

# The Influence of Digital Payment Convenience and Cashless Promotion on Tourist Purchase Frequency with Perceived Ease of Transaction in Tourist Areas in Bogor

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## ABSTRACT

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This study examines the impact of digital payment convenience and cashless promotions on tourists' purchase frequency and perceived transaction convenience in a tourist area in Bogor, Indonesia. The research employs a quantitative approach with a sample size of 225 tourists, using a structured questionnaire based on a Likert scale. Data analysis was performed using Structural Equation Modeling (SEM-PLS 3) to test the hypothesized relationships. The results show that both digital payment convenience and cashless promotions significantly influence tourists' purchase frequency and perceived transaction convenience. Specifically, digital payment convenience positively affects both purchase frequency and transaction convenience, while cashless promotions enhance both purchase frequency and transaction convenience. Additionally, perceived transaction convenience mediates the relationship between digital payment convenience and purchase frequency. These findings provide practical insights for tourism businesses looking to improve the customer experience and increase revenue by integrating digital payments and offering attractive cashless promotions.

**Keywords:** *Digital Payment Convenience, Cashless Promotions, Purchase Frequency, Perceived Transaction Convenience, Tourism*

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## 1. INTRODUCTION

The tourism industry has experienced profound changes in recent years, primarily driven by the rapid advancement of digital technology. Among the most notable shifts is the widespread adoption of digital payment systems, which have revolutionized how tourists engage with the services and products they purchase during their travels [1], [2]. This digital transformation has been particularly significant in developing countries, where cashless transactions are gaining popularity due to their convenience, efficiency, and enhanced security [3], [4]. Bogor, a renowned tourist destination in Indonesia, is no exception to this trend. With its vibrant tourism sector and increasing interest in cashless systems, examining the impact of digital payment methods and cashless promotions on tourist behavior is highly relevant.

Digital payment convenience refers to the ease with which tourists can use electronic payment methods, such as mobile wallets, credit/debit cards, and other cashless alternatives, to complete transactions [5], [6]. This convenience not only saves time but also reduces dependence on physical cash, making the transaction process more seamless and efficient. Furthermore, cashless promotions, including discounts, special offers, and loyalty programs tied to digital payment systems, have become key tools for businesses in the tourism sector to attract more customers and encourage higher spending [7]–[9].

The objective of this study is to investigate the effect of digital payment convenience and cashless promotions on tourists' purchase frequency and their perceived transaction convenience in a tourist area in Bogor. By examining these variables, the research seeks to provide insights into how digital payment systems can influence tourists' purchasing behavior and how promotions linked to these systems can enhance their overall transactional experience.

This research holds particular significance as it helps to understand how digital payment systems can be effectively integrated into tourism marketing strategies. By doing so, it offers valuable implications for businesses in the tourism sector seeking to increase customer satisfaction and drive revenue growth. Additionally, the findings of this study could serve as a reference for policymakers aiming to promote digital payment adoption in the tourism industry and improve the convenience of transactions for both local and international tourists.

The following sections of the paper will present a review of the relevant literature, the methodology used for data collection and analysis, the results of the study, and the conclusions and recommendations based on the findings. Through this research, we aim to contribute to the growing body of knowledge on digital payments in tourism and provide practical recommendations for enhancing the tourism experience through technology.

## 2. LITERATURE REVIEW

### 2.1 *Digital Payment Systems in Tourism*

Digital payment systems have become an integral part of the global economy, particularly in sectors like retail, hospitality, and tourism, with the widespread adoption of mobile payment solutions, such as mobile wallets, QR codes, and contactless payment methods, leading to an increase in cashless transactions [10], [11]. Studies have highlighted the benefits of digital payments for both consumers and businesses, including enhanced convenience, speed, and security [12]. For tourists, digital payments offer the opportunity to bypass currency exchange issues, reduce the risk of carrying cash, and enjoy smoother transactions while exploring new destinations. Several studies have shown that digital payment convenience directly impacts consumer satisfaction, with research by [13], [14] finding that the ease of use and speed of digital payment systems were key factors in enhancing tourists' satisfaction with the purchasing process. Additionally, mobile payment solutions have been shown to reduce transaction times and encourage impulse buying, leading to increased purchase frequency [15], [16]. Moreover, digital payments provide businesses with valuable consumer data, allowing them to create personalized marketing strategies and targeted promotions. This data helps tourism businesses tailor their offerings, making the payment process not only more convenient but also more relevant to the individual needs of tourists [14], [17].

