

Received: May 2023 Accepted: June 2023

DOI: <https://doi.org/10.58262/ks.v11i2.376>

## Multidimensional Landscape of Umrah Service Operations: A Comprehensive Literature Review and Prospective Research Agenda

Aisyah Rahmawati<sup>1</sup>

### **Abstract**

*The study aims to investigate the Umrah service operation of an Umrah travel agent. The research method used is a systematic literature review (SLR) using the PRISMA research protocol. A total of 28 final articles were reviewed and obtained through the Scopus database, Web of Science (WoS), and Google Scholar. The result shows a multidimensional service operation that is found in the Umrah process, and it's reflected in the three stages of Umrah, namely pre-journey (before Umrah departure until registration), In-journey (departure until arrival in the home country), and post-journey (after arriving from pilgrimage). At each stage of Umrah, the agents provide variative service operations, starting from pre-journey service operations such as physical facilities of the Umrah agent, tour design, legal matters, and application process. Following that, in the In-journey stage, many service-related physical facilities such as transportation and hotels, security, monitoring, and spiritual service. The post-engagement and services provided focus on after-sales service, including receiving complaints and feedback, improving connection engagement, and connecting with the community. This research will benefit Umrah agents by increasing their service operations, leading to customer satisfaction and commitment.*

**Keywords:** service operation, Umrah, Umrah agent, Umrah provider, Islamic pilgrimage, Islamic tourism

### **Introduction**

Service industries are developed in the digital era and are very interesting to study. Many service-based companies like banking and finance, insurance, transportation (Nunkoo and Ramkissoon, 2010), and health (Matthias and Brown, 2016) are likely to increase service to attract customers and keep customer loyalty. Some systematic literature review has been conducted for some years. Machuca, Gonzalez-Zamora, and Aguilar-Escobar (2007) And Victorino *et al.* (2017) reviewed service operations management, and Dixon *et al.* (2014) investigated the marketing operation strategies in services and service operation framework (Sung-Eui, 2005). Furthermore, O'Neill and McGinley (2014) studied operations research from 1913-2013. That research was conducted in many fields of business or service. One exciting service operation sector to be scrutinized is religious tour service or pilgrimage tour, which has already been found in various parts of the world. The religious tour can be found in various religions, like Catholicism to the Vatican, Islam to Mecca, and Hinduism in India. Religious tours experience evolutions in a form or purpose to make the journey. There are changes in religious travel, meaning, and destination (Kim, Kim and King, 2020). The change of

---

<sup>1</sup> Institute of Transportation and Logistic Trisakti, Jakarta, Indonesia,  
Email: [aisyahkicil@gmail.com](mailto:aisyahkicil@gmail.com)

motivation and goals to make a religious journey also impacts the values obtained by pilgrims, like enhancement of belief and spirituality. Besides, the pilgrims also learn about spiritual history by visiting historical places according to their respective religions (Kim and Kim, 2019). Over the years, more people have come to religious places to fulfil their spiritual and recreational needs.

Many Pilgrims buy pilgrimage packages provided by agents, such as *Umrah* worship tours that require pilgrims to join the tour agent who will bring them in a group to go for *Umrah*. *Umrah* tour agent will later arrange all necessities such as visas, medical checks, tickets, hotels, transportation, and tour leader during the trip. The existence of *Umrah* tour agents is one form of cooperation between government and business in managing the pilgrimage tour to be more effective, easy, and comfortable. Besides visiting Mecca, many travel agents offer additional packages to attract visitors.

With many travel agents who provide similar services, these travel agents will compete to attract customers. Furthermore, some challenges faced by Umrah business providers are the slow shift to use digital marketing platforms such as social media (Muslim and Harun, 2023), the Umrah industry sustainability in the online environment (Ishak and Harun, 2019), the continuity of business on umrah and hajj (Fadilah and Novita, 2022).

Therefore, they should improve their service. Studies regarding Umrah agent service operations are still few. However, several studies about *Umrah* found different topics like health issues among pilgrims (Aldossari, Aljoudi, and Celentano, 2019), diabetes among pilgrims (Shaikh *et al.*, 2020; Yezli and Khan, 2021), infectious diseases during Umrah (Razavi, Mardani and Salamati, 2017), the use of information technology (IT) and internet of thing (IoT) on Umrah-related services (M. K. Shambour and Gutub, 2021; Shambour and Gutub, 2022), marketing the *Umrah* program through social media (Khadijah, Novianti and Anwar, 2022; Mubarrok, US., Ulfi, S and Sukoco, B., 2022).

Furthermore, the previous studies stated an intermediate impact on quality service with Umrah customer satisfaction in Malaysia (Othman, Harun, and Rashid, 2019; Othman and Harun, 2021; Othman *et al.*, 2021; Fikri *et al.*, 2022). Many previous studies discuss the Hajj pilgrimage, one of the obligatory worships for Muslims, and it needs a good physique and financial capability. There is also much research about health matters on the pilgrimage because the religious journey requires solid physical stamina, endurance, and health because they will meet with people from various countries for a long time. Many publications discuss hajj, the health of Umrah pilgrims, Umrah, and COVID-19, but microscopic studies about Umrah service operation comprehensively. Through a systematic literature review, the writers want to investigate the multidimensional Umrah service operation to increase customer satisfaction and loyalty. A systematic literature review will give a complete description of the service operation of the Umrah agent. The research questions are: (1) How does the research development on the Umrah service operation of *Umrah* agents in a year? (2) How does the service operation dimension in the Umrah industry increase customer satisfaction and loyalty?

## Literature Review

### Service Operation

Service operation is defined as several functions an organization offers customers or users. Furthermore, a product or service is obtained from a specific activity between the provider and

customer to fulfil their needs (Harper and Harper, 2018). Service operation is an interaction between employees and customers (Sampson, 2012). Another definition of service operation is activity and process to achieve business success, which means linking all business processes (Shen, 2015). Service operation will affect customer experience and influence customer decision to continue the long-term relationship to use a service or product. Service operation is serial activities or all business process activities in an organization to provide products or services for customers so customers will gain experience. Therefore, all business process activities should be conducted based on customers' needs and requirements.

Some studies on service operation are about service operation in travel industries that give insight into the logistics and supply chain in travel services, business planning and strategy, travel society and culture, and sustainability (Nunkoo and Ramkissoon, 2010). Following this, Dixon *et al.* (2014) discuss specifically the role of marketing strategy in the service operation, Victorino *et al.* (2017) explore the research on service operations, including the service operation performance, understanding customer and employee behavior Mathias and Brown (2015), describe the best practice of service operation in hospital. That research focuses on how an organization or company offers products and services by leveraging the marketing strategy, strengthening the supply chain, and understanding customer behavior to maintain the long-term relationship between the company and the customer.

### **Service Operation in the Umrah Industry**

Like other service industries, Umrah agents constantly innovate to increase customer satisfaction. Several service industries use various approaches to increase innovation, like systems thinking. Service innovation starts from the micro level (individual level) in the organization, then moves up to the *meso* level (functional level), and finally becomes corporate innovation (macro level) (Jaaron and Blackhouse, 2017). In the service industry, banking, insurance, accounting, and others use a scientific approach to study service activities and processes in the company. At the same time, Walt Disney sells fantasy. McDonald's uses an approach to service production (Chase and Apte, 2007). Healthcare services are sold in transit with security (safety) (Al-Bsheish, 2017).

Umrah is different from other services like banking, finance, and health. Those services each individual will receive service individually. Many involved parties in the Umrah industry must work together synergically, including umrah agents, the government, healthcare centres, and umrah recipient countries. So, the Umrah service operation is unique and has very complex features. Start from the community health sector (Al-Tawfiq and Memish, 2014; Latif *et al.*, 2016, 2019; Alzahrani and Aljamaan, 2020), convenient transportation and accommodation during Umrah (Ali and Salameh, 2021), service safety (Mróz, 2019), service help law (legal) (Maggalatung, 2017; Abd Rahman and Ahamat, 2019).

### **Religious Tourism**

Religious tourism has been conducted since a long time ago. There are various types of belief and religious pilgrimages, including pilgrimages of Hindus in India (Jyotsna and Sai, 2022), Catholics in Europe and North America (Dowson, 2021), Christian pilgrimages that carry out journey tour religion to Africa (Adebayo, 2021), and Muslim to Mecca (Hassan, Salem, and Refaat, 2022). Religious tourism is different from general tourism trip, which is tourism in which people seek stimulating activities, comfort, and fun; however, in religious tourism, people emphasize reinforcement, belief, and connection with the thing they are exalted or worship (Brdesee, Corbitt and Pittayachawan, 2013; Casais and Sousa, 2020). However, the development of religious tours

at this moment is becoming a desirable commodity for development, especially in giving appropriate service to the needs of every religion for interesting pilgrims and tourists to get two things at a time, i.e. religious aspects and leisure (Qurashi, 2017; Huang *et al.*, 2019; Mróz, 2019). A change from the traditional journey to religious tourism changed the travel industry's business processes and put forward customers' convenience and security.

