

# Halal Risk Management in the Internet Age

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**Abstract**— This paper aims to evaluate the nature of halal risk management by focusing on the advent of online business. Globally, there is a growing trend of halal trading activities from inbound to outbound stages in a virtual marketplace utilising the advancement of online technology. With reference to MS 2400: 2010, an organization must establish a Halalan-Toyyiban Risk Management Plan (HTRMP) following the principles outlined in the standard. This means, beside Halal, the elements for Toyyib should also be considered during risk management, namely the physical, chemical and biological aspects. However, as the Halal items or services originated and processed from all parts of the world, the question of whether these products are genuinely Halal lingers in the minds of the Halal consumers especially among the Muslim communities. Thus, with the complexity of the current world virtual trade scenario, we found the Halal consumers are bound to be sceptical on whether the particular items or products being traded are indeed produced in accordance with the Halal principles and Sharia law or whether it can be construed as Halal when it has to undergo various interfaces in its entire cycle of logistics. The impact of the technology is heavily depending upon the awareness. And the relationship between different stakeholders during the process is another main cause of the risks.

**Keywords**— Halal risk management, Toyyib, Online business, Trading, Muslim consumers

## 1. Introduction

This paper aims to evaluate the influence of online business by comparing the risk management system between conventional and Sharia principles. There are several similarities between these two methods in terms of it does not only concern the minimization of risks, but also supports activities that foster innovation, so that the greatest returns can be achieved with acceptable results, costs and risks [1]. As for Halal risk management, it “systematically put the whole process of manufacturing or from the upstream (origin) to downstream (end users) either, product or service to be monitored and scrutinized for any threat to halal at all times in order to assure halal, clean, safe and quality its self” [2]. In this study, we focused

our survey on halal risk management issues of online business.

Malaysia through annual World Halal Conference has identified the halal industry and provided the ideal platform for intellectual discourse on issues pivotal to halal industry development and also inspired wealth creation from technology breakthrough and innovation [3]. In 2015, it contributed 7.5% to gross national product. The Southeast Asian country expects exports of halal products, both food and non-food items, to exceed 50 billion ringgit (\$11 billion) annually by 2020, up from 39.3 billion ringgit in 2016. The target for 2020 is 8.7%. The benefit from the rising spending power of Muslim consumers which is projected to increase to US\$5.3 trillion by 2020 [4]. Motivated by this, the government is also keen to tap opportunities arising from China's One Belt One Road initiative to promote cross-border trade and investment. There are about 30 million Muslims in China, and the halal market there is growing at 10% annually [5].

In 2012, we examined the level of awareness and concern about halal food and product consumptions among Muslims is gaining impetus in Shah Alam. As obviously shown by the findings of the study, the growing demands for halal consumptions is aided by a number of potential factors or sources identified, which include: their religious belief, exposures, role played by halal certification via halal logo/label and health related reasons. The results of paper have been established by modelling between these factors and level of awareness on halal [6]. This study is based upon the findings from the project.

A general guideline when dealing with issues of halal, not inclusive to halal food only [7]: The basic asl (origin) is that all things created by Allah are halal, with few exceptions that they are prohibited (haram). To make things lawful and to prohibit things is the right of Allah alone. Prohibiting the halal and permitting the haram is similar to committing a Shirk (ascribing partners to God). What is halal being sufficient, what is haram is superfluous. Whatever is conducive to haram is itself haram. If something is haram (prohibited),

anything leading to it is also haram. Falsely representing the haram as halal is prohibited. Representing lawful as unlawful is also haram. Good intentions do not make the haram acceptable. Doubtful things are to be avoided. The haram is prohibited to everyone alike. Islamic laws are universally applicable to all races, creeds and sexes. Compelling necessity (Darurah) Dictates Exception. Some of the potential issues include lack of global standard for halal logo or label, and monitoring the processing stages after certification has been issued to a company [8].

## 2. Literature Review

### 2.1. Halal Risk Management in The Internet Age

In pursuing this goal, companies, now more than ever, would do well to begin by identifying their top drivers, then pinpointing the top threats to those revenue drivers, and distinguishing between those that are predominantly downside risks and those that are predominantly variable risks [9].

While both categories of risk deserve attention, companies may discover the effectiveness of their risk management programs are most effective if they devote more of their attention to controlling risk rather than transferring it to insurance companies. And the risks that can be most directly controlled are downside risks, the very risks that are most likely to threaten company's top revenue drivers. When downside risks are dealt with first through prevention and control, it enables senior management to deal more aggressively with variable risks. In short, they become more proactive and strategic with their risk management approach. Because companies indicate that they expect having trouble finding the time, budget and people necessary to implement or maintain a strong risk management program, senior management must demonstrate leadership in championing and funding this initiative. The number one consequence of poor risk management is lack of bargaining power which may than lead to loss of competitiveness [10].