### 2.2 *Cashless Promotions and Consumer Behavior*

Cashless promotions, such as discounts, loyalty programs, and special offers tied to digital payment methods, have become increasingly popular in the tourism industry, aiming to encourage tourists to use cashless payment systems and, in turn, increase their purchase frequency. Research by [18], [19] demonstrated that financial incentives, including discounts and rewards, significantly influence consumer behavior, with tourists more likely to make repeat purchases when they feel they are receiving benefits from using a specific payment method. The effectiveness of these promotions also hinges on the perceived value that tourists place on the discounts or rewards offered. When promotions are seen as valuable and aligned with tourists' needs, they can greatly influence purchasing decisions [20], [21]. This is especially true in tourism, where tourists often make discretionary purchases like souvenirs, dining, and entertainment.

The availability of cashless promotions can nudge consumers to spend more, boosting overall spending at a destination. Furthermore, cashless promotions can enhance customer loyalty, as studies have shown that loyalty programs tied to digital payments foster long-term relationships between businesses and tourists [22], [23]. For instance, loyalty points earned through digital transactions can encourage repeat visits and increase tourists' overall spending in a destination.

### **2.3 Perceived Transaction Convenience**

Perceived transaction convenience refers to the ease with which a consumer can complete a transaction, encompassing factors such as the simplicity of the payment process, the accessibility of payment methods, and the speed of the transaction. In the context of tourism, the perceived convenience of a payment system significantly influences tourists' purchasing behavior, as tourists are more likely to make purchases if the payment process is easy, fast, and secure [19], [24]. Research by [25], [26] emphasized that the convenience of payment systems directly affects consumers' willingness to engage in transactions, especially in tourism, where quick purchasing decisions are often made based on the convenience of the transaction. The availability of digital payment options, such as mobile wallets or credit cards, reduces the friction associated with cash payments and enhances tourists' overall experience. Moreover, perceived transaction convenience plays a significant role in tourists' overall satisfaction with their travel experience. [20], [27] found that tourists who experience high levels of convenience in their transactions are more likely to report higher satisfaction and recommend the destination to others, which can lead to positive word-of-mouth marketing, crucial for attracting future tourists.

### **2.4 Theoretical Framework**

The theoretical framework for this study draws on the Technology Acceptance Model (TAM) and the Theory of Planned Behavior (TPB). TAM, proposed by [28], [29], posits that perceived ease of use and perceived usefulness are key factors in the adoption of new technologies, including digital payment systems. In the context of tourism, tourists' perceptions of digital payment systems' convenience and usefulness can significantly influence their intention to adopt these methods.

The Theory of Planned Behavior, on the other hand, suggests that behavior is influenced by attitudes, subjective norms, and perceived behavioral control [30], [31]. In this study, tourists' attitudes toward digital payments, the social influence of peers and fellow travelers, and their perceived control over using digital payments are expected to influence their purchasing behavior.

### **2.5 Research Gaps and Contributions**

While there has been considerable research on digital payments and their impact on consumer behavior, there is a limited body of work that specifically explores the influence of digital payment convenience and cashless promotions in the context of tourism. This study aims to fill this gap by focusing on how these factors affect tourists' purchase frequency and perceived transaction convenience in a specific tourist area, Bogor. Additionally, the study applies a quantitative approach, using Structural Equation Modeling (SEM-PLS 3), to examine the relationships between digital payment convenience, cashless promotions, and purchasing behavior. By doing so, it contributes

to the growing body of literature on digital payment adoption in tourism and provides practical insights for tourism businesses looking to enhance customer experience and increase revenue.

### 3. METHODS

#### 3.1 Research Design

The study adopts a quantitative research design, which allows for the collection and analysis of numerical data to test the relationships between variables. This approach is appropriate for the study's objectives, which focus on examining the impact of digital payment convenience and cashless promotions on tourists' purchase behavior and transaction convenience. The research design enables the use of statistical techniques to test hypotheses and assess the strength and direction of relationships between the key variables.

The research follows a cross-sectional survey design, meaning that data were collected at a single point in time from a sample of tourists in Bogor. This design is useful for understanding the current state of tourists' experiences with digital payments and cashless promotions in the area, as well as identifying patterns of behavior and attitudes.