## Method

### Search Strategy and String

This study uses the SLR with PRISMA protocol, the primary data from the Scopus and Web of Science (WoS) database. Scopus and WoS databases were chosen because Scopus and WoS are leading indexing databases covering various fields of science, including business and economics, marketing, and related fields. Both Scopus and WoS have stable and consistent growth of publication and citation on the databases, and the database shows the stable coverage of five primary disciplines, one of which is economics and business (Harzing and Alakangas, 2016). Secondary data was gathered from Google Scholar by using the handpicking technique. The search was conducted on November 30, 2022, using the keywords in this search: 'service,' 'Umrah or 'Umrah services or 'pilgrimage' or 'Muslim pilgrimage, and 'religious tourism.' The paper timeframe was from 2013 to 2022. The search results obtained 201 documents from the Scopus database, 72 from WoS, and eight from Google Scholar

**Figure 1.** Search String pada Scopus, WoS, Dan Google Scholar.

---

<b>Scopus search string</b>
TITLE-ABS-KEY ( service AND umrah OR pilgrimage OR "Muslim pilgrimage" OR "spiritual tour" OR "religious tourism" ) AND ( LIMIT-TO ( DOCTYPE, "ar" ) ) AND ( LIMIT-TO ( LANGUAGE, "English" ) ) AND ( LIMIT-TO ( PUBYEAR, 2022 ) OR LIMIT-TO ( PUBYEAR, 2021 ) OR LIMIT-TO ( PUBYEAR, 2020 ) OR LIMIT-TO ( PUBYEAR, 2019 ) OR LIMIT-TO ( PUBYEAR, 2018 ) OR LIMIT-TO ( PUBYEAR, 2017 ) OR LIMIT-TO ( PUBYEAR, 2016 ) OR LIMIT-TO ( PUBYEAR, 2015 ) OR LIMIT-TO ( PUBYEAR, 2014 ) OR LIMIT-TO ( PUBYEAR, 2013 ) )
Web of Science search string
TITLE (umrah OR "umrah service")
Google Scholar Keywords
"Umrah services," "Muslim pilgrimage," "religious tourism,"

---

### Data Extracting, Inclusion and Exclusion, and Processing

The data extraction obtained a total of 281 titles. Furthermore, the researchers screened a title and left as many as 38 articles titles. Full-text search results were obtained (34 titles), and several articles could not be found because the library did not subscribe to that journal, broken links, or articles could not be found. The results of the inspection article left 28 titles. At the same time, the other six are considered inadequate because they needed to answer the research question correctly, only discussing the hajj or the facilities in Macca. (Figure 1).

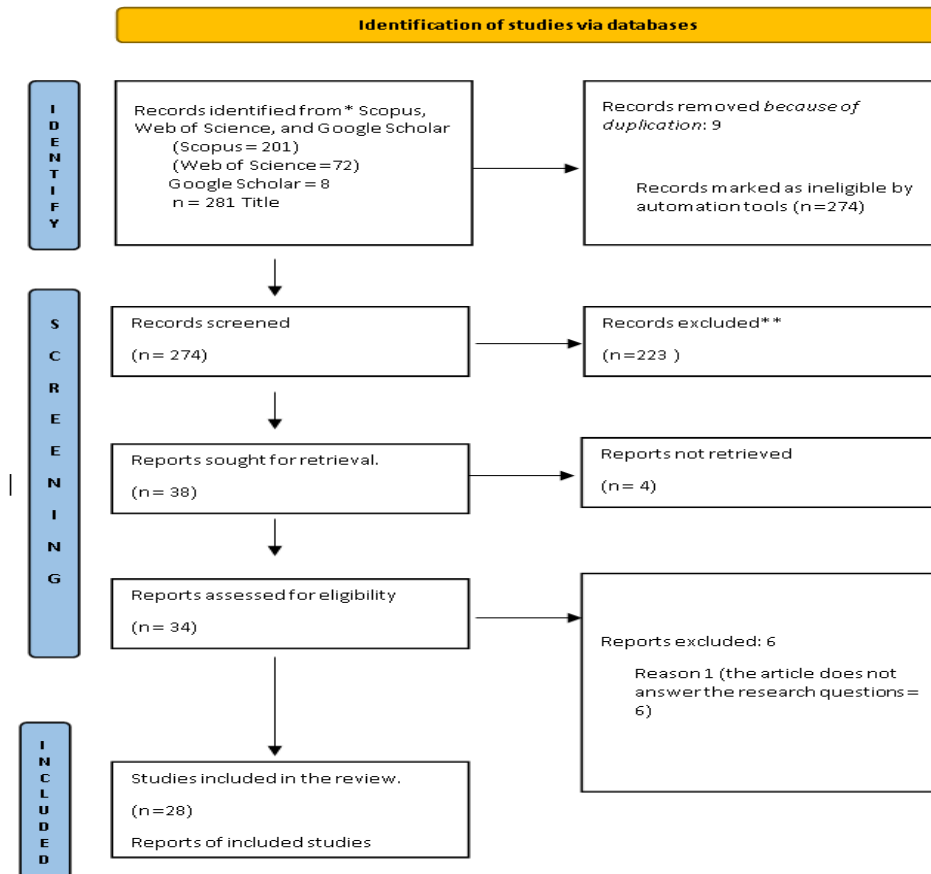
Then, the data inclusion criteria are limited to only document types of articles and use English language and original articles in the time range of 10 years period. The year limitation is from 2013-2022, and there are no area restrictions because the documents in the area are limited.

We exclude article reviews and book chapters, articles in the press stage, and education subjects because we only focus on real case studies, research, the experience of the Umrah agent, and customer perspectives. We also excluded articles that were unrelated to the research question or did not answer the research question.

Furthermore, all articles are processed using Atlas.ti9 and MS Excel. In this process, a review of the article is carried out. Then, it determines the code according to the research question, including the pilgrims' motivations, customers' wants, and what the agents provide services. After coding, the codes are analysed by grouping by category and looking at the pre-existing theory.

### Risk of Bias

Researchers manually screened the title in the selection and screening process. To minimize bias in the selected articles, the review process starts with reviewing the title, abstract, and article contents by researchers consisting of four people independently after the data was successfully extracted. All the researchers have a marketing and management background to make it easier to review the desired article.



**Figure 1.** Manuscript Search Flow Using PRISMA Protocol.

From: (Page *et al.*, 2021)

## Finding and Analysis

There are 28 papers reviewed in this systematic literature review. Most articles originated from Malaysia and Indonesia (Table 1). It is because both countries have many Muslim people, and they usually go for Umrah using an *Umrah* agency certified by the ministry. Besides Hajj, *Umrah* worship is obligatory for Muslims (Surah Al Baqarah 2:19); along with existing enhancement income (economy), many people are going to Umrah, and now many Umrah travel agents provide Umrah trips. Leisure activity also motivates people to go to Umrah, and this is because many pilgrims also work, which makes religious trips also going for a holiday. Furthermore, the Umrah pilgrims are also motivated by cultural and social visits where they visit the historical places of the city.

See this motivation, and the Umrah agent can give service that can cover the whole activity as expected by the customer. For including the Umrah package with holidays and visit historical places as service addition without significantly raising the price. The price factor will influence customer satisfaction. Umrah services operation depends on physical service from pre-journey to post-journey. All must notice because an Umrah agent should provide comfortable and relaxed customer service if the customer has a motivational holiday. Hence, they feel much value when going on worship trips.

*Umrah's* travel industry is different from general travel. The Umrah travel agent requires a license from the government to operate and serve Umrah from pre-departure until the finish. Here, the service operation in Umrah agent is divided into three stages: pre-journey service operation, which consists of activity promotion, registration, tour design, physical service, legal aspects, and health. In this state, information technology support services, especially in the registration and giving information about the product. Following services operation at the In-journey stage started from departure until returning to their respective countries. At this stage, these services provided different services, including the role of staff already replaced with guides or *mutawwif*, a representative from an agent at the airport to help with the check-in process and when arriving at the airport. Staff with a sense of empathy and caring become important in Step This. Service guarantee security also plays a significant role in utilising information technology. The final stage is post-journey. After all, pilgrims finish and return to their home country. However, Umrah agents continue giving service at this stage. They permanently open their doors wide to accommodate all complaints and problems experienced by the pilgrims, and the agent maintains a good relationship. Finally, they actively evaluate the *Umrah* services (Table 2).

