also other services which include supply chain. Accordingly, in realizing the supply chain and halalan-toyyiban concept in the daily food consumption is interrelated, thus the application of the halalan-toyyiban concept of the supply chain is deemed important. Hence, it is vital to focus on the supply chain of the food in ensuring only halalan toyyiban food will be consume by consumer.

### Halal Supply Chain

To date, the new approach in supply chain namely halal, has create attention to the worldwide market which include food and non-food industry players. Thus, trully understand of halal supply chain has been defined as in Table 3.

Authors	Definition
Omar, Jaafar, & Osman ( 2012)	Halal supply chain is the concept starting from farm to the consumers which means <b>everything</b> must be halal and also toyyib along the chain.
Bahrudin, Ilyas, & Desa ( 2011)	<b>Proses of managing</b> the procurement, movement, storage and handling of materials, parts livestock and semi- finished inventory food and non-food and related information and related documentation flows through the organization and supply chain in <b>compliance with the general principles of Shariah Law</b> . Halal Supply Chain also has the <b>same definition with conventional supply chain</b> but with the additional of Syariah law, whereby the Islamic law is the guideline for a proper halal process.
Tieman (2011)	Halal supply chains can be characterized as <b>robust supply</b>

Authors	Definition
Omar & Jaafar (2011)	<p><i>chains</i> that strive for a lower vulnerability for Halal contamination.</p> <p>Halal is <b><i>applied in the supply chain</i></b>; thus become a halal supply chain starting from the <b><i>point of origin to the point of consumption</i></b>. These activities include warehousing, sourcing, transportation, handling of products, inventory management, procurement and order management which must follow the <b><i>Syariah Islamic perspectives</i></b>.</p>

Table 3 : Halal Supply Chain Definition

Omar, Jaafar, & Osman (2012b) have been highlighted that in the halal supply chain, the total chain must be halal and tayyib. Indeed, Bahrudin et al., (2011) emphasis that the halal supply chain also has a similar definition like conventional supply chain; it involves the managing process in the supply chain activities with relevant information and necessary documents and only dissimilar in the aspect of following the principles of Shariah law. This definition is also similar to studies by Omar & Jaafar, (2011) which discover applying the halal concept in the activities of the supply chain which begins from the point of origin to the point of consumption with regard to Syariah Islamic perspectives. Unlike, Tieman (2011b) expresses the halal supply chain is a robust supply chain which attempts to reduce the halal contamination. Consequently, the halal supply chain is more suitable for the food industry as it has immediate response after consumption to the consumers. Therefore, halal food supply chain was well-defined in the next section.

#### *Halal Food Supply Chain*

Of late, consumers are more concerned towards food safety, quality, origin and authenticity for the reason of global food safety crises and incidents. Hence, this generated needs for more transparency in the food chain and also guarantees the healthiness of food from the various features of quality information (Verbeke, Rutsaert, Bonne, & Vermeir, 2013). Indeed, a quality assurance system within the halal meat chain may change the civic and domestic coordination of quality towards an industry or market coordination of the halal meat market in non-Muslim societies (Bonne & Verbeke, 2008). Therefore, halal food supply chain is becoming well known as demand for halal product is increasing. This is due to the fact that Muslim population increasing yearly for instance in the year 2011, the World Muslim population is about 1977.24 million and it increased to 2013.62 million in the year 2012 (Muslim Population, n.d.). Therefore, demand for halal food is also increasing as well as customers' acquire for the halal food supply chain.

In describing the halal food supply chain as in TABLE 4, many researchers focus on the process of supply chain from the point of origin to the point of consumption (Che Man et al, 2007; Tieman, 2009a, 2009b; Lodhi, 2010 and Zulfakar, Jie & Chan, 2012). However, Tieman (2009a, 2009b) and Lodhi (2010b) emphasis the supply chain must comply to the Shariah law general principles and Islamic dietary. Indeed, the products must also be halal certified (Che Man et al, 2007). Unlike other researchers, only Zulfakar, Jie & Chan (2012) highlights towards exceptional to the types of products which have been handled.

Authors	Definition
Che Man et al, 2007	'Process of planning, implementing and controlling the efficient flow and storage of <b>Halal certified product</b> from the source to the demand point'
Tieman, 2009a, 2009b	' <b>Process of managing</b> the procurement, movement, storage and handling food products through the organization and the supply chain in compliance with the <b>general principles of Sharia law</b> '
Zulfakar, Jie & Chan, 2012	'Halal food supply chain applies the same principles as conventional or generic supply chain with special exception on the <b>type of products</b> that have been handled'
Lodhi, 2010	The halal food supply chain requires conforming to the <b>Islamic dietary laws at all stages from production to consumption</b> . Hence, the intentional addition of any amount of prohibited food or material is not allowed into the food chain at any stage and strict control of all stages is essential to ensure the integrity of the halal product.

