Trends and Themes in Halal Industry Research: A Scientometric Study Based on Scopus Publications

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Article Info

ABSTRACT

This study examines global trends, topic development, and collaborative networks in halal sector research through a scientometric analysis of Scopus publications from 2000 to 2025. The analysis, utilizing VOSviewer and Biblioshiny for data visualization, reveals four predominant research clusters: halal food, halal tourism, supply chain management, and sustainability. The findings indicate a transition from conventional issues of religious adherence and certification to modern topics including digital innovation, ethical consumption, and sustainable business practices. Malaysia and Indonesia are the primary suppliers, bolstered by robust institutional networks involving Universiti Teknologi MARA, International Islamic University Malaysia, and Universitas Gadjah Mada. Notwithstanding increasing regional collaboration, global participation is predominantly concentrated in Southeast Asia, with minimal involvement from Western and African institutions. This study enhances theoretical development by delineating the intellectual framework of halal research and provides practical implications for policymakers and industry stakeholders aiming to amalgamate halal principles with sustainability, governance, and technological progress.

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1. INTRODUCTION

The halal industry has emerged as one of the most dynamic and swiftly expanding sectors of the world economy. The halal notion, grounded in the Islamic principles of halalan tayyiban—denoting permissible and wholesome—transcends mere religious adherence to include quality, safety, and ethical guarantee in consumption [1]. The halal industry was originally linked mainly to the food and beverage sectors serving Muslim consumers. It has since expanded into pharmaceuticals, cosmetics, finance, logistics, tourism, and fashion, establishing itself as a holistic ethical consumption ecosystem [2]. The global Muslim population, projected to attain 2.3 billion by 2030, along with escalating disposable income and heightened knowledge of halal certification, has catalyzed this transition [3], [4]. Thus, halal has transformed from a religious mandate into a global economic brand associated with quality, trust, and sustainability.

Concurrent with industrial expansion, academic interest in halal studies has markedly increased. In the last twenty years, scholarly discussions regarding the halal industry have transitioned from basic examinations of consumer preferences to intricate, multidisciplinary studies that include marketing, supply chain management, certification governance, and digital innovation [5], [6]. Researchers increasingly acknowledge that halal products attract not only Muslim consumers but also non-Muslims who perceive halal as a symbol of sanitation, safety, and ethical integrity [7], [8]. Furthermore, the increase in global trade of halal products has positioned non-Muslim-majority nations like Brazil, New Zealand, and Thailand as significant exporters of halal-certified goods, underscoring the necessity for standardized international regulations and reliable certification systems [9], [10].

A fundamental element of the halal industry's integrity is in its certification and standardization standards. Since the early 2000s, the integrity of halal certification has been a primary study topic, examining consumer trust, supply-chain transparency, and regulatory harmonization [8], [11]. Researchers have determined that inconsistent certification systems and varying interpretations of halal principles across regions result in business inefficiencies and consumer misunderstanding [12]. Thus, research increasingly underscores the imperative for strong governance and digital traceability systems to bolster customer confidence [13]. Recent research indicate that halal principles overlap with sustainability, positing that the tayyiban (wholesome) concept is congruent with environmental stewardship and corporate social responsibility [14], [15].

The digital transformation of the halal industry signifies a crucial development. The integration of blockchain, Internet of Things (IoT), and artificial intelligence technology has become significant in halal logistics, traceability, and certification processes [13]. Researchers like Aziz et al. (2020) and Shaharudin et al. (2022) emphasize that

digitalization facilitates real-time verification, improves efficiency, and reduces fraud in halal supply chains. Moreover, research has expanded to encompass halal tourism, halal medicines, and fintech—domains that were previously underrepresented in the literature but are swiftly gaining significance as global halal consumption patterns evolve [16], [17]. These developing sectors illustrate the transformation of the halal business from a conventional framework to a technologically advanced ecosystem, in accordance with the global sustainability agenda and the United Nations Sustainable Development Goals (UNSDGs).

In academia, scientometric and bibliometric methods have become effective instruments for mapping and visualizing research advancements in the halal sector. These methods utilize quantitative tools to analyze extensive datasets of publications, identify research clusters, assess prominent authors and journals, and monitor topic evolution over time [18]. Researchers can utilize Scopus or Web of Science databases and applications such as VOSviewer to identify knowledge structures and intellectual connections within subfields [19]. Prior scientometric analyses, such those conducted by Nasution et al. (2021) and Omar et al. (2023), have indicated that halal research predominantly focuses on consumer behavior, certification, and supply chain management, while increasingly emphasizing innovation and sustainability. Nonetheless, these assessments are fragmented, frequently concentrating on specific issues or restricted time periods, resulting in deficiencies in comprehending the comprehensive evolution of halal industry research across several disciplines and geographies.

The growth of the halal business and its related academic discussions underscore the necessity for a rigorous mapping of its intellectual terrain. Notwithstanding the variety of research domains—ranging from marketing and governance to technology and sustainability—the discipline is devoid of a unified synthesis of global trends, research collaborations, and thematic trajectories. A

scientometric analysis based on Scopus data offers a thorough picture of the evolution of scholarship in the halal business, its growing frontiers, and the potential direction of future research priorities.

