

ANALYSIS OF CONSUMER BEHAVIOR TOWARDS DIGITAL TECHNOLOGY IN UMRAH RELIGIOUS ECOTOURISM PACKAGES

Sayid Abas^{1*}, Choirul Hamidah², Asis Riat Winanto³

^{1,2,3}Faculty of Economics, University of Muhammadiyah Ponorogo, Indonesia

*Corresponding Author:

abas@umpo.ac.id

Abstract

Consumer behavior in choosing Umrah and Hajj religious ecotourism packages is increasingly influenced by advances in digital technology. With digital platforms, consumers can now access information, compare prices, and place orders online more easily. This study aims to analyze how digital technology influences consumer decisions in choosing Umrah and Hajj packages and its impact on the religious tourism industry. The methodology of this research will use a qualitative approach to get a comprehensive picture of consumer behavior towards digital technology in choosing Umrah and Hajj religious ecotourism packages, observations, interviews, analysis of supporting documents for pilgrims and Umrah and Hajj travel agencies. As informants, Umrah and Hajj pilgrims who use digital services as a consideration for choosing Umrah packages. The results of the study obtained an idea that consumers interact with digital technology in choosing religious ecotourism packages for Umrah and Hajj, as a preference for the use of technology that influences decisions. Testimonial Reviews, Comfort, Update, Efficiency, Facilities, Wide Network, Price, Convenience, Trust, Decision and Content, are some of the factors that influence decision-making in choosing an Umrah package.

Keywords: Consumer Behavior, Tourism, Digital Technology, Religious Ecotourism, Umrah Hajj

1. Introduction

In today's digital era, consumers have greater access to information related to religious ecotourism packages, especially Umrah and Hajj. According to a report from the Association of Hajj and Umrah Organizers (APHI), around 70% of prospective pilgrims prefer to do research online before deciding to buy a package (APHI, 2022). This shows that digital technology has fundamentally altered the consumer journey, transforming how individuals search for, evaluate, and commit to religious travel services. With websites, mobile applications, and social media platforms, consumers can now efficiently compare offerings, scrutinize reviews, and assess the credibility of various Hajj and Umrah travel agents from the convenience of their devices.

Digital technology also facilitates more dynamic and transparent interaction between service providers and consumers. These platforms enable prospective pilgrims to ask detailed questions directly to travel agents via instant chat, video calls, or dedicated online forums. A study by Nielsen (2021) reinforces this point, showing that 85% of consumers feel more confident in their final purchase decisions after receiving prompt and helpful responses from service providers through digital channels. This underscores that the speed, quality, and accessibility of digital interactions have become critical factors influencing consumer trust and their ultimate choice of religious travel packages.

However, this digital shift is not uniform across all consumer segments. A significant digital divide persists, influencing market behavior and accessibility. According to a

survey conducted by the Ministry of Tourism and Creative Economy (Kemenparekraf, 2023), there are pronounced differences in technology adoption and comfort levels between younger and older generations. The younger demographic, typically more digitally native, shows a strong preference for researching and booking entirely through apps and websites. In contrast, the older generation, who constitute a substantial portion of pilgrims, may exhibit lower digital literacy and a persistent preference for traditional, high-touch methods. These methods include visiting travel agencies in person, consulting with religious figures, and seeking advice through personal networks from those who have previously undertaken the pilgrimage. This generational gap highlights a critical challenge: while digitalization offers efficiency and scale, it risks alienating a significant portion of the market if not implemented inclusively.

This context creates a pressing research problem at the intersection of digital marketing, consumer behavior, and religious tourism. There is an urgent need to understand how the rapid digital transformation of marketing channels is affecting the decision-making processes of potential pilgrims, and how travel agencies can design strategies that are both technologically advanced and demographically inclusive. The current landscape suggests a potential disconnect between the industry's push towards digital platforms and the heterogeneous needs of its consumer base.

Therefore, this study is motivated by the necessity to bridge this knowledge gap. Its primary purpose is to analyze the impact of digital marketing channels encompassing social media, websites, mobile apps, and online reviews on the consumer decision-making process for selecting Hajj and Umrah travel packages. Furthermore, it aims to explore the moderating role of demographic factors, particularly age, in this relationship. By doing so, the research seeks to develop a segmented marketing framework that can guide travel agencies in crafting effective, inclusive, and resonant digital engagement strategies.

The contribution of this research is twofold. Theoretically, it will enrich the literature on digital consumer behavior within the unique, high-involvement context of religious tourism, a domain that blends profound spiritual significance with significant financial commitment. Practically, it will provide actionable insights for Hajj and Umrah travel organizers (PPIU), digital marketers, and policymakers on how to optimize their digital outreach while ensuring no consumer segment is left behind, thereby supporting the industry's growth, transparency, and service quality in the digital age.