TABLE 4 : Halal Food Supply Chain

Adopted from (Zulfakar, Mohamed, & Ab Talib, 2012) and author

#### *Similarities and Differences*

##### *1. Definition*

The process of supply chain remains the same as the conventional supply chain activities nevertheless it must comply with the general principles in the Shariah law. However, this definition did not include the underlying reason for the consumers which will benefit them. As in halalan toyyiban supply chain, the main aim is to provide halalan toyyiban food to consumers which mean good to consume. This is due to the fact that *halal* and *toyyiban* concept are comprehensive as stipulated in Islam as the concept covers nutritiousness, quality, cleanliness, and safety for everyone i.e., not for Muslim society only. For instance, halal poultry will be good to consume by the consumer if the halal poultry is in good quality.

##### *2. Objectives*

Accordingly, the aim of halal supply chain is to ensure halal integrity of halal products for final consumers (Bahrudin et al., 2011). Additionally, the halal supply chain also ensures halal process performance through advance technology and coordination between the channel members. As a result, it will reduce the lead time of the certification process and supply chain as well as quality monitoring of the products (Belkhatir & Bala, 2004).

Although the objective of halal supply chain is the same with halalan toyyiban supply chain, but in the context of poultry, the aspects of animal welfare and halal animal feed must not be neglected. Apart from the animal welfare, the halalan toyyiban concept which is comprehensive covers nutritiousness, quality, cleanliness, and safety will result good to consume by consumers.

##### *3. Cross Contamination Occurrence*

Possibility of cross contamination would exist in the conventional supply chain, nevertheless in the halal supply chain cross contamination definitely must be guaranteed would not occur. As the halal product will be contaminated with non-halal products, the product will result or become non-halal. Even the product is halal; it may not be suitable or good to consume by consumers and vice versa, the product is toyyib but it is not halal also cannot be consumed by Muslim consumers. Consequently, in the halalan toyyiban supply chain segregation is important to ensure the halal authenticity of the poultry.

#### 4. Segregation

In the conventional supply chain concept, there will be possibilities of no segregation among various products compare to a halal supply chain, which segregate between halal and non- halal product is needed. Thus, in the halalan toyyiban supply chain, proper segregation is also needed and the concept of dedicated is recommended as it ensures the halalness of the product.

Elements	Comparison	
	Conventional Supply Chain	Halal Supply Chain
Definition	Functions that plans, implements and control the efficient, effective forward and reverse flow and storage of goods, services and related information between the point of origin and the point of consumption in order to meet customer requirements	<i>Proses of managing</i> the procurement, movement, storage and handling of materials, parts livestock and semi-finished inventory food and non-food and related information and related documentation flows through the organization and supply chain in <i>compliance with the general principles of Shariah Law</i> . Halal Supply Chain also has the <i>same definition with conventional supply chain</i> but with the additional of Syariah law, whereby the Islamic law is the guideline for a proper halal process.
Objective	Minimize cost, maximize profit	Ensure Halal integrity of Halal products for end consumers
Cross contamination occurrence	Possibilities for cross contamination exist	To ensure no cross contamination happens
Segregation needs	Possibilities for no segregation among various products	Separation of halal products and non-halal products

Table 5. Comparison between conventional supply chain and halal supply chain  
Adopted by (Bahrudin et al., 2011)

#### Conclusion

To conclude, halalan toyyiban supply chain is the concept of applying syariah principles in the supply chain management. The concept of halalan toyyiban along the supply chain will begin from the sourcing aspect to the point of consumption. In the halalan toyyiban supply chain activities, all aspect of halal and toyyib must be deliberated (everything must be halal and toyyib) in order to ensure final consumers will be getting halalan toyyiban food. With regard to poultry industry, halalan toyyiban supply chain safeguards the halal animal feed, proper slaughtering, proper segregation (Omar & Jaafar, 2011) and animal welfare (Omar et al., 2012a). Apparently, in identifying the possibility of halalan toyyiban will break the chain, it can identify through the halalan toyyiban critical control points (HTCCPs) at all stages in the supply chain which result halalan toyyiban poultry. However, this study limit to the supply chain, halal and halalan toyyiban definitions only, other area such as financial aspect of halalan toyyiban supply chain for can be discussed further in the future research.

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