Despite the proliferation of research on the halal market, current studies frequently exhibit fragmentation in terms of domain, region, or technique. Integration of findings across subfields, including halal logistics, finance, tourism, and digital transformation, remains limited. Furthermore, previous bibliometric analyses have generally focused on particular elements—such as halal food [15] or consumer behavior [4]—lacking a comprehensive scientometric overview of the discipline. As a result, there is an absence of a comprehensive, data-driven examination of worldwide halal industry scholarship. In the absence of a synthesis, scholars and policymakers encounter challenges in recognizing research deficiencies, collaboration networks, and emerging thematic trends crucial for the advancement of halal sector innovation and policy development [20].

This study intends to do a thorough scientometric analysis of halal sector research included in the Scopus database. The objectives are fourfold: (1) to investigate the temporal development and publication trends of halal industry research; (2) to identify and illustrate prevailing research themes and their progression through keyword co-occurrence mapping; (3) to analyze collaboration networks among authors, institutions, and countries; and (4) to reveal research gaps and suggest potential future directions. This study offers a thorough, evidence-based analysis of the intellectual framework and developing trends in halal industry research, thereby enhancing scholarly comprehension and strategic advancement of the global halal economy.
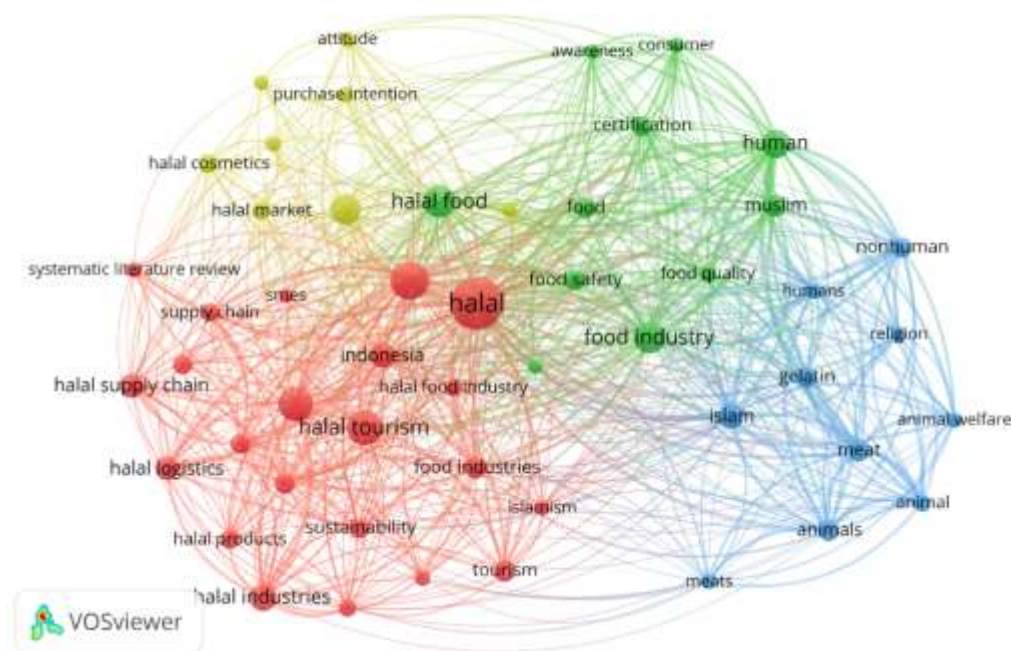
2. METHODS

This study utilized a scientometric and bibliometric methodology to systematically analyze global research trends in the halal market. Scientometrics is a quantitative approach employed to assess the structure, evolution, and dynamics of scientific knowledge through the analysis of publication and citation data [18], [19]. This approach enables academics to visualize collaborative patterns, emerging research themes, and intellectual connections among authors, institutions, and countries. The Scopus database was chosen as the principal data source because of its extensive coverage of peer-reviewed journals, books, and conference proceedings across several fields [21]. The search approach employed a combination of terms pertaining to "halal industry," "halal business," "halal supply chain," "halal finance," and "halal tourism" inside the titles, abstracts, and keywords boxes. The timeframe was constrained from 2000 to 2025 to document the progression of halal industry research over the preceding 25 years. The initial dataset was modified by omitting publications irrelevant to halal economic activity, so retaining only pertinent items for study.

Following data retrieval, bibliographic information—including author names, titles, publication years, keywords, affiliations, citations, and sources—was exported from Scopus in CSV format. The dataset was subsequently refined to remove duplicates and standardize author and institution names, adhering to the protocols established by Aria and Cuccurullo (2017). The resulting dataset was loaded into VOSviewer (version 1.6.20) and Biblioshiny, an R-based interface for the Bibliometrix software, for additional analysis. These instruments were selected for their capacity to visualize co-authorship networks, keyword co-occurrence, citation patterns, and theme progression. Co-occurrence analysis was utilized to discern the most prevalent terms and their interrelations, therefore delineating significant topic clusters in halal industry study [22]. Co-citation analysis identified prominent authors, journals, and documents that provide the intellectual foundation of the discipline, whereas co-authorship analysis elucidated collaboration patterns among

academics, institutions, and countries [23]. To maintain reliability, normalization techniques like fractional counting were employed to account for discrepancies in publication output between regions.

