

DIGITAL CONSUMER EXPERIENCE: AN EMPIRICAL STUDY OF MOBILE APP USAGE

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Abstract

Purpose – Mobile apps have been constantly evolving in recent years as user demand for mobile apps increases as they offer better features that meet user needs and wants. Companies are increasingly using digital platforms, especially mobile apps, to extend the offer to their users and provide them with a comprehensive shopping experience. The main aim of this research was to examine the relationship between users' perceptions of mobile shopping applications and their behavioral intentions and satisfaction.

Methodology - Primary data was collected for the empirical research using the survey method. The research sample consisted of 308 Generation Z and Y respondents who use mobile applications for searching and shopping. The collected data was analyzed using SPSS 25 and AMOS 21 programs.

Results - Structural equation modeling was applied to examine which features of mobile app usage have an important impact on usage satisfaction and to explore whether there are some dimensions that have a major impact on the purchase intentions of generations Z and Y. The results show that there are statistically significant differences between mobile app features and purchase intentions and usage satisfaction

Contribution – This study contributes to the understanding of the role of mobile apps in determining purchase intentions in the context of Generation Z and Y. It also provides insights into the differences between purchase intentions and user satisfaction with mobile app usage. The research findings can be used by companies to optimize their mobile platforms and digital marketing strategies with the aim of increasing user engagement and encouraging them to purchase.

Keywords purchase behavior, mobile apps, purchase intentions, usage satisfaction

INTRODUCTION

In recent years, the rapid increase in the number of mobile device users has contributed significantly to the spread of mobile applications. Originally, the term "application" was primarily associated with software designed to support general productivity and information management tasks, such as email communication. Over time, however, the scope and functionality of mobile applications have expanded greatly, reflecting changes in user behavior. Therefore, mobile apps have become increasingly popular in developed countries and in most developing markets due to the unexpected growth and development of the mobile phone market.

Recently, e-retailers have been actively driving the adoption of mobile shopping among consumers by offering high-quality services and user-friendly features in their apps (Da Silva Goulart, 2025; Stambouli and Almi 2024).

Users utilise a diversity of apps features to complete different assignment, such as searching, saving and distribution information or content, navigating and shopping. Mobile apps enable faster information transfer, better integration of customers and companies to strengthen their communication, which would lead to stronger user loyalty (Hsu and Tang, 2020). This communication allows the mobile apps to provide a greater user experience and become more valuable and useful (Sayah, 2025; Chopdar et al., 2018).

Mobile apps are particularly effective when it comes to reaching Generation Z, who respond better to personalised notifications and promotions tailored to their preferences. This was confirmed by the study of Yang et.al. (2025), which found that perceived usefulness, ease of use, subjective norms, product features, brand image influence the purchase intentions of the younger generation, such as Generation Z. Mobile apps aimed at Generation Z must adapt to their preferences. This includes intuitive design, strong branding, AI-driven personalisation and integrated social commerce features (Hasim and Nazri, 2025). This demographic, particularly Gen Z, represents a high-density market for mobile apps, making it an ideal place to study the impact of mobile app features on purchase intent. The design of mobile apps plays a crucial role in influencing user satisfaction and purchase intent. Therefore, it can be emphasised that well-designed mobile apps can ensure a holistic user experience while increasing user engagement and conversion rates.

Specifically, according to Timotius and Octavius (2021), consumers would choose mobile apps rather than websites to be the shopping platform. Thus, it is necessary to study the nature of mobile shopping apps and consumer shopping intention in this virtual environment. Therefore, some of the previous findings do not pay enough attention to the study of mobile app features (information, usefulness, mobility, empathy, and perceived value) and their mediating role between mobile app features and purchase intention and usage satisfaction. Therefore, the goal of this study is to evaluate the impact of mobile app features on users purchase intentions.

Objectives of this study are:

To explore the role of mobile app features on users purchase intentions.

To contribute to the existing literature on mobile commerce by filling the gap related to the interplay between mobile apps features and behavioral intentions.

Finally, by focusing on mobile shopping applications, the study responds to the growing digital commerce trend and provides empirical evidence in an area where literature is still limited, especially in linking perceptual variables to actual behavioral outcomes.

This study is structured as follows. The first section is the introduction and the following section provides an overview of the relevant literature. The following section presents the methodology of the study. Section four presents the results of the empirical analysis. The most important empirical results of the study are then discussed and presented. The

concluding section offers implications for academics and practitioners and suggests directions for future research.

