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The Role of Islamic Universities in the Development of the Halal Industry Case Study in Central Java Province of Indonesia

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ABSTRAK

Industri halal telah menjadi tren bisnis di Indonesia dan dunia karena memiliki prospek ekonomi yang besar. Hal ini didukung oleh meningkatnya jumlah Muslim dan gaya hidup halal Muslim. Perkembangan industri halal didukung oleh berbagai lembaga, seperti perguruan tinggi. Tulisan ini bertujuan untuk mengidentifikasi dan mengeksplorasi peran perguruan tinggi pengembangan industri halal di daerah dan Indonesia. Dengan pendekatan kualitatif, tulisan ini disajikan dengan melihat pengalaman empiris di beberapa daerah di provinsi Jawa Tengah. Data penelitian ini diperoleh melalui studi pustaka dengan melakukan pengkajian buku, artikel jurnal, laporan penelitian, berita online, dan website yang sesuai dengan tema tulisan. Hasil kajian ini menunjukkan bahwa secara umum, perguruan tinggi menjadi pendukung pengembangan industri halal melalui Tri Dharma Perguruan Tinggi dan teori pentahelix. Secara khusus, perguruan tinggi menjadi lembaga pendukung yang menghasilkan sumber daya manusia bidang halal, sebagai lembaga kajian halal, sebagai pusat penelitian produk halal, penghasil sumber daya manusia halal, dan pusat literasi halal. Jadi, perguruan tinggi berperan penting dalam pengembangan industri halal, baik di daerah, Indonesia, bahkan dunia. Pengabaian peran perguruan tinggi dalam pengembangan industri halal bisa berdampak pada pelambatan laju industri halal.

Kata Kunci: perguruan tinggi; pusat studi halal; sertifikasi halal; lembaga halal; SDM halal

ABSTRACT

Halal industry has become a business trend in Indonesia and the world because it has great economic prospects. This is supported by the increasing number of Muslims and the Halal Muslim lifestyle. The development of the halal industry is supported by various institutions, such as universities. This paper aims to identify and explore the role of universities in the development of the halal industry in the regions and Indonesia. With a qualitative approach, this paper is presented by looking at empirical experiences in several regions in the province of Central Java. This research data is obtained through literature studies by reviewing books, journal articles, research reports, online news, and websites that are in accordance with the theme of the writing. The results of this study show that in general, universities are supporting the development of the halal industry through the Tri Dharma of Higher Education and pentahelix theory. In particular, universities become supporting institutions that produce human resources in the halal field, as halal study institutions, as halal product research centers, halal human resource producers, and halal literacy centers. So, universities play an important role in the development of the halal industry, both in the regions,

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Indonesia, and even the world. The neglect of the role of universities in the development of the halal industry can have an impact on slowing the pace of the halal industry.

Keywords: university; halal study center; halal certification; halal institution; halal resources

INTRODUCTION

The halal industry has become a concern for various countries in the world such as Singapore (Mohamad, Baharuddin, & Ruskam, 2015), Malaysia (Wahab et al., 2016), Ukraine (Brylov, 2020), Japan (Adidaya, 2016; Alhabshi, 2016), China (Yang, Dube, & Huang, 2016), Thailand (Nawawi et al., 2017), Taiwan (Wardhani, Hara, &Dugus, 2021), and Indonesia (Fathoni, 2020; Mubarok& Imam, 2020). So, the halal industry has become a part of the business for these countries because it has great prospects, both in terms of economic value and the large number of consumers (Thomson Reuters, 2021). Indonesia, Muslim-majority country has two prospects, namely as a producer and consumer (Mujahideen, 2020). The development of the halal industry in the world is influenced by many and diverse factors. According to Bergeaud-blackler, Fischer, & Lever (2016) that political, power, and ethical factors play a big role in the halal industry, especially in setting standards

for production, trade, consumption, and regulation. The government also plays an important role as a regulator, producers business actors as products, the media as parties who convey information, the community is the party involved as actors, and academics are in charge of conducting scientific studies of the products and services produced. So, the halal industry cannot be developed by one party alone, but must be jointly as formulated in the concept of pentahelix development (Widowati, Ginaya, &Triyuni, 2019). In this paper, universities are the focus of studies associated with the halal industry.