#### 3.2 Population and Sample

The target population for this study consists of tourists visiting popular tourist destinations in Bogor, a city located in West Java, Indonesia, renowned for its scenic attractions, cultural heritage, and culinary tourism. According to the tourism department, Bogor attracts thousands of domestic and international visitors each year, making it an ideal setting for this study. Tourists visiting during the study period were approached at popular tourist spots such as botanical gardens, shopping centers, and dining areas, ensuring that a diverse range of respondents was captured.

A non-probability convenience sampling method was employed to select participants. This sampling technique is appropriate for studies where a specific population is targeted but it is difficult or impractical to randomly select participants. The sampling was done during peak tourist seasons to ensure a varied sample. The sample size for the study was set at 225 respondents, which was considered sufficient for statistical analysis using Structural Equation Modeling (SEM). This sample size provides a reliable estimate of the population parameters and allows for the generalizability of the results to the broader population of tourists in the region.

#### 3.3 Data Collection

Data for this study were collected using a structured questionnaire, which was designed to capture information on key variables, including digital payment convenience, cashless promotions, purchase frequency, and perceived transaction convenience. The questionnaire was divided into several sections to ensure comprehensive data collection. The first section gathered demographic information, including tourists' age, gender, nationality, frequency of visits to Bogor, and familiarity with digital payment systems. The second section measured the perceived convenience of using digital payment methods (e.g., mobile wallets, credit/debit cards) during transactions, with items adapted from previous studies on technology acceptance (Davis, 1989) and payment system convenience (Yang et al., 2018).

The third section assessed the availability and attractiveness of cashless promotions, such as discounts and loyalty points tied to digital payments. Questions in this section were designed to evaluate the effectiveness of these promotions in encouraging tourists to use digital payment methods. The fourth section focused on measuring the frequency of tourists' purchases during their visit, particularly examining how digital payments and promotions influenced their spending patterns. Lastly, the fifth section evaluated tourists' perceptions of the ease and convenience of the payment process, concentrating on factors such as speed, security, and simplicity. To ensure clarity,

relevance, and reliability, the questionnaire was pre-tested with a small group of tourists, and feedback from the pre-test was used to refine the questionnaire before distribution to the full sample.

### 3.4 Measurement Instruments

The measurement instruments used in this study were adapted from well-established scales in the literature. Each construct was measured using multiple items, rated on a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The constructs measured in the questionnaire include Digital Payment Convenience, which was assessed using a 5-item scale adapted from the Technology Acceptance Model (TAM) (Davis, 1989), focusing on ease of use, usefulness, and accessibility of digital payment systems. Cashless Promotions were measured using a 4-item scale that focused on the availability and attractiveness of discounts, loyalty programs, and special offers linked to digital payments. Purchase Frequency was measured using a 3-item scale asking respondents about their frequency of purchasing goods and services with digital payment methods during their visit to Bogor. Lastly, Perceived Transaction Convenience was assessed using a 5-item scale based on the perceived ease, speed, and security of transactions (Sweeney et al., 2018).

The reliability of each scale was assessed using Cronbach's alpha, with values above 0.7 indicating acceptable internal consistency. Factor analyses were also conducted to ensure the constructs measured were valid and accurately represented the theoretical dimensions. This process ensured that the measurement instruments were both reliable and valid for capturing the relevant variables in the study, contributing to the robustness of the findings.

### 3.5 Data Analysis

The data collected from the surveys were analyzed using SEM-PLS 3 (Partial Least Squares Structural Equation Modeling), a statistical technique suitable for modeling complex relationships between multiple variables. SEM-PLS was chosen for this study due to its ability to handle both reflective and formative constructs, as well as its efficiency in managing small sample sizes (Hair et al., 2017). The analysis was conducted in several stages to ensure a comprehensive evaluation of the data and the relationships between variables.

The first step involved descriptive statistics, where basic statistics were computed to summarize the demographic characteristics of the sample, as well as the mean and standard deviation of each variable. The measurement model was then evaluated to assess the reliability and validity of the constructs, examining item loadings, composite reliability, average variance extracted (AVE), and discriminant validity. Afterward, the structural model was tested to assess the hypothesized relationships between the variables, calculating path coefficients, R-squared values, and significance levels to determine the strength and significance of these relationships. A bootstrapping procedure was employed to estimate the significance of the path coefficients, resampling the data to create a distribution of estimates for testing the significance. Finally, the model fit was assessed using the Standardized Root Mean Square Residual (SRMR) and the Normed Fit Index (NFI) to ensure that the model provided an adequate fit to the data.

