Integrating Co-Creation and Open Innovation for Sustainable Value Creation: Evidence from Muslim-Friendly Restaurants in Tokyo

Ikhbal Fadillah[1], Dyah Ismoyowati[*,1], Mohammad Affan Fajar Falah[1], Masaharu Tsujimoto[2]

[1]Department of Agroindustrial Technology, Faculty of Agricultural Technology, Universitas Gadjah Mada, Jl. Flora No.1 Bulaksumur 55281, Indonesia

[2]Department of Technology and Innovation Management, Tokyo Institute of Technology, Shibaura, Minato-ku, Tokyo 108-0023, Japan

Email: dyah_ismoyowati@ugm.ac.id*

Received: July-25-2025; Accepted: December-16-2025; Published: December-30-2025

Abstract

The growing presence of Muslim residents and visitors in Japan has increased the need for food services that align with Muslim-friendly expectations. However, limited empirical research examines how co-creation and open innovation contribute to sustainable business performance in this niche sector. This study explores these dynamics by analysing insights from five Muslim-friendly restaurants in Tokyo and survey responses from 57 Muslim consumers. The findings show that consumer involvement in open innovation activities meaningfully enhances several dimensions of sustainability, including financial performance, environmental responsibility, and social value creation, thereby strengthening trust and loyalty. Despite these positive outcomes, restaurants continue to face operational constraints—particularly certification challenges and the costs associated with providing fully Muslim-friendly offerings. The study suggests refining the DART (Dialogue, Access, Risk–Benefit Assessment, and Transparency) framework to better reflect co-creation practices in minority-market food services. Overall, the results confirm that open innovation significantly drives sustainable business outcomes ($\beta = 0.675$, $p < 0.05$) and provide strategic guidance for Muslim-friendly restaurants seeking to expand their market reach and enhance long-term sustainability.

Keywords: *co-creation; minority markets; Muslim-friendly food services; open innovation; sustainable business*

1. INTRODUCTION

Food quality has become a significant concern for many, particularly among Muslim communities, as evidenced by the considerable growth of the halal food market, which rose by 6.9% in 2021 and 7.0% in 2022 (DinarStandard, 2022). This growth presents an opportunity for countries that receive large numbers of Muslim tourists to meet the demand for halal food, such as Japan. However, the previous research by Ohgata (2021) stated that the production and business processes present in Japan pose complex challenges, including raw material selection, production facilities, transportation, kitchen usage, storage, placement of sales floors, and certification costs, which have limited product development (Widiastuti et al., 2020) and resulted in a lack of customer trust, loyalty (Quoquab et al., 2019), and satisfaction (Putra et al., 2016).

Japanese restaurants have been encouraged to develop innovative business processes to address these challenges. However, halal business owners struggle to balance open innovation with the challenges of the halal food industry, and providers must utilize co-creation to maintain customer loyalty. Previous research demonstrates a positive correlation between open innovation, co-creation, and business performance, particularly in product development and marketing. Additionally, stakeholder collaboration is a core success factor for businesses to sustain their performance (Jeong et al., 2020).

Although Muslim-friendly food services hold considerable promise in countries where Muslims represent a minority, scholarly evidence on how co-creation and open innovation contribute to

Agroindustrial Journal Vol. 12 (No. 2), 2025, 113-124, doi: 10.22146/aij.v12i2.109683

sustainable business performance in this sector remains scarce. Actors within this ecosystem require integrated innovation frameworks; however, practical and strategic challenges frequently lead to fragmented information and limited coordination. In response to these gaps, this study investigates how Muslim-friendly restaurants in Tokyo, Japan's largest metropolitan area, and a key example of a Muslim-minority market, enact open innovation and co-creation to identify mechanisms that can strengthen long-term sustainability within these businesses.

2. MATERIAL AND METHODS

This study investigates how open innovation and co-creation operate in Muslim-friendly foodservice businesses in Tokyo, with a specific emphasis on restaurant operations. Co-creation is approached as a value-generation process grounded in reciprocal interaction between firms and consumers, whereby both parties contribute knowledge, preferences, and experiential insights (Prahalad & Ramaswamy, 2004). This process aligns closely with the principles of open innovation, which encourage organizations to incorporate external ideas and knowledge flows into their internal development activities (Haro et al., 2014). Together, these concepts provide a foundation for understanding how Muslim-friendly restaurants engage multiple stakeholders in shaping product and service improvements.