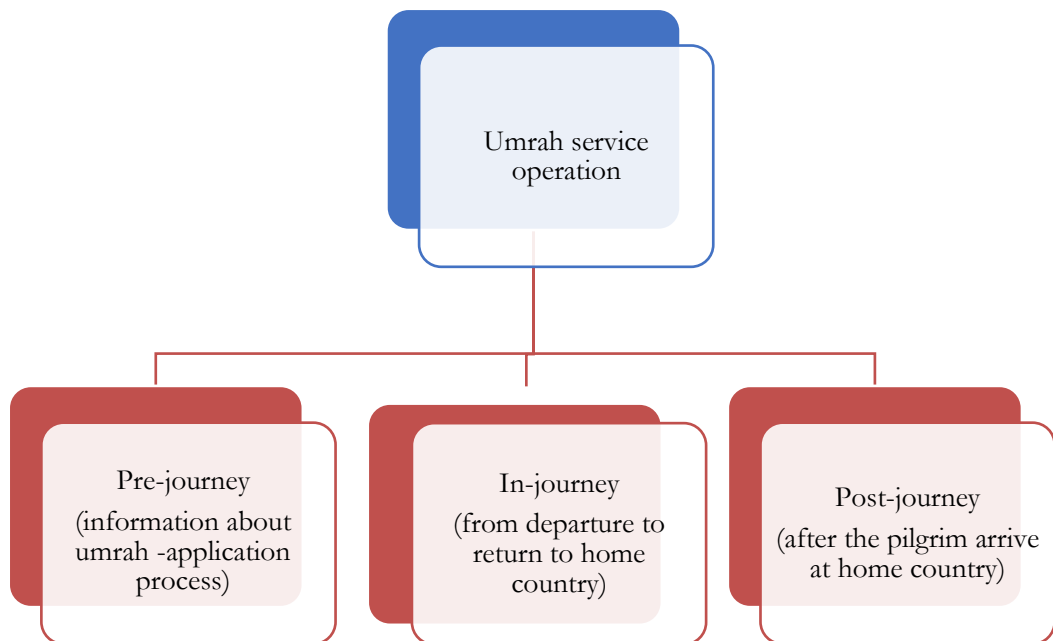
More services provided throughout the Umrah stages could give additional scores for *Umrah* agents and attract customers. However, services often add costs for the *Umrah* trip. On the other hand, many customers want reasonable and affordable prices, so the provider must smartly arrange high-quality service with affordable prices and flexible payment.

## Discussion

### The Development of Research on Umrah Service Operation

The research topics on Umrah services are changing every year. In a decade, the Umrah service operation, service management, and marketing authors came from Muslim countries such as Malaysia, Indonesia, Egypt, Saudi Arabia, Kuwait, and Bangladesh. The authors of two papers come from Australia and Taiwan (Table 1). From 2013 to 2016, the research focused on

information technology and information systems used to support Umrah. Following that, from 2017-2020, some papers discuss customer satisfaction, Umrah package quality, after-sales communication, and pre-departure preparation. Finally, the last two years discussed Umrah customization, the freedom package suitable for customer budget, and the customer's involvement in designing the Umrah package. The research trend on Umrah services is evolving, and customer involvement is increasing. That is a good sign that customers actively choose and decide on the right program. The previous studies only focused on specific topics such as *Umrah and Hajj* mass gatherings during COVID-19 (Hoang et al., 2020), health issues on *Hajj* (Aldossari, Aljoudi, and Celentano, 2019) mobile apps for Umrah (Khan and Shambour, 2018), disease transmission (Badahdah *et al.*, 2018). The findings show that *Umrah* services operations dimensions are physical or tangible service (Othman, Harun, and Rashid, 2019), health matters (Aziz, El-Megeed, and Ellatif., 2018); legality (Abd Rahman and Ahamat, 2019), and flexible tour design (Mahrinasari *et al.*, 2022; Mursid and Hsi-Jui Wu, 2022) which umrah agents will later adopt to increase customer satisfaction and loyalty (Nuraini, 2021). Many research topics related to Umrah service operations still need to be investigated, such as using big data by Umrah agents to handle customers, developing a metaverse to enhance connectivity between agents and customers, and adopting artificial intelligence to help the Umrah process.



**Figure 3.** *Umrah* Service Operation in *Umrah* Journey Model.

### **Umrah Service Operation Dimensions**

Based on the results, we propose an Umrah service operation dimension model on the Umrah journey (Figure 3). There are three stages of the Umrah services operating model. Firstly, the pre-journey, which consists of seven service operation dimensions, such as a marketing campaign to promote a product, building an office with a professional physical appearance, providing well-trained and knowledgeable staff, designing product information related to Umrah, providing a license or letter of permission to perform Umrah and cooperating with

health institutions for the process of pre-journey health care. At this stage, this Umrah provider must be seen in physical appearance and have a representative office so potential customers will be able to join the Umrah trip. Marketing has become necessary in-service operations, and marketing strategies are influenced by the leadership style (Dixon et al., 2013; Supriharyanti and Sukoco, 2023). Marketing should have a good relationship with operations to have a good result. This research's marketing activities cover clear product information availability, advertising or promoting the package and providing customer service. However, the marketing strategy needs to be better described. In-journey stages include physical services such as transportation, accommodation, pilgrim security and safety, and emotional and spiritual approach—Finally, the post-journey stage includes after-sales services, engagement, and evaluation systems dimension.

The utilisation of information technology to support the pilgrim convenience is pictured in all the stages of Umrah, starting from pre-journey, the technology used to support the virtual Umrah application and simulation process, including using the website for support and deploying information products with flexibility. The information technology service is developed and has become a spear for Umrah agents to increase pilgrim convenience by monitoring the Umrah process. For example, building an expert system containing Umrah waiting time, application timeline until possible arrival time can be monitored online, use of smart tags for worshipers, and provision of interactive information related to pilgrimage comprehensively. However, the results mention that pilgrims prefer face-to-face contact with Umrah agents. However, developing expert systems will be able to give information widely to the customers. Plus, candidate Umrah customers are increasing and come from younger age groups or millennials, who love to interact virtually. An information system will increase Umrah management's transparency, which could increase trust and lead to customer loyalty. Information technology can support evaluation or feedback through a review system at the post-journey stage. Pilgrims could provide a review or testimony-related service (Othman, Harun, and Rashid, 2019) and facilitate a responsive customer relations unit (hui-Wen Chuah *et al.*, 2022).

Umrah agents also need to train employees/staff to be able to give service with good cognitive (knowledge), affective (emotions), and behavior (behavior). Another aspect that customer wants from the staff is staff understanding, and understand product knowledge, and expertise (Abdul Kadir, Ab Rahman, and Muhad, 2020; Tjahjadi *et al.*, 2022; Jasin *et al.*, 2023)), swift staff help (Othman *et al.*, 2021) and good emotional intelligence (Firdaus *et al.*, 2017). Another interesting point is the availability of customized or personalized Umrah, where customers can design their Umrah trip according to their budget and desire. However, this thing is followed by an increase in Umrah costs, and it will be better if the Umrah agent provides affordable customised packages considering the future trend of Umrah will change, such as the emergence of Umrah backpacker, do-it-yourself Umrah (Atikah *et al.*, 2022; Sukmaningrum *et al.*, 2022).

## Conclusion

Studies on Umrah services have been conducted for a long time, especially in Muslim countries. There are still many research gaps that need to be studied. So, the future direction of the study can be focused on the Umrah service operations in all dimensions, especially on information technology (IT) and information systems. This research also provides new insights for Umrah agents to increase service operations to improve customer satisfaction and loyalty. The enhanced multidimensional service operations in the pre-journey, in-journey, and post-journey



of Umrah will add value for Umrah agents. Umrah agents can increase the staff and muttawif competency, focus on religious activity programs, and pay attention to the customers' needs.

For future research direction, it is necessary to conduct field studies and observations to prove the Umrah service operation dimensions empirically before being implemented broadly. Limitations on studies include the limited use of databases on Scopus, WoS, and Google Scholar, so many possible appropriate articles still need to be entered into research. It becomes notes, and the researcher can use various journal databases to get related data service Umrah operation. Next, many topics related to Umrah services operation that can be developed involve three stages: pre-journey, in-journey, and post-journey, especially those related to application information technology, intelligent systems, or mobile applications used to increase satisfaction and loyalty of the customer. This research will contribute to developing the Umrah business providers, especially in the service operation process. Umrah service providers can use this result as guidelines to improve the pre-, in, and post-journey service.