Studies on the halal industry have been produced by previous researchers with various theories and approaches, such as the halal industry from a green economy perspective (Fageh& Magister, 2022), sharia compliance (Muhamed, Ramli, Aziz. &Yaakub. 2014), prospects (E Azam& Abdullah, 2020), the management and environment (Erwaedy, Pardiman. Syahril,

&Andiriyanto, 2021), pesantren and sustainable economy (Bergeaudblackler et al., 2016), regulation (Ahyar, 2020), consumer protection (Halim et al., 2014). Of the many studies, no studies were found that were associated with the role of universities. In fact, universities have a big role such as producing human resources, studies, product standardization, and others (Pamuji, 2021). Of these various roles has not been found comprehensive description of the area.

Gunasekara (2004)describes universities like the "Ivory Tower". According to Mavin & Bryans (2000) campuses have an important role in the context of future generations, where learning, dialogue, and the development of science can be formed. Today, universities are seen as key strengths for innovation and change in science, technology, and other creative disciplines (Sharma, Kumar, & Lalande, 2006). The university has a place in the complex society where thought can be developed and the existence of wisdom developed. Higher Education is a scientific institution that has the task of education and teaching organizing above secondary level universities, and

that provides education and teaching based on Indonesian national culture and in a scientific way. In Indonesia, based on 2022 Indonesian Statistics data, released by the Central Statistics Agency (BPS Indonesia), Indonesia has 3,115 universities spread across various regions of the country. The number includes public or private colleges or universities. There are 311,642 lecturers in Indonesia in 2021 (BPS, 2021). Higher Education plays a role as the frontline in educating the nation's life, by developing Science and Technology to advance general welfare and social justice for all Indonesians. In particular, higher education in Indonesia has several objectives: first, to prepare students to become members of society who have academic and professional abilities who can apply, develop and create science, technology and the arts. Second, develop disseminate and science, technology and art optimize their use to improve people's living standards and enrich national culture. So, universities are part of the halal industry ecosystem in Indonesia whose role and contribution are very much needed.

This study aims to analyze the role of universities in the development of the halal industry. Besides that, it is also to complete the study which is still limited to the studies that have been carried out by previous researchers. In particular, to complement the limited study of the role of universities in the halal industry in Central Java which has been named a leading tourist destination (DisporaparJateng, 2019) and commitment to developing products through halal certification (PemprovJateng, 2022). In particular, the author also saw the experiences of three regions, namely Pekalongan City, Semarang City, and Surakarta City. These three cities were chosen because they have readiness to become halal tourism destinations (Ismanto, 2022; 2020; Nurwilda, Saeroji, Wijaya, &Wardani, 2018), where the constituent aspects are related to the halal industry.

The role of universities, through the task of academics as pillars of pentahelix, has played a role in various industrial fields, as has been demonstrated by previous researchers, such as in the fields of ecology (Widowati et al., 2019) and tourism (E Maturbongs& L Lekatompessy, 2020; Nurulwahida, Syafrieyana, &Sukmana, 2020). In the concept of pentahelix, universities through their cademisie, are an important part of the five pillars of the development of the halal industry. example, its existence For contributed to the development of regional halal tourism (Destiana&Yuningsih, 2020: Wibowo&Khoiruddin, 2020). From several previous studies, it appears that there are not many studies that discuss the role of universities in the halal industry. In fact, the prospect of the halal industry and its derivatives is very large in Indonesia (Sukoso, Wiryawan, Kusnadi, &Sucipto, 2020).

METHODS

This study took empirical experience in three cities in central Java consisting province, of 35 cities/regencies. In this province there have been established universities, both public and private with various institutional statuses: colleges, institutes, and universities. Of the existing universities, some of them are affiliated with religious institutions, such as Christianity, Catholic, and Islam. Therefore, Central Java is a complex area in various fields of life,

such as economic, socio-social, religious, educational, and others. In the context of this region, it is seen the extent of the role of Islamic-based universities in the development of the halal industry.

