

# The Adoption of Mobile Payment Technologies, Social Interactive Consumer-Oriented Applications, and Online Purchasers' Decision-Making Process

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## Abstract.

**Research background:** This paper analyzes the outcomes of an exploratory review of the current research on the relationship between the global adoption of mobile payment technologies, social interactive consumer-oriented applications, and online purchasers' decision-making process.

**Purpose of the article:** The data used for this study was obtained and replicated from previous research conducted by Econsultancy and Statista. We performed analyses and made estimates regarding mobile e-commerce sales worldwide, frequency of mobile retail app usage according to U.S. smartphone shoppers, how well organizations understand the customer journey for certain audiences, share of Internet users who are likely to use mobile payments on their smartphone in the next year (by country), and time spent per mobile app category.

**Methods:** Data collected from 6,200 respondents are tested against the research model by using structural equation modeling.

**Findings & Value added:** The advent of smartphones redesigns the routine of shopping, thus altering the agency of users. Retailers have instant access to data on the geographical position of users that can be employed in addition to other information to regulate the decision-making process. Perceived effortlessness in utilization of the smartphone is somewhat similar for various mobile shopping application settings. The degree to which mobile purchasing applications are time critical and location sensitive may differ substantially. Mobile retailers can make public the personal, collaborative, and instantaneous buying experience that mobile shopping can offer to customers.

**Keywords:** *mobile; payment; technology; consumer; application*

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## **1 Introduction**

Perceived effortlessness in utilization of the smartphone is somewhat similar for various mobile shopping application settings. Practicality and effortlessness in utilization [1] constitute reliable facilitators for nearly all mobile shopping features. Habit and on-the-spot connectivity have effective direct consequences. The relevant direct implications of on-the-spot connectivity on practice response and purpose to adopt [2] are robust grounds why on-the-spot connectivity constitutes a pivotal predictor for mobile purchasing acceptance. Users aiming a superior shopping practice are less expected to spend their time on assimilating technical features, as the requirement to become versed may not quickly generate contentment [3].

## **2 Conceptual framework and Literature review**

The advent of smartphones redesigns the routine of shopping, thus altering the agency of users. Mobile devices allow individuals to access, preserve, and organize information in innovative manners [4] – reinforcing groundbreaking ways of social purchasing, facilitating users to transform the routine of shopping, and furnishing them more access to financial networks and creative calculative capacities. Mobile shopping is in many instances unscheduled, swift, and can be performed at a range of locations. Numerous users are under pressure by the abundance of news, while craving knowledge and incessantly checking their smartphones for information. The permanent feed of data frequently feels uncontrollable, becoming an issue that needs to be administered [5], and users advance various strategies to cut down the volume of information (e.g. unsubscribing from newsletters, removing applications, and deactivating notifications). While taking satisfaction in the contiguity and convenience of shopping by smartphone, users are also worried about its impact upon their purchase habits: while benefiting from the practicality and immediacy of mobile buying [6], they are concerned that it may generate overconsumption. Smartphones and their technical capabilities are facilitative and challenging, but also constitute sources of shopping distress [7].

Retailers have instant access to data on the geographical position of users that can be employed in addition to other information to regulate the decision-making process [8] via precisely formulated notifications and marketing strategies. Insight into the user's setting in conjunction with demographic and socioeconomic statistics, previous buying behavior, and the individual's instant shared shopping purposes enables retailers to more thoroughly grasp the specific importance of a certain purchase encounter and more effectively shape and add value [9] to the individual's mobile shopping journey. With data on user's geographical position, shared shopping purposes, and specific importance, retailers can become aware of the entire facility that mobile technologies provide in producing a significant, customer-oriented experience. Individuals employ applications for the practicality, swiftness, resourcefulness [10], and the customized purchase experience they can generate. The practical knowledge that applications may provide is instrumental in creating the significant, customer-oriented commitment materialized in the mobile purchase disruption [11].

### 3 Methodology and Empirical Analysis

This paper analyzes the outcomes of an exploratory review of the current research on the relationship between the global adoption of mobile payment technologies, social interactive consumer-oriented applications, and online purchasers' decision-making process. The data used for this study was obtained and replicated from previous research conducted by Econsultancy and Statista. We performed analyses and made estimates regarding mobile e-commerce sales worldwide, frequency of mobile retail app usage according to U.S. smartphone shoppers, how well organizations understand the customer journey for certain audiences, share of Internet users who are likely to use mobile payments on their smartphone in the next year (by country), and time spent per mobile app category. Data collected from 6,200 respondents are tested against the research model by using structural equation modeling. Survey method: The interviews were conducted online and data were weighted by five variables (age, race/ethnicity, gender, education, and geographic region) so that each country's sample composition reliably and accurately reflects the demographic profile of the adult population according to the country's most recent census data. Sampling errors and test of statistical significance take into account the effect of weighting. Stratified sampling methods were used and weights were trimmed not to exceed 3. Average margins of error, at the 95% confidence level, are +/-2%. For tabulation purposes, percentage points are rounded to the nearest whole number. The precision of the online polls was measured using a Bayesian credibility interval. An Internet-based survey software program was utilized for the delivery and collection of responses.

