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## The Effect of Co-Creation Value on Umrah Pilgrims' Loyalty: The Moderating Role of Digital Engagement

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**Abstract:** This study examines the effect of co-creation value on Umrah pilgrims' loyalty and investigates the moderating role of digital engagement in the relationship. Grounded in Service-Dominant Logic (SDL), this research emphasizes the importance of customer participation in value creation within service interactions. A quantitative approach was employed using a survey of Umrah pilgrims who had experience using Umrah travel services in Jakarta. Data were collected through structured questionnaires and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings reveal that co-creation value has a positive and significant effect on pilgrims' loyalty, indicating that active customer participation in service processes enhances long-term relationships with the travel agency. However, digital engagement was not found to significantly moderate the relationship between co-creation value and loyalty. These findings suggest that loyalty in Umrah travel services is primarily driven by direct service experiences and value co-creation rather than by digital interaction alone. This study contributes to the Service-Dominant Logic literature by extending the application of co-creation value in the context of religious service marketing and provides practical insights for Umrah travel agencies seeking to strengthen customer loyalty.

**Keyword:** Co-Creation Value, Digital Engagement, Customer Loyalty, Umrah Travel Services, Service-Dominant Logic.

## INTRODUCTION

The Umrah travel industry in Indonesia has experienced significant growth in recent years, accompanied by the increasing number of licensed Umrah travel agencies offering various service packages to prospective pilgrims. This development has intensified competition among travel agencies, requiring companies to continuously improve service quality and maintain long-term relationships with their customers. In service industries, customer loyalty is considered a strategic asset because loyal customers are more likely to reuse services, provide positive recommendations, and contribute to business sustainability through positive word-of-mouth communication.

In the context of Umrah travel services, customer loyalty plays an even more important role because pilgrims often rely on recommendations from family members, friends, colleagues, and religious communities when selecting a travel agency. Unlike many commercial services where repeat purchases occur frequently, loyalty in Umrah services is often reflected through customers' willingness to recommend a travel agency to others. However, maintaining customer loyalty remains a significant challenge for Umrah travel agencies. Data from Umrah Travel Agencies in Jakarta indicate that the number of pilgrims increased from 1,420 in 2022 to 2,610 in 2023 before declining to 1,480 in 2024. During the same period, the recommendation rate declined from 46% in 2022 to 39% in 2023 and further decreased to 30% in 2024. These findings suggest that an increase in the number of pilgrims does not necessarily translate into stronger customer loyalty, highlighting the importance of understanding the factors that contribute to loyalty formation among Umrah pilgrims.

Customer loyalty has long been recognized as a critical determinant of organizational performance and long-term success. According to Oliver (1999), loyalty reflects a deeply held commitment to repurchase or continue using a preferred product or service despite the availability of competing alternatives. Loyal customers not only maintain relationships with service providers but also become advocates who voluntarily recommend services to others. Consequently, understanding the mechanisms that drive customer loyalty remains an important area of inquiry within service marketing research.

One theoretical perspective that provides a comprehensive explanation of loyalty formation is Service-Dominant Logic (SDL). According to Vargo and Lusch (2017), value is not created solely by organizations but is co-created through interactions between service providers and customers. Customers are viewed as active participants who contribute knowledge, experiences, and resources throughout the service process. Therefore, value creation becomes a collaborative process rather than a unilateral activity performed by organizations. Within this perspective, co-creation value is expected to strengthen customer relationships and generate long-term loyalty.

Co-creation value refers to the value generated through collaborative interactions between customers and service providers during service delivery processes (Yi & Gong, 2013). Through information sharing, personal interaction, responsibility, and feedback, customers actively participate in creating service experiences that better reflect their needs and expectations. In the context of Umrah travel services, pilgrims frequently engage in consultation activities, communicate their preferences, provide feedback regarding service quality, and participate in various service-related interactions. Such involvement enables pilgrims to become active contributors to service experiences rather than passive recipients of services.

