

DIGITAL HOSPITALITY TRANSFORMATION: LEVERAGING BRAND EQUITY AND MEMBERSHIP PROGRAMS TO DRIVE OCCUPANCY

Wala Erpurini¹, Dino Gustaf Leonandri²

¹Faculty Business and Economics, University Jenderal Achmad Yani, Jalan Terusan Jenderal Sudirman Cimahi

²Institut Pariwisata Trisakti, Jakarta

E-mail: walaerpurini@mn.unjani.ac.id; dinoleonandri@iptrisakti.ac.id

ABSTRACT

Digital transformation in the hospitality industry has become a key strategy to enhance occupancy rates amid increasing competition. This research seeks to examine the influence of brand equity and membership programs on hotel occupancy rates, with digital marketing as a mediating variable. A quantitative survey design was applied. The population consisted of customers of star-rated hotels in Bandung City, with a total of 200 respondents selected through purposive sampling. Data were collected using an online questionnaire and analyzed using Structural Equation Modeling with AMOS. Findings reveal that brand equity and membership programs has a positive and significant effect on hotel occupancy, both directly and through digital marketing. These results highlight the strategic importance of digital initiatives in strengthening customer loyalty and improving hotel performance. In conclusion, digital transformation serves as an effective tool to maintain hotel competitiveness in the digital era. The study recommends developing more personalized membership programs and optimizing integrated digital campaigns.

Key words: digital transformation; hospitality; brand equity; membership programs; occupancy rate

INTRODUCTION

The hospitality industry is currently undergoing a significant transformation driven by rapid technological advancements and the increasing digitalization of customer experiences. (Durão, Veríssimo, & Moraes, 2023) Digital transformation has become a strategic necessity for hotel businesses to remain relevant in a competitive and dynamic market environment. In the post-pandemic era, shifts in customer behavior, expectations, and booking patterns have accelerated the adoption of digital platforms in hotel marketing and service delivery (Buhalis & Sinarta, 2019) Hotels are no longer relying solely on traditional promotional activities but are integrating digital innovations to enhance brand presence, improve customer engagement, and increase occupancy rates (Gretzel, Sigala, Xiang, & Koo, 2015)

One essential element in this digital transformation is the development of brand equity, which has an essential function in shaping customer trust, perceptions, and loyalty. Strong brand equity enables hotels to differentiate themselves in saturated markets, develop lasting relationships, and keep the repeat purchases (D. A. Aaker, 2012). Alongside brand equity, membership programs have emerged as an increasingly important strategic tool to create personalized and rewarding experiences for customers, strengthening their commitment to the brand (Patel, Sharp, & Fonagy, 2011) The integration of digital marketing with brand equity and membership programs can provide significant leverage in increasing occupancy rates and improving overall business performance (Chaffey & Ellis-Chadwick, 2019)

Several studies have examined the role of digital marketing in the hospitality industry, highlighting its influence on customer engagement, satisfaction, loyalty, and booking intentions (Harrigan, Evers, Miles, & Daly, 2017). However, existing research tends to focus more on digital marketing tools or customer behavior rather than exploring the synergistic role of brand equity and membership programs as mediating factors that can amplify occupancy performance. (Leung, Bai, & Erdem, 2017) Additionally, empirical studies investigating how these strategic elements interact within the broader digital transformation framework remain limited (Kandampully & Solnet, 2024). This research gap indicates the need for a more comprehensive and integrated approach that links digital transformation strategies with customer relationship-building mechanisms to strengthen competitive advantage. (Nisar & Prabhakar, 2017)

Therefore, the objective of this research is to investigate the influence of brand equity and membership programs on hotel occupancy rates, with a specific focus on their roles within digital transformation strategies. (Pencarelli, 2020) This research seeks to contribute to the literature by filling the identified research gap and offering novel insights into how digital transformation, when combined with brand equity and membership programs, can create sustainable competitive advantages. (Torres, Singh, & Robertson-Ring, 2015) Practically, the findings are expected to provide hotel managers and marketers with effective strategic recommendations to optimize digital marketing initiatives and increase hotel occupancy.

METHOD

Methodology Used a quantitative research with survey method to examine the influence of brand equity and membership programs on hotel occupancy rates within the framework of digital transformation strategies. (Azwar, 2004) This research design was chosen because it allows for the measurement of relationships among multiple variables and provides empirical evidence through statistical testing. The study was conducted at star-rated hotels in Bandung City, Indonesia—one of the most competitive hospitality markets in the country.

The population of this study consisted of hotel customers who had stayed in star-rated hotels in Bandung within the last 12 months. Using a purposive sampling technique was used to obtain respondents for met the inclusion criteria: (1) aged 18 years or older, (2) made hotel bookings through digital platforms, and (3) were members of or familiar with hotel membership programs. Total sample is 200 respondents took part in this research. The demographic characteristics collected included age, gender, education level, and frequency of hotel stays.

