

## IPR: HALAL INNOVATION PRODUCTS IN MALAYSIAN MANUFACTURING INDUSTRY

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### ABSTRACT

*Halal innovation products in Malaysian manufacturing industry is gaining much interest not only among Malaysian but also to the other community as well. Due to majority of Muslims which accounted for more than 61.3% of the total population of Malaysia, issues on halal innovation products is so close to their heart. Since the concept of halal is not limited to the food aspect alone, it covers a whole spectrum of Muslim way of life. This study highlights how roles played by intellectual property rights in Malaysian manufacturing industry pertaining on halal innovation. Survey method was applied in this study. There were 136 companies participated in this study however due to incomplete responses, only 124 companies were included in the analysis. Limitation for this study was due to manufacturing companies that operates in the Northern Region of Malaysia. This study intent to determine IPR issues in halal manufacturing industry. Respondents were R&D or Intellectual Property Manager who represents and involved in the halal manufacturing industry. It was indicated that IPR may improve the sales of halal product, difficulties in registering patent of halal product, and IPR roles in supporting company's business strategy. It is important to note that this study provides the community of Halal manufacturing companies for a better picture on Halal Ecosystems in Malaysia. Detail elaboration on the roles played by IPR in improving sales of halal product, providing better understanding on the halal innovation ecosystem as well as landscaping a new direction of prospect on halal innovation. Future studies may look into opportunities and threats that is crucial in this industry.*

Keywords: IPR, halal innovation, manufacturing.

### INTRODUCTION

Halal industry is among the famous term in Muslim nation. With the growing number of Muslim tourist travelling all over the world, the demand for halal related items also increase in the same amount. Halal is a popular term among all the Muslims where it relates to the teaching of Islam. It is stated in the Holy book of Al Quran that all muslims shuld eat from the Halal sources which means it has undergone the right process and procedure.

Halal is an Arabic word which defines as lawful and permissible according to Islamic Syariah law. This is based on the teachings of Islam derived from the Holy book of Al-Quran and follows the exemplary behavior and practise of Prophet Muhammad (Peace and blessings of Allah be upon Him) as quoted in Hadith. Haram is the opposite of halal which defines as forbidden (Husain, Ghani, Mohammad, & Mehad,2012).

According to the Al Quran, halal is an Arabic word. Halal means anything permissible. For many of Muslims, halal is merely related to the food that consume. Actually, from the Islamic perspectives, halal is beyond than that. It does not only covers food that we consume, halal is about the way of life Muslims should adhere. Muslims need to eat halal meat which ahs gone through the proper way of slaughtering of animals. To comply to it, does not mean that any kinds of animal are suitable to be slaughter in a halal way. There are a group of animals that can be eaten by Muslim which includes seafoods, animals with four leags and plants.

In the teaching of Islam, the process to slaughter an animal or poultry, dhabiha, is by killing through a cut to the jugular vein, carotid artery and windpipe. This should be done by using a sharp knife in a way to respect the animal. The reason being is to make sure the animal is not being torture to death eventhough the purpose is to eat the animal.

Halal concept is to provide a condition that encourage Muslims to seek, to search and to use products and services which are clean. The terms clean covers a wider aspect which also includes a person's life. In terms of food, halal means the food that Muslims are supposed to consume is safe, produce in clean environment and shows a quality of its own (Omar, Muhammad, & Omar, 2008).

In the teaching of Islam, it can be noted there are many evidence on Halal as mentioned in the Al Quran. From the Surah Al Baqarah, there is a verse that strongly recommend Muslim people to consume what is lawful in Islam including halal thing. It also mentioned that Muslims should avoid themselves from wrongful thing which is misguided by the Satan.

Understanding the challenge of halal in the market, serious attention should be given on the strategies of how intellectual property can play it roles in improving the sales of halal products. The issues on difficulties in registering patent for halal products also should be look into. Commonly, IPR becomes as a business strategy, but, does this play the same role in halal manufactured products? In the long run, government intervention is something that can be considered as well because they are the policy makers. Hence, their support would help to encourage industry players to implement IPR protection.