In addition to co-creation value, digital engagement has emerged as an increasingly important aspect of customer relationship management in the digital era. Digital engagement refers to customers' cognitive, emotional, and behavioral involvement with organizations through digital platforms such as websites, social media, mobile applications, and online communities (Hollebeek et al., 2014). According to Brodie et al. (2011), engaged customers tend to develop stronger relationships and emotional attachment toward organizations. In tourism settings, customer engagement has also been found to contribute to favorable behavioral outcomes, including loyalty and advocacy behaviors (Rather et al., 2019). Through these digital channels, organizations can maintain continuous communication with customers before, during, and after service delivery, thereby potentially strengthening customer attachment and loyalty.

Previous studies consistently demonstrate that co-creation value positively influences customer loyalty across various service industries. Customers who actively participate in value creation processes generally develop stronger emotional attachment, trust, and

commitment toward service providers. However, empirical findings regarding the role of digital engagement remain inconsistent. Several studies report that digital engagement positively influences customer loyalty by strengthening customer-brand relationships, emotional attachment, and relationship quality. In contrast, other studies report insignificant or weaker effects, suggesting that digital engagement does not always translate into stronger customer loyalty. These inconsistent findings indicate that the effectiveness of digital engagement may depend on service characteristics, customer motivations, and contextual factors.

Furthermore, most previous studies have been conducted in commercial service environments such as e-commerce, hospitality, tourism, and retail industries. Comparatively little attention has been devoted to religious service settings, particularly Umrah travel services. This limitation is important because religious services possess characteristics that differ substantially from conventional commercial services. In commercial settings, customer evaluations are often driven by functional benefits, convenience, and economic considerations. In contrast, customers in religious services are more likely to be influenced by spiritual fulfillment, religious commitment, interpersonal trust, emotional attachment, and sacred experiences. Consequently, the mechanisms underlying loyalty formation may differ from those observed in commercial service industries.

In the Umrah context, pilgrims frequently evaluate travel agencies based on reliability, spiritual guidance, responsiveness, personal assistance, and overall pilgrimage experiences. Direct interactions between pilgrims and travel agency representatives often play a more important role than purely digital interactions. Therefore, although digital engagement has been widely recognized as an important relationship-building mechanism, its ability to strengthen the influence of co-creation value on loyalty within religious service settings remains unclear. This condition reveals an important research gap regarding the moderating role of digital engagement in the relationship between co-creation value and customer loyalty in religious service contexts.

This study contributes to the literature in two ways. First, it extends Service-Dominant Logic by examining digital engagement as a moderating mechanism rather than merely as a direct antecedent of customer loyalty. Second, it provides empirical evidence from the religious service sector, particularly Umrah travel services, which remains underexplored compared to commercial service industries. Therefore, this study aims to examine the effect of co-creation value on Umrah pilgrims' loyalty and investigate the moderating role of digital engagement in this relationship. The findings are expected to contribute to the development of Service-Dominant Logic literature and provide managerial insights for Umrah travel agencies in strengthening customer loyalty through customer participation and digital interaction strategies.

## **METHOD**

This study employed a quantitative research approach to examine the effect of co-creation value on Umrah pilgrims' loyalty and the moderating role of digital engagement. Quantitative research was selected because it enables the measurement and analysis of relationships among variables using statistical techniques. The study was conducted among individuals who had experience using Umrah travel services in Jakarta.

The population consisted of Umrah pilgrims who had previously used Umrah travel services in Jakarta. Since the exact number of Umrah service users could not be determined with certainty, the population was classified as an infinite population. A total of 120 respondents were selected using purposive sampling. Respondents were recruited through online questionnaire distribution using Google Forms. The purposive sampling technique was employed because the study required respondents who had direct experience using Umrah

travel services and were therefore capable of evaluating co-creation value, digital engagement, and loyalty based on actual service experiences. To ensure the relevance of responses, participants were required to meet the following criteria: (1) having previously used Umrah travel services, (2) being at least 18 years old, and (3) being willing to participate voluntarily in the study.