## References

- Abd Hamid, N. *et al.* (2016) 'Heuristic evaluation of virtual Umrah to improve user experience,' *Advanced Science Letters*, 22(10), pp. 2918–2921. doi: 10.1166/asl.2016.7122.
- Abd Rahman, W. F. I. W. and Ahamat, H. (2019) 'Legal protection of Malaysia Umrah pilgrims,' *International Journal of Engineering and Advanced Technology*, 8(5), pp. 397–404. doi: 10.35940/ijeat.E1057.0585C19.
- Abdul Kadir, F. K., Ab Rahman, S. R. and Muhad, F. N. (2020) 'Level of Satisfaction Towards Umrah Management Service by Juara Travel and Tours Company,' *International Journal of Academic Research in Business and Social Sciences*, 10(5), pp. 171–178. doi: 10.6007/ijarbss/v10-i5/7185.
- Adebayo, R. O. (2021) 'Shopping for salvation: A comparative appraisal of the place of worship and marketplace in South Africa,' *International Journal of Religious Tourism and Pilgrimage*, 8(8), pp. 57–69. doi: <https://doi.org/10.21427/gsmv-2s62>
- Al-Bsheish (2017) 'Enhancing Safety Performance by Recognizing the Role of Perceived Management Commitment to Safety in the Jordanian Healthcare Industry: Conceptual Framework,' *International Journal of Business and Social Research*, January. doi: DOI:10.18533/IJBSR.V7I01.1023.
- Al-Tawfiq, J. and Memish, Z. (2014) 'Mass gathering medicine: 2014 Hajj and Umrah preparation as a leading example,' *Int J Infect Dis*, 27, pp. 26–31. doi: 10.1016/j.ijid.2014.07.001. Epub 2014 Aug 14. PMID: 25128639; PMCID: PMC7110515.
- Aldossari, M., Aljoudi, A. and Celentano, D. (2019) 'Health issues in the Hajj pilgrimage: a literature review,' *Eastern Mediterranean Health Journal*, 25(10). doi: 10.26719/2019.25.10.744
- Alharthi, W. J. (2021) 'Proposing the use of Digital Currency in Hajj and Umrah', 12(6), pp. 1388–1392.
- Ali, S. and Salameh, A. (2021) 'Role of travel and tourism sector in the attainment of Vision 2030 in Saudi Arabia: An analytical study', *Problems and Perspectives in Management*, 19(2), pp. 276–290. doi: DOI:10.21511/ppm.19(2).2021.23.
- Alwie, F. N. and Hermawan, D. (2021) 'Operational Management of the Umroh Plus Tour Program in Pt. Alamin Ahsan Travel', *Journal of Indonesia Tourism and Policy Studies*, 6(1), pp. 30–46. doi: 10.7454/jitps.v6i1.265.
- Alzahrani, S. and Aljamaan, I. (2020) 'Forecasting the spread of the COVID-19 pandemic in Saudi Arabia using ARIMA prediction model under current public health interventions', *Journal of Infection and Public Health*, 13(7). doi <https://doi.org/10.1016/j.jiph.2020.06.001>.

- Amar Mahmad, M. *et al.* (2021) 'Handling of Umrah Packages in Kedah: an Early Review,' *Journal of Tianjin University Science and Technology*, 54(12), pp. 1–9. Available at: <https://oarep.usim.edu.my/jspui/bitstream/123456789/14247/1/226>. Handling Of Umrah Packages In Kedah-An Early Review.pdf. DOI : 10.17605/OSF.IO/HJQB6
- Atikah, R. S. *et al.* (2022) 'The Emergence Of A New Religious Travel Segment: Umrah Do It Yourself Travellers (DIY),' *Geojournal of Tourism and Geosites*, 40(1), pp. 37–48. doi: 10.30892/gtg.40104-800.
- Aziz, M., El-Megeed, H. S. A. and Ellatif., A. (2018) 'Pre-travel health-seeking practices of Umrah pilgrims departing from Assiut International Airport, Egypt,' *Travel Med Infect Dis*, (May-June), pp. 72–76. doi: DOI: 10.1016/j.tmaid.2018.04.012.
- Badahdah, A. *et al.* (2018) 'Meningococcal disease burden and transmission in crowded settings and mass gatherings other than Hajj/Umrah: A systematic review,' *Vaccine*, 36(31). doi: DOI: 10.1016/j.vaccine.2018.06.027.
- Brdese, H., Corbitt, B. and Pittayachawan, S. (2013) 'Barriers and motivations affecting information systems usage by Hajj-Umrah religious tourism operators in Saudi Arabia,' *Australasian Journal of Information Systems*, 18(1), pp. 5–23. doi: 10.3127/ajis.v18i1.809.
- Casais, B. and Sousa, B. (2020) 'Heterogeneity of motivations and conflicts in pilgrim-to-pilgrim interaction: A research on the way of Saint James,' *Tourism Management Perspectives*, 36. doi <https://doi.org/10.1016/j.tmp.2020.100748>.
- Chase, R. and Apte, U. (2007) 'A history of research in service operations: What's the big idea?', *Journal of Operations Management*, 25(2). doi <https://doi.org/10.1016/j.jom.2006.11.002>.
- Chikhaoui, K. *et al.* (2022) 'Automatic Hajj and Umrah Ritual Detection Using IMU Sensors,' *IEEE Access*, 10(August), pp. 98232–98243. doi 10.1109/ACCESS.2022.3206363.
- Dixon, M. *et al.* (2014) 'The role of coordinated marketing-operations strategy in services: Implications for managerial decisions and execution,' *Journal of Service Management*, 25(2), pp. 275–294. doi <https://doi.org/10.1108/JOSM-02-2014-0060>.
- Dowson, R. (2021) "“Biker revs” on pilgrimage: Motorbiking vicars visiting sacred sites,' *Religions*, 12(3), pp. 1–17. doi: 10.3390/rel12030148.
- Elgammal, I., Alhothali, G. T. and Sorrentino, A. (2022) 'Segmenting Umrah performers based on outcomes behaviors: a cluster analysis perspective,' *Journal of Islamic Marketing*. doi: 10.1108/JIMA-01-2021-0004.
- Fadilah, M.R., Novita, N. 2022. COSO: Enterprise Risk Management Sebagai Upaya Mempertahankan Keberlangsungan Perusahaan Jasa Travel Haji Dan Umrah. *Trilogi Accounting and Business Research*, Vol. 3. DOI: <https://doi.org/10.31326/tabrv3i2.1343>
- Fikri, A. *et al.* (2022) 'Market orientation and business performance: the mediating role of total quality management and service innovation among Moslem fashion macro, small and medium enterprises in Indonesia,' *Journal of Islamic Accounting and Business Research*, 13(8). doi: DOI 10.1108/JIABR-12-2021-0321.
- Firdaus, F. *et al.* (2017) 'Effect of emotional intelligence and spiritual intelligence on service quality, customer satisfaction, and loyalty: Study on Himpun member Umrah organizer company in district and municipality of Bekasi,' *International Journal of Economic Research*, 14(18).
- Harper, H. and Harper, H. (2018) *Managing Operations*, In *Management in Further Education*. doi <https://doi.org/10.4324/9781351041027-3>.
- Harun, A. *et al.* (2020) 'Star rating factors for Umrah services: The perspectives of Umrah operators and consumers', *The international journal of religious tourism and pilgrimage*, 8(4). doi: DOI: 10.21427/rq15-p355.
- Harzing, A. and Alakangas, S. (2016) 'Google Scholar, Scopus and the Web of Science: a longitudinal and cross-disciplinary comparison,' *Scientometrics*, 106. doi <https://doi.org/10.1007/s11192-015-1798-9>.