## LITERATURE REVIEW

### HALAL INDUSTRY

Halal industry is now becoming the emerging markets in today's world. Serious efforts done by the host of Olympic Games in 2020, (<https://www.bbc.com/sport/olympics/24002795>, 2013) Japan in promoting halal services should be praised by the Muslim community. Collaboration between the local authority together with the Islamic Authority in Japan, provides a new perspectives for the world community.

This shows that halal market that caters to the needs of Muslims is being taken seriously by the Japanese Government. It offers a new opportunity as well as providing a new market which had not being considered well before this. This emerging markets reflects the new paradigm for the market. Imagine that Muslim population in the world as updated on February 2016, covers at 2.18 billion people worldwide. This represents 23% of the total global population. It is recorded that the growth of Muslim people stand at 1.84%. (<http://muslimpopulation.com/World/>, 2018)

With the growing number of Muslims, the involvement and participation of innovation pertaining to halal creates a new and emerging market ([http://www.hdcglobal.com/publisher/gw\\_halal\\_agencies](http://www.hdcglobal.com/publisher/gw_halal_agencies), 2018). Halal lifestyle is also becoming a trend nowadays. From the way Muslim's present themselves especially in the form of clothing, apparels, fashion, materials that they use in everyday life, cosmetic and pharmaceuticals, and many other form of things, materials, products and lot more. Therefore, for the non-Muslims business owners, venturing into halal business provide a new and emerging markets to them.

### INTELLECTUAL PROPERTY RIGHTS

Intellectual Property Right is a new form of wealth in the economic system based on innovation. More than 50% of the assets in giant companies like Microsoft, Intel, Starbuck, and Sony are in the form of IPR (Kevin, 1998). This includes the outcomes of innovation and creativity, such as patents, copyrights, trademarks, industrial design, etc., that are used in trade and commerce. For non-physical assets, it includes literary and art given to the exclusive rights under the law to the owner to prevent others from doing exploitation (Anuar, Udin & Nawi, 2013).

According to the National Economic Advisory Council Malaysia, (NEAC, 2009), it emphasizes that the Strategic Reform Initiatives 6: Building the knowledge base and infrastructure; that is "to promote an environment for innovation" ([https://www.pmo.gov.my/dokumenattached/NEM\\_Report\\_1.pdf](https://www.pmo.gov.my/dokumenattached/NEM_Report_1.pdf)). It has mentioned that in order to implement the initiatives are through applying protection of Intellectual Property Right.

Intellectual Property Rights can be divided into 2 main categories. The first one is on copyrighted materials and the second is on non-copyrighted materials. Copyrighted materials including copyright, trademark, trade secret, geographical indication, and integrated circuit design. Whereas, non-copyrighted materials including patent. In order for a particular product to be classified under patent category, it should consist three main elements which are new (novel), no one had ever introduce it before, and it should have inventive steps (MyIPO, 2010).

Copyrights material are those linked to literary art work, books, play and any product of creative minds. Trademark is a design, logo or any symbols that portray the name of a particular product. Normally, there is a sign of R at the last name of the product. Trade secret is normally associated with secret recipe that is included in the menu of a particular restaurant or food outlet.

Geographical indication is another form of IPR which applies to the unique location of a particular product. For example, in Malaysia, there is Sabah Tea which informs us the unique feature of the tea that comes from the state of Sabah. Another example is Sarawak Black Pepper which indicates that the black pepper is originally planted in the state of Sarawak. Another example is Cameron Tea which tells that the tea is planted at Cameron Highland, Pahang. Therefore, geographical indication indicates the location of that unique product.

With the fast rapid development in technology, integrated circuit design has shown a great interest among industry player especially those in the electric electronic industry. They way of the design for a particular IC also shows a serious design that should be protected. This is where the protection of the IC comes into the picture.