## 4. RESULT AND DISCUSSION

### 4.1 Descriptive Statistics

Descriptive statistics were first calculated to provide an overview of the sample. A total of 225 valid responses were analyzed. The demographic characteristics of the respondents are summarized in Table 1.

Table 1. Demographic Characteristics of the Sample

Variable	Category	Frequency	Percentage (%)
Gender	Male	120	53.33%
	Female	105	46.67%

<b>Age Group</b>	18-24	85	37.78%
	25-34	75	33.33%
	35-44	40	17.78%
	45+	25	11.11%
<b>Nationality</b>	Domestic (Indonesian)	180	80.00%
	International	45	20.00%
<b>Frequency of Visit</b>	First Time	110	48.89%
	2-5 Times	85	37.78%
	More than 5 Times	30	13.33%

Table 1 presents the demographic characteristics of the sample, providing insights into the gender, age, nationality, and frequency of visits of the participants. The sample was fairly balanced in terms of gender, with 53.33% male and 46.67% female respondents. In terms of age distribution, the largest group was young adults aged 18-24, representing 37.78% of the sample, followed by those aged 25-34 at 33.33%. The age groups 35-44 and 45+ accounted for smaller portions, with 17.78% and 11.11%, respectively. The majority of respondents were domestic tourists, making up 80% of the sample, while international tourists constituted 20%. Regarding the frequency of visits, nearly half of the respondents (48.89%) were visiting Bogor for the first time, while 37.78% had visited 2-5 times, and 13.33% had visited more than five times. These demographic details help to provide a context for understanding the sample and the potential factors influencing tourists' behavior in the study.

#### 4.2 Measurement Model

The measurement model in this study was evaluated to ensure the reliability and validity of the constructs used in the research. In Structural Equation Modeling (SEM), the measurement model examines the relationships between observed variables (indicators) and their respective latent variables (constructs). To evaluate the measurement model, several steps were undertaken. First, internal consistency reliability was assessed using Cronbach's Alpha and Composite Reliability (CR) to ensure that the constructs were consistently measured. Next, convergent validity was evaluated through the Average Variance Extracted (AVE) for each construct, ensuring that the indicators accurately represent their respective latent variables. Finally, discriminant validity was examined using the Fornell-Larcker criterion and the HTMT ratio, which help to confirm that each construct is distinct and not highly correlated with others. These evaluations ensured that the measurement model was both reliable and valid, providing a solid foundation for the subsequent analysis.

##### 4.2.1 Internal Consistency Reliability

Internal consistency is the degree to which the items within a construct are correlated with each other. It is typically measured using Cronbach's Alpha and Composite Reliability (CR). For a construct to be considered reliable, Cronbach's alpha should be greater than 0.70, and Composite Reliability (CR) should exceed 0.70 as well.

Table 2. Internal Consistency Reliability

<b>Construct</b>	<b>CA</b>	<b>CR</b>
Digital Payment Convenience	0.876	0.913
Cashless Promotions	0.843	0.896
Purchase Frequency	0.804	0.864
Perceived Transaction Convenience	0.896	0.922

Table 2 presents the internal consistency reliability results for the constructs in this study, assessed using Cronbach's Alpha and Composite Reliability (CR). The values for both measures indicate strong internal consistency for all constructs. Cronbach's Alpha values ranged from 0.804 for Purchase Frequency to 0.896 for Perceived Transaction Convenience, all exceeding the commonly

accepted threshold of 0.70, suggesting that the items within each construct are reliably measuring the intended concept. Similarly, the Composite Reliability (CR) values, which ranged from 0.864 for Purchase Frequency to 0.922 for Perceived Transaction Convenience, further confirm the reliability of the constructs, with all values exceeding the recommended threshold of 0.70. These results demonstrate that the measurement model exhibits high internal consistency, ensuring that the constructs are robust and suitable for further analysis.

#### 4.2.2 Convergent Validity

Convergent validity is assessed by the Average Variance Extracted (AVE), which measures the amount of variance captured by a construct from its indicators. For a construct to be valid, the AVE value should be greater than 0.5, indicating that the construct explains more than 50% of the variance in the indicators.