By implementing an effective risk management program, companies protect their ability to compete. Nothing is more fundamental to business success. Malaysia abundant experience and technology gained from past disasters, having coped with natural disasters over years. With these experience and technology, to upgrade our halal certificate repository system which includes a halal verified engine (HVE) and halal certificate management system (HCMS), to further develop the current e-commerce platform and a new mobile application for the consumer. The HVE was jointly developed by DagangHalal and the Department of Islamic Development Malaysia (JAKIM).

Collaboration agreements have been signed with 36 out of 70 international CBs recognized by JAKIM in promoting halal trade by facilitating and simplifying halal business transactions anywhere and anytime, through the usage of information technology [11].

Collaboration agreements with other certified bodies (CBs) will also be expanded, growing the halal ePlatform ecosystem in existing core markets, by expanding activities into new geographies targeting Indonesia, China and Japan, through increasing the number of Halal CB partners. Indeed, national culture, which underlines employee's cultural values, attitudes, and beliefs, has a profound impact on organizations and thus its impact on market performance should not be underestimated [12].

DagangHalal is No.1 Halal business portal in the world featuring Halal products and services. It is a Halal e-Marketplace that integrates manufacturers, importers, exporters, distributors and service providers as to manifest the full potential of the people and businesses in the global Halal market. DagangHalal helps the entrepreneurs to gain maximum branding exposure and business opportunities especially in the Halal world.

DagangHalal is currently having an exclusive collaboration with Department of Islamic Development Malaysia (JAKIM) and other established international Halal institutions and certification bodies, to develop the global halal industry. DagangHalal comprises of Halal food category from beverages, bread, biscuit & pastry, dairy products, food additives, frozen food, honey products, meat, poultry to Halal consultancy and service agencies.

Only the Halal Verified suppliers are allowed to join us to ensure the genuineness of the sellers. Halal Verified is the status awarded to our merchant who gets the Halal Certificate from the JAKIM and other 52 Halal Certified Bodies. By engaging the marketplace more effectively, the government wants to help small enterprises reach out globally. Already companies in Malaysia receive government subsidies to advertise on global ePlatform such as Alibaba.com, DagangHalal and Aladdinstreet.com which offers a business-to-business trading avenue for millions of products from over 190 countries [5]. Benefits of Halal Trading Online are:

- Extended global reach to Worldwide Muslim market.
- Trade Lead generation from DagangHalal Trade Manager via Online Exhibition, Marketing Website and Search Engine Optimization.
- Source for more Trade Leads from Worldwide Exhibitions.

- Improved corporate image with Professional B2B website solutions.
- Easy-to-use B2B E-Business solutions.
- Trade Lead alerts via SMS or Email.
- Receive updates on the latest Halal Projects and Business New.

## 2.2. Conventional versus Islamic Risk Management

We identified the following elements conventional and Islamic risk management:

**Table 1.** Comparison between Conventional and Islamic Risk Management

NO		Halal Risk Management (HRM)	Conventional Risk Management (CRM)
1.	Concept	The underlying principle for a Muslim diet is product has to be halal (permissible by Islamic law) and <i>Toyyiban</i> (wholesome: healthy, safe, nutritious, quality and animal welfare) as well as for services.	The underlying principle is products has to be wholesome (healthy, safe, nutritious, quality) as well for services.
2.	Products	The products must comply Sharia requirement, regulatory requirements and customer requirements.	The products must comply regulatory requirements and customer requirements.
3.	Services flow	The process of managing the procurement, movement, storage and handling of materials, parts, livestock and semi- finished inventory, food and non-food, and related information together with documentation flows through the organization that comply with the requirements of Syariah Law	A process of planning, implementing and managing the efficient, seamless flow and storage of: ISO certified raw materials, ISO semi-finished or ISO finished goods