With regards to this study, protection on halal innovation should be seen as a new way of promoting halal in manufacturing industry. Halal Innovation has the potential to become a weapon in today's ever challenging business environment. With the issues and challenges surrounding halal innovation, applying the IPR may become one of the strategy for the company to sustain.

### HALAL INNOVATION PRODUCT

Halal Innovation product is in a high demand because the needs for Muslims to acquire it. Further more, for the non-Muslim when dealing with innovative products with the halal marks, it shows the product has certain quality. Halal products if it is in the form of food, it indicates that the food has gone through a selction process, prepapration process and manufacturing process which not only save but also hygiene. From this simple explanation, people feel save and secure to consume the food products. Sane goes to the other manufactured product which signifies certain standard and quality measures.

In order to make sure that Malaysian companies not only comply to the Halal standards, government encourages these companies to equip themselves with Malaysian Standard MS1500. Other authority licensed include Good Manufacturing Practices (GMP) and Good Hygiene Practices (GHP) which could be obtained by the Department of Standards Malaysia (DSM) by SIRIM (SIRIM, 2009). These GMP and GHP promotes for proper general guideline on the production, preparation, handling and storage of halal foods.

Is important to note that for the year 2012, 2629 food premises which were granted with the Halal certification, according to Ahmad, Abaidah, & Yahya, (2013) as cited from Halal Development Corporation (2012). The serious measures taken by Malaysian Government can be seen in the Second Industrial Master Plan (1996-2005) and National Agriculture Policy (1998-2010) which aims is to support the Halal industry in Malaysia.

## **IMPORTANCE OF INNOVATION**

Innovation is defined as something new or different introduced: numerous innovations in the high-school curriculum. Whereas the act of innovating is the act of introducing of new things or methods (<https://www.dictionary.com/browse/innovation>), 2018. Innovation is important to make the product sustainable in the fierce competition global marketplace. By putting serious efforts to innovation, the product shall have a longer life span.

Just look at what happen to Kodak who once used to be the most sought after product. Now, with the emergence of latest gadget which provided camera in the phone, Kodak no longer exist. The reliance of people to the product has negative impact to the company. Kodak is no longer become an important product for the market with the growing demand of latest gadget which includes the function of a camera.

The same thing happen with Nokia and Blackberry. Fail to respond to the market demand, makes these 2 giant company left behind. Nokia which used to be an important cellular company back in the 1990's has now become a small company. This is due to the fact that it fails to innovate and respond to the demand of the market. The same happen to Blackberry which were used to be one of the prominent player in mobile telecommunication company, being left behind because its fail to understand the market demand.

The situation mentioned above shows that when a compant fails to understand the market demand, this is a signal for them to be drifted apart from the market. Being able to respond to the market needs, understand what is the market demand, aggressively respond to the changes and produce product that is needed in the market. In this study, how IPR can improve sales of halal manufactured products will be investigated. Issues on difficulty to register patent of halal product may also look into. It is understood that by looking at IPR as business strategy for normal products, how IPR plays it role for halal manufactured products is being investigated. Benefit of IPR protection for halal manufactured products is also being studied.

## **WHEN INNOVATION CAN OCCUR?**

Innovation occurs when there is a need to response to customer and market demand (Hanssens, Leeflang, & Wittink, 2005) . In order for the company or corporation to remain competitive in the market, they need to have a right strategy especially to make sure that their product is inline with the taste of the consumer or customer. In any industry, failing to understand and response of the market, will cause a serious damage to the company (Dollery & Wallis, 2001). Understanding market failure at some point could assist policymakers in determining the appropriate role for local governments.

There is no specific timeline as to when is necessary for the company to change and improve the quality, design or performance of any particular product. It depends on the market survey and feasibility studies done by the company. For example, the life span for any new mobile phones is about 3 months. For every 3 months company will try to come out with the latest technology, application, software and any new improvements for the product to make sure that it manages to secure the marketshare and attract more new customer.