The sample size of 120 respondents was considered adequate for Partial Least Squares Structural Equation Modeling (PLS-SEM). According to Hair et al. (2022), PLS-SEM is appropriate for studies with relatively small to medium sample sizes and complex models involving latent constructs. Furthermore, the sample size exceeded the minimum requirement recommended by the ten-times rule, which suggests that the sample should be at least ten times the largest number of structural paths directed at a particular construct.

Data were collected using a structured questionnaire. The questionnaire consisted of two sections. The first section collected respondents' demographic information, including gender, age, education level, occupation, and monthly income. The second section measured the research variables, namely co-creation value, digital engagement, and customer loyalty.

The measurement items were adapted from established studies. Co-creation value was measured using indicators developed by Yi and Gong (2013), including information sharing, responsible behavior, personal interaction, and feedback. Digital engagement was measured based on the framework proposed by Hollebeek et al. (2014), which captures customers' cognitive, emotional, and behavioral engagement through digital platforms. Customer loyalty was measured using indicators adapted from Oliver (1999), including repurchase intention, positive word-of-mouth, recommendation intention, and resistance to switching behavior.

All measurement items were assessed using a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. The use of a Likert scale enabled respondents to express their level of agreement with each statement and facilitated quantitative analysis of the collected data.

Data analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS software. PLS-SEM was selected because it is suitable for predictive research, does not require strict assumptions regarding data normality, and can effectively analyze complex relationships involving moderation effects. The analysis consisted of two stages: evaluation of the measurement model (outer model) and evaluation of the structural model (inner model).

The measurement model was evaluated by examining convergent validity, discriminant validity, and construct reliability. Convergent validity was assessed using outer loadings and Average Variance Extracted (AVE), with acceptable thresholds of 0.70 and 0.50, respectively. Discriminant validity was assessed using the Fornell-Larcker Criterion and the Heterotrait-Monotrait Ratio (HTMT). According to Fornell and Larcker (1981), discriminant validity is established when the square root of AVE for each construct exceeds its correlations with other constructs. Additionally, HTMT values below 0.90 indicate satisfactory discriminant validity (Henseler et al., 2015). Reliability was evaluated using Cronbach's Alpha and Composite Reliability, with values above 0.70 indicating acceptable reliability.

The structural model was evaluated using the coefficient of determination ( $R^2$ ), predictive relevance ( $Q^2$ ), effect size ( $f^2$ ), and hypothesis testing through the bootstrapping procedure. The significance of path coefficients was assessed using t-statistics and p-values. Hypotheses were considered supported when the p-value was below 0.05.

Because all variables were collected from the same respondents using a single questionnaire at one point in time, Common Method Bias (CMB) was assessed using the full collinearity approach proposed by Kock (2015). Variance Inflation Factor (VIF) values were examined to identify potential common method bias and multicollinearity issues. VIF values

below the recommended threshold indicated that common method bias and multicollinearity were not substantial concerns in this study.

## RESULT AND DISCUSSION

### Respondent Profile

A total of 120 respondents participated in this study. The respondents consisted of 61 males (50.83%) and 59 females (49.17%). The majority of respondents were aged between 25 and 34 years (39.17%), indicating that the sample was dominated by individuals in the productive age group. In terms of education, most respondents held a bachelor's degree (50.00%), followed by diploma and senior high school graduates.

Regarding occupation, private employees represented the largest group (39.17%), followed by government employees, military personnel, and police officers (25.83%). Most respondents reported monthly expenditures ranging from IDR 2,000,000 to IDR 5,000,000 (40.00%). Furthermore, the majority of respondents had performed Umrah once within the last two years (50.00%), while 33.33% had performed Umrah twice. These characteristics indicate that the respondents possessed adequate experience and knowledge to evaluate co-creation value, digital engagement, and loyalty toward Umrah travel services.