2. Theoretical Background

2.1 The Digital Consumer Journey in Religious Tourism

The theoretical landscape for understanding consumer behavior in religious tourism has been significantly reshaped by digital technology. In the context of religious ecotourism, digital platforms serve a dual purpose: they are functional marketing tools and vital channels for communicating core values. Digital technology allows service providers to emphasize the sustainability aspects of their offerings. For instance, many travel agents now prominently display information about their environmental conservation efforts and support for local communities on their websites and social media. Data from the Global Sustainable Tourism Council (GSTC) indicates that 65% of consumers are more likely to choose travel packages that demonstrate a clear commitment to sustainability (GSTC, 2022). This highlights that digital technology is not merely a transactional interface but a critical medium for conveying the ethical and spiritual values that resonate deeply with consumers in this sector. Overall, the influence of digital

technology on consumer behavior in choosing Umrah and Hajj religious ecotourism packages is very significant. By leveraging digital technology, service providers can improve the consumer experience and strengthen their position in an increasingly competitive market.

2.2 Information Search, Price Transparency, and Purchase Decisions

Digital technology fundamentally alters the traditional consumer decision-making model, particularly in the high-involvement context of religious travel. It affects not only how consumers seek information but also has a direct impact on their final purchasing decisions. The abundance of information available online empowers consumers to meticulously compare prices, itineraries, amenities, and policies across different providers. According to a survey by Deloitte (2023), approximately 80% of consumers admit to comparing prices online before finalizing a travel package purchase. This underscores the critical role of price transparency enabled by digital platforms, which can be a decisive factor in consumer choice. This behavior aligns with the Economics of Information Theory, which posits that reduced search costs lead to more informed and efficient market decisions.

2.3 Platform Dynamics: Mobile Apps, Social Media, and Electronic Word-of-Mouth (eWOM)

The digital ecosystem for choosing Umrah and Hajj packages comprises various platforms, each with distinct characteristics and influences. The choice of platform is a key part of the consumer's journey. Data from Statista (2023) shows a 40% increase in mobile app usage for travel bookings over the past two years, highlighting a consumer shift towards the convenience and immediacy offered by dedicated applications. Simultaneously, social media plays an indispensable role. A survey by We Are Social (2023) found that around 60% of consumers receive recommendations for Umrah and Hajj packages through platforms like Instagram and Facebook. The power of engaging visual content and authentic peer testimonials on these platforms significantly sways consumer decisions. This phenomenon is rooted in Social Proof Theory, where individuals look to the behavior and experiences of others to guide their own choices in uncertain situations.

Closely related is the powerful role of online reviews and testimonials, a form of electronic word-of-mouth (eWOM). Data from TripAdvisor (2022) reveals that 90% of consumers feel more confident purchasing a package after reading positive reviews from previous pilgrims. This makes online reputation management not just a marketing activity but a core component of trust-building and risk reduction for prospective pilgrims, directly linking to the Theory of Perceived Risk.

2.4 Opportunities and Challenges in the Digital Religious Tourism Market

While digital technology unlocks substantial opportunities, it also presents distinct challenges that frame the operational and strategic context for service providers.

- 1) Opportunities: Digital platforms are a gateway to international market expansion. The Ministry of Religious Affairs reported a 15% increase in foreign Umrah pilgrims in 2023 (Ministry of Religion, 2023), showcasing the global reach potential of effective digital marketing. Furthermore, enhancing the customer experience through seamless digital integration is a major opportunity. A McKinsey (2022) report found that 70% of consumers prefer online purchases due to the convenience offered, making a

frictionless booking experience a key competitive advantage. Finally, the growing consumer demand for sustainable tourism, projected by the World Travel Organization (WTO) to grow by 25% in the next five years (WTO, 2023), allows providers to differentiate themselves by integrating and communicating ecotourism practices through their digital narratives.

- 2) Challenges: These opportunities are counterbalanced by significant hurdles. Data security and privacy concerns are paramount, as increased online transactions elevate the risk of data breaches. Cybersecurity Ventures (2023) reported a 30% rise in cyberattacks on the tourism industry, necessitating robust security protocols to protect sensitive pilgrim data a challenge tied to maintaining consumer trust. Additionally, the digital divide remains a persistent barrier. Data from the Indonesian Internet Service Providers Association (APJII, 2023) indicates that about 20% of the population in remote areas lacks internet access, potentially excluding a segment of the market and challenging providers who rely solely on digital channels. This creates a need for omni-channel strategies that blend digital efficiency with traditional, high-touch services.