This is not the challenge face by the telephone manufacturer alone, the same goes to any car industry. The car manufacturer will try to make innovation into their product to make sure that the product becomes more dynamic, appealing in every aspect to the customer as well as providing the latest technology that suits the needs and wants of the market.

## **RESEARCH METHODOLOGY**

### **RESEARCH DESIGN**

In this study, halal innovation among Malaysia Manufacturing companies is being investigated. The flows of the study start with reviewing the literature and halal manufacturing industry, followed by sending the survey questionnaire to the respondents, mapping the company's strategy along the process, identify issues and challenges in halal innovation among manufacturing

companies, and finally provides solutions and recommendation towards issues and challenges in halal innovation among manufacturing industry.

The summary of the research design is shown in Figure 1.

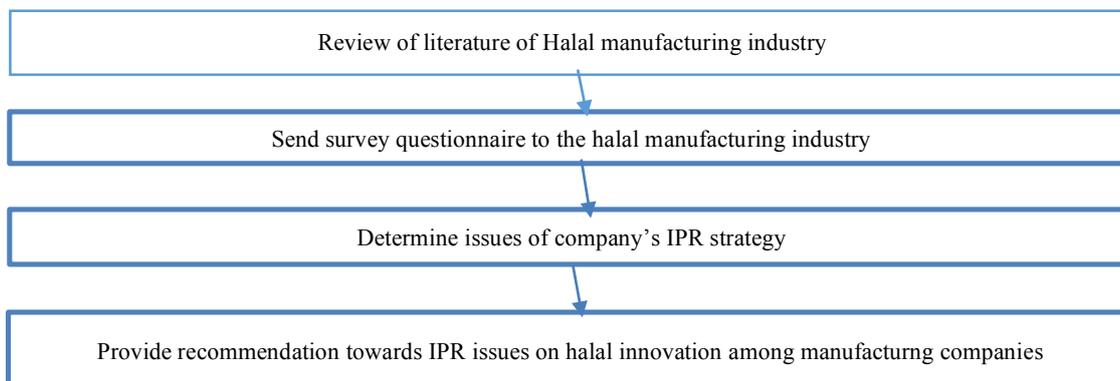


Figure 1: Research Design

This research project employs the quantitative methodology. It is used to collate identifiable data. Primary data will be used and will be treated with confidential. The research team will analyse data collected through survey questionnaire send to manufacturer of halal products.

This study applies the survey method (in the form of structured questionnaires) in collecting data. The survey questions were distributed to Northern Region halal manufacturing companies in Malaysia. This type of manufacturing companies was chosen because this group was the one who heavily rely on manufacturing halal innovation products.

The list of company names was obtained from Intellectual Property Corporations of Malaysia (MyIPO). These companies at the same time also registered with the Federation of Malaysian Manufacturers (FMM). Unit analysis for this study was companies with key R&D/ IP managers or executives, or any executive level officer who knows about the R&D / IP on halal manufacturing.

The population for this study was 599. Using the confidence level of 95%, confidence interval of 8, sample size needed is 120 (Survey system, 2018). After the surveying question collection was finished, a researcher received 136 responses. Out of this number, only 124 survey responses were usable. The other 14 were unusable due to missing and incomplete data in their survey responses.

## RESEARCH OBJECTIVES

This study emphasise on the following matters including:

1. To evaluate how IPR plays it role in improving the sales of halal product.
2. To assess difficulties in registering a patent for halal product.
3. To understand how IPR become as part of the firms business strategy.
4. To estimate the support from the government on IPR.
5. To support IPR matters in a company.

## RESEARCH QUESTIONS

1. How can IPR play it roles in improving sales of halal product ?
2. What are the difficulties in registering a patent for halal product?
3. How can IPR become a business strategy for a company?
4. What are supports given by the government in promoting halal products?
5. Is there a specific unit in a company to support IPR matters?