The investigation was performed in two phases: descriptive analysis and network analysis. The descriptive stage analyzed publication trends over time, the most prolific authors, leading publishing journals, and contributions by country, offering a picture of the quantitative expansion of halal industry research. The network analysis phase concentrated on visualizing links and clusters with VOSviewer's mapping method. The association strength method was utilized to ascertain the proximity of nodes, representing entities such as authors, keywords, or organizations [24]. The thematic evolution

analysis in Biblioshiny was utilized to monitor the progression of research topics over specified intervals (e.g., 2000–2010, 2011–2020, 2021–2025), facilitating an understanding of the shift in scholarly focus from conventional halal certification studies to modern domains such as sustainability and digitalization. Ethical study protocols were upheld by exclusively utilizing publicly accessible bibliometric metadata, without including human or proprietary data. This scientometric methodology guarantees objectivity, reproducibility, and transparency in delineating the intellectual landscape of halal sector research.

3. RESULTS AND DISCUSSION

3.1 Network Visualization

Figure 1. Network Visualization
Source: Data Analysis Result, 2025

The VOSviewer graphic illustrates a rich and linked research ecosystem in the halal industry. The term "halal" serves as a pivotal concept, linking several research domains including halal food, halal tourism, halal logistics, and halal supply chain. The numerous connections demonstrate that different subthemes often coexist within the same articles, indicating the multidisciplinary

and integrative characteristics of halal industry research. The closeness and intersection of nodes illustrate robust intersectoral connections among the economic, religious, and ethical aspects of halal. The network exhibits significant interconnection among clusters, indicating that the halal business is examined not as a singular domain but as a merging subject that

amalgamates food science, consumer behavior, logistics, sustainability, and religion.

The red cluster, centered on concepts like halal, halal tourism, halal supply chain, halal logistics, Indonesia, sustainability, and halal products, signifies the macro-level view of the halal ecosystem. This cluster encompasses research on the worldwide advancement of halal industries, governance frameworks, and their socioeconomic consequences. Indonesia's prominence as a key node underscores its pivotal role in worldwide halal research and policy, along with its aspiration to establish itself as a world halal hub. Moreover, subjects such as sustainability, small and medium-sized enterprises, and systematic literature reviews demonstrate an increasing academic focus on environmental, entrepreneurial, and methodological dimensions. This signifies a transition from conventional religious discourse to practical industrial advancement, wherein academics investigate the incorporation of halal principles into sustainable production and economic frameworks.

The green cluster includes terms like halal food, food industry, food quality, food safety, certification, and consumer awareness. This is the most extensive and developed research field in halal studies. It underscores the academic community's persistent emphasis on maintaining food integrity via certification, traceability, and consumer education. The strong connection between food quality and consumer awareness highlights two key aspects: adherence to religious standards and fulfillment of contemporary customers' demands for sanitation and openness. Research within this cluster frequently intersects with behavioral research that investigate the impact of trust and certification labels on purchasing intentions and attitudes (Bonne & Verbeke, 2008; Awan et al., 2015). This indicates that halal food serves as the intellectual cornerstone of the domain, establishing the basis for emerging sectors such as halal tourism and logistics.

The blue cluster, centered on keywords including human, Muslim, Islam, religion, animal welfare, meat, and gelatin, signifies the ethical and theological aspects of halal study. This cluster emphasizes that the basis of the halal idea is both economic and ethical, as well as humanitarian. Terminology such as animal welfare and nonhuman underscores the increasing academic discourse around ethical slaughter procedures, animal rights, and its congruence with Islamic law. The recurrent association of Islam with humanity suggests that several research persist in grounding their theoretical frameworks in Islamic law (Shariah), highlighting the humanistic dimension of halal eating. This cluster has progressed towards multidisciplinary investigation, connecting theology with animal science, food biotechnology, and ethics—demonstrating the intensifying discourse between religion and sustainability in modern halal research.

The yellow cluster encompasses purchasing intention, attitude, awareness, halal cosmetics, and the halal market, emphasizing consumer perception and market segmentation. This expanding cluster signifies an increasing trend towards perceiving halal as a global lifestyle and branding phenomena, extending beyond mere food consumption. The inclusion of terminology such as halal cosmetics and halal market indicate an expansion of the research focus into non-food industries, in accordance with worldwide halal lifestyle trends and marketing developments. The relationships among purchasing intention, attitude, and awareness illustrate the applicability of behavioral and psychological theories, such as the Theory of Planned Behavior (TPB), in elucidating halal consumption choices. This cluster has become notably dynamic in recent years, indicating that forthcoming halal research is transitioning towards consumer analytics, digital marketing, and product innovation in accordance with emerging worldwide trends in ethical and sustainable consumption. The network diagram illustrates that halal sector research has progressed from studies focused on religious

food safety to a multifaceted ecosystem that includes sustainability, digital innovation, consumer psychology, and ethics. The robust inter-cluster connectedness signifies a rise in interdisciplinarity, illustrating a field in transition—from normative compliance to a holistic halal economy integrated within global value chains and sustainability frameworks.