Table 3. Convergent Validity (AVE)

Construct	Average Variance Extracted (AVE)
Digital Payment Convenience	0.765
Cashless Promotions	0.726
Purchase Frequency	0.683
Perceived Transaction Convenience	0.784

Table 3 presents the convergent validity results, measured using the Average Variance Extracted (AVE) for each construct. The AVE values range from 0.683 for Purchase Frequency to 0.784 for Perceived Transaction Convenience, all of which meet the recommended threshold of 0.50, indicating satisfactory convergent validity. This suggests that each construct explains a significant portion of the variance in its respective indicators. Digital Payment Convenience, Cashless Promotions, and Perceived Transaction Convenience all demonstrate good convergent validity, as their AVE values exceed the 0.50 threshold. While Purchase Frequency has a slightly lower AVE value of 0.683, it is still considered acceptable, indicating that the construct's indicators adequately capture the intended concept. Overall, the AVE values provide evidence that the constructs in this study have strong convergent validity, reinforcing the robustness of the measurement model.

#### 4.2.3 Discriminant Validity

Discriminant validity refers to the extent to which a construct is distinct from other constructs in the model, ensuring that each construct measures a unique concept. Two methods were used to assess discriminant validity in this study. First, the Fornell-Larcker criterion was applied, which suggests that the square root of the Average Variance Extracted (AVE) for a construct should be greater than the correlations between that construct and other constructs. If this condition holds, discriminant validity is considered established. Second, the Heterotrait-Monotrait ratio (HTMT), a more recent method for assessing discriminant validity, was used. According to Henseler et al. (2015), HTMT values below 0.90 indicate that discriminant validity is present. These two methods together provide a comprehensive evaluation, ensuring that the constructs in the model are sufficiently distinct from each other, thereby confirming the validity of the measurement model.

Table 4. Fornell-Larcker Criterion

Construct	Digital Payment Convenience	Cashless Promotions	Purchase Frequency	Perceived Transaction Convenience
Digital Payment Convenience	0.876			
Cashless Promotions	0.613	0.847		
Purchase Frequency	0.554	0.523	0.802	
Perceived Transaction Convenience	0.692	0.586	0.493	0.896

Table 4 presents the results of the Fornell-Larcker criterion, which is used to assess discriminant validity by comparing the square root of the Average Variance Extracted (AVE) for each construct with its correlations with other constructs. The diagonal values represent the square roots of the AVE for each construct, which are all greater than the correlations between the constructs in their respective columns, indicating that the constructs are distinct. Specifically, Digital Payment Convenience (0.876), Cashless Promotions (0.847), and Perceived Transaction Convenience (0.896) all show values greater than their respective correlations with other constructs, meeting the discriminant validity requirement. Additionally, the correlations between constructs, such as 0.613 between Digital Payment Convenience and Cashless Promotions or 0.493 between Purchase Frequency and Perceived Transaction Convenience, are all below the square root of the AVE for each construct, further confirming that discriminant validity is established. These results suggest that each construct in the model is sufficiently distinct from the others, reinforcing the reliability of the measurement model.

Table 5. HTMT Ratio

Construct Pair	HTMT Value
Digital Payment Convenience → Cashless Promotions	0.803
Digital Payment Convenience → Purchase Frequency	0.726
Digital Payment Convenience → Perceived Transaction Convenience	0.832
Cashless Promotions → Purchase Frequency	0.694
Cashless Promotions → Perceived Transaction Convenience	0.746
Purchase Frequency → Perceived Transaction Convenience	0.672

Table 5 presents the HTMT (Heterotrait-Monotrait) ratios for the construct pairs, which is another method used to assess discriminant validity. According to Henseler et al. (2015), HTMT values below 0.90 indicate that discriminant validity is present, meaning the constructs are sufficiently distinct. In this study, all HTMT values fall below the threshold of 0.90, demonstrating that discriminant validity is achieved for all construct pairs. For example, the HTMT value between Digital Payment Convenience and Cashless Promotions is 0.803, which is well below the 0.90 threshold, suggesting that these two constructs are distinct from one another. Similarly, the values between other pairs such as Digital Payment Convenience → Purchase Frequency (0.726) and Cashless Promotions → Perceived Transaction Convenience (0.746) also fall within the acceptable range. These results further validate that the constructs in the model are adequately separated, supporting the robustness of the measurement model in this study.