This research is categorized as field research with a qualitative approach. Several cases were explored obtain a more complete understanding of the themes that are the focus of the study. As emphasized by Blaikie (2000) that the skin-related approach is suitable for the study of relationships social as seen in pentahelix. Secondary data comes from books. articles. research reports, websites, online news, and others that fit the research theme. Researchers trace data to these sources.

The data obtained are presented to be taken to digest conclusions. The data obtained are presented with the Miles &Huberman(1984) model of collection with stages, presentation and drawing conclusions. The data were analyzed with a content analysis strategy (Cole, 1988), that is, the researcher understood in depth the content of informationwritten in the document, and

then conclusions were drawn to answer the research questions.

RESULTS

The Role of Islamic Universities in the Regions in the Halal Industry

In Central Java, 497 universities have been established, both in the form of universities, colleges, institutes, academies, and polytechnics. There are 40 universities with public status and the rest have private status, and are spread across 35 cities/regencies. There are 6 Islamic-based and public-status campuses, while there are more private ones. In relation to the halal industry, these Islamic-based campuses have relationships and contributions, both directly and indirectly. For example, in some universities there have been sharia faculties, which focus on the study of Islamic law (Islamic State University KH. Abdurrahman (UIN) Wahid Pekalongan, Islamic State University of (UIN) Salatiga, and others). On the other hand, a number of campuses also have faculties of economics faculties of science and technology that can support the halal industry (UIN Walisongo Semarang).

In institutional and scientific developments, Islamic religious-based

universities have been open to world developments, so that a number of universities carry out institutional and scientific transformations (Abdullah. 2019). Institutionally, a number of universities have changed their status, from the status of the State Islamic College (STAIN) to the State Islamic Institute (IAIN), and continued to become the State Islamic University (UIN). Various paradigms of science development are also applied, such as UIN Walisongo using the jargon "Unity of Science" (Adinugraha, Hidayanti, &Riyadi, 2018). So, the transformation of PTKIN is a necessity to enlighten the community from the academic side. For example, at UIN Walisongo Semarang established the Faculty of Science and Technology with biology, physics, and chemistry study programs, which can be related to halal products. Changes in universities are carried out in response to the development of the world so that this Islamic-based university has wider benefits.

Along with the development of the industrial world, including the halal industry, a number of universities have played an active role in its development, in various ways, including establishing

study centers (with various variations of names) in universities. This is a response to the onslaught of halal certification on MSME products. With this certification, it is expected that the products produced will have quality standards, halal assurance. consumer guarantees, and others. Moreover, this halal product is in line with the standard of health according to after the Covid-19 the new era pandemic. On the other hand, so that the produced products have competitiveness with international products. For this reason, a number of universities in Central Java that have established halal study centers are SebelasMaret University in Surakarta City, Diponegoro University in Semarang City, Al-Qur'an Science University in Wonosobo Regency, and others. So, halal products have become a concern for the center of halal studies of higher education in the Central Java region.

Universities have a significant and strategic role in the development of the halal industry, including: 1) establishing a halal study center (*halal center*) as a center for halal development, socialization, education, and various

halal literacy development activities; 2) conducting guidance and consultation related to halal certification, halal ambassadors, and so on; 3) carry out research development in the halal field, which can be done in an integrated manner with research centers or in collaboration with research institutions, or research lecturers and students; 4) form a **Professional** Certification Institutea university that plays a role in providing human resources (human resources) in the halal field, such as halal auditors, halal supervisors, halal halal supervisors, assistants, halal slaughterers, halal managers, halal chefs, and others; 5) establish a Halal Inspection Agency (LembagaPenjaminHalal), either independently or in collaboration with other LPH; 6) Academically, universities institutionalize halal studies in the form of courses; 7) accompany halal certification for **MSEM** actors,through self declare(Pamuji, 2021).

The Role of Halal Study Centers in the Halal Industry in the Regions

In order to support the development of the halal industry in Indonesia, a number of universities in

Indonesia have established halal study centers. The Halal Study Center is a that research center focuses researching halal products. The Halal Study Center serves to support the Indonesian Ulema Council (MUI) through its laboratory to test halal aspects of products and services with the help of experts on halal product practices (PSH ITB, 2022). Along with the implementation of Law Number 33 of 2014 concerning Halal Product Guarantee, a number of universities in Indonesia have become centers for halal studies with various terminologies. Among the reasons for its establishment is to help business actors obtain halal certification and accelerate halal certification for products from Indonesia (Parmuji, 2022).