3.2 Overlay Visualization

Figure 2. Overlay Visualization
Source: Data Analysis Result, 2025

The overlay visualization depicts the temporal progression of research themes in the halal industry, demonstrating a distinct shift from traditional and religious foundations (in blue hues, circa 2017–2019) to more modern and market-focused subjects (in green and yellow, from 2020–2022). Initial research focused on essential topics concerning Islam, religion, animal welfare, meat, and food quality, illustrating the preliminary academic emphasis on delineating halal in relation to adherence to Islamic law and ethical slaughtering methods. This fundamental phase prioritized theological legitimacy, consumer confidence in halal certification, and food safety norms as the principal areas of concern. The early research established the conceptual foundation for subsequent studies on halal business ecosystems, industrial sustainability, and digital transformation.

The shift to green nodes signifies that the period from 2019 to 2021 witnessed an expansion of the research agenda, extending from religious and ethical inquiries to encompass economic, managerial, and operational dimensions of the halal industry. Keywords include halal food, food industry, certification, consumer awareness, and food safety prevail in this period. The convergence of halal supply chain, halal logistics, halal tourism, and sustainability indicates an increasing scholarly focus on the integration of halal practices within global supply chains and sustainable development paradigms. This multidisciplinary phase connected corporate management, marketing, and logistics with religious principles, illustrating how halal transformed into a global commerce paradigm and branding strategy. Indonesia and Malaysia often emerge as research centers, highlighting their vital roles in global halal governance and their

substantial contributions to academic literature during this intermediate phase.

The yellow nodes signify the latest and developing research trajectories (post-2021), encompassing subjects such as purchase intention, attitude, halal cosmetics, halal market, systematic literature evaluation, and SMEs. The recent subjects indicate a transition towards consumer psychology, market segmentation, and innovation in the halal economy. The rise of halal cosmetics and digital halal markets signifies a diversification beyond food into lifestyle and technology sectors, where halal is reinterpreted as an ethical and sustainable consumption option for both Muslim and non-Muslim consumers. The incorporation of "systematic literature review" as a keyword indicates methodological sophistication, demonstrating that the area has advanced to meta-analytical and evaluative study. The overlay map illustrates a progressive shift from fundamental religious tenets to advanced, data-informed, and globally focused halal sector research that incorporates sustainability, digitization, and consumer-oriented innovation.

3.3 Citation Analysis

To comprehend advancements in worldwide halal industry research, it is essential to examine the most significant academic studies elucidating consumer behavior, supply chains, and halal logistics. The subsequent table delineates the 10 most referenced papers about halal food, halal logistics, and halal tourism, which constitute the primary foundations of the halal economy. The works produced from 2010 to 2023 illustrate the progression of scholarly thought about the implementation of planned behavior theory, technological innovation, halal certification, and the worldwide problems associated with preserving the integrity of the halal supply chain. This review illustrates the interaction of religious, social, and economic factors in the formulation of halal company policies and practices across many industries and nations.

Table 1. Top Cited Research

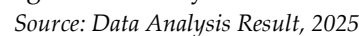| Citations	Authors and year	Title
531	Shah Alam, S., Mohamed Sayuti, N.	Applying the Theory of Planned Behavior (TPB) in halal food purchasing
123	Samori, Z., Md Salleh, N.Z., Khalid, M.M.	Current trends on Halal tourism: Cases on selected Asian countries
116	Zailani, S., Iranmanesh, M., Aziz, A.A., Kanapathy, K.	Halal logistics opportunities and challenges
105	Elseidi, R.I.	Determinants of halal purchasing intentions: evidences from UK
99	Ab Rashid, N., Bojei, J.	The relationship between halal traceability system adoption and environmental factors on halal food supply chain integrity in Malaysia
96	Lubis, H.N., Mohd-Naim, N.F., Alizul, N.N., Ahmed, M.U.	From market to food plate: Current trusted technology and innovations in halal food analysis
91	Ab Talib, M.S., Hamid, A.B.A.	Halal logistics in Malaysia: A SWOT analysis
88	Ab Talib, M.S., Md. Sawari, S.S., Abdul Hamid, A.B., Ai Chin, T.	Emerging Halal food market: an Institutional Theory of Halal certificate implementation
83	Haleem, A., Khan, M.I.	Towards successful adoption of Halal logistics and its implications for the stakeholders
81	Azam, A.	An empirical study on non-Muslim's packaged halal food manufacturers: Saudi Arabian consumers' purchase intention

Source: Scopus, 2025

The bibliometric data presented indicates the significant contribution of researchers to the theoretical and practical comprehension of the halal sector ecosystem. The most cited publication, Shah [25], with 531 citations, employed the Theory of Planned Behavior (TPB) to examine the purchase behavior of halal products. This study served as the primary basis for later research investigating the intents of Muslim and non-Muslim consumers about religious conformity and the impact of attitudes, subjective standards, and behavioral control on purchase decisions.