This theoretical synthesis establishes that the selection of Hajj and Umrah packages in the digital age is a complex process mediated by technology, influenced by social proof, constrained by perceived risks, and segmented by access and demographic factors. The following hypothesis development will build upon these interconnected theoretical pillars to guide the empirical investigation.

3. Methods

3.1 Research Design

This study employs a qualitative exploratory research design. The primary objective is to gain a comprehensive, in-depth understanding of the complex phenomena surrounding consumer behavior in using digital technology for selecting Umrah and Hajj religious ecotourism packages. A qualitative approach is deemed most appropriate as it allows for the exploration of motivations, perceptions, experiences, and underlying factors that quantitative methods might overlook. This design will facilitate a rich, contextual analysis of how digital platforms influence the high-involvement decision-making process in religious tourism.

3.2 Research Scope and Object of Analysis

The scope of this research is focused on the consumer journey for Umrah and Hajj packages within the Indonesian context, specifically examining the role of digital technology from initial information search to final purchase decision. The object of analysis comprises two primary groups:

- 1) Consumers/Pilgrims: Individuals who have undertaken or are planning to undertake Umrah or Hajj and have used digital platforms (websites, social media, apps, review sites) as part of their decision-making process.
- 2) Service Providers: Managers or marketing officers of licensed Hajj and Umrah Travel Organizers (*Penyelenggara Perjalanan Ibadah Umrah dan Haji* - PPIU) who utilize digital technology in their marketing and service operations.

The research addresses the following Problem Formulation:

- 1) How does digital technology influence and what are the factors that affect consumer behavior in using digital technology on the purchase decision of Umrah and Hajj religious ecotourism packages?

- 2) What is the extent of consumer satisfaction and the comparison between the behavior of consumers who use digital technology and those who do not in the process of ordering religious ecotourism packages?
- 3) What are the challenges and opportunities faced by service providers in utilizing digital technology for religious ecotourism packages?

3.3 Data Collection Techniques

To ensure triangulation and data richness, this study will utilize multiple qualitative data collection techniques, executed in stages:

- 1) In-Depth Interviews: Semi-structured interviews will serve as the primary data source. Interviews will be conducted with:
 - a. Pilgrims (approx. 15-20 informants) to explore their personal experiences, decision-making processes, trust factors, and satisfaction levels related to digital platform usage.
 - b. PPIU managers or digital marketing staff (approx. 8-10 informants) to understand their strategies, perceived challenges, opportunities, and observations of consumer behavior.
- 2) Observations: Non-participant observations will be conducted on relevant digital platforms. This includes observing:
 - a. Interactions on PPIU social media pages (comments, Q&A).
 - b. The user interface and content presentation on official PPIU websites and mobile apps.
 - c. Discussions in pilgrim community forums or groups.
- 3) Document Analysis: Supporting documents will be analyzed to provide context and corroborate findings. These include:
 - a. Digital marketing materials (brochures, videos, social media posts) from PPIUs.
 - b. Online reviews and testimonials on platforms like Google Business, TripAdvisor, and specialized Islamic travel forums.
 - c. Policy documents or reports from relevant associations (e.g., APhi - Association of Hajj and Umrah Organizers) regarding digital trends.

4. Results and Discussion

4.1 Research Results

4.1.1 The Influence of Digital Technology on Consumer Purchase Decisions

In recent years, the development of digital technology has changed many aspects of human life, including in the tourism sector, especially religious ecotourism such as Umrah and Hajj. Through interviews with several travel agents, prospective pilgrims, and experts in the field of technology, in-depth insights were gained on how digital technology influences the purchase decision of religious ecotourism packages. One of the travel agents, Mr. SG, explained: "Nowadays, most prospective pilgrims are looking for information about Umrah and Hajj through the internet. They compare prices, amenities, and reviews from people who have already been there. This really helps them in making decisions." According to data from the Indonesian Umrah and Hajj Travel Association (ATUHI), around 75% of prospective pilgrims use the internet as the main source of information before making a purchase (ATUHI, 2022).

Digital technology not only makes it easier to find information, but also allows prospective pilgrims to make orders online. In an interview with Mrs. ST, a pilgrim who had just returned from Umrah, she stated: "I feel more comfortable buying Umrah

packages online. I can see all the details, including prices, schedules, and accommodation. In addition, I can also read testimonials from other pilgrims." This shows that the transparency of information provided by digital technology can increase the trust of prospective pilgrims in travel agents.

In addition, the use of social media also plays an important role in purchasing decisions. Many travel agencies are leveraging platforms like Instagram and Facebook to promote their Umrah and Hajj packages. In an interview with Mr. JK, the travel organizer, he explained, "Social media allows agents to reach a wider audience and interact directly with prospective pilgrims. Engaging visual content can influence their decisions." According to a survey conducted by Nielsen, 92% of consumers trust recommendations from friends and family more than traditional advertising (Nielsen, 2021).

