

## Impact of mobile social commerce service quality on customer satisfaction and repurchase intentions

<sup>1</sup>Kyu-dong Kim, <sup>2</sup>Young-SeonYun, <sup>3</sup>Jeong-lae Kim \*

<sup>1</sup>Professor, Dept. of Medical IT, Eulji Univ., Korea

<sup>2</sup>Undergraduate Student, Dept. of Medical IT, Eulji Univ., Korea

<sup>3</sup>Professor, Dept. of Biomedical Engineering, Eulji Univ., Korea  
kdkim@eulji.ac.kr, yyyyyys96@naver.com, jlkim@eulji.ac.kr

### Abstract

*We conducted this study to identify the impact of mobile social commerce service quality on customer satisfaction and repurchase intentions. The survey method used the self-recording way in which the respondents selected for the study and distributed 300 questionnaires, and with due personal care, researchers collected all the distributed questionnaires. The service quality in mobile social commerce has been selected as a factor of price, convenience, interaction and information through previous research. The results of this study are summarized as follows: First, the mobile social commerce service quality attributes all affected significantly ( $p < .05$ ) customer satisfaction and the beta value of Economic Efficiency was the highest among the service quality attributes. Second, also the customer satisfaction influenced on consumer repurchase intentions significantly ( $p < .05$ ). Based on the results of this study, we should strive to establish effective marketing strategies in the mobile social commerce industry.*

**Keywords:** Service Quality, Customer Satisfaction, Mobile Social Commerce, Repurchase Intended

## 1. INTRODUCTION

With online and offline boundaries removed, online shopping is available through smartphones, and the ratio of smartphones to mobile shopping is steadily increasing. As the number of social commerce companies increases, strategies for satisfying existing members and maintaining purchasing activities rather than securing new members are becoming more universal. According to the National Statistical Office (2020), online shopping transactions in Korea in 2020 were 15.995 trillion won, up 26.1% from the same month last year, and mobile shopping transactions in November 2020 increased 33.8% from November 2019 [1].

Groupon, which launched its operations in California in 2008, experienced explosive growth in its own country. Domestic social commerce first generation, such as Ticket Monster and Coupang, became the center of the domestic social commerce market since 2010, and the number of social commerce companies increased in a year due to the expansion of large enterprises, small and medium-sized enterprises, and venture companies. The reality is that research on mobile social commerce, an area of fast-growing e-commerce, needs to be done, and it needs to analyze consumers' perceptions of mobile social commerce quality to increase consumer

---

Manuscript received: November 30, 2021 / revised: December 2, 2021 / accepted: December 7, 2021

Corresponding Author: [jlkim@eulji.ac.kr](mailto:jlkim@eulji.ac.kr)

Tel: +82-31-740-7211, Fax: +82-31-740-7360

Professor, Dept. of Biomedical Engineering, Eulji Univ., Korea

satisfaction and reuse intent. In relation to this, prior studies set the quality of service and satisfaction of mobile social commerce perceived by consumers as the leading factors affecting the sustainable use intent of mobile social commerce. When we set and analyze convenience, economics, entertainment, and information as key components of mobile social commerce quality, entertainment and informativeness were influenced [2].

Previous domestic studies have shown a number of studies on the satisfaction and re-purchasing intentions of mobile commerce and social commerce that consumers are late for, but there has been no study on the combination of mobile commerce and social commerce, or mobile social commerce. Therefore, the goal of the study was to understand the impact of mobile social commerce's quality of service on customer satisfaction and re-purchasing intentions, which is increasingly a major area.

## **2. THEORETICAL BACKGROUND**

### **2.1 Previous studies on the mobile social commerce**

A personalized recommendation system means providing appropriate content or services based on the preference of each user [3]. While there are not many mobile social commerce studies, previous studies have suggested product information quality, discount rate, and design interaction as characteristics of mobile social commerce. As a result, the higher the product information quality, design, and interaction, the higher the user's satisfaction with mobile social commerce, but it turns out that the relationship between discount rates and mobile social commerce satisfaction was not taken into account.

As a leading factor affecting the sustainable use intent of mobile social commerce, we set the quality and satisfaction of mobile social commerce, where consumers are late, and found that the more entertaining and informative the higher the satisfaction. Satisfaction with mobile social commerce also had a positive impact on sustainable use intentions, and the self-efficacy regulatory effect was noted only in terms of convenience and satisfaction [4-5].