Moreover, [17], with 123 citations, underscore contemporary trends in halal tourism across several Asian nations, elucidating that Muslim-friendly policies and amenities are pivotal in drawing halal travelers. [26], with 116 citations, and [27], with 91 citations, underscore the opportunities and challenges associated with the implementation of halal logistics, encompassing supply chain management, certification, and the enhancement of consumer confidence in the distribution of halal products. Elseidi's (2018) study, which has garnered 105 citations, broadens the focus to the Western context by investigating the determinants of the intention to purchase halal items in the UK. The findings indicate that awareness, trust in halal certifications, and ethical judgments are predominant influences on non-Muslim customer choices. Ab Rashid and Bojei (2019), with 99 citations, emphasize the significance of halal traceability systems in preserving the integrity of the halal food supply chain in Malaysia, illustrating how technological adoption can enhance transparency and public trust.

The study by [28]which has garnered 96 citations, offers a technological viewpoint, examining developments in halal analysis that encompass laboratory techniques and advanced technology to guarantee the authenticity and safety of halal food items [27], with 88 citations, utilize Institutional Theory to elucidate the determinants affecting the adoption of halal certification in the global food market. The research conducted by [29], which has garnered 83 citations, broadens the discourse on effective halal logistics adoption strategies and their effects on stakeholders. In contrast [30], with 81 citations, offers empirical insights into the evaluation of halal food products by non-Muslim Saudi consumers, emphasizing the aspect of cross-cultural trust within the global market. These papers indicate that research on the halal business has transitioned from an emphasis on religious conformity to encompass broader topics, including sustainability, technology, consumer trust, and global governance. These works not only bolster the academic standing of the halal sector in marketing and management studies but also significantly contribute to the development of inclusive, transparent, and globally competitive strategies for the halal industry.

3.4 Density Visualization

Figure 3. Density Visualization
Source: Data Analysis Result, 2025

The density map illustrates regions of elevated research activity in the halal business using warmer color gradients—yellow signifies high-frequency keywords, while green to blue denotes lower intensity. The term "halal" occupies the core of the highest-density area, demonstrating its fundamental significance in the domain. Adjacent to it are highly interconnected nodes, including halal food, food industry, food safety, halal tourism, and Indonesia, signifying that these domains provide the intellectual and empirical foundation of halal-related studies. The convergence of halal supply chain, halal logistics, and sustainability indicates an increasing scholarly focus on the operational and ethical dimensions of the halal environment, especially in Southeast Asia. Simultaneously, concepts such as food quality, certification, and consumer awareness underscore the emphasis on preserving integrity and confidence in halal products and services, affirming that consumer perception and quality assurance are crucial to the discussion.

Outside the core zones, the density map indicates notable research effort in peripheral fields, including halal cosmetics, halal market, purchasing intention, and systematic literature review. These new subjects signify a diversification beyond the conventional food-centric narrative, illustrating the halal industry's progression into lifestyle and innovation-oriented markets. On the right side of the picture, cooler green and blue hues delineate groups pertaining to Islam, animal welfare, meat, and religion, indicating that these represent earlier or more specialized domains that, although foundational, have been less prominent in recent years. The geographical distribution of human, Muslim, and nonhuman terms signifies increasing overlaps with ethical consumption, biotechnology, and socio-religious studies. The density visualization illustrates a developing study domain—rooted in the foundations of halal food and tourism, yet progressively expanding into sustainability, digital supply chains, consumer behavior, and innovations in halal living.