The study examines open innovation and co-creation as integral components of product and service development, involving contributions from business owners, customers, and relevant external actors—including community groups and governmental institutions. To analyze these interactions, the research draws on the Dialogue, Access, Risk, and Transparency (DART) framework, which provides a structured lens for assessing how co-creation unfolds in practice. The framework enables a dual-perspective analysis, capturing both consumer expectations and restaurant owners' operational considerations as they seek to enhance Muslim-friendly service delivery and strengthen business sustainability.

Understanding the regulatory and operational context of Muslim-friendly food services in Japan is essential for situating the conceptual model. In Japan, the term "Muslim-friendly restaurant" generally refers to establishments that offer food and services aligned with selected Islamic dietary expectations without fully meeting all requirements for formal halal certification. Guidance from organizations such as the Nippon Asia Halal Association (NAHA) highlights several areas relevant to this designation, including the sourcing and handling of ingredients, the use of dedicated or segregated utensils, staff competencies, hygiene management, and overall food safety procedures. Certification bodies further outline expectations regarding the treatment of animals, the avoidance of prohibited ingredients, and management practices to prevent cross-contamination. These criteria shape how businesses interpret and operationalize Muslim-friendly service standards in practice (Kitayama et al., 2018).

To empirically examine the relationships among the study constructs, Partial Least Squares–Structural Equation Modeling (PLS-SEM) was employed using SMARTPLS software. Selected PLS-SEM was suitable for complex models involving multiple latent variables, for its ability to handle non-normal data, and for its strengths in exploratory and predictive analysis—the analytical procedure involved two primary stages. First, the measurement model was assessed to evaluate indicator reliability, construct reliability, and the validity of the latent variables. Convergent validity was examined through the magnitude of item loadings and the average variance extracted (AVE), while discriminant validity was assessed to ensure adequate separation between constructs. Composite reliability was used to evaluate the internal consistency of the constructs.

The second stage involved evaluating the structural model to determine the strength and significance of the hypothesized relationships among the latent variables. The stage included assessing multicollinearity, examining path coefficients and their statistical significance, and evaluating the model's explanatory power using the coefficient of determination (R^2). Model fit and predictive relevance were also reviewed in accordance with established PLS-SEM guidelines. Figure 1 illustrates the analytical framework and hypothesized relationships.

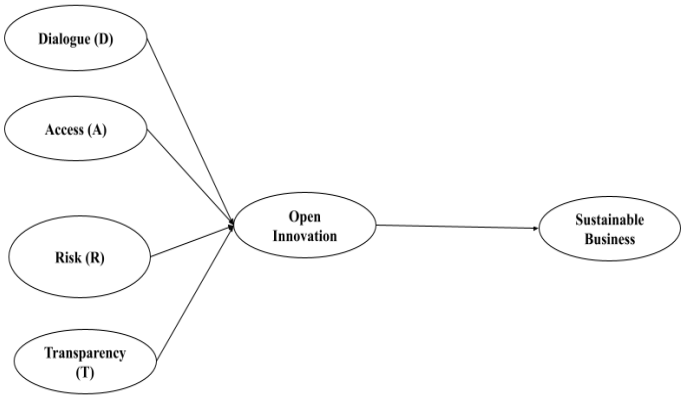

Figure 1. Research Model

The study adopted a combination of snowball and purposive sampling to reach members of the Muslim community in Tokyo, including both producers and consumers engaged with Muslim-friendly restaurant services. Producer-side data were collected through interviews with five restaurant operators: one serving Japanese cuisine, two offering Indonesian cuisine, and two international establishments originating from Bangladesh and Pakistan.

On the consumer side, data collection began with a preliminary survey of 35 individuals to explore their preferences toward Muslim-friendly dining options. The survey used a structured questionnaire completed by 57 Muslim respondents to obtain detailed consumer perceptions. The analytical approach focused on examining the roles of open innovation and co-creation by applying the DART framework alongside a multi-actor network perspective. The operationalization of each construct, including the questionnaire items used, is summarized in Table 1.

Table 1. Scale Measurement of Co-Creation and Open Innovation.