While digital technology provides a lot of convenience, there are also challenges faced. Mr. AD as a travel organizer added, "We have to ensure that the information we convey on digital platforms is accurate and up-to-date. Many prospective pilgrims are victims of fraud because they buy packages from untrusted sources." This shows the need for education for prospective pilgrims to be more careful in choosing a credible travel agent.

In a statistical context, a report from the Ministry of Religious Affairs of the Republic of Indonesia shows that the number of Umrah pilgrims increased by 30% in 2023 compared to the previous year, and most of them made orders online (Ministry of Religion of the Republic of Indonesia, 2023). This shows that digital technology has become an important factor in the growth of the number of pilgrims.

From these various opinions, digital technology has a great influence on the purchase decision of Umrah and Hajj religious ecotourism packages. From ease of access to information to interaction through social media, all aspects contribute to increasing the trust and comfort of prospective pilgrims in making purchases. However, it is important for prospective pilgrims to remain vigilant and do in-depth research before deciding to buy a travel package. Along with technological developments, it is hoped that the religious tourism industry can continue to adapt and provide the best service for pilgrims.

In today's digital age, technology has changed many aspects of life, including the way people choose Umrah and Hajj packages. Interviews conducted with some of the individuals who have used digital technology to choose these hallowed travel packages provide in-depth insights into the factors influencing consumer behavior. Through this interview, it was found that there are several main factors that influence consumer decisions, namely information accessibility, trust in service providers, and user experience.

One of the most striking factors is the accessibility of information. In an interview with BD, a prospective Hajj pilgrim, he explained: "In the past, I had to go to several travel agents to get information about Umrah and Hajj packages. Now, with one click, I can compare different plans from many service providers." This is in line with data from the Association of Hajj and Umrah Organizers (APHI) which shows that 70% of consumers use the internet to search for information before deciding on their travel packages (APHI, 2022). This easy access allows consumers to get more complete and accurate information, so they feel more confident in choosing.

Trust in service providers is also a crucial factor. In an interview with ST, a woman who has just completed Umrah, she stated, "I choose an agent who has good reviews and is experienced. Reviews from other users have helped me feel safe." According to a survey conducted by Nielsen, 83% of consumers believe that online reviews influence

their decisions (Nielsen, 2021). Therefore, service providers who are able to build a good reputation in the digital world will more easily attract the attention of consumers.

In addition, the user experience in using digital technology also plays an important role. In an interview with AN, a college student who has just planned an Umrah trip, he said, "I really appreciate the ease of using the app to choose and book packages. If the application is complicated, I will look for other alternatives." Data from Statista shows that 52% of users prefer to use mobile apps to book trips compared to websites (Statista, 2023). A positive experience in using digital technology will encourage consumers to return to using the same services in the future.

Another factor that is no less important is the price. In an interview with RN, a housewife as an Umrah pilgrim, she revealed, "I always compare prices from several agents before deciding. With digital technology, I can easily find the best deal." According to a report from Indonesia's Ministry of Trade, 65% of consumers choose travel packages based on competitive prices (Ministry of Trade, 2022). This shows that consumers are getting smarter in their search for the best deals, and digital technology gives them the tools to do so.

In addition to the above factors, digital promotion and marketing also contribute to consumer behavior. In an interview with DK, a businessman who often travels for Umrah, he explained, "I often get attractive offers through social media. This made me more interested in trying out new agents." Data from Hootsuite shows that 54% of internet users in Indonesia are active on social media, and many of them use the platform to find information about travel packages (Hootsuite, 2023). With the right marketing strategy, service providers can reach more consumers and increase their sales.

The results of the study show that consumer behavior in using digital technology to choose Umrah and Hajj packages is influenced by various factors. Information accessibility, trust in service providers, user experience, pricing, and digital promotions are some of the factors that interact with each other and shape consumer decisions.

From the qualitative data analysis using NVivo software, several key themes emerged as factors influencing digital technology adoption in pilgrimage package selection. Figure 1 presents the thematic network derived from the analysis.