**Table 1. Respondent Profile**

| Characteristics                | Category                                | Frequency | Percentage |
|--------------------------------|-----------------------------------------|-----------|------------|
| Gender                         | Male                                    | 61        | 50,83%     |
|                                | Femalie                                 | 59        | 49,17%     |
| Age                            | < 25 years                              | 15        | 12,50%     |
|                                | 25–34 years                             | 47        | 39,17%     |
|                                | 35–44 years                             | 29        | 24,17%     |
|                                | 45–54 years                             | 20        | 16,67%     |
|                                | ≥ 55 years                              | 9         | 7,50%      |
| Education                      | Senior High School                      | 20        | 16,57%     |
|                                | Diploma                                 | 22        | 18,33%     |
|                                | Bachelor's Degree (S1)                  | 60        | 50%        |
|                                | Master's Degree (S2)                    | 18        | 15%        |
| Occupation                     | Private Employee                        | 47        | 39,17%     |
|                                | Government Employee / Military / Police | 31        | 25,83%     |
|                                | Entrepreneur                            | 21        | 17,50%     |
|                                | Housewife                               | 11        | 9,17%      |
|                                | Retired                                 | 10        | 8,33%      |
| Monthly Expenditure            | < IDR 2.000.000                         | 20        | 16,67%     |
|                                | IDR 2.000.000 – 5.000.000               | 48        | 40%        |
|                                | IDR 5.000.001 – 10.000.000              | 32        | 36,67%     |
|                                | IDR 10.000.001 – 2.000.000              | 16        | 13,33%     |
|                                | > IDR 20.000.000                        | 4         | 3,33%      |
| Umrah Frequemcy (Last 2 Years) | One                                     | 60        | 50%        |
|                                | Twice–3 times                           | 40        | 33,33%     |
|                                | More Than Twice                         | 20        | 16,67%     |

Source: Processed Data (2026)

### Measurement Model Evaluation

#### 1. Convergent Validity

Convergent validity was assessed using Average Variance Extracted (AVE) and outer loading values. A construct is considered valid if the AVE value exceeds 0.50 and the outer loading values are greater than 0.70.

**Table 2. Average Variance Extracted (AVE)**

| Variable           | AVE   | Description |
|--------------------|-------|-------------|
| Co-creation Value  | 0,729 | Valid       |
| Digital Engagement | 0,677 | Valid       |
| Loyalty            | 0,647 | Valid       |

Source: Processed Data (2026)

Based on Table 2, all constructs have AVE values above the recommended threshold of 0.50. These results indicate that the constructs are able to explain more than 50% of the variance of their indicators, thereby satisfying the convergent validity requirement.

**Table 3. Outer Loading**

| Variable             | Indicator | Loading |
|----------------------|-----------|---------|
| Co-Creation Value    | CV1       | 0,777   |
|                      | CV2       | 0,833   |
|                      | CV3       | 0,918   |
|                      | CV4       | 0,882   |
| Digital Engagement   | DE1       | 0,795   |
|                      | DE2       | 0,837   |
|                      | DE3       | 0,835   |
| Repurchase Intention | CL1       | 0,791   |
|                      | CL2       | 0,829   |
|                      | CL3       | 0,864   |
|                      | CL4       | 0,803   |
|                      |           | 0,728   |

Source: Processed Data (2026)

The results show that all indicators have outer loading values above 0.70, indicating that each indicator adequately represents its respective construct. Therefore, all indicators were retained for further analysis.

## 2. Discriminant Validity

Discriminant validity was evaluated using the Fornell-Larcker Criterion, Heterotrait-Monotrait Ratio (HTMT), and Cross Loading analysis.

**Table 4. Fornell-Larcker Criterion**

| Variable           | CL           | CV           | DE           |
|--------------------|--------------|--------------|--------------|
| Loyalty            | <b>0,804</b> |              |              |
| Co-Creation Value  | 0,823        | <b>0,854</b> |              |
| Digital Engagement | 0,704        | 0,727        | <b>0,823</b> |

Source: Processed Data (2026)

Based on Table 4, the square root of AVE values (diagonal elements) are generally higher than the correlations among constructs. These findings indicate that each construct shares more variance with its own indicators than with other constructs, thereby supporting discriminant validity.