Construct	Indicators	Measurement items	Source
Dialogue (D)	Customer Engagement	Conduct dialogue sessions with the consumer frequently (D1)	Taghizadeh et al., 2016; Cheng et.al., 2014; So et.al.,2014
	Realize Innovativeness	Use a variety of communication channels to facilitate dialogue with consumers (D2)	
Access (A)	Customer Participation Behavior	Provide consumers with comprehensive information related to the service product (A1)	Taghizadeh et al., 2016: Yi & Gong, 2013; Solakis et al., 2017
		Offer consumers the opportunity to determine how they wish to experience the service product (A2)	
Risk (R)	Risk and Responsibilities	Inform consumers of any potential risks associated with the service product (R1)	Taghizadeh et al., 2016: So et.al.,2014
		Communicate the firm's knowledge and capability limitations to consumers (R2)	
		Assume full responsibility for risks related to the service product (R3)	

Construct	Indicators	Measurement items	Source
Transparency (T)	Sharing Information	Disclose all pricing-related information to consumers (T1)	Taghizadeh et al., 2016: Apenes Solem, 2016
		Foster consumer trust by providing transparent and accurate information (T2)	
Open Innovation Strategy (OI)	Network and Knowledge Management	Obtain innovation opportunities through building a network among other significant players in the ecosystem (OI1)	Felix, 2022
	Business Model	Implement collaboration with external stakeholders (OI2; OI4)	
	Knowledge Base View	Encourage outsiders to supply external innovation (OI3)	
Sustainable Business (SB)	People, Planet, and Profit	Achieve customer satisfaction (SB1)	Nidumolu et al., 2009; Werbach, 2009
		Increase the market performance constantly (SB2)	

The quantitative data were analysed using Partial Least Squares–Structural Equation Modelling (PLS-SEM) to examine the relationships among variables and to identify the significant factors underlying the proposed hypotheses:

H1: Dialogue is positively related to Open Innovation

H2: Access is positively related to Open Innovation

H3: Risk is positively related to Open Innovation

H4: Transparency is positively related to Open Innovation

H5: Open Innovation is positively related to Sustainable Business

3. RESULTS AND DISCUSSION

3.1 Respondent Profile

The study's producer respondents were five Muslim-friendly restaurants in Tokyo, Japan. The restaurants applied codes A, B, C, D, and E for confidentiality purposes. A is a pioneer in halal ramen, while B and C are authentic Indonesian cuisine restaurants. D specializes in authentic Pakistani cuisine, while E offers a variety of Indian and Bengali dishes. Table 2 presents a summary of the restaurant profile, with the representative as the interviewee, as shown below.

Table 2. Characteristic Restaurant Profile and Representatives.

No	Name of The Restaurant	Category	Specific Menu	Interviewee Role	Country of Origin
1	A Restaurant	Japanese Restaurant	Ramen	Halal Advisor	Indonesia
2	B Restaurant	Indonesian Restaurant	Indonesian cuisine, e.g, Rendang, Fried rice, and noodles	Owner	Indonesia

No	Name of The Restaurant	Category	Specific Menu	Interviewee Role	Country of Origin
3	C Restaurant	Indonesian Restaurant	Indonesian cuisine with traditional sambal, e.g, Ketoprak, Gado-gado, and Rendang	Owner	Japan
4	D Restaurant	Pakistan Restaurant	Traditional Pakistani dishes, including curries, biryanis, and beef seekh kebabs	Branch Manager	Pakistan
5	E Restaurant	Bangladesh Restaurant	Indian and Bengali dishes, e.g., biryani, chicken tikka masala, kebab, and tandoori chicken	Owner	Bangladesh

Among the sample, Indonesian students were the most frequent consumers of Muslim-friendly restaurants, with 57 respondents from various backgrounds residing in Japan, including researchers, trainees, and workers, as detailed in Table 3 and indicated by the statistical results. The respondents are predominantly male (71.9%), young adults aged 20 to 34 (70.2%), students (47.4%), and reside in Tokyo (50.9%).

3.2 Statistical Results

Two evaluation procedures in SMARTPLS 4.0: the measurement model and the structural model applied to the questionnaire data.

Table 3. Demographic characteristics (n=57).