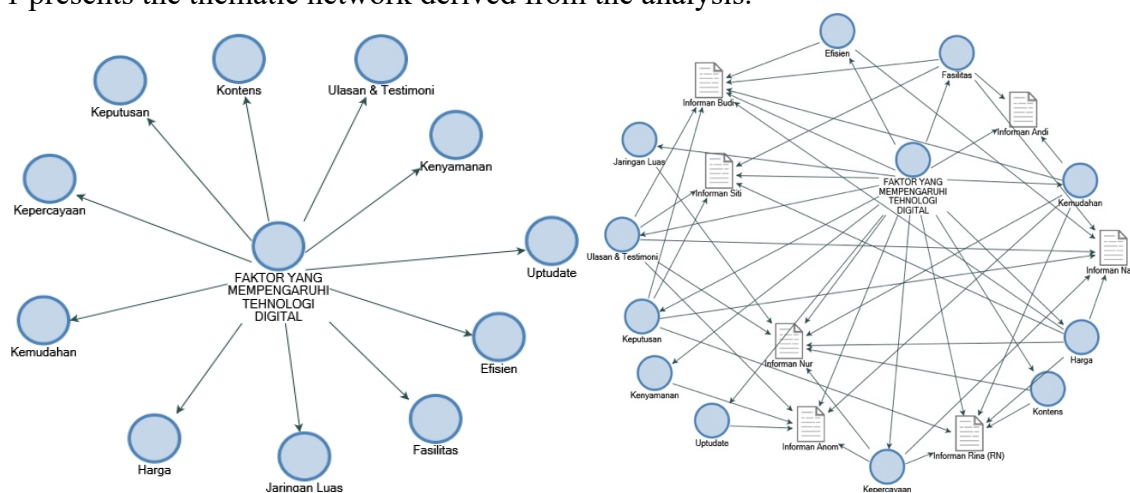


Figure 1. Factors Influencing Digital Technology Adoption in Pilgrimage Package Selection
(Source: NVivo analysis of interview data, 2024)

The NVivo analysis reveals that the decision-making process is driven by core factors including Reviews & Testimonials, Trust, Price, and Convenience, which are supported by enabling factors such as Updated Information, Efficiency, and Comprehensive

Facilities. These factors collectively create a Wide Network of influence that shapes the final Decision through compelling Digital Content.

4.1.2 Consumer Satisfaction and Behavioral Comparison

In recent years, the tourism industry has undergone a significant transformation thanks to advances in digital technology. One of the sectors that feels this impact is religious ecotourism, where consumers can now easily book tour packages through digital platforms. To understand the extent of consumer satisfaction with the use of digital technology in the process of ordering religious ecotourism packages, from the results of interviews with consumers who have used this service, the results of this interview provide an interesting picture of their experience.

One of the respondents, BD, an Umrah pilgrim, revealed that he was very satisfied with the convenience offered by digital technology. "I can quickly compare various tour packages with just a few clicks," he said. This is in line with data from the Indonesian Travel Company Association (APPI) which states that 75% of consumers prefer to book tour packages online rather than in person (APPI, 2022). With digital platforms, consumers can see reviews, prices, and other details more transparently.

However, not all experiences are positive. RN, a housewife who is also an Umrah pilgrim, shared her unpleasant experience. "I have had difficulties when making payments. The system often errors, and that frustrates me," he complained. According to a survey conducted by the Ecotourism Research Center, 30% of consumers report technical problems when making online transactions (Ecotourism Research Center, 2023). This shows that although digital technology offers many conveniences, there are still challenges that must be overcome by service providers.

From the interview, it was revealed that the trust factor is also one of the important aspects in the level of consumer satisfaction. Ahmad, a college student who often travels religiously, emphasized the importance of reviews from other users. "Before ordering, I always read reviews from people who have used the service. It helps me feel more confident," he explained. Data shows that 85% of consumers are likely to choose services that have high ratings and positive reviews (Statista, 2023). This shows that transparency and trust are essential in building relationships between service providers and consumers.

In addition, innovations in technology also play a big role in increasing consumer satisfaction. For example, some platforms now provide mobile apps that allow users to book tour packages more easily. "With the app, I can order anytime and anywhere. This is very helpful for me who has a busy schedule," said LN, a professional worker. According to a report from the Global Digital Travel Report, the use of mobile apps for travel bookings has increased by 50% in the last two years (Global Digital Travel Report, 2023). This shows that consumers are increasingly relying on technology to meet their needs.

However, behind all these conveniences, there are still challenges that must be faced by the religious ecotourism industry. One of them is the lack of digital literacy among several segments of society. FH, a retiree who is trying to order an Umrah package online for the first time, expressed his confusion. "I find it difficult with all the technical terms and complicated site navigation. I prefer it if there are clearer instructions," he said. According to data from the Central Statistics Agency (BPS), around 40% of the Indonesian population is still not used to using digital technology (BPS, 2023). This shows the need for education and training for the community to make better use of technology.

In today's digital era, the use of technology in various aspects of daily life is inseparable. One obvious example is in the selection of Umrah and Hajj packages. To understand the comparison of consumer behavior that uses digital technology with those that do not, interviews were conducted with several individuals who have different experiences in choosing this worship travel package.