1. LITERATURE REVIEW, RESEARCH HYPOTHESIS AND CONCEPTUAL MODEL

Advances in mobile technology have made significant progress in recent years, fuelling creativity in the development of various mobile apps with simple and practical functions (Wanof, 2023). In recent decades, the way consumers shop has changed dramatically. In the past, the traditional form of shopping was exclusively focused on direct, personal contact with a product or seller. With the development of internet technologies, a radical change has occurred. The internet has not only increased the number of sales channels available, but has also fundamentally changed the way consumers access product information and make purchasing decisions. Young generation prioritise convenience and efficiency in digital platforms. Generations Y and Z have been significantly influenced by the digital revolution. If young users have confidence in using a mobile app, they will have positive attitude towards purchasing via mobile apps (Correia et.al. 2024).

Recent evidence also shows that mobile apps are also powerful marketing tools (Patsiotis et.al., 2020), providing a direct channel to engage with customers, deliver personalized content, and analyze user data to make informed decisions (Murmman and Karegar, 2021). Nevertheless, mobile apps are still not sufficiently recognized as powerful tool for influencing purchase intention. (Hasić nad Hasibović, 2025).

Although mobile applications have been developed for more than two decades, they still face numerous usability and utility issues that can significantly influence usage intent (Coursaris et al., 2012) and thus purchase intent. Recognizing such potential usability issues highlights the need to explore how mobile apps can motivate users to use (Coursari and Kim, 2011) and ultimately purchase. Weichbroth (2023) examined categories of mobile usability issues and found that ease of use was the second most cited issue by experts. Tang (2020) came to the conclusion that perceived ease of use and perceived usefulness have positive influence on the purchase intention of mobile application users. Hanjaya et.al. (2019) found that usefulness and information quality have a significant influence on online purchase intention via a mobile app in Indonesia, while in Singapore, ease of use, usefulness and service quality have a significant influence on online purchase intention via a mobile app Chan et al. (2022) and Anifa and Sanaji (2022) found that perceived ease of use can significantly influence the willingness to shop via mobile applications. In contrary, some studies have shown that information quality, perceived ease of use and perceived usefulness do not significantly influence the intention to use mobile apps (Barry et.el, 2024).

Ankadhitra et al. (2023) emphasised that perceived satisfaction, subjective norms, perceived ease of use and perceived usefulness are important characteristics that have a direct influence on the intention to continue using mobile apps. Perceived usefulness is described as a person's tendency to use an application and believe that this perception

will help them do a better job The research results of Sari et al. (2023) show that perceived usefulness can significantly influence customer satisfaction when shopping via a mobile application. The study of Hasim and Nazri (2025) emphasises that optimising user experience such as offering personalised content and integrating social commerce features to effectively influence on consumer purchase intention among Generation Z.

The benefits of mobile applications reflect a number of elements, such as the provision of timely and relevant information (Nikou and Mezei, 2013). Given the increasing information overload on the internet, the quality of information can be crucial for a positive shopping experience and the user's purchase intention (Ghasemaghaei and Hassanein, 2016). The primary goal of a mobile app is to provide high-quality information that includes both general and product-related features, which in turn affects purchase intention (Al-Qeisi et al., 2014). Lee et al. (2023) found that high-quality information significantly influences perceived value, which in turn influences purchase intention. Camilleri et al. (2023) found a positive relationship between information quality and purchase intention. Numerous studies have found that information quality can determine purchase intention in mobile applications (Rahardja et.al. (2023); Yoo et.al. (2023); Setiadi et.al (2023). Users mainly use mobile apps to share information and make purchases (Lee, 2018). A positive attitude towards mobile app use increases both the likelihood of users visiting an app and the duration of each visit. This can lead to greater 'stickiness', which can result in higher potential purchase intent (Hsu and Lin, 2016).

In e-commerce, users encounter several challenges from the moment they begin using a mobile application to the point at which they make a purchase. This process involves risks such as privacy protection and ultimately requires a high level of trust from the user (Zarifis and Fu, 2023). Insecurity related to privacy arises from users' concerns about the illegal collection, use, and protection of data gathered during the downloading of applications, as well as data collected while using the application (Al-Natour et.al., 2020). Similarly, Chellap and Sin (2005) argues that individuals with stronger information privacy concerns tend to exhibit negative attitudes towards technology use. Mobile apps often overreach in accessing the personal data of mobile device users, as most users are not sufficiently aware that their privacy is at risk and therefore needs protection (Polykalas, 2017; Masran and Adis, 2024). As supported by Soumelidou and Tsohou (2020) and Paspatis and Tsohou (2023), users make informed decisions because they are aware of potential privacy breaches that could cause harm and increase privacy concerns when using mobile apps.