Details		Frequency	Percentage (%)
Gender	Male	41	71.9
	Female	16	28.1
Age (years old)	15-19	3	5.3
	20-24	15	26.3
	25-29	18	31.6
	30-34	7	12.3
	35-39	6	10.5
	40 and Above	8	14
Educational Background	Junior High School	0	0
	Senior High School	13	22.8
	Bachelor Degree	21	36.8
	Master Degree	13	22.8
	Doctoral Degree	10	17.5
Occupation	Student	27	47.4
	Lecturer/Researcher	6	10.5
	Trainee	5	8.8
	Permanent Employee	16	28.1
	Others	3	5.3

Details		Frequency	Percentage (%)
Gender	Male	41	71.9
	Female	16	28.1
Domicile Prefecture	Tokyo	29	50.9
	Kanagawa	10	17.5
	Chiba	2	3.5
	Saitama	4	7
	Others	12	21.05
Nationality	Indonesia	46	80.7
	Malaysia	5	8.8
	Bangladesh	3	5.3
	Pakistan	1	1.8
	Nepal	1	1.8
	United States of America	1	1.8

3.2.1 Measurement Model.

The first phase of the analysis examined the measurement model to determine whether the constructs adequately captured the validity and reliability criteria. Convergent validity was assessed by examining the extent to which indicators of the same construct shared variance. In line with established guidelines, an average variance extracted (AVE) exceeding 0.50 was taken as evidence of adequate item convergence (Fornell & Larcker, 1981; Hair et al., 2022). Indicator loadings were reviewed to ensure that items contributed meaningfully to their respective constructs; although loadings above 0.70 are generally preferred, items with moderate loadings may be retained when theoretically justified (Hair et al., 2011; Henseler & Ringle, 2009).

Internal consistency was evaluated using composite reliability, which reflects the overall coherence of the indicators within a construct. Appropriate reliability is typically demonstrated by values ranging from 0.60 to 0.70 in exploratory contexts and above 0.70 in more confirmatory applications. At the same time, very high levels (e.g., approaching 0.95) may suggest redundancy among indicators (Hair et al., 2021). Table 4 presents the outcomes of these assessments.

Table 4. Measurement Model.

Dimensions	Question Items	FL	CR	AVE
Dialogue (D)	D1	0.702	0.783	0.646
	D2	0.894		
Access (A)	A1	0.914	0.835	0.717
	A2	0.775		
Risk (R)	R1	0.728	0.771	0.53
	R2	0.765		
	R3	0.688		
Transparency (T)	T1	0.862	0.868	0.766
	T2	0.888		

Dimensions	Question Items	FL	CR	AVE
Open Innovation (OI)	OI1	0.813	0.87	0.626
	OI2	0.88		
	OI3	0.738		
	OI4	0.725		
Sustainable Business (SB)	SB1	0.904	0.736	0.591
	SB2	0.604		

Table 5. Discriminant Validity Test (Fornell-Larcker Criterion).

Dimensions	D	A	R	T	OI	SB
D	0.804					
A	0.583	0.847				
R	0.198	0.382	0.728			
T	0.114	0.23	0.242	0.875		
OI	0.472	0.432	0.259	0.287	0.791	
SB	0.473	0.449	0.122	0.171	0.675	0.769

The factor loadings are all greater than 0.6, and the CR and AVE values meet the reliability test standards. The Fornell-Larcker Criterion result is also satisfactory for the discriminant validity test, as shown in Table 5.

3.2.2 Structural Measurement Model

Then, after the data has passed the validity and reliability test, the second measurement is an evaluation that aims to determine how well the proposed model fits the data, hypothesis testing, and whether the relationships between the latent variables are statistically significant and theoretically meaningful, including path analysis and explanatory power analysis using R-squared and F-squared.