## ANALYSIS AND FINDINGS

From the study, it was indicated that Innovation is a very crucial issue in Malaysian manufacturing industry.

**Table 1: Summary of Data Findings**

No.	Items	SD	D	N	A	SA
Q1	Intellectual Property Rights can improve product sales for my company.	2.3	3.5	9.3	40.7	40.7
Q2	It is difficult to register a patent for my company's product.	3.5	2.3	19.8	43.0	29.1
Q3	My company implements Intellectual Property Rights as part of our business strategy.	1.2	4.7	30.2	46.5	10.5
Q4	Government policy encourages my company to implement Intellectual Property Rights.	0	4.7	25.6	55.8	12.8
Q5	The company has established a unit to specifically deal with Intellectual Property Rights matters.	2.3	8.1	32.6	39.5	14.0
Q6	My company is aware about the benefits of Intellectual Property Rights in improving our business strategy.	2.3	4.7	30.2	38.4	19.8
Q7	It is important to implement Intellectual Property Rights in the company.	1.2	7.0	20.9	33.7	36.0

It was indicated that 81.4 % agrees that Intellectual Property Rights can improve product sales for my company. Another 9.3% in the neutral mode whereas remaining 5.8% is against it. The biggest percentage that agrees with the statement on IPR able to increase sales shows that roles played by IPR is acknowledged. Industry feels that IPR may play its role actively in attracting consumer through the quality that it offers. Very little among industry practitioner who is against the role played by IPR and they cannot deny it.

72.1% agrees that It is difficult to register a patent for my company's product, 19.8% feels neutral about it while the remaining 5.8% is against it. Even IPR roles is recognised, somehow, to register a patent is still an issue. There are various reasons for this issue to occur. It can be seen in a bigger perspective, the role played by the government in terms of policy, the middle people which consists of patent drafter, patent agent, patent regulator, patent lawyer and many others, or the ecosystem of the IPR scenario that is not friendly to the industry needs and wants. This is issue needs a careful and serious attention by the authority involved.

57.0% of the total respondents agrees that their company implements Intellectual Property Rights as part of their business strategy. 30.2% is doing it partly whereas the remaining 5.9% doesn't agree at all. They don't see that IPR can become as part of their business strategy. The majority of industry practitioner that agrees with IPR being one of the strategy in their business indicated that they have implemented it (Fowler, Charoenpot & Chernkwanma, 2017). Therefore, those industry players who are not a strong believer to the role played by IPR as company's business strategy, is yet to apply it seriously on that. Perhaps, combination of strong patent agent, patent lawyer, government regulatory and authorized authority would then encourage industries to implement IPR aggressively (Saha & Bhattacharya, 2011).

68.6% feels that government policy encourages their company to implement Intellectual Property Rights. 25.6 % is in neutral state whereas the remaining 4.7% doesn't agree that government is putting more emphasis on the policy to help their businesses through IPR protection. The significant percentage on government policy that encourages implementation of IPR indicate will become the next step in the era of industry aggressively apply IPR protection. There is a chance for the neutral group to adhere to the challenge of implementing IPR in their business operations (Ballardini, 2012).

53.5% of the respondents in their company has established a unit to specifically deal with Intellectual Property Rights matters. 32.6% is neutral on it and the remaining 10.4% is not having a special unit on IPR. The importance of setting up an IPR unit clearly signals a strong emphasis on the implementation of IPR protection of the firms involved. 53.5% of these companies agrees on that however, only 32.6% being neutral on this. It is because they blend the function with other units such as R&D unit, marketing unit or any other unit that seems can work together on the IPR portfolio. The remaining 10.4% may perceived IPR as not their main thing to consider. Majority of the manufacturing industries feels that there is a significant step in establishing specific unit or department in dealing with IPR matters. This is due to the advantages and benefits that IPR could offer in the near future.