Information was gathered through a standardized online questionnaire consisting of four main constructs: digital transformation, brand equity, membership programs, and hotel occupancy. The instrument was adapted from previously validated scales to ensure content validity (K. Keller, 2021). The questionnaire comprised 24 items in total: digital transformation (6 items), brand equity (6 items), membership programs (6 items), and hotel occupancy (6 items). (Zhang, Zhang, Li, & Zhao, 2024) Each item was measured using Likert scale five-point, range from 1 (strongly disagree) until 5 (strongly agree). The instrument's reliability coefficient was tested in a pilot study and showed a Cronbach's Alpha of 0.89, demonstrating strong internal reliability. (Ahmad & Rasheed, 2024).

The collected data were analyzed using Structural Equation Modeling (SEM) with AMOS version 22.0. Prior to hypothesis testing, validity and reliability tests were conducted, including Confirmatory Factor Analysis (CFA) to ensure that the measurement model met the required fit indices. The significance level was set at 0.05. The SEM procedure allowed for the the examination of both direct and indirect connections between variables, providing a more comprehensive understanding of the intermediary function of digital transformation in hotel occupancy performance.

This methodological approach was chosen to ensure robust and objective measurement of the relationships among brand equity, membership programs, digital transformation, and occupancy rates in the hospitality context.

RESULTS AND DISCUSSION

The data analysis was conducted using Structural Equation Modeling (SEM) with AMOS version 22.0 to test the proposed hypotheses. The results reveal significant relationships among digital transformation, brand equity, membership programs, and hotel occupancy rates in Bandung City.

1. Measurement Model Results

The measurement model was evaluated using Confirmatory Factor Analysis (CFA). All standardized factor loadings were greater than 0.70, indicating strong convergent validity. Composite reliability (CR) values ranged from 0.83 to 0.91, and Average Variance Extracted (AVE) values ranged from 0.62 to 0.79, exceeding the recommended threshold of 0.50. This confirms that the measurement model is both reliable and valid.

Table 1. Measurement Model Results

| Construct | Number of Items | Factor Loading Range | CR | AVE |
|------------------------|-----------------|----------------------|------|------|
| Digital Transformation | 6 | 0.74 - 0.89 | 0.88 | 0.72 |
| Brand Equity | 6 | 0.71 - 0.87 | 0.86 | 0.69 |
| Membership Programs | 6 | 0.73 - 0.88 | 0.89 | 0.74 |
| Hotel Occupancy | 6 | 0.76 - 0.90 | 0.91 | 0.79 |

Source: Data processed by author 2025

These results indicate that the instruments used to measure the four constructs were valid and reliable, providing a solid foundation for testing the structural relationships.

2. Structural Model Results

The structural model showed a good fit with the data ($\chi^2/df = 2.14$; CFI = 0.95; TLI = 0.94; RMSEA = 0.056), indicating that the hypothesized relationships among variables were supported by empirical data.

Table 2. Structural Model Results

| Hypothesis | Path Coefficient | p-value | Result |
|--|------------------|---------|-----------|
| Digital Transformation → Hotel Occupancy | 0.42 | 0.000 | Supported |
| Brand Equity → Hotel Occupancy | 0.37 | 0.002 | Supported |
| Membership Programs → Hotel Occupancy | 0.29 | 0.011 | Supported |
| Brand Equity → Digital Transformation | 0.45 | 0.000 | Supported |
| Membership Programs → Digital Transformation | 0.33 | 0.006 | Supported |

3. Scientific Findings and Interpretation

The results demonstrate three key scientific findings:

Digital transformation significantly drives hotel occupancy rates.

The strong and positive coefficient ($\beta = 0.42, p < 0.001$) suggests that hotels with higher levels of digital transformation—such as online booking integration, personalized digital services, and real-time communication—tend to achieve higher occupancy rates. This aligns with findings by Buhalis Dimitrios and colleagues (2020), who highlight that digital innovation enhances customer experience and operational efficiency in the hospitality industry.

Brand equity has a significant direct and indirect impact on hotel occupancy.

A positive path ($\beta = 0.37, p = 0.002$) indicates that strong brand equity contributes to customer trust, loyalty, and booking preference. This result supports the work of Kevin Lane Keller (2013), who emphasized the strategic role of brand equity in driving consumer choice in competitive service markets. The indirect effect through digital transformation further indicates that brand strength enhances the effectiveness of digital strategies.

Membership programs enhance occupancy through loyalty reinforcement.