**Table 5. Heterotrait – Monotrait Ratio (HTMT)**

| Variable                | CL    | CV    | DE    | DE × CV |
|-------------------------|-------|-------|-------|---------|
| Loyalty (CL)            | -     |       |       |         |
| Co-Creation Value (CV)  | 0.939 | -     |       |         |
| Digital Engagement (DE) | 0.978 | 0.899 | -     |         |
| DE × CV                 | 0.568 | 0.591 | 0.653 | -       |

Source: Processed Data (2026)

The HTMT results indicate that most construct pairs demonstrate acceptable discriminant validity. Although the HTMT values between Loyalty and Co-Creation Value (0.939) and between Loyalty and Digital Engagement (0.978) slightly exceed the recommended threshold, the overall results remain acceptable when considered together with the Fornell-Larcker and Cross Loading analyses.

**Table 6. Cross Loading**

| Indicator | CL           | CV           | DE           | DE × CV      |
|-----------|--------------|--------------|--------------|--------------|
| CL1       | <b>0.791</b> | 0.587        | 0.647        | -0.347       |
| CL2       | <b>0.829</b> | 0.684        | 0.694        | -0.485       |
| CL3       | <b>0.864</b> | 0.710        | 0.651        | -0.455       |
| CL4       | <b>0.803</b> | 0.735        | 0.550        | -0.400       |
| CL5       | <b>0.728</b> | 0.625        | 0.648        | -0.425       |
| CV1       | 0.585        | <b>0.777</b> | 0.644        | -0.475       |
| CV2       | 0.703        | <b>0.833</b> | 0.551        | -0.482       |
| CV3       | 0.760        | <b>0.918</b> | 0.636        | -0.449       |
| CV4       | 0.761        | <b>0.882</b> | 0.666        | -0.481       |
| DE1       | 0.649        | 0.706        | <b>0.795</b> | -0.484       |
| DE2       | 0.611        | 0.596        | <b>0.837</b> | -0.556       |
| DE3       | 0.693        | 0.500        | <b>0.835</b> | -0.366       |
| DE × CV   | -0.527       | -0.549       | -0.565       | <b>1.000</b> |

Source: Processed Data (2026)

The cross loading results show that each indicator loads highest on its respective construct compared to other constructs. Therefore, the indicators demonstrate satisfactory discriminant validity and adequately represent their intended latent variables.

### 3. Reliability Test

**Table 7. Reliability**

| Variable           | Cronbach's Alpha | Composite Reliability |
|--------------------|------------------|-----------------------|
| Co-Creation Value  | 0,875            | 0,888                 |
| Digital Engagement | 0,761            | 0,763                 |
| Loyalty            | 0,862            | 0,865                 |

Source: Processed Data (2026)

Based on Table 7, all constructs have Cronbach's Alpha and Composite Reliability values above the recommended threshold of 0.70. These results indicate satisfactory internal consistency and reliability. Therefore, all constructs are considered reliable and suitable for further analysis.