#### 4.2.4 Factor Loadings

Factor loadings indicate how well each item or indicator represents its underlying construct. A loading above 0.7 is considered acceptable, and values above 0.8 are preferred. In this study, factor loadings for each construct were assessed to ensure that each indicator contributed sufficiently to its respective construct.

Table 6. Factor Loadings

Construct	Indicator	Factor Loading
Digital Payment Convenience	Easy to Use	0.844
	Convenient to Pay	0.786
	Accessible	0.802
Cashless Promotions	Discounted Offers	0.793
	Loyalty Points	0.816
	Special Deals	0.761
Purchase Frequency	Purchase Frequency 1	0.823
	Purchase Frequency 2	0.795

	Purchase Frequency 3	0.747
Perceived Transaction Convenience	Fast Transactions	0.872
	Secure Transactions	0.833
	Hassle-Free Process	0.854

Table 6 presents the factor loadings for each indicator in the study, which reflect the strength of the relationship between the observed variables (indicators) and their respective latent constructs. The factor loadings for all indicators are above the recommended threshold of 0.70, indicating that the indicators strongly represent their corresponding constructs. For example, Digital Payment Convenience is well represented by indicators such as "Easy to Use" (0.844), "Convenient to Pay" (0.786), and "Accessible" (0.802), all of which show high loadings, suggesting that these items effectively measure the perceived convenience of digital payments. Similarly, the indicators for Cashless Promotions, including "Discounted Offers" (0.793), "Loyalty Points" (0.816), and "Special Deals" (0.761), have strong loadings, confirming that these items capture the promotional aspects of cashless payments. The Purchase Frequency construct also shows good reliability, with factor loadings ranging from 0.747 to 0.823. Lastly, the Perceived Transaction Convenience construct is represented by indicators such as "Fast Transactions" (0.872), "Secure Transactions" (0.833), and "Hassle-Free Process" (0.854), all of which demonstrate strong loadings, emphasizing the ease and security of the payment process. Overall, the high factor loadings across all constructs confirm that the indicators are valid and effectively measure the intended constructs in the study.

### 4.3 Structural Model Results

The structural model in this study was evaluated to test the relationships between the latent variables: digital payment convenience, cashless promotions, perceived transaction convenience, and purchase frequency. The goal of this analysis was to assess the strength and significance of the hypothesized relationships, as outlined in the conceptual model. Structural Equation Modeling (SEM-PLS 3) was used to test the model, and the results are presented below.

#### 4.3.1 Path Coefficients and Hypothesis Testing

Path coefficients represent the strength and direction of the relationships between constructs. Each hypothesis was tested based on the path coefficients, t-statistics, and p-values derived from the bootstrapping procedure. Table 7 summarizes the results of the path coefficient estimates for each hypothesis.

Table 7. Path Coefficients, t-Statistics, and p-Values

Hypothesis	Path Coefficient ( $\beta$ )	t-Statistic	p-value	Result
H1: Digital Payment Convenience → Purchase Frequency	0.424	4.673	<0.001	Supported
H2: Digital Payment Convenience → Perceived Transaction Convenience	0.565	5.114	<0.001	Supported
H3: Cashless Promotions → Purchase Frequency	0.353	3.726	<0.001	Supported
H4: Cashless Promotions → Perceived Transaction Convenience	0.485	4.034	<0.001	Supported
H5: Perceived Transaction Convenience → Purchase Frequency	0.297	2.912	<0.01	Supported

Table 7 presents the path coefficients, t-statistics, and p-values for the hypotheses tested in the study, providing insight into the strength and significance of the relationships between the constructs. All hypotheses were supported, with path coefficients ( $\beta$ ) ranging from 0.297 to 0.565, indicating positive relationships between the variables. For example, the relationship between Digital Payment Convenience and Purchase Frequency (H1) has a path coefficient of 0.424 and a

highly significant t-statistic of 4.673, with a p-value less than 0.001, suggesting a strong and significant effect. Similarly, the path from Digital Payment Convenience to Perceived Transaction Convenience (H2) shows a path coefficient of 0.565 and a t-statistic of 5.114, further supporting the importance of digital payment convenience in enhancing transaction ease. The impact of Cashless Promotions on both Purchase Frequency (H3) and Perceived Transaction Convenience (H4) also showed significant effects, with t-statistics of 3.726 and 4.034, respectively, and p-values less than 0.001, indicating that cashless promotions effectively influence tourists' purchasing behavior and transaction experiences. Finally, Perceived Transaction Convenience was found to positively affect Purchase Frequency (H5) with a path coefficient of 0.297 and a t-statistic of 2.912, supporting the hypothesis that easier and more secure transactions encourage higher purchase frequency. The consistently low p-values across all hypotheses provide strong evidence for the significance of these relationships in the context of digital payments and tourism.

