



## A Study On Factor Influence Of Mobile Commerce Usage And Satisfaction Of Customers In Madurai District

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**Abstract:** A potential change in consumer shopping habits that will establish a significant business channel. Consumers rely more than ever on digital devices and on mobile commerce. The use of mobile commerce has become a trend among online shoppers. Advances in wireless communication have made mobile commerce a new paradigm of personal communication, free of location restrictions. From teenagers to retirees, everyone is addicted to mobile devices. They use computers and the Internet to buy products, send and receive emails, and play online games. Using this study for mobile commerce and customer influencing factors, satisfaction with mobility offers newfound freedom to pay greatly. Finally, this study of mobile commerce usage and satisfaction, and the effects of factors on mobile commerce usage, creates new opportunities for mobile services for customers.

**Keywords:** Usage of mobile trading applications, satisfaction and problems of mobile trading, awareness and benefits of mobile trading etc.,

### 1. Introduction

Mobile phones have become a new means of connecting people and maintaining social relationships, enabling accessibility to others 24/7, regardless of their location ([Gao et al., 2022](#)). This is a significant shift from the past, where contacting someone required knowledge of their whereabouts. This shift offers businesses an opportunity to establish meaningful connections with consumers, while consumers can establish more profound relationships with businesses. In India, the growth of mobile phones, combined with the increase in debit and credit card issuance and usage, makes mobile commerce the natural next step for businesses, offering strong growth potential in the years ahead ([Varshney & Vetter, 2001](#)).

Mobile technology can provide a competitive advantage for businesses, and First Data offers mobile commerce solutions to meet the needs of the mobile and social media revolution ([Bolat et al., 2016](#)). Social media platforms like Facebook can now serve as sales channels and consumer engagement tools. First Data has already developed a loyalty solution for Facebook and enabled mobile payments by leveraging the Trusted Service Manager (TSM) technology, which also powers Google Wallet ([NWOZOR & OLOKOR, 2025](#)). Google Wallet enables millions of consumers to store credit cards, gift cards, offers, and other information on their mobile phones, replacing the need for a physical wallet.

The adoption of mobile phones continues to grow, with over 3 billion in use worldwide, meaning approximately 40% of the global population carries one. At present, the Mongolian market has a massive demand for the development of intensive agriculture.

The processing and sale of agricultural and livestock products take place in the suburbs of Ulaanbaatar and Dar-Han, where modern and traditional agriculture coexist ([Dureng et al., 2022](#)). China's advanced technology, operations, and management, ample funds, and natural geographic advantages provided significant opportunities for Mongolian agricultural development and helped Mongolia develop modern agriculture with

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international competitiveness. Therefore, it is necessary to analyze the current situation, the content, the existing problems, and the agricultural South-South technical cooperation policies between China and Mongolia ([Dureng et al., 2022](#)). This analysis will help policymakers explore future trends and gaps in cooperation. Meanwhile, it provides some suggestions to promote the long-term, sustainable, and stable development of agricultural technical cooperation in both countries ([Pandey et al., 2022](#)).

## **2. Literature review**

([Cao et al., 2018](#)) sought to better understand how trust developed during the shift from online to mobile payments, as well as how trust affected customer satisfaction and continued use of mobile payments. Invoking transactional trust theory, the authors propose that user pleasure and sustained usage in the context of online payments are influenced by online payment trust, perceived similarity, and the importance of the site and destination ([Cao et al., 2018](#)).

This study gathers data from 219 customers of a well-known payment corporation in China to assess the measuring methodology. According to the findings, confidence in mobile payments is positively influenced by perceptions of resemblance to online payments and relevance, which, in turn, influence payment ([Almaiah et al., 2022](#)). User happiness remains the main driver of mobile money. This study emphasizes the critical importance of trust in users' happiness with mobile payments and brand loyalty in the context of online payments ([Jimenez et al., 2016](#)).

([Chopdar & Sivakumar, 2018](#)) set out to find out how psychological contract violation (PCV) affected users' intentions to suggest mobile shopping apps to others as well as the perceived value and quality of the services they received.

In this study, personalization could function as a moderator. 252 users of an Indian mobile shopping application participated in an online survey that provided data for the study, which then examined the research model using a variance-based partial structural equation modeling technique. According to the results, PCV negatively influences perceived value and service quality, while positively influencing consumers' inclination to promote positive word of mouth ([Nguyen & Phan, 2024](#)).

The study demonstrates that while personalization mitigates PCV's negative effects on consumers' perceptions of value for mobile shopping applications, it does not ensure service quality. This study is the first to explore PCV's impact on mobile shopping applications and argues that using larger samples from other nations may increase the generalizability of the results.