## Structural Model Evaluation

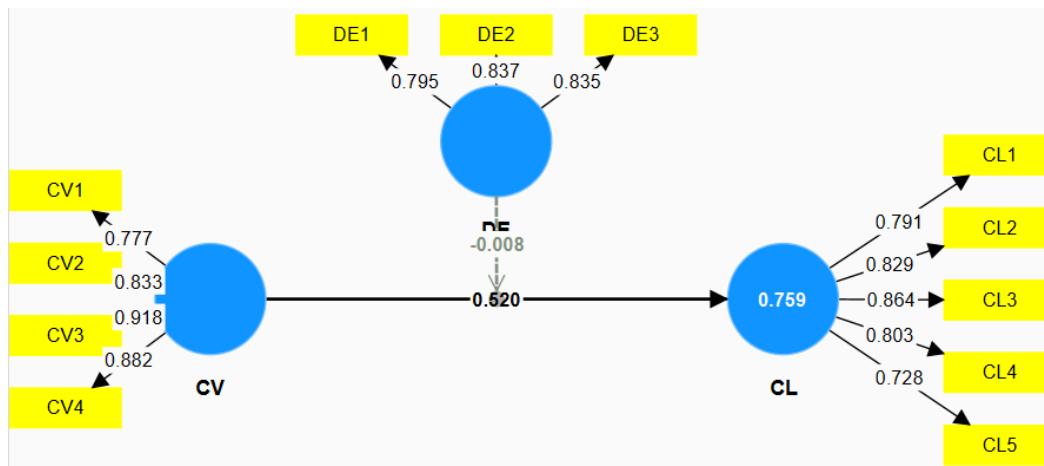


Figure 1. Inner Model

### Coefficient of Determination ( $R^2$ )

The results indicate that the loyalty construct achieved an  $R^2$  value of 0.759, with an adjusted  $R^2$  value of 0.752. This finding suggests that co-creation value and digital engagement collectively account for 75.9% of the variation in customer loyalty. The remaining 24.1% may be explained by other factors not incorporated into the present research model. Therefore, the model demonstrates a substantial level of explanatory capability.

Table 8. Coefficient of Determination ( $R^2$ )

| Construct | $R^2$ | $R^2$ Adjusted |
|-----------|-------|----------------|
| Loyalty   | 0,759 | 0,752          |

Source: Processed Data (2026)

### Predictive Relevance ( $Q^2$ )

The predictive relevance of the model was assessed using the blindfolding procedure. The  $Q^2$  value obtained for loyalty was 0.481, which exceeds the minimum threshold of zero. This result confirms that the structural model possesses adequate predictive relevance and is capable of generating meaningful predictions regarding customer loyalty in the context of Umrah travel services.

Table 9. Predictive Relevance ( $Q^2$ )

| Variable | $Q^2$ |
|----------|-------|
| Loyalty  | 0,481 |

Source: Processed Data (2026)

### Effect Size ( $f^2$ )

The effect size analysis was conducted to determine the relative contribution of each predictor to the loyalty construct. Co-creation value exhibits a substantial effect on loyalty ( $f^2 = 0.496$ ), indicating that customer participation in value creation plays a major role in strengthening loyalty. Meanwhile, digital engagement demonstrates a moderate effect ( $f^2 = 0.300$ ), suggesting that interactions through digital platforms also contribute meaningfully to the development of customer loyalty.

**Table 10. Effect Size ( $f^2$ )**

| Relationship                 | $f^2$ | Effect Size |
|------------------------------|-------|-------------|
| Co-Creation Value → Loyalty  | 0,496 | Large       |
| Digital Engagement → Loyalty | 0,300 | Moderate    |

Source: Processed Data (2026)

The effect size analysis indicates that co-creation value has a substantial effect on loyalty ( $f^2 = 0.496$ ), while digital engagement demonstrates a moderate effect ( $f^2 = 0.300$ ). These findings suggest that both constructs contribute to explaining customer loyalty. However, the moderating effect of digital engagement is examined separately through the interaction term in the hypothesis testing stage.

## Hypothesis Testing

Hypothesis testing was conducted using the bootstrapping procedure in PLS-SEM by examining the path coefficients, t-statistics, and p-values. A relationship was considered significant when the t-statistic exceeded 1.96 and the p-value was below 0.05.

**Table 11. Hypothesis Testing**

| Hipotesis | Keterangan   | Original Sample<br>(O) | T Statistics<br>(  O/STDEV  ) | P-Values | Hasil         |
|-----------|--------------|------------------------|-------------------------------|----------|---------------|
| H1        | CV → CL      | 0,520                  | 4,686                         | 0,000    | Supported     |
|           | DE → CL      | 0,410                  | 4,094                         | 0,000    | Significant   |
| H2        | CV x DE → CL | -0,008                 | 0,154                         | 0,439    | Not Supported |

Source: Processed Data (2026)

The results indicate that co-creation value has a positive and significant effect on loyalty ( $\beta = 0.520$ ;  $t = 4.686$ ;  $p < 0.001$ ). Therefore, H1 is supported. This finding suggests that greater customer participation in value creation activities contributes to stronger loyalty among Umrah pilgrims. When pilgrims actively participate in information sharing, consultation, feedback provision, and service-related interactions, they are more likely to develop positive perceptions of the travel agency and maintain long-term relationships.