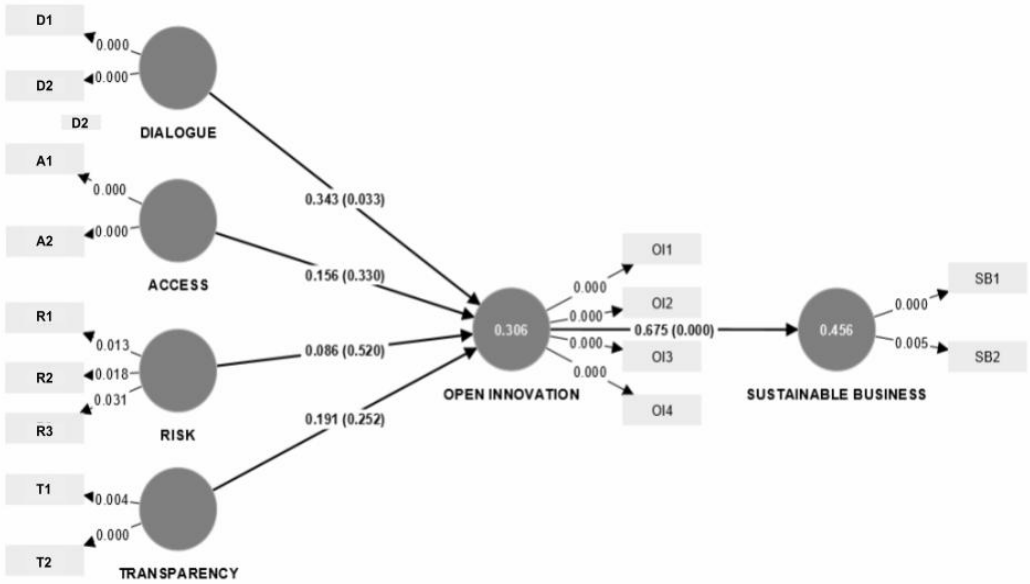

Figure 2. Path Analysis Model

Table 6. Path Analysis.

Path Analysis	Path Coefficient (β)	Mean	Standard deviation	T statistics	P values	Hypothesis remarks
D → OI	0.343	0.327	0.161	2.13	0.033	H1 supported
A → OI	0.156	0.163	0.16	0.973	0.33	H2 rejected
R → OI	0.086	0.115	0.133	0.644	0.52	H3 rejected
T → OI	0.191	0.179	0.167	1.147	0.252	H4 rejected
OI →SB	0.675	0.684	0.074	9.074	0.000	H5 supported

The second stage of the analysis focused on evaluating the structural model to determine the strength and significance of the hypothesized relationships among the latent constructs. Effect sizes were interpreted using guideline ranges commonly applied in PLS-SEM, in which smaller path coefficients indicate weaker influences and larger coefficients denote more substantial impacts (Hair et al., 2013; 2021; 2022). Thresholds were adjusted to match the characteristics of the sample used in this study, in accordance with recommendations for PLS-based modelling (Hair et al., 2022). Figure 2 visually summarizes the outcomes of the path analysis.

The results indicate that Dialogue exerts a significant positive influence on Open Innovation ($\beta = 0.343$, $p < 0.05$), with a moderate effect size. Open Innovation also demonstrates a strong, statistically significant effect on Sustainable Business outcomes ($\beta = 0.675$, $p < 0.05$). These findings provide empirical support for hypotheses H1 and H5.

In contrast, the pathways from Access to Open Innovation ($\beta = 0.156$, $p > 0.05$), Risk to Open Innovation ($\beta = 0.086$, $p > 0.05$), and Transparency to Open Innovation ($\beta = 0.191$, $p > 0.05$) were not statistically significant, leading to the rejection of hypotheses H2, H3, and H4.

Interpretation of explanatory power followed established benchmarks for R-square values in PLS-SEM (Hair et al., 2011), where values near 0.10 signal weak explanatory ability, values between 0.11 and 0.30 indicate modest explanatory strength, values from 0.30 to 0.50 reflect moderate explanatory power, and values exceeding 0.50 denote strong predictive capability. As shown in Table 5, the combined influence of Dialogue, Access, Risk, and Transparency explains 30.6% of the variance in Open Innovation, representing a moderate level of explanatory power. Additionally, Open Innovation accounts for 45.6% of the variance in Sustainable Business, suggesting a mild degree of predictive strength for this construct.

Table 7. R-square and F-square value.

Path Analysis	F-square	R-square
D → OI	0.111	0.306
A → OI	0.02	
R → OI	0.009	
T → OI	0.048	
OI →SB	0.837	0.456

On the other hand, Table 7 also presents the F-square result**.** The findings revealed that Dialogue value (F-square = 0.111) was the most significant predictor of Open Innovation, with a medium effect size, compared with other variables such as Access (0.02), Risk (0.009), and Transparency (0.048), which indicated small effect sizes. Additionally, the Open Innovation value (F-square = 0.837) is also a critical predictor of Sustainable Business, with a large effect size.