- Hassan, T. H., Salem, A. E. and Refaat, S. A. (2022) 'The Impact of Eatmarna Application Usability on Improving Performance Expectancy, Facilitating the Practice of Rituals and Improving Spirituality Feelings during Umrah Amid the COVID-19 Outbreak', *Religions*, 13(3). doi 10.3390/rel13030268.
- Huang, K. *et al.* (2019) 'Visitors' spiritual values and relevant influencing factors in religious tourism destinations,' *International Journal of Tourism Research*, 22(3). doi https://doi.org/10.1002/jtr.2337.
- Hui-Wen Chuah, S. *et al.* (2022) 'What is holding customers back? Assessing the moderating roles of personal and social norms on CSR'S routes to Airbnb repurchase intention in the COVID-19 era', *Journal of Hospitality and Tourism Management*, 50. doi: DOI 10.1016/j.jhtm.2021.12.007.
- Ishak, M.I., Harun, A. 2019. Online Consumer Review and Its Roles in Malaysian Umrah Industry: Issues and Challenges. *International Journal of Psychosocial Rehabilitation*, Vol. 23, No 2
- Jaaron, A. and Blackhouse, C. (2017) 'Operationalisation of service innovation: a systems thinking approach,' *The Service Industries Journal*, 38(9–10). doi https://doi.org/10.1080/02642069.2017.1411480.
- Jamaludin, M. S., Suyurno, S. S. H. and Meerangani, K. A. (2022) 'Assessing The Level of Efficiency of Umrah and Ziarah Company Managers in Managing Umrah Packages in Malaysia,' *International Journal of Academic Research in Business and Social Sciences*, 12(7), pp. 889–907. doi: 10.6007/ijarbss/v12-i7/14320.
- Jasin, M. *et al.* (2023) 'The effects of customer satisfaction, perceived service quality, perceived value, and brand image on customer loyalty,' *Uncertain Supply Chain Management*, 11(2), pp. 763–768. doi: DOI 10.5267/j.uscm.2023.1.004.
- Jyotsna, J. and Sai, L. (2022) 'Modelling pilgrim-tourist experience in Hindu religious destinations: an Interactive Qualitative Analysis,' *Journal of Tourism and Cultural Change*. doi https://doi.org/10.1080/14766825.2022.2095914.
- Kabir, A. M., Sharaban, T. N. and Khan, M. M. (2021) 'A Virtual Reality (VR) Based Interactive and Educative Experience of Hajj and Umrah for the People of Bangladesh,' in *2021 IEEE 11th Annual Computing and Communication Workshop and Conference (CCWC)*. Doi: DOI: 10.1109/CCWC51732.2021.9375915.
- Khadijah, U., Novianti, E. and Anwar, R. K. (2022) 'Social Media in Guiding and Marketing Religious Tourism: the Case of Umrah and Hajj Services', *Sosiohumaniora*, 24(1). doi: DOI:10.24198/sosiohumaniora.v24i1.36579.
- Khan, E. and Shambour, M. (2018) 'An analytical study of mobile applications for Hajj and Umrah services,' *Applied Computing and Informatics*, 14(1). doi https://doi.org/10.1016/j.aci.2017.05.004.
- Kim, B. and Kim, S. (sam) (2019) 'Hierarchical value map of religious tourists visiting the Vatican City/Rome,' *An International Journal of Tourism Space, Place, and Environment*, 21(19). doi https://doi.org/10.1080/14616688.2018.1449237.
- Kim, B., Kim, S. and King, B. (2020) 'Religious tourism studies: evolution, progress, and future prospects,' *Tourism Recreation Research*, 45(2), pp. 185–203. doi: DOI: 10.1080/02508281.2019.1664084.
- Latif, A. *et al.* (2016) 'An Investigation of IoT Importance and Viability of Health Records Retrieval using Electronic Tags in Pilgrimage,' *Global Journal of Computer Science and Technology*, 16(3). Retrieved from <https://jtec.utem.edu.my/jtec/article/view/1378>
- Latif, A. *et al.* (2019) 'Feasibility of Internet of Things Application for Realtime Healthcare for Malaysian Pilgrims,' *Journal of Computational and Theoretical Nanoscience*, 16(3). doi: DOI:10.1166/jctn.2019.8013.

- Machuca, J. ., Gonzalez-Zamora, M. and Aguilar-Escobar, V. G. (2007) 'Service Operations Management research', *Journal of Operations Management*, 25, pp. 258–603. DOI: 258–603. <https://doi.org/10.1016/j.jom.2006.04.005>
- Maggalatung, S. (2017) 'Legal Protection Against Indonesian Umrah Jemaah', *Jurnal Cita Hukum*, 5(1), pp. 171–182. doi: 10.15408/jch.v5i1.6582.
- Mahrinasari, M. *et al.* (2022) 'The Effect of Environmental Issues on Customer's Environmental Safety Pattern: An Experiential Text Analysis in the Literature,' *Journal of Environmental Management and Tourism*, 13(5). doi: DOI 10.14505/jemt.v13.5(61).09.
- Majid, A. R. M. A. *et al.* (2018) 'GPU-based optimization of pilgrim simulation for Hajj and Umrah rituals,' *Pertanika Journal of Science and Technology*, 26(3), pp. 1019–1038.
- Matthias, O. and Brown, S. (2016) 'Implementing operations strategy through Lean processes within health care: The example of NHS in the UK,' *International Journal of Operations & Production Management*, 36(11), pp. 1435–1457. doi <https://doi.org/10.1108/IJOPM-04-2015-0194>.
- Mohamed, H. H. *et al.* (2013) 'M-umrah: An android-based application to help pilgrims in performing Umrah,' *Proceedings - 2013 International Conference on Advanced Computer Science Applications and Technologies, ACSAT 2013*, (December), pp. 385–389. doi: 10.1109/ACSAT.2013.82.
- Mohandes, M. *et al.* (2013) 'Pilgrim Tracking and Identification Using Wireless Sensor Networks and GPS in a Mobile Phone,' *Arabian Journal for Science and Engineering*, 38(8), pp. 2135–2141. doi 10.1007/s13369-013-0572-7.
- Mróz, F. (2019) 'Changes in religious tourism in Poland at the beginning of the 21st century.', *Turyzm/Tourism*, 29(2), pp. 95–103. doi: [://doi.org/10.18778/0867-5856.29.2.09](https://doi.org/10.18778/0867-5856.29.2.09).
- Mubarrok, US., Ulfi, I., Sukmana, R. and Sukoco, B. (2022) 'A bibliometric analysis of Islamic marketing studies in the "Journal of Islamic marketing",' *Journal of Islamic Marketing*, 13(4). doi: DOI 10.1108/JIMA-05-2020-0158.
- Murshid, A. and Hsi-Jui Wu, C. (2022) 'Customer participation, value co-creation, and customer loyalty: evidence from Umrah travel agencies in Indonesia', *Journal of Islamic Marketing*, 13(3). doi <https://doi.org/10.1108/JIMA-06-2020-0190>.
- Muslim, A.K., Harun, A. 2023. Challenges And Opportunities In Developing Malaysian Umrah Tourism: Implication Of Social Media Application Among Umrah Consumers And Umrah Travel Agents. *Resmilitaris*, Vol 13, No 1
- Nunkoo, R. and Ramkissoon, H. (2010) 'Modeling community support for a proposed integrated resort project.', *Journal of Sustainable Tourism*, 18(2), pp. 257–277. DOI: <https://doi.org/10.1080/09669580903290991>.
- Nuraini, D. (2021) 'Analysis of Factors Affecting Customer Satisfaction and Customer Retention on E-Commerce,' *Jurnal Ekonomi dan Bisnis Islam*, 7(2). doi <https://doi.org/10.20473/jebis.v7i2.25936>.
- O'Neill, J. and McGinley, S. (2014) 'Operations research from 1913 to 2013: The Ford assembly line to hospitality industry innovation', *European Journal of Marketing*, 26(5), pp. 185–203. doi: DOI: 10.1108/IJCHM-08-2013-0331.
- Othman, B. *et al.* (2019) 'The influences of service marketing mix on customer loyalty towards Umrah travel agents: Evidence from Malaysia,' *Management Science Letters*, 9(6). doi: DOI:10.5267/j.msl.2019.3.002.
- Othman, B. *et al.* (2020) 'Effects of service marketing mix on Umrah customer satisfaction: an empirical study on Umrah traveling industry in Malaysia,' *Test Engineering and Management*, 83(March-April).
- Othman, B. A. *et al.* (2021) 'The effects on customer satisfaction and customer loyalty by integrating marketing communication and after-sale service into the traditional marketing mix model of Umrah travel services in Malaysia,' *Journal of Islamic Marketing*, 12(2), pp. 363–388. doi: 10.1108/JIMA-09-2019-0198.