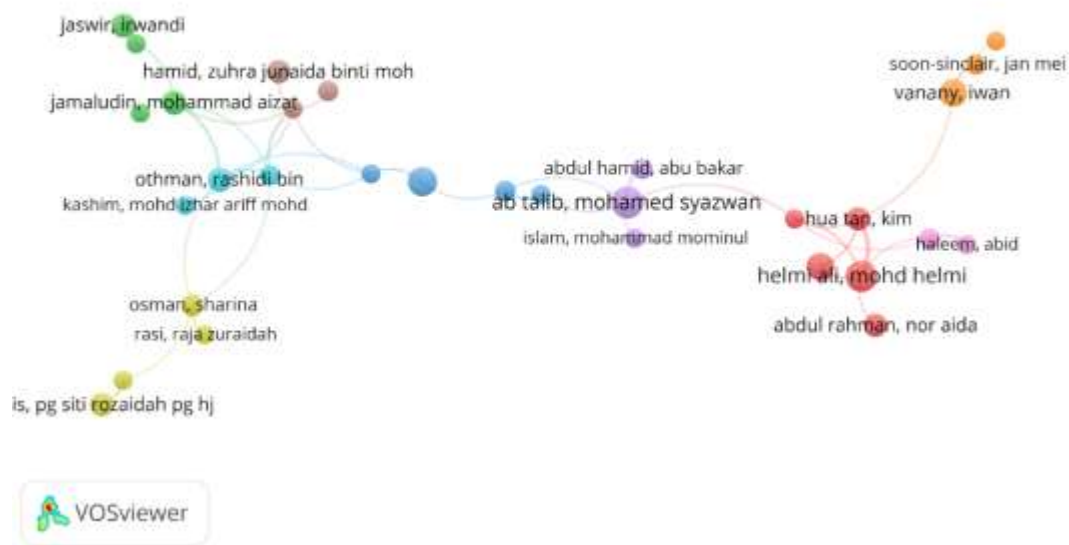### 3.5 Co-Authorship Network

Figure 4. Author Visualization
Source: Data Analysis Result, 2025

The co-authorship visualization of the author delineates the collaborative framework and intellectual interconnections within halal industry research. The map illustrates multiple unique clusters, each signifying a network of researchers who regularly co-author works. The predominant and most unified group revolves around Helmi Ali and Mohd Helmi, closely associated with Hua Tan, Kim, Abid Haleem, and Nor Aida Abdul Rahman, signifying robust interdisciplinary collaboration among Malaysian and international researchers concentrating on halal logistics, supply chain, and innovation. A notable cluster comprises Mohamed Syazwan Ab Talib and Abu Bakar Abdul Hamid, prominent experts in halal management and marketing studies, connecting research on consumer trust, certification, and organizational behavior.

Compact yet dense clusters, exemplified by the leadership of Irwandi Jaswir, Rashidi Bin Othman, and Mohammad Aizat Jamaludin, demonstrate proficiency in halal food science and biotechnology, frequently prioritizing quality control and product development. The collaboration of Malaysian, Bruneian, and Indonesian researchers, illustrated by Siti Rozaidah Pg Hj Idris and Sharina Osman, demonstrates that Southeast Asia is the focal point of halal scholarship. The visualization illustrates a moderately interconnected network marked by robust regional hubs yet constrained global integration, indicating potential for expanded international collaboration to improve cross-border knowledge exchange and interdisciplinary innovation in halal industry research.
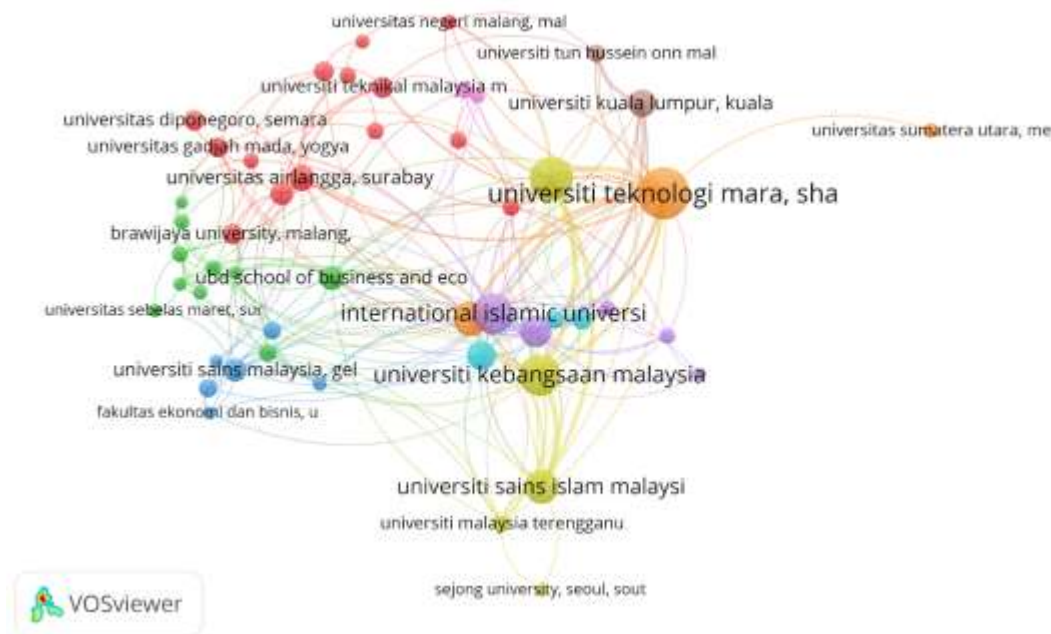
Figure 5. Affiliation Visualization
Source: Data Analysis Result, 2025