Our first interview was with Mr. AD, an Umrah pilgrim who prefers the traditional way of choosing Umrah packages. "I prefer to come directly to a travel agent. I feel more comfortable talking directly and getting a clear explanation of the package offered," said Mr. AD. He revealed that even though information can be accessed online, he values in-person interaction more. This is in line with data from the Ministry of Religion of the Republic of Indonesia which shows that around 40% of people still prefer to make transactions directly rather than through digital platforms (Ministry of Religion, 2022).

On the other hand, we also interviewed Mrs. ST, a pilgrim who is an active user of digital technology. "I prefer to look for information online. By using just my phone, I can compare different packages from different agents in a matter of minutes," he said. ST's mother explained that she uses apps and websites to read reviews and see price comparisons. According to a survey conducted by the Association of Hajj and Umrah Organizers (APHI), around 60% of young consumers prefer to use digital technology in the selection of Umrah and Hajj packages (APHI, 2023).

From the two interviews, it is clear that there is a difference in behavior between consumers who use digital technology and those who do not. Mr. AD relies on recommendations from friends and family as well as information he obtains from direct visits to agents. He believes that direct experience gives more confidence in choosing a package. On the other hand, Ibu Siti prioritizes the efficiency and convenience offered by digital technology. He mentioned that by using technology, he can save time and effort.

Statistical data shows that the use of digital technology in the selection of Umrah and Hajj packages continues to increase. According to a report from the Global Digital Report 2023, internet users in Indonesia reach 202 million people, and 90% of them use smartphones (We Are Social, 2023). This shows that access to digital information and services is getting easier, and consumers are getting used to new ways of shopping. While there are many advantages offered by digital technology, it is undeniable that there are challenges faced by consumers. Mr. AD revealed, "I am worried about online fraud. A lot of news about irresponsible travel agents." This concern is also supported by data from the National Consumer Protection Agency (BPKN) which recorded an increase in fraud reports related to Hajj and Umrah travel by 25% in the last two years (BPKN, 2023).

On the other hand, Mrs. ST is also aware of the risks in using digital technology. "I always make sure to read reviews and look for information about the agent before deciding to buy a package," he explains. This shows that even though technology provides convenience, consumers still need to be careful and do adequate research.

The NVivo analysis further illuminates the factors driving satisfaction across different consumer groups. Figure 2 presents the thematic structure comparing satisfaction drivers between digital adopters and traditional consumers.

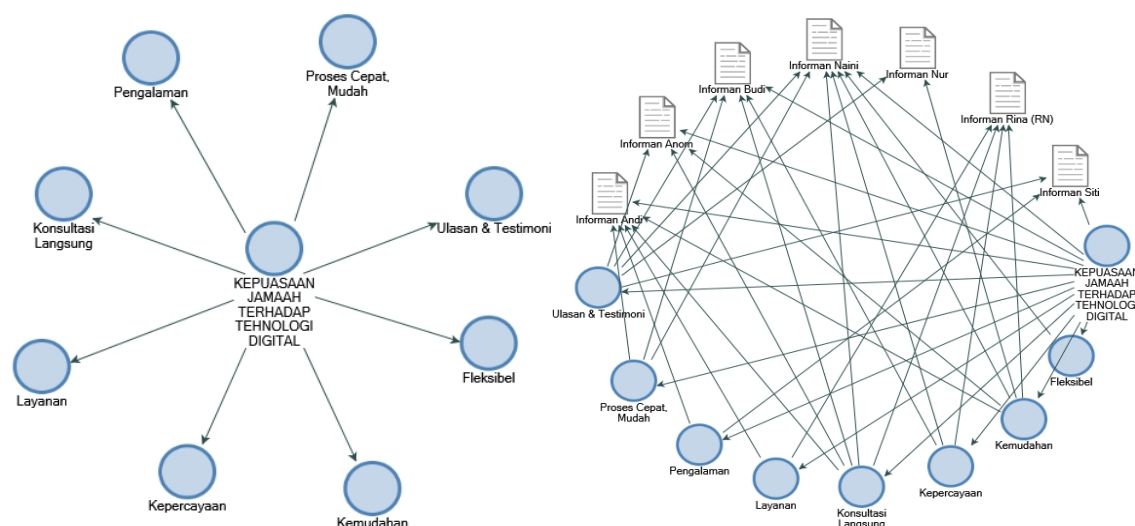


Figure 2. Factors Influencing Satisfaction with Digital vs Traditional Purchase Methods
 (Source: NVivo analysis of interview data, 2024)

The analysis reveals distinct pathways to satisfaction: digital adopters value Quick & Easy Process, Flexibility, and Convenience supported by Reviews & Testimonials, while traditional consumers prioritize Direct Consultation, Personal Experience, and established Trust through Personalized Service.