3.3 Implementation of Co-creation and Open Innovation in Tokyo Halal Food Industry

This study applied the DART model to examine the implementation of co-creation and open innovation among the restaurant respondents in the Tokyo halal food sector. The analysis yielded the following key findings:

Dialogue: All the restaurants engage in frequent conversations with their customers, using both direct communication methods, such as in-person interactions, and indirect methods through social media platforms. One restaurant owner believes in focusing on five-sense communication during the customer's visit to encourage repeat business with the quotes below:

> *"I concentrate on providing friendly service and offering free mineral drinks to catch up with customers because I believe they will want to revisit our restaurant due to their positive experience." (E Restaurant owner - Bangladesh)*

Access: Most restaurants are open to customer insights when creating new menus, and access to the platform is primarily through dialogue, including social media. Some restaurants use vending machines and social media engagement to increase customer accessibility. One of the owners quotes below:

> *"In our restaurant, we used a vending machine system so that the consumer could easily access their favorite menu with detailed prices and variety. Not only that, the influence of social media such as TikTok and Instagram has helped us to be more popular through the Instagram stories and reviews" (Halal Advisor A Restaurant - Indonesia)*

Risk: Most restaurants inform consumers about the consumption risks associated with the menus they offer, while also acknowledging that they still face limitations in providing a full halal standard. Building a trustworthy relationship with consumers is established through the sharing of information regarding halal qualification, such as the use of the halal logo and a Muslim-friendly menu. One of the owners quotes below:

> *"The most important thing for us is that consumers know that the menu we offer does not contain prohibited ingredients such as alcohol and pork, even if not all of our menu items are halal-certified. We inform them about this, even though I am still confused about the Muslim-friendly requirements and the various types of halal certificates that are quite expensive." (C Restaurant owner - Japan)*

Transparency: All respondents claimed to be transparent with their consumers, despite offering some non-halal menu items, by providing ingredient information, detailed pricing, and building trust through the halal certification process. One of the owners quotes below:

> *"We recognize that our consumers are not only Muslim but also non-Muslim, such as Japanese. Therefore, we offer alcohol and pork-based dishes, but we also inform consumers by displaying the non-halal menu items separately." (E Restaurant owner - Bangladesh)*

Open Innovation and Sustainable Business: Establishing positive relationships with customers, the government, and halal institutions was vital to the respondents' efforts to export products beyond their countries, expand their number of branches, and reach more consumers who enjoy their cuisine. Rapid response to new product development was also crucial to the success of some restaurants. The representative's restaurant quotes are below:

> *"I built a strong partnership with a supplier who supplies specific materials such as traditional flavoring or halal ingredients. It impacts food menu availability, and we are also able to make an online marketplace to provide an Indonesian menu." (C Restaurant owner - Japan)*

> *"Our team was getting trust from consumers and easy access to the relevant supplier, so that we were also able to provide a green halal supermarket" (E Restaurant owner - Bangladesh)*

The findings suggest that Dialogue is closely related to open innovation in the Muslim-friendly restaurant sector, involving shared learning and communication that helps build customer loyalty. Access, on the other hand, is not statistically significant in helping producers develop open innovation strategies due to limited consumer involvement in the process. Regarding Risk and Transparency, halal

food restaurants need to provide consumers with comprehensive information about their menu items, including any potential risks of consumption. However, some Muslim-friendly restaurants may not provide such information due to a lack of knowledge or fear of losing customers. It is worth noting that transparency levels vary across different food industries, especially in the restaurant sector. Furthermore, the study confirms that Open Innovation only partially explains the DART components, suggesting that DART may not accurately represent innovation strategies as aligned with previous findings (Pellizzoni and Baldanza, 2019; Mazur and Zaborek, 2014).

Additionally, previous research has demonstrated the positive impact of co-creation-based open innovation strategies on various industries. For example, in the perfume industry, such strategies have contributed to the development of new products (Santos et al., 2017), while in the telecommunication sector, they have resulted in improved market performance (Taghizadeh et al., 2016) Similarly, in the case study of the Korean food industry has experienced enhanced financial sustainability through the implementation of open innovation practices (Jeong et al., 2020). This research has provided new and valuable insights into the food industry's open innovation and its implications for sustainable business practices. All respondents desire this approach due to its positive effects on business profitability, community, and environmental acceptability. Statistical analysis has further supported this claim by indicating a strong relationship between open innovation and sustainable business practices (H5 supported).