([Roy & Moorthi, 2017](#)) aims to develop a conceptual model of M-commerce that integrates concepts from marketing and information systems research. The model accounts for the relationship between perceived smartphone ubiquity (PQ), which is impacted by technical readiness (TR), and M-commerce adoption (MA) ([Roy & Moorthi, 2017](#)). The study also examines the moderating effect of privacy concerns (PC) on the relationship between PQ and MA, while accounting for perceived utility (PU) and perceived ease of use (PEU).

The conceptual model was developed through four focus groups and tested in two questionnaire studies conducted in India, each with 372 and 431 respondents ([Chutke et al., 2022](#)). After employing structural equation modeling to evaluate the data, exploratory and confirmatory factor analyses were performed. The quantitative results showed that TR had a big impact on PQ, PU, and PEU.

Furthermore, all three factors had a big influence on MA. The research revealed that PC significantly moderated the relationship between PQ and MA. The study contributes to the literature on successful M-commerce adoption by developing and validating a model that examines the relationships among attitude characteristics related to technology use and M-commerce adoption ([Ngubelanga & Duffett, 2021](#)). The study's findings provide service providers with a novel and practical paradigm for M-commerce adoption.

## **3. Study objectives**

To investigate the level of mobile commerce usage among the aware. Analyze the influence factor of the use of mobile commerce. To be aware of the benefits that consumers receive from mobile commerce.



#### 4. Research methodology

This study uses survey methods and is an empirical inquiry. The methods used to acquire the data were consumer observations, conversations, and interviews. In this study, primary and secondary data were also used. A questionnaire with 100 questions was used to collect primary data. Secondary data was meantime acquired from textbooks and periodicals. Suitable statistical methods, such as the independent t-test, weighted mean, and percentage analysis, were used to assess the acquired data. These statistical methods were chosen based on the research goals and the type of data being analyzed.

#### 5. Theoretical aspect

##### 5.1 Definition of M-Commerce

"M-commerce" is a type of transaction that involves exchanging money over a mobile telecommunications network. In other words, it refers to the process of buying and selling goods or services using wireless handheld devices, such as mobile phones and personal digital assistants (PDAs).

##### 5.2 The evolution of M-Commerce

Although mobile commerce has gained widespread popularity, it is still in its nascent stage and has the potential to expand to all aspects of human life ([Kourouthanassis & Giaglis, 2012](#)). Mobile trading is not a recent concept, as it has been around for some time, starting with the use of wireless POS terminals and subsequently extending to mobile phones and PDAs.

The foundation of m-commerce was established with the introduction of WAP and i-mode, mobile Internet services that enabled users to browse the Internet on 2.5G phones ([Sadeh, 2003](#)). The evolution of m-commerce continued with the advent of 3G phone technology ([Sadeh, 2003](#)). The future of m-commerce looks promising as ongoing experiments seek to introduce an enhanced version of mobile commerce that is expected to emerge with the development of 4G mobile technology.

##### 5.3 Data analysis and interpretation

###### Using mobile phones for information services

Table: 1

S. No	Mobile information services	No. of respondents	% of respondents
1.	Current affairs	25	25
2.	Travel information	29	29
3.	Tracking services	9	9
4.	Search engines and directories	22	22
5.	All the them	15	15
	<b>Total</b>	<b>100</b>	<b>100</b>

###### Source: Primary Data

Mobile information services: out of 100 respondents, 25 use current events services, 29 use travel information services, 9 use tracking services, 22 use search engine and directory services, and 15 use all. In other words, in mobile information services, 25% of respondents use news services, 29% use travel information services, 9% use tracking services, 22% use search engines and directory services, and 15% use all of them. It follows that the majority of respondents (29%) will receive travel information.

##### 5.4 Using mobile phone for marketing

Table: 2

S.No	Mobile marketing	No. of respondents	% of respondents
1.	Gift coupon	41	41

2.	Online trading	24	24
3.	Organization of mobile events	5	5
4.	Mobile newsletters	13	13
5.	All the them	17	17
	<b>Total</b>	<b>100</b>	<b>100</b>

**Source: Primary Data**

In mobile marketing services, 41 respondents get gift coupons, 24 respondents get online trading, 5 respondents get mobile event organization, 13 respondents get mobile newsletters, and 17 respondents get all of them. In other words, in the area of mobile marketing services, 41% of respondents get gift coupons, 24% get online shopping, 5% get mobile event organization, 13% get mobile newsletters, and 17% all. The majority of respondents (41%) thus receive gift coupons.