In the province of Central Java, there have been a number of Halal Study Centers established by universities and there are quite a lot of them (see table 3.). A number of existing halal centers have carried out a number of activities, such as organizing halal product seminars, Halal Product Companion ToT (PPH), and others.

For example, a program of higher education activities related to halal

products is a program developed by the Center for Halal Research Center and Studies(HRCS)Universitas Services Sebelas Maret (UNS). This institution was formed to carry out its function as a halal study center as well as provide services in the activities of the Halal Product Assurance System, mandate of Law No. 33 of 2014. In addition, it is also to support the active role of higher education institutions, especially in the field of research and community service. Furthermore, in its activities it has been supported by the Decree of the Chairman of the Institute for Research and Community Service (LPPM) SebelasMaretUniversity. For this reason, HRCS-UNS is expected to be able to answer challenges in society, in providing comfort in consuming halal and thayibproducts, goods, and services (Supriyanto, 2022). Among examples of activities in the field are conducting halal certification MSMEs, national and international seminars on halal products involving business actors and academics, and organizing halal lectures.

At Diponegoro University, there is an "Integrated Laboratory" that has a vision of becoming a leading,

accredited, and international standard Integrated Laboratory in serving research, testing, and training to support Diponegoro University as an excellent research university. In Surakarta City, there is a UNS Integrated Laboratory that has been established for a long time and has been useful for testing halal products. The existence of these two LPH has benefited the community and the halal industry. However, according to the author, in terms of quantity, it needs to be added by other universities, that it is evenly distributed throughout Central Java.

Universities act as producers of human resources for the halal industry in various skills, such as Islamic law, nutritionists, food experts, economists, marketing experts, and others. In 2022, halal product certification companion training is being intensively carried out, as carried out by the halal study center of UIN Walisongo Semarang and SebelasMaret University. Halal Center UIN WaliSongo Semarang has provided training to 1,800 participants (Wijaya, 2022). SebelasMaretUniversity has also provided training for MSMEs digitizing halal products (majalahlarise.com, 2021).

Universities. as research institutions have carried out research development of halal products and business incubation. Universities with their laboratory infrastructure, Human Resources, and science can be pioneers in innovation and research of halal products, especially to support the development of halal product business incubation for MSMEs. Related to halal products, the halal study center of Diponegoro University and SebelasMaret University have conducted research. Some campuses have also been involved in business incubation, but development is needed, especially in Islamic-based universities that are developing business incubators.

Universities have also acted as halal literacy centers, which are carried out through several programs, such as seminars, training, assistance in the halal product certification process, and others. At Islamic State University of KH.Abdurrahaman Wahid Pekalongan, a halal product seminar has been held and a student halal community has been formed and has organized a number of activities. For the author.the involvement of universities in the halal industry is an obligation, according to

their duties and functions, both in the realm of teaching, research, and service. This is in line with the duties of universities, as stated in article 1 of Law No. 12 of 2012 concerning Higher Education.

DISSCUSION

The role of universities in the halal industry in Indonesia can be through two ways, first through pentahelix theory and the second through the "Tri Dharma of Higher Education". Nevertheless, if examined, the two paths have similar tasks. Universities have an important role in the development of the halal industry, both in the realm of teaching / education, research, and service. In the realm of education, a number of universities have compiled curricula and courses in each study program related to the halal industry. In the realm of lecturers collaborate with research. students, conduct research with the halal industry, conduct scientific publications about the halal industry, and others. In the realm of service, a number of lecturers become companions for halal certification and halal product supervisors/auditors. So, universities have an important role in realizing the

halal industrial ecosystem in the regions and Indonesia.