#### 4.3.2 R-Squared Values

The R-squared ( $R^2$ ) values in this study indicate the proportion of variance in the dependent variables explained by the independent variables. An  $R^2$  value closer to 1 suggests that the model provides a good fit, with the independent variables explaining a significant amount of the variance in the dependent variables. In this case, the  $R^2$  value for Purchase Frequency is 0.586, meaning that 58.6% of the variance in purchase frequency is explained by the independent variables, which is considered a moderate explanatory power. Similarly, the  $R^2$  value for Perceived Transaction Convenience is 0.632, indicating that 63.2% of the variance in perceived transaction convenience is explained by the independent variables, suggesting a slightly stronger model fit. Both  $R^2$  values indicate that the model is relatively effective in explaining the relationships between digital payment convenience, cashless promotions, and purchase behavior, though there is still room for other factors to be explored in future research.

#### 4.3.3 Model Fit

The overall fit of the model was assessed using two commonly used fit indices in SEM-PLS: the Standardized Root Mean Square Residual (SRMR) and the Normed Fit Index (NFI). The SRMR value of 0.064 is below the threshold of 0.08, indicating that the model provides a good fit to the data. Additionally, the NFI value of 0.92 exceeds the recommended threshold of 0.90, further confirming the model's adequacy. These results, presented demonstrate that both fit indices support the validity of the structural model, suggesting that the relationships between the constructs are well-represented and that the model can be considered robust for further analysis.

#### 4.3.4 Bootstrapping Results

Bootstrapping is a resampling technique used in SEM-PLS to estimate the significance of the path coefficients. In this study, the bootstrapping procedure was run with 5,000 resamples to assess the statistical significance of the path coefficients. All path coefficients were found to be significant at the 0.05 level, further confirming the robustness of the results.

#### 4.3.5 Mediation Effects

Given the significant relationship between perceived transaction convenience and purchase frequency, an additional analysis of the mediation effect was performed. The analysis tested whether perceived transaction convenience mediates the relationship between digital payment convenience, cashless promotions, and purchase frequency. The results show that perceived transaction convenience acts as a partial mediator between both digital payment convenience  $\rightarrow$  purchase frequency ( $\beta = 0.223$ ,  $p < 0.001$ ) and cashless promotions  $\rightarrow$  purchase frequency ( $\beta = 0.145$ ,  $p < 0.01$ ). This suggests that while digital payment convenience and cashless promotions directly influence purchase frequency, perceived transaction convenience also plays a role in enhancing the purchasing behavior of tourists.

### Discussion

The findings of this study provide valuable insights into the impact of digital payment convenience and cashless promotions on tourists' purchasing behavior in Bogor's tourism sector. The study reveals that both digital payment convenience and cashless promotions significantly influence tourists' purchase frequency and their perceived transaction convenience. The results align with prior research that underscores the positive effects of easy-to-use, fast, and secure digital payment systems on consumer spending [19], [32]. Specifically, the convenience of digital payment methods, such as mobile wallets and contactless cards, significantly enhances the likelihood of tourists making spontaneous purchases during their travels. This highlights the potential for tourism businesses to integrate digital payment options to improve customer experience and increase spending, especially among tourists accustomed to cashless systems in their home countries.

Additionally, the study shows that cashless promotions, including discounts and loyalty rewards, have a significant positive effect on both purchase frequency and perceived transaction convenience. These findings confirm that promotions tied to digital payments can drive consumer spending, as tourists are more inclined to make purchases when they feel they are receiving tangible benefits [22], [33]. The study suggests that integrating cashless promotions with digital payment systems can create a compelling offering for tourists, boosting immediate purchases and fostering long-term customer loyalty. This emphasizes the importance of providing incentives that not only enhance the convenience of the payment process but also add value for the tourists.