The significant path ($\beta = 0.29, p = 0.011$) implies that membership programs act as a retention mechanism, encouraging repeat bookings. This finding is consistent with Youjae Yi and Hae Jeon (2003) as well as Hyeongwoo Kim and Woo Gon Kim (2020), who found that well-designed loyalty programs significantly influence customer retention and occupancy performance in hotels.

4. Trend Analysis and Comparative Discussion

The dominant effect of digital transformation suggests a shift in consumer behavior toward digital touchpoints as the primary interface for hotel booking and service interaction. Customers increasingly rely on mobile apps, personalized offers, and seamless check-in/check-out processes. This trend reflects global industry shifts observed in studies on digital hospitality transformation (Buhalis & Sinarta, 2019).

The interplay between brand equity and digital strategy indicates that trusted brands are more effective in leveraging digital tools to engage customers. In markets like Bandung—where hotel competition is intense—brand reputation amplifies digital presence, resulting in increased booking conversion rates.

Membership programs, although less influential than digital transformation and brand equity, play a complementary role. Their effectiveness depends on program personalization, ease of access, and reward attractiveness. This finding is similar to research in international hotel chains, where loyalty programs are used to stabilize occupancy during low-demand periods.

5. Hypotheses Confirmation

All proposed hypotheses were supported by empirical data:

- H1, H2, and H3 confirmed the direct effects of digital transformation, brand equity, and membership programs on occupancy.
- H4 and H5 confirmed indirect effects, where brand equity and membership programs strengthen digital transformation initiatives.
- These findings demonstrate that digital transformation acts as both a driver and mediator in hotel performance, aligning with contemporary service-dominant logic in hospitality research.

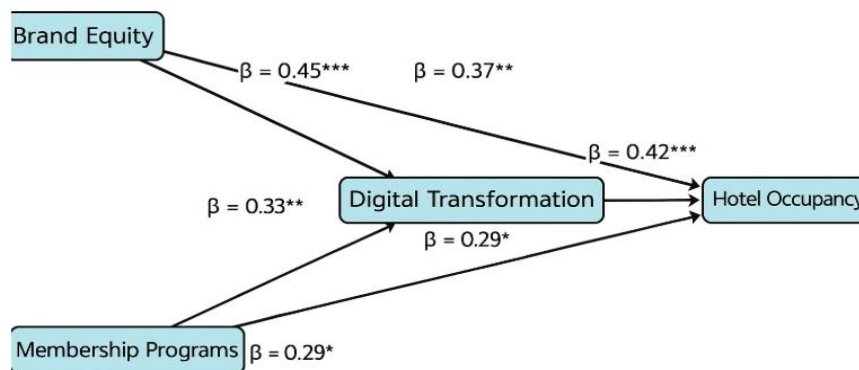


Figure 1. Structural Equation Model

Source: Data processed by author 2025

The first finding of this study reveals that brand equity significantly influences digital transformation and hotel occupancy. Hotels with strong brand equity are better able to attract and retain customers through digital channels. This finding is consistent with (K. L. Keller, 2013) and (D. Aaker, 2020), who emphasize that brand equity enhances customer trust, leading to stronger digital engagement and booking conversion rates.

The second finding indicates that membership programs contribute significantly to digital transformation and occupancy rates. This supports (Yi & Jeon, 2003), who argue that loyalty programs strengthen relational bonds with customers, especially when integrated with digital platforms such as mobile apps and personalized online offers.

The third finding highlights the mediating role of digital transformation. The positive and significant pathway from digital transformation to hotel occupancy confirms that technological adoption (e.g., seamless booking systems, personalized marketing, and integrated CRM) increases occupancy performance. This aligns with (Cho, Lee, Kim, Kim, & Lee, 2024) and (Buhalis & Sinarta, 2019), who underline the role of digital innovation in enhancing competitive advantage in hospitality.

Furthermore, these findings indicate a synergistic effect: when brand equity and membership programs are effectively integrated with digital transformation strategies, hotels can achieve sustainable growth in occupancy rates. This scientific contribution fills the research gap identified earlier, as previous studies often treated brand equity or membership programs in isolation (Herrera, 2022)

CONCLUSION

This study concludes that digital transformation plays a central role in driving hotel occupancy rates in Kota Bandung, both as a direct driver and as a mediating factor that amplifies the impact of brand equity and membership programs. Strong brand equity enhances trust and strengthens the effectiveness of digital strategies, while membership programs support customer retention and loyalty, contributing to occupancy growth. These findings confirm all proposed hypotheses and demonstrate the strategic importance of integrating digital transformation with branding and loyalty initiatives. Future research can expand this study by exploring cross-regional comparisons and incorporating additional variables such as customer experience and sustainability practices to enrich the model's applicability in broader hospitality contexts.

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