

## **The Academia's Multidisciplinary Approaches in Providing Education, Scientific Training and Services to the Malaysian Halal Industry**

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**Abstract:** The major challenge faced by the Halal industry is the shortage of knowledgeable work force that understands syariah requirements and implementing this theoretical knowledge into actual industrial practice. This paper highlights a multi-disciplinary approach towards Halal education, scientific training and services. As a multi-racial country, in Malaysia, one needs not necessarily become a Muslim, in order to be actively involved in the Halal services and production line. Ignorance, confusion or deliberate fraudulent practices will consequently result in the presence of adulterants or contaminants in the product, making it Haram or Syubhah with negative consequence on Halal branding. The Halal integrity and values are thus compromised. The Malaysian Standard MS 1500:2009 and the Trade Description Act 2011 are legal guidelines, mandatory for the acquiring of the Malaysian Halal logo. Understanding the principles and practices of *Halalan* and *thoyyiban*, with hands-on knowledge that meets industrial needs and demand, is necessary to cater for the rapid expansion of the Halal industry and to achieve compliance. As a niche-comprehensive university, Universiti Sains Islam Malaysia have collaborated with the Halal industry and government agencies in the development and implementation of training modules for meat slaughterers, laboratory analysts and those involved in the areas of food, pharmaceutical, cosmetics and consumer goods. The Halal Executive Program with HDC was done, to fulfill the needs for trained human resources for the monitoring and surveillance agencies. This holistic initiative of combining syariah knowledge with technology has benefited the Halal industry, the NGOs, education system and the Muslim communities and consumers.

**Key words:** Multi-disciplinary • Halal Assurance • Education • Capacity building

### **INTRODUCTION**

The world demands for Halal products, covering foods, services and other products will continue to grow with the increase in global population, especially the Muslims. Awareness of the need and importance of Halal products and services have also increased. The Halal industry is a new growth sector in the Malaysian manufacturing sector and is the fastest growing global business across the world. This awareness has resulted in the increase in value of Halal commodity, with a huge

market of USD 2.3 trillion (for food and market of USD 2.3 trillion (for food and non-food, but excluding banking) and is expected to grow each year [1]. From providing and fulfilling the needs of 1.8 billion of Muslims worldwide for Halal food, it is also attracting non-Muslims in terms of cleanliness, purity and good quality of Halal products. Therefore, Halal products will be an important factor not only for the Muslims, but also to the non-Muslims not only for economic growth and development but also for fulfilling the hygiene or *thoyyiban*, which are the wholesome and goodness elements encouraged by Islam.

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As an Islamic nation with a multiracial society, Malaysia had allocated substantial resources and commitment towards enhancement of her capacity as a choice provider for Halal products and ingredients. The Halal Hub Master Plan had identified two development objectives for Malaysia. The first focus is on R&D and best practices in products, processes, standards and certification. The second focus is to create greater economic impact, on consumer goods industries that are relevant to the Halal value proposition, such as specialty premium processed food, organic/natural personal care products and Halal ingredients. Good governance and coordinated efforts among authorities in Muslim countries worldwide, are now narrowing the gap and disparity between scientific, technical and Syariah knowledge and overcoming the unresolved Halal issues in the Halal industry between religious scholars, authorities, policy makers, consumers, researchers and other peripheral industry players [2].

In Malaysia, as a multi-racial country, one needs not necessarily become a Muslim, in order to be actively involved in the Halal services and production line. Ignorance, confusion or deliberate fraudulent practices will consequently result in the presence of adulterants or contaminants in the product, making it Haram or Syubhah with negative consequence on Halal branding. The Halal integrity and values are thus compromised. Economically, this can tarnish the country's credibility and image. Consequently, Malaysia as a promising global Halal hub may be negatively affected from the point of view on image, reputation and branding.