The recommendations for potential strategies, based on the research findings, are divided into two categories: Adjustment Strategies and Improvement Strategies. The adjustment strategy suggests that halal food restaurants should focus on delivering high-quality halal food to both Muslim and non-Muslim customers, develop strategies to create halal products that appeal to non-Muslim consumers, and create products that meet the long-term needs of the immigrant community. The improvement strategy suggests that halal food businesses should enhance their service systems and business development, conduct market research and competitor analysis, engage with consumers through dialogue activities, and improve their business support systems, such as promotional media and customer service. Restaurants can make their websites more accessible to foreign tourists and offer additional measures, such as free Wi-Fi or complimentary water refills, to enhance customer convenience.

4. CONCLUSIONS

This study examines how open innovation (OI) relates to sustainable business (SB) practices in the Muslim-friendly food service sector, using an analytical framework derived from prior scholarly work. Drawing on a case study of five Muslim-friendly restaurants in Tokyo, the research examines the OI approaches adopted by these businesses. It evaluates how consumer involvement contributes to sustainability across different dimensions. The results show that co-creation and OI play meaningful roles in advancing financial resilience, promoting environmentally conscious practices, and strengthening social value creation, thereby fostering greater trust and loyalty among customers. Despite these benefits, restaurants' capacity to fully implement Muslim-friendly standards remains limited due to structural constraints, particularly certification costs and the complexity of compliance procedures. The study suggests that several strategic alternatives—such as modifying products to align with customer expectations, targeting new consumer segments, and enhancing quality and service through improved standardization—may offer practical avenues for improving business performance in this context.

ACKNOWLEDGEMENT

The authors acknowledge the support of the Young Science and Engineering Researcher Program (YSEP) at the Department of Technology and Innovation Management, Tokyo Institute of Technology, Tokyo, Japan.

REFERENCES

Apenes Solem, B. A., 2016. Influences of customer participation and customer brand engagement on brand loyalty. Journal of Consumer Marketing, Volume 33. No 5: Page 332–342. http://doi.org/10.1108/JCM-04-2015-1390

Cheng, C. C. J., Shiu, E. C. C., Dawson, J. A., 2014. Service business model and service innovativeness. International Journal of Innovation Management, 18(02), 1–22. https://doi.org/10.1142/S1363919614500133

DinarStandard., 2022. State of the Global Islamic Economy Report. DinarStandard, with the support of Dubai Economy and Tourism (DET).

Felix, Jao., 2022. Open Innovation Strategy Systematic Literature Review. Departamento Economia E Gestão, Universidade Portucalense

Fornell, C., Larcker, D.F., 1981. Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research, 18(1), pp.39–50.

Hair, J.F., Ringle, C.M., Sarstedt, M., 2011. PLS-SEM: Indeed, a silver bullet. Journal of Marketing Theory and Practice, Volume 19, No. 2: Page 139–151.

Hair, J.F., Ringle, C.M., Sarstedt, Danks, Nicholas P., Ray, S., 2021. Partial Least Squares Structural Equation Modeling (PLS-SEM) using R: A workbook. Cham: Springer

Hair, J., & Abdullah, A., 2022. Partial Least Squares Structural Equation Modeling (PLS-SEM) in Second language and education research: Guidelines using an applied example. Research Method in Applied Linguistics.

Haro, M.A., Martínez Ruiz, M.P., Martínez Cañas, R., 2014. The effects of the value co-creation process on the consumer and the company. Expert Journal of Marketing, 2(2), pp.68–81.

Henseler, J., Ringle, C.M., Sinkovics, R.R., 2009. The use of partial least squares path modeling in international marketing. In: R.R. Sinkovics and P.N. Ghauri, eds. New Challenges to International Marketing. Advances in International Marketing, Vol. 20. Bingley: Emerald Group Publishing Limited, pp.277–319

Jeong, H., Shin, K., Kim, S., 2020. Does open innovation enhance a large firm's financial sustainability? A case of the Korean food industry. Journal of Open Innovation: Technology, Market, and Complexity, 6(4), p.101. https://doi.org/10.3390/joitmc6040101

Kitayama, D., Takanokura, M., Ogiya, M., Eksan, S.H.R., Ali, M.H., 2018. A study on the halal food supply chain in Japan from an inbound perspective. Proceedings of the International MultiConference of Engineers and Computer Scientists 2018, 2, pp.959–964.