The results also reveal that digital engagement has a positive and significant direct effect on loyalty ( $\beta = 0.410$ ;  $t = 4.094$ ;  $p < 0.001$ ). This finding indicates that customers who actively interact with travel agencies through digital platforms tend to demonstrate higher levels of loyalty. Digital channels facilitate communication, information sharing, and relationship development, which may strengthen customers' attachment to the service provider.

However, the interaction effect between co-creation value and digital engagement is not significant ( $\beta = -0.008$ ;  $t = 0.154$ ;  $p = 0.439$ ). Therefore, H2 is not supported, indicating that digital engagement does not strengthen the relationship between co-creation value and loyalty.

This finding represents an important contribution of the study because it suggests that the positive influence of co-creation value on loyalty remains relatively stable regardless of the level of digital engagement. Although digital engagement contributes directly to loyalty, it does not enhance the effectiveness of co-creation value in generating loyal customers.

A possible explanation is that loyalty in the Umrah travel context is influenced more strongly by direct service experiences, interpersonal trust, spiritual guidance, and personal interactions than by digital interactions. Unlike commercial service sectors, religious travel services involve emotional and spiritual dimensions that are often developed through face-to-face communication with travel consultants, religious mentors, and service personnel. Consequently, pilgrims may evaluate the value created through their service experiences independently of their level of digital engagement.

Another possible explanation is that digital engagement primarily functions as a communication and information-sharing channel rather than as a mechanism that reinforces the impact of co-creation activities. While digital platforms may facilitate interaction between travel agencies and pilgrims, loyalty formation in religious services may depend more heavily on trust, service reliability, and the quality of personal relationships established during the pilgrimage preparation process.

Therefore, the findings suggest that travel agencies should not rely solely on digital engagement strategies to strengthen the effect of co-creation value on loyalty. Instead, greater attention should be directed toward enhancing service quality, trust-building activities, personalized assistance, and meaningful interactions throughout the Umrah journey.

## Discussion

Co-creation value has a positive and significant effect on Umrah pilgrims' loyalty. This result supports the Service-Dominant Logic (SDL) perspective, which argues that value is created collaboratively through interactions between customers and service providers (Vargo & Lusch, 2017). In the context of Umrah travel services, pilgrims who actively participate in information sharing, consultation activities, feedback provision, and service planning are more likely to perceive greater value from the service experience. Such participation strengthens emotional attachment and trust toward the travel agency, ultimately fostering customer loyalty.

This finding also supports Relationship Marketing Theory, which emphasizes that long-term relationships are built through continuous interactions and mutual value creation between customers and organizations. Through co-creation activities, pilgrims become more involved in the service process and develop stronger relational bonds with the travel agency. Consequently, they are more willing to reuse the service and recommend it to others. The results are consistent with previous studies by Mursid and Wu (2022) and Cossío-Silva et al. (2016), which reported that customer participation and value co-creation positively influence loyalty across various service settings.

A more interesting finding emerges from the moderating effect analysis. Although digital engagement has a significant direct effect on loyalty, it does not significantly strengthen the relationship between co-creation value and loyalty. This result suggests that the benefits generated through co-creation activities are sufficient to influence loyalty regardless of the intensity of customers' digital engagement.

One possible explanation is that religious trust may play a more important role than digital interaction in shaping loyalty among Umrah pilgrims. Unlike customers in commercial service sectors, pilgrims often place substantial trust in travel agencies because Umrah involves religious obligations, financial commitments, and spiritual expectations. As a result, loyalty is likely to be influenced more strongly by trustworthiness, reliability, and the quality of direct service experiences than by the frequency of digital interactions. In this context, trust-based relationships may substitute for the reinforcing role that digital engagement often plays in other service industries.