The depiction of institutional co-authorship underscores the predominant academic centers and collaborative connections influencing the worldwide framework of halal sector research. Universiti Teknologi MARA (UiTM), Malaysia, is the largest and most central node, functioning as the principal knowledge hub and demonstrating extensive collaborations with other Malaysian universities, including International Islamic University Malaysia (IIUM), Universiti Kebangsaan Malaysia (UKM), and Universiti Sains Islam Malaysia (USIM). These institutions constitute the intellectual foundation of halal studies, especially in areas such as halal management, certification, supply networks, and consumer behavior. The intricate relationships among these universities signify robust local collaborative networks that bolster Malaysia's status as a global leader in halal studies. Moreover, cross-border connections encompass Indonesian institutions such as Universitas Gadjah Mada, Universitas Diponegoro, Universitas Airlangga, and Brawijaya University, indicating robust regional collaboration within Southeast Asia—demonstrating common cultural, religious, and economic interests in halal ecosystems. Recent contributions from UBD School of Business and Economics (Brunei) and Sejong University (South Korea) indicate a growing worldwide academic presence, but the network continues to be regionally focused. The visualization illustrates a Southeast Asian-focused collaboration model, with Malaysia as the nucleus of research influence, bolstered by a network of Indonesian and Bruneian partners, while also presenting opportunities for expanded engagement with Middle Eastern and Western institutions to augment the global visibility and interdisciplinary scope of halal industry research.
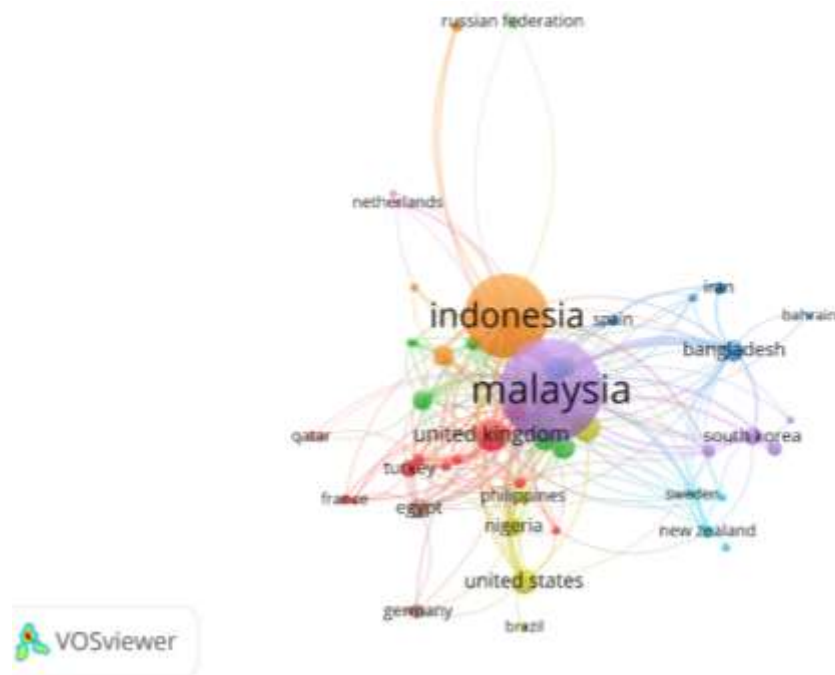
Figure 6. Country Visualization
Source: Data Analysis Result, 2025

The country collaboration visualization map depicts the geographical distribution and international connections in halal sector research, highlighting a concentrated network primarily driven by Malaysia and Indonesia as the two principal contributors. Both countries occupy the central position with the largest node sizes, indicating their substantial publication volume and critical influence in the development of worldwide halal studies. The intricate interrelations among Malaysia, Indonesia, and countries like the United Kingdom, Turkey, and the United States signify the development of robust academic partnerships linking Southeast Asia with Western and Middle Eastern research networks. Malaysia's substantial relationships with Bangladesh, South Korea, and Bahrain underscore its growing prominence in halal supply chain management, certification, and Islamic economics. Conversely, Indonesia's relationships with the Russian Federation, Netherlands, and Qatar demonstrate diversified alliances that transcend the regional framework. Despite the involvement of Europe and North America (e.g., France, Germany, and the U.S.), their node sizes and link densities are diminished, indicating a more peripheral engagement relative to Asia's dominance. The visualization indicates that Southeast Asia is the global hub for halal industry research, bolstered by increasing intercontinental collaboration; however, it also reveals opportunities for enhanced integration with African, European, and Middle Eastern regions to establish a more balanced and interconnected halal knowledge network.

Discussions
Practical Implications

This scientometric analysis has substantial practical consequences for policymakers, industry professionals, and academic institutions involved in the halal economy. The identification of prominent research clusters—specifically those pertaining to halal food, halal supply chain, tourism, and sustainability—equips policymakers with an evidence-based comprehension of the areas receiving the most academic focus. This can guide national strategies for the development of the halal industry, certification policies, and regional integration, particularly in prominent nations like Malaysia and Indonesia. The pivotal participation of these nations within the

collaborative network enhances their status as intellectual and economic leaders in the formulation of global halal standards. Furthermore, industry stakeholders can utilize insights from emerging themes such as halal logistics, digital traceability, and consumer behavior to innovate in product development and marketing strategies, thereby extending the halal value chain beyond food to include lifestyle, cosmetics, and fintech sectors.