Perceived value is the user's overall assessment of the usefulness of a product or mobile application, based on the perception of what is received and what is given (Saranyai and Krishnakumar, 2019), as the most important element of long-term customer relationship management is the systematic provision of additional value to create trust and purchase intentions. Thus, perceived value has a positive and significant impact on the user's purchase decision (Rotinsulu et al., 2025). Likewise, perceived value, mediated by trust, can significantly influence the intention to purchase products from restaurants via food delivery applications (Lima et al., 2025). Perceived value is an important factor

influencing consumer purchase decisions, as the value received by the consumer will encourage further consumer action towards the company (Rotinsulu et al., 2025; Almaida, Setiawan, and Ramadhani, 2019).

To achieve the main objective of this study and deepen the understanding of mobile app usage behaviour of Generations Z and Y, several research questions were formulated. These questions are designed to explore the relationship between mobile app features and users' behavioural intentions.

Research Questions:

- How does information quality of mobile shopping applications affect users' purchase intentions?
- To what extent does usefulness of mobile shopping applications influence users' purchase intentions?
- How does perceived responsibility of mobile shopping applications (e.g., security, privacy, ethical considerations) impact users' purchase intentions?
- What is the effect of perceived value of mobile shopping applications on users' purchase intentions?
- How do these factors (information quality, usefulness, responsibility, perceived value) collectively contribute to user satisfaction with mobile shopping applications?

By addressing these questions, the study aims to provide empirical insights into how mobile app design and functionality enhance the overall digital consumer experience.

Building on the previously defined research questions and the theoretical framework, a set of hypotheses is proposed to establish the relations between the key constructs of the study:

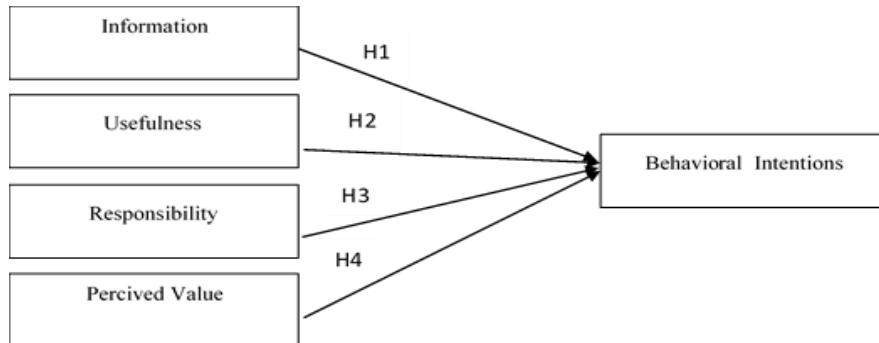
H1: Information quality of mobile shopping applications has a positive effect on users' purchase intentions.

H2: Usefulness of mobile shopping applications positively influences users' purchase intentions.

H3: Responsibility of mobile shopping applications has a significant positive impact on users' purchase intentions.

H4: Perceived value of mobile shopping applications positively affects users' purchase intentions.

Figure 1: **Conceptual model**



Source: Authors

2. METHODOLOGY

For the empirical research, primary data was collected using the survey, and the instrument used for this type of research was a questionnaire created using Google Forms. The questionnaire was forwarded to the respondents through social media such as Instagram and Facebook as well as through mobile messaging applications such as WhatsApp and Viber. A total of 334 respondents participated in the study, but 19 respondents were excluded due to incompleteness of the questionnaire. The research sample comprised 308 Generation Z and Y respondents who use mobile applications for searching and shopping. The research was conducted with a purposive sample and data collection lasted from the end of February to mid-March 2024.

The main aim of this research was to examine the relationship between users' perceptions of mobile shopping applications and their behavioral intentions and satisfaction. Special emphasis was placed on identifying key psychological and experiential factors that influence user engagement, particularly in terms of information, usefulness, responsibility, empathy, and perceived value. To achieve this, a structured questionnaire was developed, consisting of three main sections: sociodemographic characteristics and user profile, experience with mobile shopping applications, and a user perception scale, comprising a series of statements rated on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree) The study by Cho S.H. (2019) was taken into account when developing the questionnaire. For the empirical research, primary data was collected using the survey method, and the instrument used for this type of research was a questionnaire created using Google Forms. The analysis was conducted in several stages. First, descriptive statistics were used to profile respondents and summarize their experience with mobile shopping apps. In the next step, responses to the perception scale were processed, including the calculation of means and standard deviations and it was found that seven respondents had a standard deviation of zero across all Likert-scale items, indicating uniform response patterns. These cases were excluded from further analysis.