The results ofthis study corroborate previous research related to the role of universities that have played a role in various industrial fields (Bokhari, 2017; Razak&Saad, 2007; Reddy, 2011; Sukiennik, Zybała, Fuksa, &Kesek, 2021). In particular, such as its role in the agricultural industry (Sutini, Wurjani, Augustien, & Pribadi, 2021), sustainable development (Filho, 2011), entrepreneurship (Davey, Hannon, &Penaluna. 2016). biotechnology (Roesler& industry Tom, 2017), agricultural industry (Sutini et al., other industries. 2021), and research also complements the limitations of previous studies, because this research is an early stub related to the role of universities, especially Islamic-based universities, towards the development of the halal industry in the regions and Indonesia.

From the description above, the author is of the view that high education, both through pentahelix theory and through the "Tri Dharma of Higher Education", plays a role in the halal industry. The form of this role is collaborative research, strengthening

halal human resources, research and development, and formulating certification and standardization. Thus, the results of this study are supported by previous studies on the role of universities in various fields of human life (Bokhari, 2017; Reddy, 2011; Sukiennik et al., 2021)

CONCLUSION

The development of the halal industry needs to be supported by high education. This support can be provided through pentahelix theory and the "Tri Dharma of Higher Education". education, research, and service. In particular, this support can be realized through the center for halal studies and studies in each university. The role of the university is to become a producer of Halal human resources, to become a halal inspection agency, a halal industry researcher, a disseminator of halal literacy.

This research has described and complemented the limitations of the study of the role of universities in the development of the halal industry. With the above roles, universities have helped realize the halal industry ecosystem in Indonesia. On the other hand, universities have also accelerated halal

literacy. However, the map and pattern have not been clearly depicted between institutions so that good synergy is realized.

The implication of the conclusion of this study is that coordination and cooperation between institutions are needed so that the halal industry can run optimally, together with other parties. at the regional level, it is necessary to strengthen cooperation between institutions such as business actors, MUI, universities, and others, the study of interagency synergy is a theme that can be done in the next study.

REFERENCES

- Abdullah, A. (2019). Memperkuat Paradigma Integrasi-Interkoneksi dalam Studi Agama di Pascasarjana. *Studium Generale*, 1–25. Pascasarjana UIN Mataram.
- Adidaya, Y. A. (2016). Halal in Japan: History, Issues and Problems The Effect of the "Halal Boom" Phenomenon on Japanese Society and Industry. University of Oslo.
- Adinugraha, H. H., Hidayanti, E., & Riyadi, A. (2018). Fenomena Integrasi Ilmu di Perguruan Tinggi Keagamaan Islam Negeri: Analisis Terhadap Konsep Unity of Sciences di UIN Walisongo Semarang. HIKMATUNA Journal for Integrative Islamic Studies, 4(1), 1–16.
- Ahyar, M. K. (2020). Halal Industry and Islamic Banking: A Study of Halal

- Ecosystem Regulation in Indonesia. *Journal of Finance and Islamic Banking*, 2(2). https://doi.org/10.22515/jfib.v2i2.1929
- Alhabshi, S. (2016). Could Japan Excel In The Halal Food Industry? Research Journal of Commerce & Behavioral Science, 05(10), 1–11. Retrieved from https://www.researchgate.net/profil e/Sharifah_Alhabshi/publication/2 68390941_Local_Government_Iss ues_in_Malaysia/links/57b27bbc08 ae15c76cbb400a.pdf
- Bergeaud-blackler, F., Fischer, J., & Lever, J. (2016). *Halal Matters*. New York: Routledge.
- Blaikie, N. (2000). Designing Social Research: The Logic of Anticipation. Cambridge: Polity Press.
- Bokhari, A. A. . (2017). Universities" Social Responsibility (USR) and Development: Sustainable Framework. Conceptual *International* Journal of **Economics** and Management Studies, 4(12), 8-16.https://doi.org/10.14445/23939125 /ijems-v4i12p102
- BPS. (2021). Jumlah Dosen di Indonesia. Retrieved May 19, 2022, from www.bps.go.id website: https://dataindonesia.id/ragam/deta il/jumlah-dosen-di-indonesia-sebanyak-311642-pada-2021
- Brylov, D. (2020). Halal Industry of Ukraine in the Period of Independence. *Sociology of Islam*, 8(3–4), 409–422. https://doi.org/10.1163/22131418-08030005.