### 4 Results and Discussion

The degree to which mobile purchasing applications are time critical and location sensitive may differ substantially. Users perceive applications which employ location data to be more thoroughly designed. Such software may satisfy their demands in a suitable manner so that individuals are less apprehensive concerning information security issues. Well-integrated and personalized marketing operations [12] utilizing location data assist in decreased reactance and apprehensions among users. The link between on-the-spot connectivity and practicality is comparably important for significant and irrelevant values of location sensitivity, being though more influenced by time criticality and degree of control. Users take more satisfaction in contextual value when mobile purchasing applications are location sensitive [3]. (Table 1)

**Table 1.** Share of Internet users who are likely to use mobile payments on their smartphone in the next year (by country) (%).

China	98	Turkey	78	Tunisia	51
Indonesia	96	Russia	76	Australia	49
India	89	Brazil	74	Pakistan	48
Kenya	84	Mexico	72	Great Britain	49
Poland	83	Hong Kong	77	Canada	45
Egypt	82	Sweden	68	Italy	42
South Africa	84	Nigeria	67	France	39
South Korea	79	United States	63	Japan	37

Sources: Statista; our survey among 6,200 individuals conducted March 2020

The increasing trendiness of mobile technologies and applications has influenced numerous firms to advance relations with users through such devices [13], and thus applications should be produced in conformity with consumer preferences. Grasp of design solutions and information quality brings about superior engagement, generating perpetual practice of mobile applications. Such engagement favorably shapes consumers' purposes to incessantly adopt mobile applications. User interaction and functionality characteristics are not favorably associated with consumer commitment to mobile applications [14]. (Table 2)

**Table 2.** Time spent per mobile app category (%).

Shopping	63
Music, media, and entertainment	49
Business and finance	40
Utilities and productivity	29
News and magazines	30

Sources: Statista; our survey among 6,200 individuals conducted March 2020

Growing shopper loyalty represents a vital objective for all retailers for preserving or fortifying their market position. Utilitarian and hedonic purchasing value shapes consumers' satisfaction with a satisfactory degree of compatibility belief [15], whereas social value and retailer trust are relevant for consumers with an unsatisfactory degree of compatibility belief. The mobile shopping loyalty of individuals having an unsatisfactory degree of compatibility belief is significantly impacted by the consumers' perception of retailer trust [16]. Retailers are increasing options and convenience, enabling users to order with only a tap on their mobile devices. Innovative online platforms compete to capture markets and attract consumers. Relevant mobile application features (graphic, navigational, data and teamwork design) significantly determine the shopping decision of an individual and then make conversion possible [17]. (Table 3)

**Table 3.** Mobile e-commerce sales worldwide.

	2017	2018	2019	2020	2021
Mobile as a share of total e-commerce (%)	58.9	63.5	67.6	72.8	74.6
Total mobile e-commerce sales (in trillion U.S. dollars)	1.36	1.80	2.34	3.08	3.67

Sources: Statista; our estimates

A smartphone is often employed to inspect products online, but less customarily utilized to purchase them with, although brand awareness and fashion awareness [18] are positively associated with the incidence to examine and pay for products with a mobile device. Retailers focusing on such kinds of shoppers may satisfactorily gain from designing smartphone applications with buying capabilities. Recreational shopping behavior may be improved by employing a smartphone as an antecedent for motivating force [19]. (Table 4)

**Table 4.** Frequency of mobile retail app usage according to U.S. smartphone shoppers (%).

More than once a week	10
Once a week	22
Once a month	27
Once every few months	31
Once a year	7
Never	3

Sources: Statista; our survey among 6,200 individuals conducted March 2020

Technology has altered the manner retail business operates [20] with chief participants transferring to mobile specific platforms. Price saving orientation constitutes the leading driver for mobile shopping adoption, whereas and self-reliance represents the main determinant against it [21]. perceived effortlessness in utilization, perceived practicality, convenience, and gratification determine involvement with a mobile shopping application, whereas customization of the software has an improving impact on involvement. Utilitarian parameters of perceived effortlessness in utilization, perceived practicality and convenience are more impactful on involvement with a retailer's mobile shopping application ensuing perpetual retention, while gratification is less relevant [22]. (Table 5)

**Table 5.** How well organizations understand the customer journey for certain audiences (%)

Returning customers	78
New customers	65
Primarily offline customers	62
Customers that primarily use the desktop	58
Customers that primarily use mobile devices	56

Sources: Econsultancy; our survey among 6,200 individuals conducted March 2020

## 5. Conclusions and Implications

Mobile retailers can make public the personal, collaborative, and instantaneous buying experience [23] that mobile shopping can offer to customers. Via promotional campaigns, retailers are able to underpin the adoption of mobile shopping by bringing about awareness and highlighting the practicality and effortlessness [24] with which users can accomplish their purchase objectives, e.g. through output gains, swifter buying, and perpetual access. Mobile website developers need to consider closely upgrading platforms that are unproblematic to navigate, with guidelines to assist users smoothly carry out their tasks, whereas mobile platforms can instruct users being at a preliminary mobile shopping readiness stage via a purchase practice that strengthens their confidence [25].

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