An exploratory factor analysis (EFA) was conducted to uncover the latent structure underlying user perceptions. Based on the EFA results, a confirmatory factor analysis (CFA) was then performed to validate the factorial structure of the measurement model. The CFA included an evaluation of factor loadings, construct reliability, convergent and discriminant validity, and model fit indices (CFI, TLI, RMSEA, SRMR). Finally, a structural equation modeling (SEM) approach was used to test the hypothesized relationships between the extracted latent constructs and two key outcome variables Behavioral Intention, and Satisfaction.

3. RESULTS AND DISCUSSION

The final sample used for the descriptive analysis included 308 respondents, following the exclusion of seven cases that exhibited uniform responses across the Likert scale (standard deviation = 0). A majority of respondents were female (58.1%), while 41.9% were male. In terms of age, most participants fell within the 18–25 age group (68.2%), followed by 26–35 (29.2%), and 36–45 (2.6%). Regarding their level of education, 34.4% had completed high school, 36.4% held a bachelor's degree, and 29.2% held a master's degree.

When it comes to user interaction with mobile shopping applications, 76.3% of respondents stated that they follow updates from their favorite brands via mobile apps. Furthermore, 95.1% believed that mobile applications influence consumer behavior during the decision-making process. Additionally, 72.4% indicated that the popularity of a product or service on mobile platforms affects their purchasing decisions, and 78.2% reported that they had previously made a purchase after encountering a product or service advertised via a mobile app. Among respondents who had made such app-influenced purchases (n = 241), satisfaction with the post-purchase experience was generally high. The majority rated their experience as a 4 on a five-point scale (51.5%), while 17.4% gave the highest rating (5). Only 2.1% rated their experience below 3, suggesting that overall, respondents had a positive perception of mobile app-driven purchases.

Table 1: **Respondent profile**

| Type of nanoparticles | Frequency | Percent |
|-----------------------|-----------|---------|
| Gender | | |
| Male | 129 | 41.9 |
| Female | 179 | 58.1 |
| Total | 308 | 100.0 |
| Age | | |
| 18-25 | 210 | 68.2 |
| 26-35 | 90 | 29.2 |
| 36-45 | 8 | 2.6 |
| Total | 308 | 100.0 |
| Education | | |
| High school | 106 | 34.4 |
| Bachelor's degree | 112 | 36.4 |
| Master's degree | 90 | 29.2 |
| Total | 308 | 100.0 |

Source: Authors

These findings provide a strong foundation for further analysis of user perceptions and the identification of underlying psychological constructs through factor analysis

To explore the latent structure of respondents' perceptions regarding the use of mobile applications in consumer decision-making, an exploratory factor analysis (EFA) was conducted. The analysis was performed on a filtered sample of 308 respondents, following the exclusion of seven cases that exhibited no variability in responses on the Likert scale (standard deviation = 0), which indicated uniform answering behavior.

The appropriateness of the dataset for factor analysis was confirmed through two key indicators. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy reached an excellent value of 0.907, indicating that the correlations between variables were sufficiently high for factor extraction. Furthermore, Bartlett's test of sphericity was statistically significant ($\chi^2 = 3762.36$, $df = 190$, $p < 0.001$), suggesting that the correlation matrix was not an identity matrix and that meaningful underlying patterns could be extracted.

Factor extraction was carried out using the Maximum Likelihood method, with Promax rotation, given the conceptual assumption that the underlying factors may be correlated. Based on the Kaiser criterion (eigenvalues greater than 1), the scree plot, and theoretical interpretability, a five-factor solution was retained. The cumulative variance explained by these five factors was 63.37%, indicating a satisfactory level of explained variance for social science research.

The five factors were labeled as Behavioral Intention, Usefulness, Responsibility, Perceived Value, and Information Quality. Behavioral Intention grouped items related to continued app use, recommendation to others, and reliance on mobile apps for future

purchases. Usefulness encompassed ease of navigation and clarity of content, while Responsibility reflected users' perceptions of safety, privacy, and trust in personalized services. The Perceived Value factor captured notions of efficiency and worthwhileness, and Information Quality addressed the accuracy, credibility, and relevance of content provided through the apps.

Two items from the initial pool were excluded prior to final extraction: one intended to capture Empathy and another related to Satisfaction. These items either failed to meet the loading threshold of 0.40 or exhibited overlap with other constructs, resulting in low communalities and interpretive instability. After their removal, the factor structure became more conceptually coherent and statistically sound.