58.2% of the total respondents agrees that their company aware about the benefits of Intellectual Property Rights in improving our business strategy. 30.2% of them is neutral on this matter. The rest 8.0% is not aware on the benefits of IPR in improving the company's business strategy. Benefits of applying IPR protection are the primary issues among industries. They know what are the benefits, the management seriousness of applying it is another matter. 58.2% is a big percentage of the industries player who regards IPR as an important tool in their business however, 30.2% acted neutral in this issue. The remaining 8.0% is not serious and have a less confidence on how IPR can make a difference in their company performance.

69.7% respondents agreed that it is important to implement Intellectual Property Rights in the company. 20.7% remain neutral on this issue whereas 8.2 % doesn't think that it is important to do so. This 69.7% signifies contribution that could be derive from implementation of IPR. Only 8.2% doesn't agree with this statement and the rest 20.7% acted neutrally from agreeing IPR

importance. There are still room for improvements for IPR implementation in the near future. Study done by Anuar, Udin, Osman, Radzuan & Nawī (2015) indicated that IP protection able to improve companies marketability. When manufacturing company apply and utilise IPR protection, it may increase the performance of the company.

This study is only limited to the northern region of halal manufacturing industry. Although, there are lots more manufacturers who involve actively in producing halal products, however, due to the time and cost constraints, only certain quarters of manufacturers involved. In the near future, better coverage of manufacturer may have the opportunity to involve and participate in the study. Even with the small numbers of participation of manufacturers, this study provided a signal on how IPR impacted halal manufacturing products. Information provided may well create awareness among manufacturers of halal products to think of the solution for their sustainability and long term strategy.

## CONCLUSIONS AND RECOMMENDATIONS

In conclusion, this study managed to provide a better understanding on the roles played by IPR in securing a better company performance especially among halal manufacturing industry. At the same time, a better understanding on the halal innovation landscape. Innovation is very important in business, either for large firms or Small and Medium Enterprises (SME) as mentioned by Mohd Zawawi, N., Abd Wahab, S., Al-Mamun, A., Yaacob, A.S., Samy, N.K., & Fazalī, S.A. (2016).

Mohd Adly (2005) mentioned, efforts by Malaysian government allocated RM10 million for the development and improvement of halal products and process. It is hoped that with the allocation would help the industry to grow better in the future. Anuar, Zulhumadi & Udin (2012) & Beneito (2006) agreed when company who improves its patent application through its R&D output, will have a better chance in increasing and improving their performance. In this case, their market-share and profits will increase. This indicates that Applying IPR as a tool and business strategy has a great impact for the halal manufacturing and other manufacturing companies to compete in the long run.

Findings in this study is important to the community of Halal manufacturing companies to get a better picture on *Halal Ecosystems* in Malaysia. It is no doubt that awareness among halal manufacturing companies in applying IPR protection is in a growing stage. However, more need to be done not only among industry players but government as well in encouraging the use of IPR. IPR as a business strategy of business weapon (Ene, 2014) is also another angle that they can explore more.

Further studies may look into opportunities and threats that is embedded in this industry. It is highly recommended that future studies may look into roles and functions by the authorities with regards to promote active involvement and participation among manufacturing industries in implementing IPR. They should embrace IPR as part of their culture which would become as their business strategy. Constraints, challenges and difficulties in registering a patent need to overcome since we would want people to fully utilise the use of IPR. Furthermore, Halal products has a big potential in gaining more marketshare in years to come.

This study contributes to the industry practitioner particularly to the manufacturer of halal products. They have a better understanding on how IPR helps marketing their halal products. For business owners, better insights on the prospects that halal products may contribute to their sustainability. Government and policy makers may find information provided as a new elements to be included in their policy in the near future. Complaints and constraints of business owners and practitioners pertaining halal manufactured products shall be look into serious angle for the policy makers to address on. Finally, these halal issues is not limited to the consumer of Malaysia alone but it is a stepping stone in providing halal solutions for the world halal market.

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