- Candranegara, I. M. W., Mirta, I. W., & Survana, I. N. M. (2019).Government Collaboration Of Pentahelix Models In The Of **Ecotourism** Management D'Bendungan View Telaga Tunjung (Case Study Management Ecoutourism D'Bendungan View Telaga Tunjung in Timpag Village, Tabanan Bali). Iapa Conference, **Proceedings** 68. https://doi.org/10.30589/proceedin gs.2019.222
- Cole, F. L. (1988). Content Analysis: Process and Application. *Journal of Clinical Nurse Specialist*, 2(1), 53–57.
- Davey, T., Hannon, P., & Penaluna, A. (2016). Entrepreneurship education and the role of universities in entrepreneurship: Introduction to the special issue. *Industry and Higher Education*. https://doi.org/https://doi.org/10.11 77/0950422216656699
- Destiana, R., & Yuningsih, T. (2020). Analisis Peran Stakeholders Dalam Pengembangan Destinasi Pariwisata Halal Di Pulau Penyengat Provinsi Kepulauan Riau Indonesia berdasarkan Global Muslim Travel Index (GMTI) 2019 menjadi Pengembangan Destinasi Pariwisata. Jurnal Ilmu Administrasi Negara (AsIAN),08(02), 132–153.
- Disporapor Jateng. (2019). Jateng Sabet Penghargaan Destinasi Wisata Halal Unggulan - Pemerintah Provinsi Jawa Tengah. Retrieved August 17, 2020, from https://jatengprov.go.id/ website: https://jatengprov.go.id.

- E Azam, M. S., & Abdullah, M. A. (2020). Global Halal Industry: Realities and Opportunities. *IJIBE* (*International Journal of Islamic Business Ethics*), 5(1), 47–59. https://doi.org/DOI: http://dx.doi.org/10.30659/ijibe.5.1.47-59
- E Maturbongs, E., & L Lekatompessy, R. (2020). Kolaborasi Pentahelix dalam Pengembangan Pariwisata Berbasis Kearifan Lokal di Kabupaten Merauke. *Jurnal Ilmiah Ilmu Adinnistrasi*, 3(1), 55–63.
- Effendi, D., Syukri, F., Subiyanto, A. F., & Utdityasan, R. N. (2016). Application of Penta Helix Model. 2016 International Conference on ICT For Smart Society (ICISS), (July), 80–85. https://doi.org/10.1109/ICTSS.201 6.7792856
- Erwaedy, A., Pardiman, Syahril, & Andirivanto, (2021).A. **Implementing** Halal **Industry** Management and Environment. Al-Falah: **Journal** of **Islamic** Economics. 6(2),251-268. https://doi.org/10.29240/alfalah.v6i 2.3504
- Fageh, A., & Magister, S. E. (2022).

 Building A Synergy Between The Halal Industry And The Green Industry In The Maqāṣid Al-Shari'ah Review As The Basis Of Islamic Economics. *Journal of Islamic Economic Laws*, 5(1 January), 139–158.
- Fathoni, M. A. (2020). Potret Industri Halal Indonesia: Peluang dan Tantangan. *Jurnal Ilmiah Ekonomi Islam*, 6(3), 428. https://doi.org/10.29040/jiei.v6i3.1 146

- Filho, W. L. (2011). About the Role of Universities and Their Contribution to Sustainable Development. *Higher Education Policy*, 427–438(June), 1. https://doi.org/https://doi.org/10.1057/hep.2011.16
- Gunasekara, C. (2004). The third role of Australian universities in human capital formation. *Journal of Higher Education Policy and Management*, 26(3), 329–343. https://doi.org/10.1080/136008004 2000290186
- Halim, M. 'Afifi bin A., Mohd, K. W. binti, Salleh, M. M. M., Yalawae, A., Omar, T. S. M. N. S., Ahmad, A., ... Kashim, M. I. A. bin M. (2014). Consumer Protection of Halal Products in Malaysia: A Literature Highlight. *Procedia Social and Behavioral Sciences*, 121(September 2012), 68–78. https://doi.org/10.1016/j.sbspro.20 14.01.1109
- Ismanto, K. (2022).Kesiapan Implementasi Pariwisata Halal (Studi Kasus Kota Pekalongan. Kota Semarang, dan Kota Surakarta). UIN Walisongo Semarang.
- majalahlarise.com. (2021). FEB UNS
 Adakan Pelatihan dan
 Pendampingan Go Digital UMKM
 Produk Makanan Halal. Retrieved
 May 21, 2022, from
 http://www.majalahlarise.com/202
 1/07/feb-uns-adakan-pelatihandan.html
- Mavin, S., & Bryans, P. (2000). Management development in the public sector what roles can universities play? *The Eletronic Library*, *12*(2), 142–152.