There is still a lack of understanding in terms of what exactly does Halal mean and what are the requirements that must be fulfilled for a product to be Halal among manufacturers of products, service providers and consumers [3]. Many consumers tend to define Halal simply as a religious requirement i.e. for Muslims to consume, eat or use product or services; it must first be acknowledged as Halal. The general perception is commonly associated with understanding of Halal meat pertaining to method of slaughtering, presence or absence of contaminants of lard and pork and their derivatives, tallow from unslaughtered meat and alcohol as intoxicants. They fail to associate Halal, which is permissible, to *thoyyiban* which means wholesome, in the sense that the product, especially food, must be safe, healthy, nutritious and hygienic.

The Malaysian Standard MS 1500:2009 and the Trade Description Act 2011 are legal guidelines, mandatory for the acquiring of the Malaysian Halal logo. Understanding the principles and practices of *Halalan thoyyiban*, with

hands-on knowledge that meets industrial needs and demand, is necessary to cater for the rapid expansion of the Halal industry and to achieve compliance.

**Halal Assurance and Consultants:** There is a global shortage of suitable Halal consultants. The skills and competencies of Halal consultants are poorly defined, so that during the setting up of a Halal Assurance System in a company, competent staff who are well versed on the syariah aspects are not available and there are not enough adequate competence criteria. The authorized team may choose its own internal staff, or recruits temporary junior staff to do the work. Consequently, lead Halal auditors who are not well exposed or properly trained do not know who to propose for the Halal assurance component. There are no Halal Quality Assurance systems in typical small medium enterprises or companies producing Halal products.

In the procurement process of raw materials, there are inadequate guidelines or criteria of acceptance on the Halal status or quality of the product. Practices of this kind may bring the in-House Halal Technical committee into disrepute. As a consequence of the Malaysian Halal Trade Description Act 2011, the Halal industries are promoting the setting up of respective Halal Assurance systems. However, the establishment may employ a generalist staff who does not necessarily have the competence to appraise the assessment reports that are produced, or to determine who is competent to set up the system and monitor the process through a strong internal management system. They may have limited knowledge and experience.

To date, there is no clear definition among the Halal industry and community, of a competency framework in developing competent Halal Assurance System at an appropriate level (Table 1).

The framework that can be emulated is based on one used in the Health Impact Assessment industry. Consultants may require a combination of specialist and generic skills [4]. As shown in Table 2, generic skills include project management, negotiation, team working, community engagement, research, robust common sense, ability to pull together disparate elements; and capacity to persuade different people or differing professional background to co-operate [5].

**Halal Education:** There are various approaches on resolving a part of the Halal issues [6], such as through generation of new knowledge gained through fundamental and applied research, the application of this knowledge disseminated through training, services and

Table 1: Competence framework for Consultant on Halal knowledge as emulated from the HIA

Levels	How obtained	Usefulness
Awareness	Attended Introductory Halal course	Knows what needs to be managed
Knowledge	Attends additional Halal courses	Can contribute to the Halal committee as a team member
Skilled	Experience of Halal industry. Has attended both courses, industrial and syariah background	Can lead a Halal assurance system team
Expert	Substantial experience. International reputation. Industrial background and knowledgeable on the Syariah requirements	Can improve the Halal methods, processes and procedures

Table 2: Evidence-based Competency Classification

	Necessary	Desirable	Evidence
Education	Degree in Halal, Syariah or related subject	Postgraduate degree	Degree Certificates
Training	Training in Quality assurance	Training in project management and in Halal courses	Certificate of attendance, name of teacher, syllabus
Experience	Consultancy Halal auditing and assessment Memberships of professional bodies or technical Halal committees	Participating, leading or managing Halal projects or teams	Lists of Projects completed
Interests	Skills in at least one of field work, analysis or management Can review or summarize reports, weigh evidence, produce logical/analytical arguments, interview key informants, demonstrate professional impartiality and diplomacy Persistent at uncovering sensitive information	Knowledgeable on social, international development and halal haram issues	Activities and affiliations Listed in CV List of conferences and workshops attended
Skills	Familiarity with the region or sector associated with the project or proposal	Skills in more than one of fieldwork, analysis, management or teaching Has worked in locality	Copy of previous reports highlighting own contribution List of projects undertaken

consultancy; and elimination on ignorance, confusion of Halal requirements and apathy towards Halal nonconformance by education. The need to integrate science and technology with the expertise in Islamic law based on Al-Quran and As-Sunnah have paved the way towards setting up of new academic programs.