### **2.2 Mobile social commerce service quality**

Pricing means lower prices than other sites. Lee and Choi(2012) [6] stated that there is a significant link between economic motives such as discount prices and cost savings, and satisfaction of mobile commerce. In the social commerce field, there is a lot of research on economic efficiency. Products and services are offered at competitive prices on social commerce sites, and characteristics that can reduce costs, discount benefits, and price-oriented characteristics are used as variables that represent economic efficiency [6-7]. For this study economic efficiency was defined the characteristics of using mobile social commerce as an economy that offers discount benefits at a relatively low price [3].

Interactivity indicates ease of communication between consumers, sellers and buyers. Interactivity in the online shopping environment can be divided into two categories: enterprise-consumer interaction and consumer-consumer interaction. Interactivity in this study refers to the degree to which two-way communication between social commerce companies and consumers takes place through social commerce. In e-commerce, two-way communication between visitors and Internet shopping malls on a website basis is the most basic interaction [8-9] also conducted research on interaction, and this research defined 1:1 customized consultation and feedback acceptance when using mobile social commerce as interaction.

The Ministry of Information refers to the information provided on the site, and not many studies have conducted research on the information nature of mobile commerce, but Choi (2015) revealed that the characteristics of all four groups, except fashion apathy, being able to provide recommendations, advertisements, and answers to individuals' needs when using mobile commerce, affect purchasing intentions

[10-11]. Social commerce research defined the degree of quality that users can perceive as the accuracy and usefulness of information provided by social commerce, the degree to which content provided by the web can be purchased, and the accuracy of information and said that such information positively influenced the satisfaction of social commerce or customer trust, which greatly influenced the purchasing intention. On the other hand, mobile social commerce researcher Baek(2015) said that the functional motivation of mobile social commerce such as real-time verification of product information, quick product search, and acquisition of useful information had a positive effect on reuse intent [12]. Therefore, this study defined information as having product information confirmation, refund information confirmation, originality of information service, and up-to-date product information when using mobile social commerce.

In a study on mobile commerce Kim, Jin, and Choi(2006) [13] defined the effective structure of the site and ease of navigation as convenience, and found that the more convenient mobile commerce is, the more satisfactory it is Kim, Yu and, Kim (2013) divided concept variables such as convenience into uneven distribution and convenience [5]. In his research, uneven distribution refers to the characteristics of mobile commerce that can be used anytime, anywhere, and convenience refers to the characteristics of the site's characters, images, and screen composition when using mobile commerce. These attributes have been found to have a significant impact on mobile shopping usage [14-15].

### **2.3 Concept of customer satisfaction and Repurchase Intentions**

The word satisfaction comes from the Latin word satis(enough)+facere(make or to do). According to the etymology of the word, satisfaction can be seen as 'stuffing' Therefore, customer satisfaction is considered to be his successful response, which means that he will satisfy this successful response to a certain level or higher. Generally speaking, the goal of consumer satisfaction is to prepare products and services appropriately according to the purpose customers desire, to provide more customers with opportunities to experience a variety of products and services, and to make them feel more emotional than expected. It has been studied that customers who are satisfied with the business side make a positive oral tradition and exhibit high purchasing intentions and repurchase intentions and store loyalty, while unsatisfactory customers make a stronger and wider negative oral tradition and various types of complaining.

The intent of repurchasing can be defined as the potential for customers to repeat purchases of products or services in the future and is very closely related to actual repurchasing behavior. Repurchase intentions are measured by evaluating the tendency of consumers to repeatedly purchase the same type of brand or product or service. Consumers' post-purchase behavior is basically related to the consumption experience of the product, while it is closely related to the psychological state of the consumer before the purchase.