4.1.3 Challenges and Opportunities for Service Providers

In today's digital era, religious ecotourism service providers face significant challenges and opportunities in utilizing digital technology. Interviews with several industry players provide in-depth insights into these dynamics. One of the speakers, BS, owner of a religious travel agency, explained, "Digital technology has opened many doors for us, but it also brings new challenges that we have to overcome."

One of the main challenges faced is the lack of understanding and skills in using digital technology. According to a survey conducted by the Indonesian Travel Association (APINDO) in 2022, around 60% of religious ecotourism service providers in Indonesia feel that they do not have enough knowledge to make optimal use of digital platforms (APINDO, 2022). This results in many travel agencies being unable to compete with larger, established service providers. "We want to use social media and websites to promote our packages, but we don't know where to start," said ST A, a religious ecotourism service provider in East Java.

On the other hand, the opportunities offered by digital technology are enormous. With online platforms, service providers can reach a wider market. According to data from the Central Statistics Agency (BPS) in 2023, the number of internet users in Indonesia reached 210 million people, and 78% of them use the internet to find information related to travel and tourism (BPS, 2023). This shows that there is huge market potential for service providers who are able to make good use of digital technology. "We started using Instagram and Facebook to promote our ecotourism packages, and within three months, we saw an increase in bookings of up to 30%," BDS said.

However, another challenge that is no less important is the increasingly fierce competition. With many service providers turning to digital platforms, the market is becoming more competitive. According to a report from Google and Temasek, the travel and tourism sector in Southeast Asia is expected to grow to USD 107 billion by 2025, which means more players will enter the industry (Google & Temasek, 2022). "We must

continue to innovate and offer unique experiences to attract customers' attention," added STA, as the organizer of Umrah.

In addition, service providers must also face challenges in terms of data security and privacy. With the increasing use of digital technology, the risk of data leakage is also getting higher. According to a report from Cybersecurity Ventures, losses due to cyberattacks in the tourism sector are estimated to reach USD 6 trillion in 2021 (Cybersecurity Ventures, 2021). "We have to make sure that our customers' data is safe and not misused," BS said, emphasizing the importance of cybersecurity in their business.

In the midst of these challenges, opportunities to collaborate with technology platforms are also increasingly open. Service providers can work with technology companies to develop more efficient apps or ordering systems. For example, some travel agencies have partnered with tech startups to create apps that allow travelers to plan their trips with ease. "We are in the process of developing a mobile application that will make it easier for customers to find and book religious ecotourism packages," said STA.

By leveraging digital technology, religious ecotourism service providers can not only improve operational efficiency, but also expand their market reach. According to a McKinsey & Company report, companies that adopt digital technology across the board can increase their productivity by up to 20-25% (McKinsey & Company, 2020). This shows that investing in digital technology is not just an option, but a must for service providers to stay relevant in an increasingly competitive market.

The NVivo analysis synthesizes these complex dynamics into a coherent framework, as shown in Figure 3.

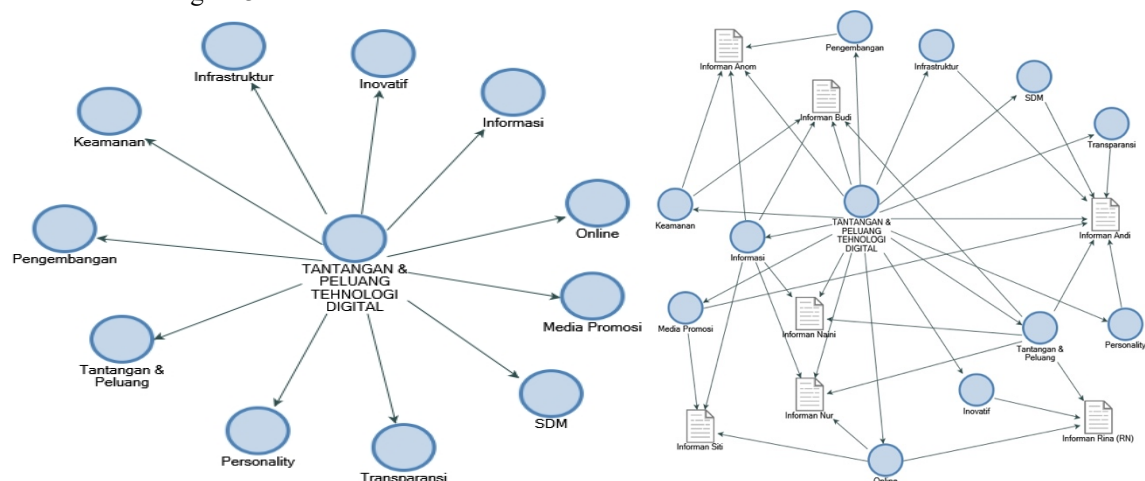


Figure 3. Challenges and Opportunities in Digital Technology Adoption for Service Providers
(Source: NVivo analysis of interview data, 2024)

The framework identifies Human Resources capacity as the foundational challenge, affecting Information management and Infrastructure development. These challenges create needs for Transparency, Security, and Innovation, which when addressed through Online Promotional Media and Personality-driven service Development, transform into significant market opportunities.