**5.5 Using of mobile phone for ticketing**

**Table: 3**

S.No	Mobile ticketing	No. of respondents	% of respondents
1.	Public transport	28	28
2.	Sports and Entertainment	27	27
3.	Air and Rail traffic	27	27
4.	Mobile parking	4	4
5.	All of them	14	14
	<b>Total</b>	<b>100</b>	<b>100</b>

**Source: Primary Data**

28 respondents out of a total of 100 respondents reserve tickets for public transport, 27 respondents reserve tickets for sports and entertainment, 27 respondents reserve tickets for air and rail transport, 4 respondents reserve tickets for mobile parking, and 14 respondents reserve tickets for all . In other words, 28% of respondents book public transport tickets, 27% of respondents book tickets for sports and entertainment, 27% of respondents book tickets for air and rail transport, 4% of respondents book tickets for mobile parking, and 14% of respondents book tickets for all of them. Most of the 28% surveyed, therefore, book public transport tickets.

**5.6 Using mobile phones for telematics**

**Table: 4**

S.No	Telematics	No. of respondents	% of respondents
1.	Remote diagnosis	20	20
2.	Navigation services	7	7
3.	Vehicle tracking	15	15
4.	Emergency service	18	18
5.	All of them	14	14
6.	None of these	26	26
	<b>Total</b>	<b>100</b>	<b>100</b>



**Source: Primary Data**

Twenty respondents use remote diagnosis, seven use navigation services, fifteen use vehicle tracking, eighteen use emergency services, fourteen use all of them, and twenty-six respondents use none of them for telematics services. In other words, 20% of respondents use remote diagnosis, 7% use navigation services, 15% use vehicle tracking, 18% use emergency services, 14% use all of them, and 26% use none of them. Therefore, 26% of respondents report using no telematics services.

**Shopping apps preferred by the respondents**

**Table: 5**

S.No	Shopping apps	No. of respondents	% of respondents
1.	Amazon	30	30
2.	Flipkart	35	35
3.	Snapdeal	7	7
4.	Mynthra	10	8
5.	Ebay	8	10
6.	All of them	10	10
	<b>Total</b>	<b>100</b>	<b>100</b>

**Data from primary sources**

30 respondents favor “Amazon”, 35 favor “Flipkart”, 7 favor “Snapdeal”, 10 favor “Mynta”, 8 favor “eBay”, and 10 favor all. In other words, 30% respondents prefer “Amazon”, 35% respondents prefer “Flipkart”, 7% respondents prefer “Snapdeal”, 10% respondents prefer “Mynta”, 8% respondents prefer “eBay”, and 10% respondents prefer all. Therefore, the most popular shopping app of 35% respondents is “Flipkart”.

**5.7 Relationship between gender and the percentage of time spent using various mobile apps in a test using mobile phones**

**Table: 6**

Factors	Gender						Sig value	T value	Sig 2 tailed value
	Male			Female					
	N	Mean	SD	N	Mean	SD			
Banking apps	60	4.49	.80	40	3.61	1.40	.000	3.64	.002
Social and gaming apps	60	3.9	1.20	40	4.26	.90	.098	2.02	.044
Retail store apps	60	3.46	1.20	40	3.63	1.36	.327	.678	.498
Ticketing	60	3.2	1.54	40	3.31	1.29	.064	.398	.692
Information services	60	3.1	1.31	40	3.53	1.25	.687	1.610	.093

**Data from primary sources**

**5.7.1 For the first claim:**

Since the p-value of 0.000 is less than 0.05, the null hypothesis is disproved at the 5% level of significance. It shows that when it comes to the frequency with which they utilize various mobile applications on their cellphones, men and women use their smartphones quite differently.

**5.7.2 For the second claim:**

The p-value of 0.099 is greater than 0.05; hence, the null hypothesis is accepted at the 5% level of significance. It suggests there is no appreciable variation in the frequency of usage of different mobile applications on smartphones between boys and girls.

**5.7.3 For the third claim:**

A P value of 0.337 is greater than 0.05, so the null hypothesis is accepted at the 5% significance level. It demonstrates that there is no appreciable variation in the frequency of usage of various mobile applications on smartphones between boys and girls.

**5.7.4 Fourth statement:**

Since the p-value of 0.054 is above the chosen significance level, the null hypothesis is accepted at the 5% significance level. Therefore, it can be said that there is no discernible difference between males and females in terms of the frequency with which they use different mobile applications on their smartphones.

**5.7.5 Fifth claim:**

The null hypothesis is accepted, as the p-value of 0.687 is greater than the selected level of significance of 0.05. This shows that there is no discernible difference between boys and girls in terms of the frequency with which they use various mobile applications on their smartphones.