Scientists and industry professionals need to take Fiqh courses to understand the tools, principles and sources of knowledge that Islamic scholars use to derive rulings. Each should have a basic competent level of understanding of the other so that multi-disciplinary organizations can be formed to solve of the Halal issues of the time. The priority areas in the Halal education field include the following [7]:

- Mass awareness campaigns fighting Islamophobic activities - Halal foods and processes. Through launching of educational programs, websites and print publications to promote Syariah compliant lifestyle. The priority languages are English and Arabic.
- Professional media and creative use of social media.

- Training of scientists and research professionals in the tools, principles and references of Syariah as used by Islamic scholars.
- Training of Islamic scholars, from government agencies, in the technical aspects of Halal production and processing.
- Coordination between scientists, Islamic scholars, Halal professionals, journalists, marketing and public relations professionals. Disseminating the benefits of Halal to the people, communities and businesses. Supporting Halal focused publications in the Western countries.
- Supporting projects educating the legislators about Halal products.

**Multidisciplinary Approach and Initiatives of IHRAM Research Focus:** The proposed Halal research fields have four components:

- Process and system management in the Halal Supply chain, Syariah, legislation and Halal product circulation.

- Setting up data base for Halal and non-Halal components as used in food, pharmaceuticals and other non-food items.
- Development of novel products and technological innovation including generation of substitutes to non-Halal components and non-Halal sources, as Halal alternatives. For instance, food, drinks, pharmaceuticals, nutraceuticals, cosmetics, medicines, apparels, accommodation and tourism from confirmed Halal resources;
- Researching new methods and improvement of developments in analysis of haram and *syubhah* adulterants and contaminants.

**Training:** The rapid expansion of the Halal services industry had increased, consequently the shortage of skilled workers and semi-skilled workers is a major hurdle for the industry in maintaining the integrity of their Halal products. To meet the obligations of Islam or "obligatory *kifayah*", efforts are made to ensure that these workers, as front-liners throughout the whole Halal supply chain, are knowledgeable. IHRAM develop Halal modules, training programs and services.

Collaboration are done with agencies which have the skills and experience in conducting training Halal programs, such as Halal Industry Development Corporation (HDC), Global Integrity Products & Services Sdn Bhd (GIPS), the Religious Affairs Department and Chemical Company of Malaysia Berhad (CCM) the necessary courses and training in knowledge transfer programs were designed to meet the identified target groups. It covers the aspects of the knowledge needed to become a professional workforce, before undergoing the practical training in industry. Halal can be divided into two segments, which consist of products and services. Services related to Halal, these include food, cosmetics, tourism, transportation and logistics, medical, hospitality, there are needs for Syariah compliant standards set by the authorities such as Department of Islamic Development Malaysia (JAKIM) and the Department of Standards Malaysia.

**Development of Module: Professional Halal Slaughterers and Food Handling Services Modules:** The increasing demand of Halal meat worldwide has put into pressure on the existing workforce for experienced and well trained Halal meat slaughterers and meat checkers. A shortage of this workers may affect or compromise the integrity of Malaysia as the Halal processed meat provider for the local and international markets. Experts who had

experience and track record in the Malaysian Meat industry and had also pioneered the Halal certification process set-up in Malaysia during the earlier days when fast food and processed meats became popular in Malaysia, during the 80-90's were referred.