4.2 Discussion

The findings reveal a complex interplay between digital transformation and religious tourism consumption. The digital adoption among pilgrims aligns with the Technology Acceptance Model (TAM), where perceived usefulness and ease of use significantly influence behavioral intention (Davis, 1989). The prominence of online reviews and

testimonials in decision-making supports the electronic Word-of-Mouth (eWOM) theory, where peer-generated content carries more credibility than marketer-generated information (Cheung & Thadani, 2012).

The generational divide in digital adoption reflects the Digital Divide theory, where age, education, and technological access create unequal participation in the digital economy (Van Dijk, 2006). Older pilgrims' preference for traditional channels suggests that high-involvement, spiritually significant purchases may require the reassurance of human interaction that digital interfaces cannot fully replicate.

For service providers, the challenges identified represent classic barriers to digital transformation in small and medium enterprises: limited technical expertise, resource constraints, and cybersecurity concerns (Cragg et al., 2011). However, the opportunities highlighted particularly market expansion and operational efficiency align with the Resource-Based View (RBV) of competitive advantage, where digital capabilities can become valuable, rare, and difficult-to-imitate resources (Barney, 1991).

The co-existence of digital and traditional channels suggests that an omnichannel strategy may be optimal for religious tourism providers. This approach acknowledges that different customer segments have varying preferences and needs throughout their pilgrimage journey, from initial research to post-travel reflection.

The ethical dimension of digital religious tourism deserves particular attention. The vulnerability of pilgrims both spiritually and financially creates special responsibilities for service providers regarding transparency, accuracy of information, and data protection. Regulatory frameworks may need strengthening to address the unique characteristics of this sector.

Future research should examine the long-term impacts of digitalization on the spiritual experience of pilgrimage, as well as comparative studies across different religious traditions to identify universal versus context-specific patterns in digital religious consumption.

5. Conclusion

Based on the comprehensive qualitative analysis conducted, this study concludes that digital technology plays a transformative and multifaceted role in the contemporary landscape of Umrah and Hajj religious ecotourism. The findings directly address the research objectives by elucidating the complex dynamics between digital adoption, consumer behavior, and service provider strategy.

In the analysis of consumer behavior towards digital technology in the Umrah religious ecotourism package, it can be concluded that digital technology has a significant influence on purchase decisions and consumer satisfaction levels. Digital platforms have fundamentally reshaped the consumer journey, transitioning it from a traditionally intermediated process to a more self-directed, information-rich experience. Key factors driving this influence include enhanced information accessibility, which empowers consumers to conduct detailed comparisons; the critical role of digital trust mechanisms, primarily built through online reviews and testimonials; and the perceived convenience and efficiency of digital transactions. However, this influence is not uniform, revealing a clear generational segmentation where younger consumers are primary digital adopters, while older pilgrims often maintain a preference for high-touch, traditional consultation methods.

Despite the challenges in the application of technology including persistent digital literacy gaps, cybersecurity and fraud concerns, and intense market competition the

opportunities are much greater, especially in terms of marketing reach, consumer insight generation, and operational efficiency. Digital channels offer unprecedented access to broader, including international, markets and provide tools for more personalized and responsive customer engagement.

Therefore, service providers must continue to invest in technology and pay attention to data security to maintain consumer trust. Strategic investment should focus not only on technological infrastructure but also on human capital development to bridge the digital skills gap within organizations. Furthermore, the utilization of data analytics and social media can help them to better understand and meet the needs of the market. An omnichannel strategy that seamlessly integrates digital efficiency with the irreplaceable value of human interaction and personalized service is recommended to cater to a diverse consumer base.

Ultimately, the formulation of the problems raised in this study shows that understanding the influence of digital technology and consumer behavior is key to improving services in the religious ecotourism industry. This understanding must be nuanced, recognizing the spiritual and emotional significance of the pilgrimage, which elevates the stakes for trust, transparency, and service quality. As such, service providers who can adapt to change and make effective use of digital technologies while upholding the ethical and spiritual values central to their service will not only gain a competitive advantage but also contribute to a more transparent, accessible, and satisfying pilgrimage experience. The future of this sector lies in a balanced, ethical, and consumer-centric digital transformation.

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