## 3. The Study

We have conducted field surveys in a Malay-Muslim dominated area in Shah Alam, Selangor since 2012. Online trading is fast becoming natural and inevitable. It is an activity which integrates recognition of risk, risk assessment, developing strategies to manage it, and mitigation of risk using managerial resources in accordance with Sharia requirement [4]. The system is, based upon the concept of total quality management and incorporates compliance with international standards of Good Manufacturing Practices and Good Hygiene Practices and prescribes practical guidelines for the food industry on the preparation and handling of Halal food (including nutrient supplements) based on quality, sanitary and safety considerations and serves as a basic requirement for food products and food trade or business in Malaysia [13]. It also simultaneously acts as an internal mechanism in monitoring, controlling, improving and preventing non-conformities at halal critical point (HCP) [10]. It coincides with the concept of Halalan Toyyiban practiced by JAKIM which covers halal, clean, safe and quality as outlined by the Trade Description (Definition of Halal) Order, 2011 and Trade Description (Definition of Halal) (Amendment) Order, 2012, Malaysian standard MS1500:2009, Procedure Manual for Malaysian Halal Certification (third revision) 2014. In an effort to exploit the market potential, Malaysia's yet biggest initiative is based upon DagangHalal, the world's first global e-marketplace to address the need for halal verification. It was successfully listed on London's ICAP Securities and Derivatives Exchange (ISDX) Growth Market on April 7, 2016 at a placing price of 25p. Gross proceeds of about £4.2mil (RM23.8mil) have been raised by way of a subscription of £3.9mil from Malaysian investors and a placing of £0.3mil from UK investors. The subscription raised about RM22.4mil as part of a pre-admission fundraising including about RM5.4mil from the Malaysia Technology Development Corp, a wholly-owned subsidiary of Khazanah Nasional Malaysia, the sovereign wealth fund of the Government [4].

### 3.1 Research Questions

Our research question is to understand the perspectives of *Maqasid Sharia* (Objective of Sharia) in terms of the realization of benefit (maslahah) to the people and protecting them against corruption of evil. Halal risk should be recognized as an important *Qawaid Fiqhiyyah*/ Islamic Legal Maxim which provides provisions such as "do not inflict harm nor reciprocate harm"; "the repealing of harm is preferred to the attainments of benefits"; "harm is repelled as far as

possible”; and “harm is put to an end”. There is a need to expose the paradigm of management in Islam. A management system in Islam stands on the basis of *Taqwa*. *Taqwa* literally means protecting oneself against risks, hazards and troubles. *Taqwa* is a paradigm whereby a management diligently avoids any a probability of damages, injury, liability, loss or any other negative occurrences that is caused by external or internal factors in all affairs of management that are displeasing to Allah SWT while the company keenly and enthusiastically pursues everything that pleases Allah. Ultimately, the objectives of Halal Risk Management are to ensure that the organization produces quality products or services to their customers or comply with statutory regulations and Shariah requirement; and, to avoid from a probability of damages, injury, liability, loss or any other negative occurrences which is to assure uncertainty does not deflect the endeavour from the business goals. Products that are permitted to be consumed (halal) and can give benefits to the human body or services that allowed to be used. Fulfils the two criteria: first, the products are halal and taken from a halal source, and, second, the products are a quality product as its provide benefit for those who consume it. Thus, products that do not have these two criteria is not classified as *Halalan Toyyiban*, hence it should be avoided.

### 3.2 Methodology

We conducted our study by looking at available secondary data, and have ensured the credibility of our study by evaluating various sources regarding the information required in order to answer our research questions. And we have identified many digital halal marketplace and projects initiatives in Malaysia such as the DagangHalal company to easily gain global recognition and endorsement, and to help highlight DagangHalal’s business profile worldwide. Those targets were mainly is poised to become the world’s largest digital Halal marketplace and a focal centre for the global halal industry. We reviewed those challenges and findings. As we have obtained few significant findings during our previous study around Shah Alam, Selangor [6], we have conducted several observations in those target area. In this study, we focus on the nature of risk management by comparing between conventional and halal practices with focus on online business.

For HRM, five categories have found to be the main challenges in implementing halal warehouse. They are coded as halal product trade, halal asset and facility, halal standard of procedure, human factor and perspectives between logistics provider and halal agencies [14]. the services flow involves the process of planning, implementing and managing the efficient, seamless flow and storage

of Halal certified raw materials, Halal semi-finished or Halal finished goods. the service flows from source to demand point, ensuring full compliance of the recognized Halal Standards throughout the process, thereby lessen the rate of Syubhah [15]. Whereas, for CRM, the service flow is from source to demand point, ensuring full compliance of the recognized ISO Standards throughout the process.

## 4. Results and Discussion

### 4.1 Elements of Halal Risk Management

When some halal integrity issues can be traced back to issues in slaughtering, manufacturing or processing and packaging, a supply chain perspective highlights the halal integrity problems that can arise at the transfer in the system from improper storage, handling and distribution of the product [2]. Considering the online business viewed within the service (rather than physical product) perspective, the specific risk elements are:

#### 4.1.1 Operational Risk

Is the prospect of loss resulting from inadequate or failed procedures, systems or policies, ie. employee errors; systems failures; fraud or other criminal activity. Any event that disrupts business processes. Must consider the full range of material operational risks. In the banking or financial transaction for instance, the activities are exposed to risks relating to Shari’a non-compliance and risks associated with the Islamic Financial Services (IFS)’s fiduciary responsibilities towards different fund providers. Shari’a non-compliance risk critical to Islamic bank licensees’ operations and such compliance requirements must permeate throughout the organization and their products and activities. Fiduciary risk is the risk that arises from Islamic bank licensees’ failure to perform in accordance with explicit and implicit standards applicable to their fiduciary responsibilities.