Development of skilled and semi-skilled workers in Halal slaughtering will decrease the dependency of technical know-how reliance on imported international expertise, which may be costly to Malaysia. This project also look inwards on training and exploring the potential of exporting certified Malaysian Halal Slaughterers to other countries, thus increasing Malaysia's credibility as the country who champion Halal and also as serving the *fardhu kifayah* (also known as obligatory *kifayah*) requirements to countries who lack the Syariah, scientific and technical knowledge pertinent towards maintaining the Halal integrity of meats.

The focus is also on the young work force who are underprivileged and do not have opportunity to receive university qualifications. This program will create sustainable – higher income opportunities as means of supporting their live hoods, if they have succeeded in achieving international competency for Halal and humane meat slaughtering which adhere to the safety, hygiene and Hazard Analysis Critical Control Point (HACCP) requirements. The knowledge on HACCP is crucial, as processed foods which do not HACCP certifications will be barred and not accepted to be exported in the international food markets.

The desire to meet the obligations of Islam or "obligatory can be made through training *kifayah*", this module will assist in building greater customer satisfaction and public confidence in Halal products. This module is not only limited to local applications in Malaysia, it is suitable for use on an international basis. Examples are organizations involved in the Halal food chain and industry. This provides qualified manpower to the country, to fulfill the needs of Muslims worldwide who are becoming more affluent and have higher awareness on Halal.

The purpose of the training program is as follows:

- Expose participants in the various fields related to the Halal Industry.
- Provide Halal technical, scientific and Syariah knowledge through theoretical classroom lectures and activities and practical experiences at industry based abattoirs.
- Provide competency and confidence when slaughtering animals for Halal meat.

- Increasing the opportunities to start a career in the Halal Food industry.
- To help Malaysia, besides exporting Halal food, also exports skilled and semiskilled workers to the international Halal Industry worldwide.

In terms of practicality of application, this module can be immediately implemented to fulfill the requirement of the Trade Description Act Malaysia 2011 for Halal and MS 1500: 2009. This module is designed to assist in the development of the Halal manpower, both skilled and semi-skilled workers. This program can help young people who may drop out of education early to acquire skills related to the Halal industry acquisition of skilled workers, creating competent manpower.

**Development of Halal Certification Training Module for the Pharmaceutical Industry:** The Halal pharmaceutical industry is relatively underdeveloped compared to the Halal food industry. There is a growing demand for Halal training and certification from the pharmaceutical industry to fulfill the increasing awareness of the Muslim community or public. Consequently, there is now a growing demand from the pharmaceutical industry for training programs in order to apply and achieve Halal certification for their products. Pharmaceuticals such as vaccines, injectable suspensions, tablets, pills and capsules that contain ingredients from animals not slaughtered according to the Syariah methods and even of porcine origin are *mughallazah najs* or filth, as well as mixtures that contain high percentages of alcohol, are considered unacceptable. Therefore, the Islamic obligation for Halal pharmaceuticals has yet to be fulfilled. Standards Malaysia launched the new Malaysian Standard for Halal pharmaceuticals, MS 2424:2010, which allows pharmaceutical manufacturers to obtain Halal compliance certification for their products.

The Malaysian Standard MS 2424:2010 (P) Halal Pharmaceuticals – General Guidelines, in subtopics 4.7 (Training), clause 4.7.1 stated that, “The organization shall provide training for all personnel on the Halal principles and its application”. Therefore, the comprehensive training should be given to the industry especially for the management and members of Halal committee to ensure the Halal requirements are fully understood and implemented. Apart from that, this training module will facilitate manufacturers, suppliers, health professionals and consumers to integrate knowledge, understanding and awareness accordingly by its target, programs and topics that had been proposed.