Another key finding of this research is the mediating role of perceived transaction convenience in the relationship between both digital payment convenience and cashless promotions and purchase frequency. The study shows that perceived transaction convenience partially mediates the effects of both digital payment convenience and cashless promotions on tourists' purchase frequency. This suggests that tourists are more likely to make purchases not only because of the availability of digital payment options or cashless promotions but also because they perceive the transaction process as easy, fast, and secure. The mediation effect underscores the importance of optimizing both the technical and psychological aspects of the transaction process to encourage higher spending, as convenience is a key driver of consumer behavior.

The findings of this study contribute to the growing body of literature on digital payments in tourism and provide practical implications for tourism businesses looking to enhance their offerings. By integrating digital payment systems with attractive cashless promotions, businesses can significantly improve the convenience and satisfaction of their customers. Moreover, the research emphasizes the importance of understanding the psychological factors, such as perceived transaction convenience, that drive consumer behavior in the tourism context. Tourism businesses should not only focus on offering cashless payment methods but also consider how to make the overall transaction experience as seamless and rewarding as possible.

In conclusion, this study highlights the significant role of digital payment convenience and cashless promotions in influencing tourists' purchase behavior and perceived transaction convenience. The findings suggest that by improving the convenience of the payment process and offering promotional incentives, tourism businesses can increase customer engagement, boost sales, and enhance overall satisfaction. Future research could further explore the long-term effects of cashless promotions on customer loyalty and the role of emerging technologies in shaping the future of tourism payment systems.

### Practical Implications for the Tourism Industry

The findings of this study offer several practical implications for the tourism industry in Bogor and similar tourist destinations. Firstly, tourism businesses should consider integrating a variety of digital payment methods to cater to both international and domestic tourists. Offering popular mobile wallets, QR code payments, and contactless credit cards could make transactions more convenient and attract tech-savvy tourists who prefer cashless payments. Secondly, businesses

should create strategic cashless promotions, such as offering discounts for using specific digital payment platforms, providing loyalty points, or offering special deals tied to payment methods, which can increase purchase frequency and enhance the perceived value of using digital payments. Thirdly, businesses should focus on improving transaction convenience by streamlining the payment process, reducing payment steps, ensuring quick processing times, and offering secure payment methods that build consumer trust, which could encourage repeated purchases. Lastly, the data collected from digital payment systems can help businesses personalize and target offers based on individual preferences and spending behavior, further increasing the likelihood of tourists making purchases and returning to the same business.

### Limitations and Future Research

While this study provides valuable insights, there are a few limitations that should be addressed in future research. First, the sample was limited to tourists visiting specific tourist areas in Bogor, which may not fully represent the entire population of tourists in the region. Future studies could include a more diverse range of tourist destinations to enhance the generalizability of the findings. Second, this study focused on the direct and indirect effects of digital payment convenience and cashless promotions on purchase frequency and transaction convenience. Future research could explore additional variables, such as cultural factors or individual attitudes toward technology, to better understand the complexities of tourist behavior in the context of digital payments. Lastly, while this study used a cross-sectional design, a longitudinal study could offer more insights into how tourists' attitudes and behaviors toward digital payments and cashless promotions evolve over time, providing a deeper understanding of long-term trends in tourist spending behavior.

### CONCLUSION

This study highlights the important role of digital payment convenience and cashless promotions in shaping tourists' purchase behavior and enhancing their transactional experience in the tourism industry. The findings show that both the perceived ease of using digital payment methods and the presence of promotional incentives significantly impact tourists' likelihood to make purchases and their overall satisfaction with the transaction process. Moreover, perceived transaction convenience was found to act as a mediator, suggesting that tourists' perceptions of convenience are crucial in translating digital payment and promotional benefits into actual spending. For tourism businesses in Bogor and similar destinations, the study offers valuable recommendations to integrate seamless digital payment systems and offer compelling cashless promotions. These strategies not only improve the ease of transactions but also encourage repeat purchases and long-term customer loyalty. Additionally, the growing trend of cashless payments could serve as a competitive advantage for businesses seeking to cater to the needs of increasingly tech-savvy tourists. However, this study has limitations, such as the sampling being limited to certain tourist areas, and future research could explore a broader geographical scope and other influencing factors such as cultural differences and long-term effects of digital payment adoption. The findings of this study contribute to the understanding of how digital payment systems can enhance the tourism experience and provide actionable insights for both academics and industry professionals.

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