Table 2: **Pattern matrix**

| | Factor | | | | |
|--|---------------|-------|-------|---|-------|
| | 1 | 2 | 3 | 4 | 5 |
| INFORMATION QUALITY | | | | | |
| Mobile applications provide accurate information. | | | 0.880 | | |
| Mobile applications provide credible information. | | | 0.889 | | |
| Mobile applications provide timely information. | | | 0.630 | | |
| Mobile applications provide relevant information. | | | 0.593 | | |
| USEFULNESS | | | | | |
| It is not difficult to use mobile applications. | | 0.734 | | | |
| The content of mobile applications is easy to understand. | | 0.867 | | | |
| It is not difficult to navigate within mobile applications. | | 0.870 | | | |
| Mobile applications are easy to use. | | 0.925 | | | |
| RESPONSABILITY | | | | | |
| I feel safe when using mobile applications. | | | | | 0.846 |
| My privacy is secure when using mobile applications. | | | | | 0.777 |
| I am confident I will receive personalized service through mobile applications based on previous browsing. | | | | | 0.413 |

Table 2 (continued)

| PERCEIVED VALUE | | | | | |
|--|-------|--|--|-------|--|
| It is useful to spend time using mobile applications. | | | | 0.763 | |
| Mobile applications are worth the effort. | | | | 0.838 | |
| It is useful to pay for the use of mobile applications. | | | | 0.681 | |
| Mobile applications are worth using. | | | | 0.617 | |
| BEHAVIORAL INTENTION | | | | | |
| I want to recommend the use of mobile applications to others. | 0.573 | | | | |
| I will use mobile applications again to purchase a specific product/service. | 0.939 | | | | |
| I will continue using mobile applications. | 0.936 | | | | |
| Search results provided by mobile applications will have priority in my purchase decision-making. | 0.553 | | | | |
| I will continue using mobile applications to purchase products. | 0.883 | | | | |
| Extraction Method: Principal Axis Factoring. Rotation Method: Promax with Kaiser Normalization. a. Rotation converged in 6 iterations. | | | | | |

Source: Authors

The factor loadings were generally strong, with most items loading above 0.60 on their respective factors, and minimal cross-loadings were observed. The correlation matrix among the five factors suggested moderate to strong relationships, ranging from 0.29 to 0.60, supporting the decision to use oblique rotation and confirming the theoretical assumption that psychological dimensions related to app usage are interrelated.

Table 3: **Factor correlation matrix**

| Factor | 1 | 2 | 3 | 4 | 5 |
|---|-------|-------|-------|-------|-------|
| 1 | 1.000 | 0.571 | 0.598 | 0.540 | 0.504 |
| 2 | 0.571 | 1.000 | 0.469 | 0.291 | 0.400 |
| 3 | 0.598 | 0.469 | 1.000 | 0.481 | 0.566 |
| 4 | 0.540 | 0.291 | 0.481 | 1.000 | 0.477 |
| 5 | 0.504 | 0.400 | 0.566 | 0.477 | 1.000 |
| Extraction Method: Principal Axis Factoring. Rotation Method: Promax with Kaiser Normalization. | | | | | |

Source: Authors

In order to assess the internal consistency of the identified factors, a reliability analysis using Cronbach's Alpha was conducted for each multi-item scale. The results indicate

that all constructs demonstrated acceptable to excellent reliability, supporting the consistency of the items within each scale. Information Quality - included four items (e.g., "Mobile apps provide accurate information") and yielded a Cronbach's Alpha of .855, indicating a high level of internal consistency. All corrected item-total correlations were above .64, suggesting that each item contributed meaningfully to the overall construct. No item substantially improved alpha if removed. Factor Usefulness comprising four items related to ease of use and understanding (e.g., "Mobile apps are easy to use"), this factor showed excellent reliability ($\alpha = .910$). Corrected item-total correlations ranged from .74 to .85, confirming the robustness of the measurement. Item deletion would not meaningfully improve the reliability score. Responsibility factor measured perceptions of security and data privacy, consisting of three items. The Cronbach's Alpha was .756, acceptable for exploratory research. One item ("I am confident I will receive personalized service") had a lower item-total correlation (.49), which may be monitored in future confirmatory testing. Factor Perceived Value four-item factor showed good reliability ($\alpha = .815$), with item-total correlations from .52 to .72. One item ("It is useful to pay for the use of mobile apps") had the lowest correlation (.52), yet contributed sufficiently to retain it in the scale. Factor Behavioral Intention - the five-item behavioral intention factor (e.g., "I intend to use mobile apps again") demonstrated excellent internal consistency ($\alpha = .891$). Item-total correlations ranged from .62 to .83, and all items significantly contributed to the latent construct.