This module was developed by USIM and HDC, Malaysian Standards, Ministry of Health, Pharmaceutical Bureau, JAKIM, CCM and others to allow the efficient and comprehensive transfer of such knowledge to the HDC in the form of a module or training program. The new version of Malaysian Halal Certification Manual Procedure 2011 (Second Revision) developed by JAKIM (Malaysia Department of Islamic Development) had officially began its pharmaceutical certification scheme starting by February 2012 [8]. Therefore, this is a novel effort to develop a module for training and certification of the industry and other stakeholders involved in Halal pharmaceuticals. The development of the training module that complies with the standards and manual procedure or protocols requirements, can contribute significantly to the overall growth of the Halal pharmaceutical industry. This innovation ultimately fulfills our responsibility as Muslims, raises public awareness and achieves public acceptance as well as public satisfaction on Halal pharmaceuticals. It will resolve the consumer needs by having pharmaceutical products that fulfills the concept of *Halalan thoyyiban* that means Halal, good and safe to consume. Hence, it will enhance the general consumers’ confidence in using the Halal pharmaceutical products and reduce the current dependency on pharmaceutical products that do not comply with *Shariah* requirements. This training and certification module program is an organized and structured body of information that integrate; *Shariah* and technical aspects of Halal certification (Figure 2).

**Halal Executive Program:** HDC, is an organization with extensive global experience and expertise in conducting *Halal* certification training programs, for example in *Halal* logistics, the *Halal* food industry and services. HDC first started its Halal Executive Program Training (HEP) in 2010 to strengthen the industry’s need for professional human resource and capital development in the Halal sector. The program’s first convocation held in 2011 witnessed the graduation of two batches of 70 students from the Polytechnic College of Malaysia. For the 2nd convocation, the batches comprised of 32 degree students from the International Islamic University of Malaysia (IIUM) and 38 students from USIM respectively. Upon graduation, these students will perform their roles as Halal Executives in corporations. HEP students possess degree or diploma foundation in *Syariah*, food technology, biotechnology, chemistry and biochemistry.

The position of Halal Executive is crucial for developing the Halal industry as they will support the Halal certification process of an organization or commercial entity by ensuring the implementation of Halal

Assurance System are in compliance with the Malaysian Halal Standard MS 1500:2009. The HEP program is six months in duration, three months of which are allocated to theory and the remaining three months to practical internship in the industry. More than 90% of the HEP graduates are absorbed almost immediately in the Food and Beverage sector and industry, the widest business sector that adopts the Halal certification process in ensuring safe consumption for Muslims and Non-Muslim [9].

**Services:** Halal Services and Training Unit was introduced, offering Halal products analysis and creating awareness on the aspects of Halal concept via general Halal training and practical training, particularly on food products food products, beverages, cosmetics, pharmaceuticals and other consumer products to the industry. IHRAM as the Halal analysis lab is the centre of excellence at USIM, plays the role in increasing and ensuring the quality in generating knowledge and services towards making it the centre of knowledge of choice. The Halal concept applied at the Halal Services and Training Unit would increase product value, through innovation and improve on the value of Halal biotechnology ingredients alternatives, locally and internationally. Meanwhile, the Bionexus Partner program for IHRAM was one of the initiatives by Biotech Corporation to support the biotechnology and life sciences industries in Malaysia through laboratory infrastructure support, trainings, promotional activities and up-to-date research services [10].

## CONCLUSION

Knowledge via educational programs, services, professional training of all key persons involved in the food and Halal supply chain, are created to help the regulatory authorities to understand and implement Halal guidelines and issues. Islamic institutions need to create Halal Boards of cross-disciplinary and technically-competent Islamic scholars. USIM has set up the transformation strategies for IHRAM into a well-recognized center which include commitment to excellence, synergizing human capital, by focusing on core business areas, creation of physical facilities, linkages (with public and private institutions), internationalization programs, graduate studies, accreditation of laboratories as driving force to create better innovative products and services at the same time upholding the Islamic values. Its main goal would be to educate the Muslim populations, the non-Muslim populations and both the Muslim and non-Muslim governments.

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