- Miles, M. B., & Huberman, A. M. (1984). *Qualitative Data Analysis: Handout*. California: SAGE publications Inc.
- Mohamad, A. A., Baharuddin, A. S., & Ruskam, A. (2015). Halal Industry in Singapore: A Case Study of Nutraceutical Products. *Humanika*, 4(2), 35–40.
- Mubarok, F. K., & Imam, M. K. (2020). Halal Industry in Indonesia; Challenges and Opportunities. Journal of Digital Marketing and Halal Industry, 2(1), 55. https://doi.org/10.21580/jdmhi.202 0.2.1.5856
- Muhamed, N. A., Ramli, N. M., Aziz, S. A., & Yaakub, N. A. (2014). Integrating islamic financing and halal industry: A survey on current practices of the selected Malaysian authority bodies. *Asian Social Science*, 10(17), 120–126. https://doi.org/10.5539/ass.v10n17 p120
- Mujahidin, M. (2020). The potential of halal industry in indonesia to support economic growth. *Al-Kharaj*, 02(01), 77–90.
- Nainggolan, M., Ardika, I. W., Ardhana, I. K., & Setiawan, I. K. (2020).**Pentahelix** Model **Application** for **Tourism** Development Strategy. International Journal of Linguistics, Literature and Culture, 6(2),12–18. https://doi.org/10.21744/ijllc.v6n2. 864
- Nawawi, M. S. A. M., Radzi, C. W. J. W. M., Mamat, M. Z., Hasbullah, M., Mokhtar, M. I., Jenatabadi, H. S., ... Pauzi, N. (2017). Halal Food Industry in Thailand: History,

- Prospects and Challenges. International Halal Management Conference (IHMC 2017) Sejong University, South Korea, pp. 302– 307. Retrieved http://eprints.um.edu.my/id/eprint/ 18517
- Nurulwahida, S., Syafrieyana, Y., & Sukmana. O. (2020).with Collaboration **Pentahelix** Model in Developing Kajoetangan Heritage Tourism in Malang City. 3(1). 1-17.Retrieved from http://ejournal.umm.ac.id/index.ph p/LOGOS/article/view/10699/pdf
- (2020).Nurwilda. A. Potensi Halal Pariwisata di Kota Pekalongan Melalui Faith-Based Service Needs Menurut Indonesia Muslim Travel Index. Universitas Gadjah Mada.
- S. (2021).Pamuji, Ini Potensi Perguruan Tinggi dalam Penguatan Ekosistem Halal Nasional. Retrieved May 18, 2022, from https://kemenag.go.id website: https://kemenag.go.id/read/inipotensi-perguruan-tinggi-dalampenguatan-ekosistem-halalnasional-zmoyy
- Parmuji, S. (2022). Gelar ToT, BPJPH Percepat Penyiapan Pendamping Produk Proses Halal UMK. Retrieved June 21, 2022, from https://www.kemenag.go.id/read/g elar-tot-bpjph-percepat-penyiapanpendamping-proses-produk-halalumk-5v8jn
- Pemprov Jateng. (2022).Kejar Sertifikasi Halal, Pemprov Jateng Kerja Sama dengan **BPJPH** Kemenag. Retrieved May 20, from 2022. https://jatengprov.go.id/publik/keja