- Othman, B. and Harun, A. Bin (2021) 'The Influence of Service Marketing Mix and Umrah Service Quality on Customer Satisfaction and Customer Loyalty towards Umrah Travel Agents in Malaysia,' *Technium Social Sciences Journal*, 22(August), pp. 553–618. doi: 10.47577/tssj.v22i1.4330.
- Othman, B., Harun, A. and Rashid, W. (2019) 'The impact of Umrah service quality on customer satisfaction towards Umrah travel agents in Malaysia,' *Management Science Letters*, 9(11), pp. 1763–1772. doi 10.5267/j.msl.2019.6.014.
- Page, J. *et al.* (2021) 'the PRISMA 2020 statement: An updated guideline for reporting systematic reviews', *BMJ*, 372(71). doi: doi:10.1136/ BMJ.n 7.
- Qurashi, J. (2017) 'Commodification of Islamic Religious Tourism: from Spiritual to Touristic Experience,' *International Journal of Religious Tourism and Pilgrimage*, 5(1). doi: /doi.org/10.21427/D7JX40.
- Razavi, S., Mardani, M. and Salamati, P. (2017) 'Infectious Diseases and Preventive Measures During Hajj Mass Gatherings: A Review of the Literature,' *Archives of Clinical Infectious Diseases*, 13(3). doi: DOI: 10.5812/archcid.62526.
- Ridha, M. and Harris, R. (2020) 'Service Quality Related to Customer Satisfaction with Umrah Worship Package Preparation at PT. Marco Tour and Travel Jakarta: Spearman's Correlation Coefficient', 426(Icvhe 2018), pp. 1–8. doi: 10.2991/assehr.k.200331.113.
- Romadhoni, R. *et al.* (2020) 'Important Performance Analysis for Measuring Customer Satisfaction for Umrah Services Bureau,' *International Journal of Economics and Management Studies*, 7(4), pp. 55–62. doi: 10.14445/23939125/ijems-v7i4p110.
- Sampson, S. E. (2012) 'Visualizing service operations,' *Journal of Service Research*, 15(2), pp. 182–198. doi https://doi.org/10.1177/1094670511435541.
- Shaikh, S. *et al.* (2020) 'Diabetes Care During Hajj,' *Diabetes Therapy*, 11. doi https://doi.org/10.6084/m9.figshare.13050551.
- Shambour, M. and Gutub, A. (2021) 'Personal Privacy Evaluation of Smart Devices Applications Serving Hajj and Umrah Rituals,' *Journal of Engineering Research*, (Online First Article). Doi: DOI: https://doi.org/10.36909/jer.13199.
- Shambour, M. K. and Gutub, A. (2021) 'Personal Privacy Evaluation of Smart Devices Applications Serving Hajj and Umrah Rituals,' *Journal of Engineering Research*, pp. 1–22. doi 10.36909/jer.13199.
- Shambour, M. K. and Gutub, A. (2022) 'Progress of IoT Research Technologies and Applications Serving Hajj and Umrah', *Arabian Journal for Science and Engineering*. Springer Berlin Heidelberg, 47(2), pp. 1253–1273. doi 10.1007/s13369-021-05838-7.
- Sharef, N. M. *et al.* (2014) 'Semantic question answering of Umrah pilgrims to enable self-guided education,' *International Conference on Intelligent Systems Design and Applications, ISDA*, pp. 141–146. doi 10.1109/ISDA.2013.6920724.
- Shen, B. (2015) 'Service operations optimization: Recent development in supply chain management,' *Mathematical Problems in Engineering*. doi https://doi.org/10.1155/2015/609061.
- Shukri, A. N. M., Set, K. and Yaakop, A. Y. (2019) 'Muslim Travellers' Perception on Quality of Service by Umrah and Hajj Travel Agencies in Malaysia,' *Universiti Malaysia Terengganu Journal of Undergraduate Research*, 1(1), pp. 18–23. doi: 10.46754/umtjur.v1i1.47.
- Sukmaningrum, P. *et al.* (2022) 'Productivity analysis of family takaful in Indonesia and Malaysia: Malmquist productivity index approach,' *Journal of Islamic Accounting and Business Research*, 13(4). doi: DOI 10.1108/JIABR-03-2021-0097.
- Sung-Eui, C. (2005) 'Developing new frameworks for operations strategy and service system design in electronic commerce,' *International Journal of Service Industry Management*, 16(3), pp. 294–314. doi https://doi.org/10.1108/09564230510601413.

- Supriharyanti, E. and Sukoco, B. M. (2023) 'Organizational change capability: a systematic review and future research directions,' *Management Research Review*, 46(1), pp. 46–81. doi: DOI 10.1108/MRR-01-2021-0039.
- Swoger, B. J. M. and Hoffman, K. D. (2015) 'Taking notes at the reference desk: Assessing and improving student learning,' *Reference Services Review*, 43(2), pp. 199–214. doi: 10.1108/RSR-11-2014-0054.
- Tjahjadi, B. *et al.* (2022) 'Human capital readiness and global market orientation in Indonesian Micro-, Small- and-Medium-sized Enterprises business performance,' *International Journal of Productivity and Performance Management*, 71(1). doi: DOI 10.1108/IJPPM-04-2020-0181.
- Victorino, L. *et al.* (2017) 'Service Operations: What Have We Learned?', *Journal of Service Management*, 29(1), pp. 39–54.
- Yezli, S. and Khan, A. (2021) 'COVID-19 pandemic: it is time to temporarily close places of worship and to suspend religious gatherings', *Journal of Travel Medicine*, 28(2). doi <https://doi.org/10.1093/jtm/taaa065>.
- Yulanda, N. K. and Herdinata, C. (2021) 'Analysis of the Attributes That Affect the Preference of Consumers Towards Hajj and Umrah Offline Store in Bontang City', *KnE Social Sciences*, 2021, pp. 378–387. doi: 10.18502/kss.v5i5.8824.

**Table 1** Research on Umrah Service Operation in Ten Years-Period

Author, year	Title	Journ al	Country	Finding	Method	Data Source	Theory	Analysis Technique	Recommendat ion
(Hassan, Salem, and Refaat, 2022)	The Impact of Eatmarna Application Usability on Improving Performance Expectancy, Facilitating the Practice of Rituals, and Improving Spirituality Feelings during Umrah Amid the COVID-19 Outbreak	Religions (Q1)	Saudi Arabia & Egypt	Safety is one of the main concerns when people go to Umrah; therefore, umrah providers can develop mobile apps to track their pilgrimage	Survey	Survey respondents through google forms	Religious tourism management	R software (RStudio 4.1.1)	The services of the Eatmarna application can be further integrated into other touristic and hotel-based. Additionally, passengers on international airlines who come from Islamic countries can be offered to acquire permits to perform Umrah and also obtain permits for other services.
(Elgammal, Alhothali, and Sorrentino, 2022)	Segmenting Umrah performers based on outcomes behaviors: a cluster analysis perspective	Journal of Islamic Marketing (Q2)	Saudi Arabia	Develop A marketing mix that suits the customer cluster	Qualitative	A self-administrated questionnaire	Religious tourism, Servicescape, Value (convenience vs hedonic), Behavioral intentions	SPSS 25	NA

Author, year	Title	Journal	Country	Finding	Method	Data Source	Theory	Analysis Technique	Recommendation
(Mursid and Hsi-Jui Wu, 2022)	Customer participation, value co-creation, and customer loyalty: evidence from Umrah travel agencies in Indonesia	Journal of Islamic Marketing (Q2)	Indonesia & Taiwan	Customizing Umrah packages that are suitable for customer needs is the best service. So the involvement of customers in designing their customizable package will give value to the agent, and customers will love it	Quantitative	Survey questionnaire	Umrah travelers' loyalty	Confirmatory factor analysis (CFA) and structural equation modeling (SEM)	NA
(Chikhaoui et al., 2022)	Automatic Hajj and Umrah Ritual Detection Using IMU Sensors	KnE Social Sciences (NA)	Saudi Arabia	The use of IMU to track real-time pilgrims during Umrah, so we know their movement	Observation (hands-on experiment)	Continuously collecting data samples (i.e., pilgrim's position with time)	Human activity recognition	Flowchart	More work is needed to apply and test both the path tracking and ritual detection, especially the Sa'i detection algorithm.
(Atikah et al., 2022)	The Emergence Of A New Religious Travel Segment: Umrah Do It Yourself Travellers (Diy)	<i>GeoJournal of Tourism and Geosites (Q2)</i>	Malaysia	The flexibility, freedom, and low-budget Umrah are preferable to DIY Umrah pilgrim	Qualitative	Semi-structured interviews	Islamic Tourism and Pilgrimage Travel	NVivo	NA
(Jamaludin, Suyurno and Meerangani, 2022)	Assessing The Level of Efficiency of Umrah and Ziarah Company Managers in Managing Umrah Packages in Malaysia	International Journal of Academic Research in Business and Social Sciences (NA)	Malaysia	Employees' competence in handling Umrah based on managers' perspective	Quantitative	A questionnaire distributed online that will be filled out by respondents (company managers).	Tourism, Umrah, and Pilgrimage	SPSS version 26	The competence of company managers should be exemplary and excellent consistently to be seen by employees and able to contribute to the passion and aspiration of their work.
(Alharthi, 2021)	Proposing the use of Digital Currency in Hajj and Umrah,	International Journal of Scientific & Engineering Research (NA)	Saudi Arabia	The introduction of digital currency, such as crypto for hajj and Umrah	The study approach was to review recent literature	Literature reviews	Cryptocurrency	NA	NA