**5.8 Benefits of mobile commerce at various levels averaged across all**

**Table: 7**

S.No	Benefits	Frequency					Weighted score	Rank
		Very high	High	Average	Low	Very low		
1.	Cost saving	125	176	48	18	6	3.73	3
2.	Time saving	220	132	39	8	6	4.05	1
3.	24 hrs access	175	136	57	18	3	3.89	2
4.	Physical security	110	64	138	30	1	3.43	4
5.	Others	70	44	99	48	18	2.79	5

**Sources: Primary Data**

When respondents were asked to assess the advantages of mobile commerce, time-saving ranked highest, with an average score of 4.05. 24-hour access came in second with a weighted score of 3.89 and was the next option. Cost savings was placed third with a weighted score of 3.73. The least weighted advantage was physical security, which ranked fourth with a weighted score of 3.43. These findings indicate that most respondents saw time savings as the most important advantage of adopting mobile commerce.

**6. Findings and suggestions**

- ✓ Most respondents (29%) get travel information.
- ✓ Most respondents (41%) receive gift coupons.
- ✓ The majority of respondents (28%) reserve public transport tickets
- ✓ The majority of respondents (26%) do not use any of the telematics services.
- ✓ The most popular shopping app of the respondent (35%) is “flipkart”.



1. At the 5% threshold of significance, the p-value of 0.000 is less than 0.05, and hence the null hypothesis is rejected. As a result, there is a substantial difference between male and female users of different mobile applications on their smartphones.
2. At the 5% level of significance, the null hypothesis is accepted since the p-value of 0.099 is greater than 0.05. This suggests that there is no appreciable variation in the frequency of usage of different mobile applications on smartphones between boys and girls.
3. Because the p-value of 0.337 is larger than 0.05 and is over the 5% level of significance, the null hypothesis is accepted. This shows that there is no discernible difference between boys and girls in terms of the frequency with which they use different mobile applications on their smartphones.
4. At the 5% level of significance, the null hypothesis is accepted since the p-value of 0.054 is greater than 0.05. Therefore, there is no appreciable variation in the frequency of usage of different mobile applications on smartphones between males and females.
5. The null hypothesis is accepted at the 5% level of significance since the p-value of 0.687 is greater than 0.05. Therefore, there is no appreciable variation in the frequency of usage of different mobile applications on smartphones between males and females.
6. Most responders (4,05%) rated the amount of time needed as the most significant advantage.
7. With a weighted average of 4.12 across the board, network availability is good (ranked first).
8. With a weighted average of 4,05, the overall average in timesaving is high (first position).

### 6.1 Satisfaction level with utilizing mobile commerce

Table:8

S. No	Satisfaction	Frequency					Weighted score	Rank
		Highly Satisfied	Satisfied	Neutral	Dissatisfied	Highly dissatisfied		
1.	Availability of network	220	168	15	-	9	4.12	1
2.	Security	130	176	57	22	-	3.85	3
3.	Easy to access	170	144	69	12	1	3.96	2
4.	Service charges	90	92	78	52	7	3.19	5
5.	Time consuming	175	84	48	26	15	3.48	4

#### Sources: Primary data

The study's findings show that network accessibility had the highest satisfaction rating, with a weighted score of 4.12, while accessibility ranked second, with a weighted score of 3.96. Time consumption had a weighted score of 3.48 and ranked fourth, while security ranked third with a weighted score of 3.85. The service costs score was the least weighted. These results imply that most respondents were quite satisfied with the network's accessibility.

### 7. Suggestions

Encourage public servants to offer training opportunities and to share information about laws and regulations on social media. This may encourage people to utilize their mobile devices for both business and personal activities. raise awareness of the distinctive qualities of various mobile applications, especially their potential uses beyond entertainment. More folks may now comprehend the useful advantages of mobile phones as a result of this.

Encourage individuals to utilize their mobile phones for shopping by offering them special discounts and promotions. For instance, nationalized banks may give young people who wish to purchase mobile credit low-interest loans.

To improve the consumer experience and foster trust in mobile purchasing, prioritize quick delivery and provide cash-on-delivery choices. To increase mobile network coverage nationwide, especially in outlying regions, more tower pillars should be installed. In this way, many people will be able to use mobile services for personal and business purposes.

## **8. Conclusion**

Mobile commerce has become an essential part of human life and holds a promising future. Over the last few years, it has proven to be a driving force for businesses, and India has shown positive signs of embracing the M-commerce platform.

As the field of m-commerce and wireless applications continue to progress, they will enhance each other and improve innovation, adaptability, and performance. While there are many business opportunities in this field, there are also significant challenges in developing reliable and powerful wireless technologies to fully utilize the Potential of Mobile Marketing in the Internet Age. Meeting the needs and expectations of mobile users and providers at both basic and advanced levels is crucial.

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