#### 4.1.2 Market Risk

Market risk is defined as the risk of losses in on- and off-balance sheet positions arising from movements in market prices i.e. fluctuations in values in tradable, marketable or leasable assets (including sukuk) and in off-balance sheet individual portfolios (for example Collective Investment Undertakings).

#### 4.1.3 Supplier Risk

Its an evolving discipline in operations management for manufacturers, retailers, financial

services companies and government agencies where the organization is highly dependent on suppliers to achieve business objectives.

4.1.4 Technology Risk

Any potential for technology failures to disrupt assets and processes vital to business and may prevent compliance with regulations, impact profitability and damage company’s reputation in the market place.

Next, we identified the established standard to overcome risks through Islamic and conventional means:

**Table 2.** Comparison between Halal Risk Management and Conventional Risk Management

Halal Risk Management	Conventional Risk Management
1. MS 1500:2009 - Halal Food - Production, Preparation, Handling and Storage – General Guidelines	1. ISO 31000:2009, Risk management — Principles and guidelines
2. MS 1514 :2009 Good Manufacturing Practice (GMP) For Food (First Revision)	2. IEC 31010:2009, Risk management — Risk assessment techniques
3. MS 1480:2007 Food Safety According to Hazard Analysis and Critical Control Point (HACCP) System (First Revision);	3. ISO/TR 31004:2013, Risk management — Guidance for the implementation of ISO 31000
4. MS 2424:2012 Malaysian Standards Halal pharmaceuticals - General guidelines	4. ISO 22000:2005 Food safety management systems -- Requirements for any organization in the food chain
5. MS 2200: Part 1 2008 Islamic Consumer Goods Part 1: Cosmetic and Personal Care General Guidelines	5. ISO 22004:2014 Food safety management systems -- Guidance on the application of ISO 22000
6. MS 2200: Part 2 2012 Islamic Consumer Goods Part 2: Cosmetic and Personal Care General Guidelines	6. ISO 22005:2007 Traceability in the feed and food chain -- General principles and basic requirements for system design and implementation
7. MS 1900:2014 Quality Management System – Requirements from Islamic Perspective	7. ISO 16091:2002 describes the set of management requirements needed to identify and provide logistic support.

8. MS 2565:2014 Halal packaging - General guidelines	
9. MS 2400-1:2010 (P) Halalan-Toyyiban Assurance Pipeline – Part 1, part 2 , part 3	

Small businesses encounter a number of risks when they use the Internet to establish and maintain relationships with their customers or suppliers. Increased reliance on the Internet demands that small business owners decide how much risk to accept and implement security systems to manage the risk associated with online business activities. The advent of the Internet has provided for a totally changed communications landscape.

Conducting business online exposes a company to a wide range of potential risks, including liability due to infringement on copyrights, patents, or trademarks, charges of defamation due to statements made on a Web site or via e mail, charges of invasion of privacy due to unauthorized use of personal information or excessive monitoring of employee communications, liability for harassment due to employee behavior online, and legal issues due to accidental noncompliance with foreign laws.

**5. Conclusion**

Malaysia is turning up the emphasis on e-commerce in its efforts to establish itself as a global hub for halal products. As identified in the study, the motivations of the different actors within the halal chain, technical constraints, economic necessities or cultural choices are crucial issues in this paper for policy-makers to be readdressed. In addition, pertaining to this matter, the paper draws the attention of the policy-makers to a point that actors such as breeders, slaughterhouses, certifying agencies, retailers, consumers, and religious representatives are in most cases have different stakes in and viewpoints on halal production and processing, which may jeopardize the economic potential of the halal market in the future. As confirmed by [16], Muslim consumers, whether in Malaysia or elsewhere, still lack the information with regards to supply chain, resulting in an insufficient assurance that even online business are not free from unlawful or unethical practices. Hence, some policy actions are needed to be established as governance of halal is unsystematic by the government in Malaysia. Finally, although the legislation made by the government would eliminate the problem of fake halal certificates from unreliable sources, yet policy mechanisms are needed to secure the confidence of Muslim in certifying products with several legislations in

place for the protection of consumers in terms of halal foods and products.

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