Table 4: **Internal consistency and descriptive statistics of identified factors**

| Factor | No. of Items | Cronbach's Alpha | Min Item-Total Corr. | Max Item-Total Corr. | Mean |
|----------------------|--------------|------------------|----------------------|----------------------|------|
| Information Quality | 4 | 0.855 | 0.649 | 0.773 | 3.12 |
| Usefulness | 4 | 0.910 | 0.739 | 0.851 | 4.16 |
| Responsibility | 3 | 0.756 | 0.490 | 0.688 | 3.07 |
| Perceived Value | 4 | 0.815 | 0.517 | 0.716 | 3.06 |
| Behavioral Intention | 5 | 0.891 | 0.619 | 0.826 | 3.71 |

Source: Authors

In terms of descriptive statistics, the highest average score was recorded for Usefulness ($M = 4.16$), indicating that respondents generally perceive mobile applications as easy to use and understand. Behavioral Intention also showed a relatively high mean ($M = 3.71$), suggesting a positive intention to continue using and recommending mobile apps. Conversely, Perceived Value and Responsibility had lower means ($M = 3.06$ and $M = 3.07$, respectively), pointing to potential areas for future enhancement in how users perceive trust and value.

These results provide a robust empirical foundation for the next analytical step: confirmatory factor analysis (CFA), which will serve to validate the factor structure, and subsequently, structural equation modeling (SEM) to test the hypothesized relationships among constructs, particularly those predicting Behavioral Intention and Satisfaction.

In order to validate the factorial structure of the proposed measurement model, a Confirmatory Factor Analysis (CFA) was conducted using the AMOS software and the Maximum Likelihood estimation method. The measurement model consisted of five latent constructs: Behavioral Intention, Usefulness, Information, Perceived Value, and Responsibility. These constructs were measured by a total of 20 observed variables, selected based on prior theoretical frameworks and results from Exploratory Factor Analysis (EFA).

The overall model fit was evaluated using several commonly accepted indices. The chi-square test yielded a statistically significant result ($\chi^2 = 354.54$, $df = 160$, $p < .001$), which is typical for models tested on larger samples. A more informative index, the ratio of chi-square to degrees of freedom (CMIN/DF), was 2.22, falling within the acceptable threshold of less than 3, indicating reasonable model fit. Furthermore, the Root Mean Square Error of Approximation (RMSEA) was .063, with a 90% confidence interval ranging from .054 to .072 and a PCLOSE value of .009, suggesting a moderately good fit of the model to the data. Comparative fit indices also supported model adequacy, with the Comparative Fit Index (CFI) at .947, the Tucker-Lewis Index (TLI) at .937, and the Incremental Fit Index (IFI) at .947. All three indices exceeded the .90 threshold, indicating good comparative fit. Additionally, the Standardized Root Mean Square Residual (SRMR), as approximated through residual estimates, was .054, which is below the .08 criterion, further confirming an acceptable level of model fit.

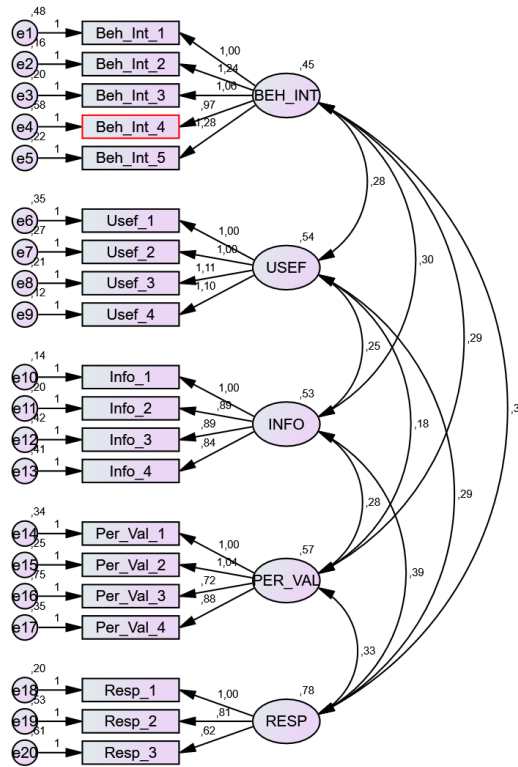
All standardized factor loadings were statistically significant and exceeded the .50 minimum threshold, with the majority ranging between .70 and .90. This indicates a strong relationship between the observed indicators and their respective latent constructs. Specifically, factor loadings for Behavioral Intention ranged from .650 to .902, for Usefulness from .781 to .920, for Information from .694 to .888, for Perceived Value from .534 to .843, and for Responsibility from .578 to .891. These values suggest that the selected items adequately represent their intended latent constructs.