Author, year	Title	Journal	Country	Finding	Method	Data Source	Theory	Analysis Technique	Recommendation
(M. K. Shambour and Gutub, 2021)	Personal Privacy Evaluation of Smart Devices Applications Serving Hajj and Umrah Rituals	<i>Journal of Engineering Research (Q3)</i>	Kuwait	Study of Umrah and Hajj mobile apps and investigate the characteristic of personal information kept	Literature review	Apps that may be related to Hajj and Umrah.	Mobile app rating scale (MARS), Web Content Accessibility Guidelines (WCAG) 2.0, human-computer interaction (HCI)	Diagram batang dan tabel	The apps improvement work and its current focus is still in its early stage for experience convenience, but can be used as background building foundation for future related Hajj and Umrah research to come.
(Othman <i>et al.</i> , 2021)	The effects on customer satisfaction and customer loyalty by integrating marketing communication and after-sale service into the traditional marketing mix model of Umrah travel services in Malaysia	<i>Journal of Islamic Marketing (Q2)</i>	Malaysia	State that marketing mix has a positive influence on customer satisfaction	Quantitative	Questionnaire	Customer in Umrah travel, Umrah travel services	The data were analyzed using the partial least square	Umrah travel agents need to place emphasis on CS which leads in CL as specified in results of the study. This study, it would be a better study if the data was collected from different districts and countries. Future research can be carried out to study SMM, CS and CL in diverse industries.
(Amar Mahmad <i>et al.</i> , 2021)	Handling Of Umrah Packages In Kedah: An Early Review	Journal of Tianjin University Science and Technology (NA)	Malaysia	The experience of Umrah agencies in handling Umrah packages in Kedah	Qualitative method namely content analysis of literature and interviews	Analysis of literature and interviews.	Umrah management information systems	NA	NA
(Kabir, Sharaban and Khan, 2021)	A Virtual Reality (VR) Based Interactive and Educative Experience of Hajj and Umrah for the People of Bangladesh	IEEE 11 <sup>th</sup> Annual Computing and Communication Workshop and Conference	Bangladesh	Educate the pilgrim before they are going Umrah and <i>hajj</i> using a Virtual Reality application	NA	NA	Applications for Pilgrims, Application for Hajj/Umrah	Comparative Analysis	The Cave system is an expensive implementation that can only be achieved given proper planning and resources. Funding is required to purchase the necessary equipment and to rent a space to set up the simulation



Author, year	Title	Journal	Country	Finding	Method	Data Source	Theory	Analysis Technique	Recommendation
(Alwie and Hermawan, 2021)	Operational Management Of The Umroh Plus Tour Program In Pt. Alamin Ahsan Travel	Journal of Indonesian Tourism and Policy Studies (NA)	Indonesia	The experience of operational services on <i>Umrah</i> agency in Indonesia	Qualitative	Observation, interviews, and literature studie, secondary data by browsing the internet, study results from previous researchers, lecture notes, and other relevant sources.	Operation management, Hajj and Umrah Travel	NA	Alisan Tours & Travel needs to add variety of destinations in Umrah Plus Tours Program, one of which is by adding religious pilgrimage tourist destinations such as the Wali Songo pilgrimage or pilgrimages in countries that have religious elements such as or pilgrimages in countries that have a religious element.
(Harun <i>et al.</i> , 2020)	Star rating factors for Umrah services: The perspectives of Umrah operators and consumers	International Journal of Religious Tourism and Pilgrimage (Q1)	Malaysia	Umrah providers should build direct communication with the customer because customers prefer to talk with the provider directly rather than read the information online. Physical service is also essential, including reducing waiting time.	Quantitative	Interview and Questionnaire	Star Rating, Interaction Service Quality, Environmental Service Quality, Outcome Service Quality	All measurements for this study are adopted from previous studies, using a 7-point Likert scale; From '1' which represents 'strongly disagree' to 7 which indicates 'strongly agree'.	Umrah operators with better services will be positively evaluated, which will help their business performance. In conclusion, a star rating system would assist Umrah consumers' decision making in choosing services and assist Umrah operators in providing the best Umrah services.
(Abdul Kadir, Ab Rahman and Muhad, 2020)	Level of Satisfaction Towards Umrah Management Service by Juara Travel and Tours Company.	International Journal of Academic Research in Business and Social Sciences (NA)	Malaysia	The pilgrim satisfaction with the Umrah services by an agency	Quantitative	Distributing the questionnaires to 40 Umrah pilgrims that were choosing the Umrah service package by this respective company.	Umrah Tourism Agency Service	Analysis using value of mean is important to perceive the satisfaction level of the clients and the increase of umrah service management.	The received perceptions and feedbacks from the clients through questionnaire able to open the way for the company to upgrade their quality and service.

Author, year	Title	Journal	Country	Finding	Method	Data Source	Theory	Analysis Technique	Recommendation
(Romadhoni <i>et al.</i> , 2020)	Critical Performance Analysis for Measuring Customer Satisfaction for Umrah Services Bureau	International Journal of Economics and Management (Q3)	Indonesia	Measuring customer satisfaction with Umrah provider services	Descriptive Quantitative	Compare the level of consumer interest with performance according to respondents' perceptions.	Customer Satisfaction	Analysis uses the IPA (Important Performance Analysis) method to find out what service attributes	Evaluate and reconsider the service attributes.
(Othman <i>et al.</i> , 2020)	Effects of Service marketing mix on Umrah customer satisfaction: an empirical study on Umrah traveling industry in Malaysia	TEST Engineering and Management (Q4)	Malaysia	Customers are satisfied with the Umrah marketing mix in Malaysia	Quantitative research with convenience method	Data from 384 respondents mainly among Umrah customers who used to have some experience on Umrah travel services	Consumer behavior, customer satisfaction in Umrah services	The necessary data were collected from 384 respondents through a structured questionnaire using a convenience sampling technique	Carried out to study service marketing mix and customer satisfaction in diverse industries
(Abd Rahman and Ahamat, 2019)	Legal Protection of Malaysia umrah pilgrims	International Journal of Engineering and Advanced Technology (IJEAT) (Q4)	Malaysia	Assurance of legal safety is also important for pilgrims so that clear legal protection will increase customer trust and safety	Qualitative	Research and critical analysis were used in analyzing relevant materials, data and information	Legal Protection	NA	Umrah pilgrims right are safeguarded. Umrah pilgrims must play a role to ensure that the misappropriations of travel agencies
(Shukri, Set and Yaakop, 2019)	Muslim Travellers' Perception of Quality of Service by Umrah and Hajj Travel Agencies in Malaysia	<i>Universiti Malaysia Terengganu Journal of Undergraduate Research (NA)</i>	Malaysia	Muslim traveler perception of Umrah agency service quality in Malaysia influence their purchase of the agency	Quantitative	a questionnaire was distributed to 400 respondents either in person or through online approach	Travelers' perception, service quality	Subsequent respondents until enough sample size is obtained. Use sample size determination	The government must create more awareness of the citizens about this issue by creating programmes for the elderly community who are highly susceptible to become victims of the scams.

Author, year	Title	Journal	Country	Finding	Method	Data Source	Theory	Analysis Technique	Recommendation
(Othman, Harun and Rashid, 2019)	The Impact of Umrah service quality on customer satisfaction towards Umrah travel agents in Malaysia	Management Science Letters (Q2)	Malaysia	Customers see the Umrah provider based on their tangible services quality, such as process and good service	Quantitative	The necessary data were collected on self-administered structured questionnaires. Out of 500 responses from the respondents	Perception of Umrah travel agents, service quality, customer satisfaction	Out of 500 responses, 384 samples were finally chosen and considered suitable for descriptive statistics analysis to fulfil the sole purpose of the paper.	The findings of research paper were based on the results which came from the analysis of responses which selected through convenience sampling,
(Othman <i>et al.</i> , 2019)	The influences of service marketing mix on customer loyalty towards Umrah travel agents: Evidence from Malaysia	Management Science Letters (Q2)	Malaysia	Customer will satisfy and loyal if the Umrah agent have good after-sales services and communication	Quantitative	Data from 384 respondents mainly among Umrah customers who used to have some experience on Umrah travel services	Umrah travel industry	Structural equations modelling through partial least squares approach "PLS"	Very important that the Umrah travel industry have knowledge about marketing needs, and they also attract customers to Umrah travel services as well
(Aziz, El-Megeed and Ellatif, 2018)	Pre-travel health-seeking practices of Umrah pilgrims departing from Assiut International Airport, Egypt	Travel Medicine and Infectious Diseases (Q1)	Egypt	The pre-travel health check is important, especially after the pandemic, and Umrah provider can improve their service on health care not only on pre-travel but also during and post travel	Quantitative	300 pilgrims participated all travelers to Saudi Arabia for Umrah departing from Assiut International Airport, from June 2016 to March 2017	Health seeking practices	SPSS v 21.0	The survey was conducted at only one International airport in Egypt. If the survey were expanded to other airports, regional differences might have been noted
(Majid <i>et al.</i> , 2018)	GPU-based optimization of pilgrim simulation for Hajj and Umrah rituals	Pertanika Journal of Science and Technology (Q3)	Malaysia	The use of GPU to help pilgrim to do crowd simulation during tawaf	Simulation	It exploits the underlying data parallel capability of an existing library for steering behaviors, called OpenSteer.	Capabilities of Graphics Processing Units.	Implementation of navigational behaviors for agent-based crowd simulation in rituals of Hajj and Umrah to be a better performance.	The main objectives of this research have been fulfilled by implementing an optimized agent-based system to simulate the crowd efficiently.