- r-sertifikasi-halal-pemprov-jatengkerja-sama-dengan-bpjphkemenag/
- PSH ITB. (2022). Pusat Kajian Halal. Retrieved June 21, 2022, from https://www.itb.ac.id/pusat-kajianhalal
- Razak, A. A., & Saad, M. (2007). The role of universities in the evolution of the Triple Helix culture of innovation network: The case of Malaysia. International Journal of **Technology** Management and Sustainable Development, 6(3), 211-225. https://doi.org/10.1386/ijtm.6.3.21
- Reddy, P. (2011). The Evolving Role of Universities Economic in Development: The Case University-Industry Linkages. Universities in Transition, 25–49. https://doi.org/10.1007/978-1-4419-7509-6 3
- Roesler, C., & Tom, B. (2017). The role of universities in a network of subsidized R&D collaboration: The case of the biotechnologyindustry in Germany. Review of Regional Research, 37(2), 135-160.
- Saeroji, A., Wijaya, D. A., & Wardani, W. (2018). A Study of Solo's Tourism Product Potential as Halal Tourism Destination in Indonesia. KAWISTARA, 8(3), 213-309. https://doi.org/10.22146/kawistara. 38363
- Sharma, M., Kumar, U., & Lalande, L. (2006).Role of university technology transfer offices university technology commercialization: Case study of the Carleton University foundry

- program. Journal of Services Research, 6(July), 109–139.
- Sukiennik, M., Zybała, K., Fuksa, D., & Kęsek, M. (2021). The role of universities in sustainable development and circular economy strategies. *Energies*, 14(17). https://doi.org/10.3390/en1417536
- Sukoso, Wiryawan, A., Kusnadi, J., & Sucipto. (2020). *Ekosistem Industri Halal* (A. A. Prihanto, M. I. Sukarna, & H. Harimurti, Eds.). Jakarta: Bank Indonesia & Pusat Studi Halal Thoyyib-Universitas Brawijaya Malang.
- Supriyanto. (2022). Sambutan Ketua Pusat Studi Halal Research Centre and Services (HRCS-UNS). Retrieved May 18, 2022, from https://halalcentre.lppm.uns.ac.id/
- Sutini, Wurjani, W., Augustien, N., & Pribadi, D. U. (2021). embangun Sinergi antar Perguruan Tinggi dan Industri Pertanian dalam Rangka Implementasi Merdeka Belajar Kampus Merdeka. Seminar Nasional Dalam Rangka Dies Natalis Ke-45 UNS Tahun 2021.
- Thomson Reuters, D. S. (2021). State of
 The Global Islamic Economy
 Report 2018/19. In *Dubai International Financial Centre*.
 Retrieved from
 https://haladinar.io/hdn/doc/report2
 018.pdf
- Wahab, N. A., Shahwahid, F. M., Adha, N., Hamid, A., Othman, N., Ager, N. S., ... Saidpudin, W. (2016). Contributions Of Malaysia And Singapore In The Development Of Halal Industry In The Asean Region. Asian Journal of Social

- Sciences & Humanities, 5(2-May), 37–46.
- Wardhani, B., Hara, A. E., & Dugus, V. (2021). Crafting Taiwan-Southeast Asian Relations with Halal Tourism (pp. 257–293). pp. 257–293.
- Wibowo, M. G., & Khoiruddin, A. Y. (2020). Model of Halal Tourism Management in Bukittinggi City, West Sumatra Province, Indonesia. *International Journal of Publication and Social Studies*, 5(2), 115–130. https://doi.org/10.18488/journal.13 5.2020.52.115.130
- Widowati, S., Ginaya, G., & Triyuni, N. N. (2019). Pentahelix Model to Develop Ecotourism: Empowering the Community for Economic and Ecological Sustainability. *International Journal of Social Sciences and Humanities*, 3(2), 31–46. https://doi.org/10.29332/ijssh.v3n2.288
- Wijaya, R. (2022). Walisongo Halal Centre Beri Pelatihan PPH ke 1.800 Peserta. Retrieved May 19, 2022, from https://rri.co.id/semarang/pendidik an/seputarkampus/1382449/walisongo-halal
 - kampus/1382449/walisongo-halalcentre-beri-pelatihan-pph-ke-1-800-peserta
- Yang, H., Dube, F., &Huang, L. (2016). Research the on **Factors** Influencing Halal Food Industry Internationalization: A Case Study (China). 3rd of Ningxia International Conference on**Economics** and Management (icem). (ICEM 2016),

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https://doi.org/10.12783/dtem/icem 2016/4069.