The analysis also examined correlations between the latent factors. Inter-factor correlations ranged from .322 to .606, indicating moderate and theoretically coherent relationships between the constructs. These results suggest that the latent variables are related but not redundant, supporting the discriminant validity of the measurement model.

Finally, the error variances for all observed variables were statistically significant, as were the variances of the latent constructs. This confirms that the model is properly specified and that the factors exhibit sufficient variability in the sample.

Taken together, these results provide empirical support for the hypothesized measurement model and confirm the factorial validity of the constructs. The model can thus be used in further analyses, including structural equation modeling (SEM), to test hypothesized relationships between constructs.

Figure 1: CFA measurement model of mobile application use constructs



Source: Authors

The structural equation model (SEM) was developed to examine the relationships between four latent constructs—Information, Usefulness, Perceived Value, and Responsibility—and Behavioral Intention to use mobile applications. Following the confirmatory factor analysis (CFA), the initial SEM model demonstrated poor fit indices, prompting a review of modification indices. These indices indicated high values for several residual covariances, particularly among items belonging to the same latent constructs. Consequently, theoretically justified covariances were introduced between residuals of items that share conceptual and linguistic similarity, which is a commonly accepted practice in SEM to account for shared measurement error not explained by the latent variable. After implementing these modifications, the model achieved excellent fit. The chi-square value was 0.000 with zero degrees of freedom, indicating a just-identified model. All other fit indices were optimal: the Goodness of Fit Index (GFI), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Incremental Fit Index (IFI) were all equal to 1.000, while the Root Mean Square Error of Approximation (RMSEA) and Root Mean Square Residual (RMR) were 0.000. Although a just-identified model

technically cannot be tested for model fit in the same way as over-identified models, these indices confirm that the model fully reproduces the observed covariance matrix.

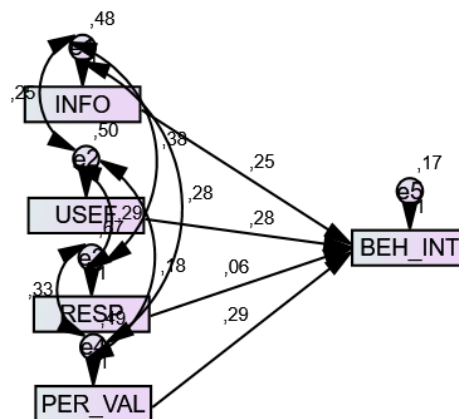
The results indicate that Perceived Value emerged as the strongest predictor of behavioral intention ($\beta = .318, p < .001$). This finding aligns with prior literature on digital consumer behavior, where perceived benefits, cost–benefit trade-offs, and the overall value of an app play a critical role in shaping users' motivation to continue its use. When users feel that an application provides high utility in relation to the time, effort, and potential cost involved, they are more likely to exhibit intention to reuse it. This construct captures both emotional and rational evaluations, making it a central driver of sustained engagement.

Usefulness ($\beta = .308, p < .001$) and Information ($\beta = .266, p < .001$) were also significant predictors, suggesting that the perceived functionality of mobile applications and the reliability of the information they provide are essential for fostering user intention. These findings support the core principles of the Technology Acceptance Model (TAM) and Information Systems Success Model, which emphasize the importance of perceived usefulness and information quality in predicting user attitudes and behaviors.

In contrast, Responsibility showed a non-significant effect on behavioral intention ($\beta = .077, p = .145$). Although the concept of ethical responsibility—such as environmental sustainability or data protection—is theoretically relevant in digital environments, its influence may be indirect or moderated by other variables, such as user awareness, personal values, or trust. It is also possible that users do not immediately associate mobile app usage with responsibility-related judgments, especially in the context of everyday consumer behavior, where convenience and value tend to override ethical concerns. Future research could explore whether responsibility plays a more prominent role in other user groups (e.g., highly environmentally conscious consumers) or under different framing conditions.

Overall, the model confirms that pragmatic factors—value, usefulness, and information—are the most decisive in predicting app usage intentions, while responsibility may require further theoretical elaboration or alternative operationalization.

Figure 2: **Structural equation model showing standardized path coefficients between latent constructs and behavioral intention**



Source: Authors

Finally, the addition of covariances between residuals improved the model's performance without compromising theoretical integrity. The decision to correlate residuals was supported by high modification indices and was limited to items within the same latent construct, thereby preserving the conceptual clarity of the measurement model. These adjustments allowed for a refined model that not only fits the data well but also maintains a strong alignment with the theoretical framework.