Mazur, J. and Zaborek, P., 2014. Validating DART model. International Journal of Management and Economics, 44(1), pp.106–125. https://doi.org/10.1515/ijme-2015-0012

Nidumolu, R., Prahalad, C.K. and Rangaswami, M.R., 2009. Why sustainability is now the key driver of innovation. Harvard Business Review, 87(9), pp.56–64. https://doi.org/10.1109/EMR.2015.7123233

NPO Nippon Asia Halal Association. (n.d.) NPO Nippon Asia Halal Association. Nippon Asia Halal Association. Available at: https://web.nipponasia-halal.org/ (Accessed: 10 October 2025).

Ohgata, S., 2021*. Kondisi layanan halal di Jepang dan tantangannya: melalui pengalaman mensupport restoran "Kiwamiya"* [The condition of halal services in Japan and its challenges: insights from supporting the "Kiwamiya" restaurant]. Journal of Japan Association for Indonesia Studies. Available at: https://nihon-indonesia-gakkai.org/

Putra, E.H., Hati, S.R.H., Daryanti, S., 2016. Understanding Muslim customer satisfaction with halal destinations: The effects of traditional and Islamic values. European Proceedings of Social and Behavioural Sciences (BE-ci 2016), pp.167–175.

Pellizzoni, L.N., Baldanza, R.F., 2019. Co-creation in conventional and collaborative business. Journal of Management and Economics for Iberoamerica, 35(151), pp.95–108. https://doi.org/10.18046/j.estger.2019.151.3055

Prahalad, C.K., Ramaswamy, V., 2001. The value creation dilemma: new building blocks for co-creating experience. Harvard Business Review, 18(2), pp.5–14.

Prahalad, C.K. and Ramaswamy, V., 2004. Co-creating unique value with customers. Strategy & Leadership, 32(3), pp.4–9. https://doi.org/10.1108/10878570410699249

Quoquab, F., Mohamed Sadom, N.Z., Mohammad, J., 2020. Driving customer loyalty in the Malaysian fastfood industry: The role of halal logo, trust, and perceived reputation. Journal of Islamic Marketing, 11(6), pp.1367–1387. https://doi.org/10.1108/JIMA-01-2019-0010

Santos, A.D., Baraldi, A., Bianchi, G., Caio, Borini, M., Felipe., 2018. Open Innovation and Co-creation in the Development of New Products: the role of design thinking. International Journal of Innovation, 6(2), 112-123. http://dx.doi.org/10.5585/iji.v6i2.203

So, K.K.F., King, C., Sparks, B., 2014. Customer engagement with tourism brands: Scale development and validation. Journal of Hospitality and Tourism Research, 38(3), pp.304–329. https://doi.org/10.1177/1096348012451456

Solakis, K., Vinces, J.C., Bonilla, J.M.L., 2017. DART model from customers' perspective: An exploratory study in the hospitality industry of Greece. Problems and Perspectives in Management, 15(2), pp.536–549. https://doi.org/10.21511/ppm.15(si).2017.07

Taghizadeh, S.K., Faryabi, M., Rahman, M.S., Ismail, I., 2016. Scale development and validation for DART model of value co-creation process on innovation strategy. Journal of Business & Industrial Marketing, 31(1), pp.24–35. https://doi.org/10.1108/JBIM-02-2014-0033

Werbach, A., 2009. Strategy for Sustainability. A Business Manifesto. Review in International Review on Public and Nonprofit Marketing, 6(2), pp.187–188. https://doi.org/10.1007/s12208-009-0039-4

Widiastuti, T., Robani, A., Rusydiana, A.S., 2020. Obstacles and strategies in developing halal industry: Evidence from Indonesia. Humanities & Social Sciences Reviews, 8(4), pp.398–406. https://doi.org/10.18510/hssr.2020.8439

Yi, Y. and Gong, T., 2013. Customer value co-creation behavior: Scale development and validation. Journal of Business Research, 66(9), pp.1279–1284. https://doi.org/10.1016/j.jbusres.2012.02.026