The visualization of institutional and author networks identifies prominent centers of excellence, like Universiti Teknologi MARA, International Islamic University Malaysia, and Universitas Gadjah Mada, which can function as hubs for academic–industry collaborations. Enhancing inter-institutional collaboration with these hubs helps expedite applied research, standardization, and knowledge dissemination across borders. For practitioners, comprehending the progression of research themes from certification-based compliance to sustainability-oriented innovation underscores the necessity of integrating halal integrity with comprehensive sustainability and ESG frameworks. This convergence not only bolsters customer trust but also establishes the halal sector as a global exemplar of ethical and responsible business practices. These practical insights collectively promote enhanced collaboration across research, industry, and policy to cultivate an inclusive and competitive halal environment.

Theoretical Contributions

This study theoretically enhances the existing knowledge of the halal sector by delineating its intellectual framework, thematic progression, and collaborative interactions during the last twenty years. The study employs a scientometric technique to empirically validate the evolution of the halal industry from a religiously based framework to a multidisciplinary field that includes business management, supply chain, tourism, ethics, and technology. This progression enhances theoretical discourse by integrating Islamic economics, consumer behavior theory, and sustainability theories within a cohesive research framework. The co-occurrence study illustrates the growing adoption of theoretical models, including the Theory of Planned Behavior (TPB), Stakeholder Theory, and Resource-Based View (RBV), to elucidate halal consumption, certification governance, and organizational performance.

This study enhances scientometric technique in Islamic and sustainability studies by offering a replicable model for bibliometric mapping utilizing Scopus data, VOSviewer visualization, and Biblioshiny analysis. It delineates knowledge clusters and research frontiers that can inform forthcoming theoretical advancements—for example, the amalgamation of digital transformation theory and institutional theory in elucidating the halal industry's adaptation to globalization. The study reveals underexplored connections—such as those between halal ethics and the circular economy, or between fintech and halal finance—thereby establishing new theoretical avenues for comprehending the interplay between religious values, technological innovation, and sustainable business practices. This study consolidates existing paradigms and offers a framework for interdisciplinary theory development in halal studies.

Limitations and Future Research Directions

Notwithstanding its thorough methodology, this study possesses many drawbacks. The dataset is confined to Scopus-indexed articles, which, although comprehensive, may overlook pertinent works published in local or non-indexed journals, especially those in Arabic, Bahasa Indonesia, or Malay. Consequently, regional variations and locally informed perspectives on halal entrepreneurship or regulatory practices may be inadequately represented. Furthermore, scientometric mapping depends on metadata including keywords, author affiliations, and citations, which may exhibit

variability in accuracy and consistency among journals, thereby influencing cluster interpretation. The analysis period (2000–2025) indicates that recent articles may not have garnered enough citations to demonstrate their nascent impact.

Subsequent research ought to broaden its scope by amalgamating data from various databases (e.g., Web of Science, Dimensions, Google Scholar) and utilizing sophisticated bibliometric methodologies, including bibliographic coupling, thematic evolution analysis, or topic modeling through AI-driven text mining to attain conceptual profundity. Furthermore, qualitative triangulation—via expert interviews or content analysis—could enhance quantitative mapping by offering contextual insights into policy consequences and industry adaptation. Extending cross-regional comparisons to encompass the Middle East, Africa, and Europe would enhance the comprehension of global halal innovation systems. These developments will allow scholars to cultivate a more comprehensive and longitudinal understanding of the evolution of the halal business as both a spiritually motivated and economically strategic domain within the global knowledge economy.

4. CONCLUSION

This scientometric analysis offers an extensive examination of the intellectual framework, theme progression, and collaborative interactions in halal sector research, utilizing Scopus articles from 2000 to 2025. The analysis reveals that the field has transitioned from its initial emphasis on religious adherence, food safety, and certification integrity to a more expansive, multidisciplinary framework encompassing business management, supply chain optimization, consumer behavior, sustainability, and digital innovation. The term network and density visualizations emphasize halal food, halal tourism, supply chain management, and sustainability as fundamental research clusters, illustrating the industry's shift from normative halal standards to global competitiveness and ethical branding. Simultaneously, the overlay analysis indicates that contemporary studies prioritize consumer awareness, digital certification systems, and market diversification, reflecting the field's response to technical and societal changes. Analyses of institutional and national collaborations confirm that Malaysia and Indonesia are the focal points of halal research, bolstered by prominent universities including Universiti Teknologi MARA, International Islamic University Malaysia, and Universitas Gadjah Mada. Their networks span Southeast Asia, the Middle East, and Europe, exemplifying the increasing transnationalization of halal studies. Nonetheless, the visualization indicates minimal participation from Western and African institutions, highlighting the necessity for more global inclusivity and interdisciplinary collaborations.This study enhances academic theory and practical policy by delineating the evolution of halal research into a globally pertinent, morally founded, and innovation-driven field. It emphasizes the strategic significance of integrating halal principles with sustainability, digital transformation, and consumer trust to enhance the global halal ecosystem. Future research should incorporate scientometric data with qualitative insights, broaden comparative analyses across geographies, and investigate emergent intersections such as halal finance, green supply chains, and digital halal ecosystems. Such activities enable the halal sector study to progress as a crucial contributor to inclusive, ethical, and sustainable global economic development.

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