Another explanation relates to the importance of face-to-face interactions in religious travel services. The Umrah journey requires extensive personal assistance, consultation, administrative guidance, and spiritual preparation. Many of these activities occur through direct interactions between pilgrims and travel agency representatives. Consequently, pilgrims may perceive value primarily through personal encounters rather than through digital channels. This characteristic differs from digital-intensive sectors such as e-commerce or online retail, where customer engagement is largely facilitated through online platforms.

The insignificant moderation effect may also indicate that pilgrims perceive Umrah as a highly personal and spiritual experience. In such contexts, emotional reassurance, religious

guidance, and interpersonal relationships may carry greater significance than online engagement. While digital platforms can facilitate communication and information dissemination, they may not substantially enhance the value already generated through direct participation in service processes. Therefore, the mechanisms underlying loyalty formation in religious services may differ from those commonly observed in commercial service environments.

Furthermore, the measurement of digital engagement may not fully capture the forms of engagement that are most relevant in religious travel services. Existing digital engagement indicators are generally developed within commercial contexts and tend to focus on interactions through websites, social media, and digital platforms. However, meaningful engagement in Umrah services may also involve spiritual discussions, religious mentoring, community participation, and interpersonal interactions that are not adequately represented by conventional digital engagement measures. This limitation may partially explain why digital engagement failed to strengthen the effect of co-creation value on loyalty.

From a managerial perspective, Umrah travel agencies should prioritize initiatives that enhance customer participation and strengthen interpersonal relationships throughout the service process. Agencies should encourage pilgrims to actively engage in consultation, planning, and feedback activities to increase perceived value and loyalty. Although digital platforms remain useful for communication and information sharing, travel agencies should not rely solely on digital engagement strategies to build customer loyalty. Greater emphasis should be placed on service quality, trust-building efforts, spiritual guidance, and personalized interactions, as these factors appear to play a more central role in fostering loyalty among Umrah pilgrims.

According to Brodie et al. (2011), engaged customers tend to develop stronger relationships and emotional attachment toward organizations. In tourism settings, customer engagement has also been found to contribute to favorable behavioral outcomes, including loyalty and advocacy behaviors (Rather et al., 2019).

## CONCLUSION

This study examined the effect of co-creation value on Umrah pilgrims' loyalty and investigated the moderating role of digital engagement. Co-creation value has a positive and significant effect on loyalty, indicating that greater customer participation in service-related activities contributes to stronger loyalty toward Umrah travel agencies. These results support the Service-Dominant Logic (SDL) perspective, which emphasizes that value is created through collaborative interactions between customers and service providers.

The study also found that digital engagement has a positive direct effect on loyalty. However, the moderating effect of digital engagement on the relationship between co-creation value and loyalty was not supported. This finding suggests that the positive influence of co-creation value on loyalty remains relatively stable regardless of the level of customers' digital engagement.

The insignificant moderation effect represents an important finding of this study. In the context of Umrah travel services, loyalty appears to be influenced more strongly by direct service experiences, interpersonal trust, spiritual guidance, and face-to-face interactions than by digital engagement. Therefore, digital engagement may function primarily as a communication channel rather than as a mechanism that strengthens the impact of co-creation value on loyalty.

From a theoretical perspective, the findings provide additional evidence regarding the application of Service-Dominant Logic in religious service settings. However, the results also indicate that the role of digital engagement in loyalty formation may differ across service contexts and may not always strengthen the outcomes of value co-creation activities.

From a managerial perspective, Umrah travel agencies should prioritize customer participation, personalized services, trust-building efforts, and meaningful interactions throughout the pilgrimage process. While digital platforms remain useful for communication and information dissemination, improving service quality and customer experiences appears to be more important for fostering long-term loyalty.

This study is limited to Umrah pilgrims in Jakarta and employs a cross-sectional research design. Future studies are encouraged to examine other religious tourism contexts, compare different demographic groups, and incorporate additional variables such as trust, customer satisfaction, perceived value, or spiritual experience to better explain loyalty formation in religious service industries.

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