Author, year	Title	Journal	Country	Finding	Method	Data Source	Theory	Analysis Technique	Recommendation
(Firdaus <i>et al.</i> , 2017)	Effect of emotional intelligence and spiritual intelligence on service quality, customer satisfaction, and loyalty: Study on <i>Himpub</i> member Umrah organizer company in district and municipality of Bekasi	International Journal of Economic Research (Q4)	Indonesia	Employees of Umrah agents need to equip themselves with emotional and spiritual intelligence to serve and mentor the pilgrims.	Explanatory research approach	Data was collected from umroh pilgrims and analyzed by Structural Equation Modeling (SEM) through software of SmartPLS (Least Square).	Theories of marketing, customer relationship management, customer loyalty, customer satisfaction, service quality, emotional intelligence and spiritual intelligence, customer relationship management (CRM)	Explained in the following six steps. Service quality has a positive and significant effect on customer satisfaction	Therefore umrah organizers companies should strengthen the ranks of members who have high emotional intelligence and spiritual, provide long-term incentives and more certainty to potential external mentors
(Abd Hamid <i>et al.</i> , 2016)	Heuristic Evaluation of Virtual Umrah to Improve User Experience	Advanced Science Letters (Q2)	Malaysia	The use of virtual reality to give customers experience in Umrah simulation	Quantitative	Interview technique has been used to collect data. Survey were expert user from Islamic study background.	Principle of UCD and performed usability evaluation specifically in Virtual Environment (VE),	Included to perform user task analysis, followed by expert guidelines based evaluation	Application is preferred by the expert users but improvement should be done on visual pleasing Criteria.
(Sharef <i>et al.</i> , 2014)	Semantic question answering of Umrah pilgrims to enable self-guided education	2013 13th International Conference on Intelligent Systems Design and Applications	Malaysia	The use of semantic QnA in helping Umrah pilgrims to get information about Umrah	Experiment	Several resources such as books, the Internet and Umrah experts. The SQA is ontology-based, follow the standard ontology development methodology	Scope of the SQA and the question complexity.	Semantic Question Answering (SQA) for Umrah that consists of two modules, Umrah Knowledge Module (UKM) and Umrah Educational Module (UEM)	For future work will explore more variation of question complexity and enrich the ontology content.
(Brdeseec, Corbitt and Pittayachawan, 2013)	Barriers and motivations affecting Information Systems Usage by Hajj-Umrah religious tourism operators in Saudi Arabia	Australasian Journal Of Information Systems (Q2)	Australia	The religious tourism industry is encouraging to use of information systems for pilgrim	Qualitative	The data was collected through semi-structured interviews and audio-taped with the respondent's consent.	Technology adoption in Arab countries	Outlines the motivations and challenges that affect the utilization of various IS services in the Saudi Arabia religious tourism industry	These research findings can be further analyzed to develop recommendations for both government policymakers and industry leaders in the field.

Author, year	Title	Journ al	Country	Finding	Method	Data Source	Theory	Analysis Technique	Recommendat ion
(Mohamed <i>et al.</i> , 2013)	M-Umrah: An Android-Based Application to Help Pilgrims in Performing Umrah	2013 <i>International Conference on Advanced Computer Science Applications and Technologies</i>	Malaysia	Develop M-umrah for the customer to help them keep updated with Umrah information	Experiment	Educate and train pilgrims for Hajj and Umrah performing Hajj with android-based M-Umrah application	Provide a complete guideline and procedure to perform Hajj and Umrah based on Sunni principles	Application provides a step-by-step guide to performing umrah; starting from preparation at home up until the pilgrimage is completed	It will plan to develop M-Hajj which is a mobile application for Hajj manasik, application on other platforms such as iOS, Blackberry OS, and Symbian.
(Mohandes <i>et al.</i> , 2013)	Pilgrim Tracking and Identification Using Wireless Sensor Networks and GPS in a Mobile Phone	<i>Arab J Sci Eng (Q1)</i>	Saudi Arabia	Develop systems that can track pilgrims on Makkah	Experiment	The WSN communicates to a server, the location information of the pilgrims periodically based on pre-set parameters	A development system to track and Monitor pilgrims for emergency assistance services	The developed system was tested	Proposed system will be applied on a large sample of pilgrims, particularly to observe the operation of such system in large crowd and heavy use of the communication network

**Tabel 2** Multidimensional Services Operation on Umrah Journey

Umrah Journey Stage	Multidimensional Services Operational	Sub-services operational	Service areas	Citation			
Pre-Journey	Physical service	Facilities	Car parking facility	(Othman <i>et al.</i> , 2020)			
			Comfortable waiting area	(Yulanda and Herdinata, 2021)			
			Availability of coffee shop	(Yulanda and Herdinata, 2021)			
			Equip with modern technology	(Othman <i>et al.</i> , 2020)			
			Proof physical evidence office	(Abdul Kadir, Ab Rahman and Muhad, 2020)			
			Good infrastructure	(Othman <i>et al.</i> , 2020; Romadhoni <i>et al.</i> , 2020)			
			Professional look employee	(Ridha and Harris, 2020)			
			Develop soft skills	(Jamaludin, Suyurno and Meerangani, 2022)			
			Trained officer	(Othman <i>et al.</i> , 2020; Romadhoni <i>et al.</i> , 2020)			
			Confidence officer	(Othman <i>et al.</i> , 2020; Romadhoni <i>et al.</i> , 2020)			
			Polite and neat	(Othman <i>et al.</i> , 2020; Romadhoni <i>et al.</i> , 2020)			
			Tour design	Customer participation	'Plus' service	Offer private and spiritual experience	(Atikah <i>et al.</i> , 2022)
						Customizable trip	(Atikah <i>et al.</i> , 2022)
						Value co-creation	(Elgammal, Alhothali and Sorrentino, 2022)
Adding additional destination	(Elgammal, Alhothali and Sorrentino, 2022)						
Application		Application processing	Offer exclusive package	(Abdul Kadir, Ab Rahman and Muhad, 2020)			
			Virtual umrah application	(Majid <i>et al.</i> , 2018)			
			Provide semantic QnA	(Sharef <i>et al.</i> , 2014)			

Umrah Journey Stage	Multidimensional Services Operational	Sub-services operational	Service areas	Citation	
In Journey			Provide umrah simulation software/apps	(Majid <i>et al.</i> , 2018)	
			Adopt e-commerce technology		
			Pricing systems	Has relevant price	(Othman <i>et al.</i> , 2020; Elgammal, Alhothali and Sorrentino, 2022)
				Affordable price	
				Offer low budget	(Atikah <i>et al.</i> , 2022)
				Offer flexible payment	(Othman <i>et al.</i> , 2020)
			Waiting time	Reducing waiting time	(Harun <i>et al.</i> , 2020)
			Legal aspect	Ensure the legal status of an agent	(Amar Mahmud <i>et al.</i> , 2021)
				Ensure that the agent has a license	
				Show the agent's legality	
				Visa and passport processing time	(Jamaludin, Suyurno and Meerangani, 2022)
			Product information	Legal protection of pilgrim	(Abd Rahman and Ahamat, 2019)
				Provide clear product information	(Yulanda and Herdinata, 2021)
				Ensure the information clarity	(Romadhoni <i>et al.</i> , 2020)
				Information about schedule	(Ridha and Harris, 2020)
				Informative communication platform	
			Marketing Communication	Link the apps with other tourist destination	(M. Shambour and Gutub, 2021)
				Promoting package	(Abdul Kadir, Ab Rahman and Muhad, 2020)
			Health care	Provide customer service	(Yulanda and Herdinata, 2021)
				Pre-departure health check	(Aziz, El-Megeed and Ellatif., 2018)p
Pilgrim security	Monitoring systems	Realtime monitoring process	(Chikhaoui <i>et al.</i> , 2022)		
		Pilgrim tracking using GPS			
		Crowd simulation during tawaf			
	Guidance	Step-by-step guidance to Umrah with application	(Mohamed <i>et al.</i> , 2013)		
		Provide umrah mobile apps			
		Friendly and serious service			
Physical service	Professional staff	Good mutawwif	(Abdul Kadir, Ab Rahman and Muhad, 2020)s		
		Provide a representative at the airport	(Othman <i>et al.</i> , 2021)		
		Service knowledge			

Umrah Journey Stage	Multidimensional Services Operational	Sub-services operational	Service areas	Citation
		Facilities	Provide accommodation near the mosque Good transportation support	
		Finance	Offer digital currency	(Alharthi, 2021)
	An emotional and spiritual approach		Emotional intelligent staff Spiritual, intelligent mentor Staff with empathy	(Othman, Harun and Rashid, 2019)
	After-sale service		Responsive handling complaint Has SOP for handling complaints Understand customer problems (empathy)	(Romadhoni <i>et al.</i> , 2020)
Post-Journey	Engagement		Develop collaboration with customers and the community Increase relationship equity	(Ridha and Harris, 2020)
			Maintain good relationships and communication	(Othman and Harun, 2021)
	Evaluation systems		Assess customer needs and expectations Periodical assessment	(Othman, Harun and Rashid, 2019)
			Review service features	(Othman and Harun, 2021)