Table 5 presents the results of the structural equation model, including standardized regression coefficients (β), standard errors, 95% confidence intervals, and p-values. The paths from *Information*, *Usefulness*, and *Perceived Value* to *Behavioral Intention* were statistically significant ($p < .001$), indicating that these latent constructs positively contribute to users' intentions to continue using mobile applications for purchasing purposes. The standardized coefficients for these three constructs ranged from .266 to .318, with *Perceived Value* exhibiting the strongest effect. In contrast, *Responsibility* showed a weaker and statistically non-significant effect ($\beta = .077$, $p = .145$), suggesting that perceived ethical concerns or responsible behavior associated with mobile applications may not directly influence user intentions in this context.

Table 5: **Structural paths with standardized coefficients and confidence intervals**

| Structural Path | Standardized β | Standard Error | 95% CI Lower | 95% CI Upper | p-value | Sign. | Hypothesis |
|-------------------|----------------------|----------------|--------------|--------------|---------|-------|---------------|
| Infor → Beh_Int | 0.266 | 0.045 | 0.178 | 0.354 | < 0.001 | *** | Confirmed |
| Usef → Beh_Int | 0.308 | 0.043 | 0.225 | 0.391 | < 0.001 | *** | Confirmed |
| Per_Val → Beh_Int | 0.318 | 0.041 | 0.236 | 0.4 | < 0.001 | *** | Confirmed |
| Resp → Beh_Int | 0.077 | 0.052 | -0.025 | 0.179 | 0.145 | ns | Not confirmed |

Source: Authors

CONCLUSION

In the modern digital environment, mobile apps are playing an increasingly important role in shaping consumer behaviour, especially among the younger generations. A review of the relevant literature shows that perceived usefulness, ease of use, information quality and personalised content are important determinants that influence mobile app users' intention to use and satisfaction (Tang, 2020; Hanjaya et al., 2019; Hsu & Tang, 2020). Mobile apps, especially in the context of generations Y and Z, act as the primary channel for digital shopping, providing users with easy access to information, personalised recommendations and a comprehensive user experience. These generations, characterised by a high level of digital adaptation, tend to make quick purchasing decisions based on application features such as intuitive design, interactivity and content relevance (Yang et al., 2025; Hasim & Nazri, 2025).

The results obtained confirm the theoretical findings. As Tang (2020) and Kang et al. (2015) found, perceived usefulness and ease of use play an important role in the development of users' behavioural intentions, which was confirmed by our research. Usefulness and quality of information were found to be among the most important predictors of behavioural intention.

In addition, the perceived value of the user experience proved to be the strongest predictor of behavioural intention. This confirms the findings of authors such as Hsu and Lin (2016) and Hasim and Nazri (2025), who indicate that the emotional and functional benefits of applications directly influence the intention to continue using them. It can be concluded that H1, H2 and H3 have been confirmed. Contrary to expectations, perceived responsibility (e.g. security and privacy) did not have a statistically significant influence, which shows that H4 has not been confirmed. It indicates that young users value the

practical benefits of apps in the everyday shopping context more than the ethical dimensions.

The scientific contribution of this study is reflected in several aspects. First, the study integrates key psychological factors and validates them through an empirical model based on SEM analysis, thus contributing to the methodological refinement of research on mobile user behaviour. Second, the results confirm the importance of perceived value as the strongest predictor of behavioural intention, extending existing theoretical models in the context of Generations Z and Y. Third, the study shows that despite its theoretical importance, responsibility has only a limited influence on behavioural intention, which opens up room for further research on the role of moderating variables such as privacy awareness or users' value orientations.

One of the limitations of the study is that the sample was limited to generations Z and Y in Croatia, which limits the possibility of generalising the results. In addition, the data collected through self-assessment is subject to subjective interpretations and socially desirable answers.

The findings of this study offer several important implications for companies and practitioners in the field of mobile commerce. First, the results show that perceived value is the strongest predictor of behavioural intention. This suggests that businesses should focus on creating added value for users which can be delivered through personalised recommendations, loyalty programmes and exclusive discounts. Mobile apps that deliver perceived value are more likely to encourage repeated use and foster long-term customer loyalty. Second, the study highlights the importance of information quality and usefulness in shaping purchase intentions. Companies should ensure that product information in their apps is accurate, clear, up to date and easy to navigate. Third, the implications are especially relevant for Generations Y and Z, who are highly digitally adaptable and tend to base decisions on the functionality and user-friendliness of mobile apps. Organisations targeting these generations should invest in intuitive design, interactivity and gamification elements. These features can influence on decision-making, reduce cognitive effort, and stimulate impulse purchases. Finally, this requires a strategic approach that treats the app not only as a sales channel but also as an integrated platform for branding, customer engagement, and relationship building.

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