## **3. RESEARCH METHOD**

### **3.1 Research design and hypotheses**

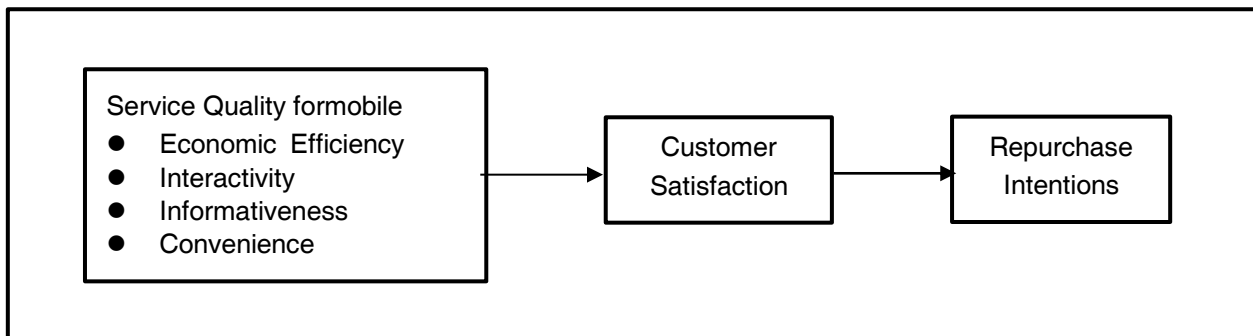
In this study, we looked at the impact of rapidly growing quality of mobile social commerce services on customer satisfaction and re-purchasing intentions, and tried to establish an efficient marketing strategy and provide useful development measures. Therefore, in order to achieve this goal, the following specific research content was taken up.

First, understand the impact of mobile social commerce on customer satisfaction

Second, understand the impact of mobile social commerce customer satisfaction on repurchase intentions

In order to achieve the purpose of this research, we presented a research model as shown inFigure 1. However, based on prior research, we presented the quality of social commerce service in four attributes: price

performance, interaction, information, and convenience. We understood that these attributes affect customer satisfaction and re-purchasing intent.



**Figure 1. The research model**

**H1:** The characteristics of the product recommendation system will have a positive effect on customer satisfaction.

**H1-1:** Economic Efficiency will have a positive impact on customer satisfaction.

**H1-2:** Interactivity will have a positive impact on customer satisfaction.

**H1-3:** Informativeness will have a positive impact on customer satisfaction.

**H1-4:** Convenience will have a positive impact on customer satisfaction.

**H2:** Customer satisfaction will have a positive impact on consumer repurchase intentions.

### 3.2 Data Collection and Measurement

The key subjects for this study were adults aged 18 or older in Seoul and Gyeonggi Province with experience in using mobile social commerce. The survey was conducted for three weeks from Feb. 1630 to Mar. 6, 2021. A total of 300 copies were distributed and 287 copies were recovered, and a total of 280 copies were used for the final analysis, except for 7 parts not available for analysis. The demographic characteristics of the respondents used in the study are as follows. First of all, male accounted for 55.7% of gender, and 20s accounted for 38.2% of age, followed by those in their 30s with 15.0%. The occupations were followed by students (46.8%), office workers (22.5%) and housewives (8.6%).

The main variables used in this study are the service quality attributes, customer satisfaction and Repurchase Intentions. Deriving these variables was based on a prior study review and was intended to measure as follows.

In order to examine whether the quality of social commerce service creates customer satisfaction and affects consumers' intention to repurchase, we measured the quality of service by dividing it into "price performance, interaction performance, information performance, and convenience" based on the previous research results. Based on the results of the previous study, customer satisfaction was measured with five questions and consumers' intention to buy again was measured with three questions each, but the five-point Recut scale was used for all measures.

## 4. RESULT AND DISCUSSION

### 4.1 Exploratory Factor Analysis and Reliability Test for the Measuring Instruments

A factor analysis was performed for validity verification, but a principal component analysis method was used for factor extraction, and a VARIMAX rotation method was used for factor rotation. The number of

extraction factors was selected based on Eigen Value 1. The Kaiser-Meyer-Olkin is based on a strict 0.6, the Communality is based on a universal 0.4, and the Factor loading is based on 0.4.

The results of exploratory factor analysis and reliability tests are shown in Table 1. Specifically, factors 1 are identified as "low price", "price discount", "low product service", and "cheaper than open market", indicating "Economic Efficiency". A factor 2 is constituted of items such as "resolution", "screen configuration", "readability", and "visuality", and becomes "convenience". A factor 3 is composed of items of "feedback", "consumer opinion", and "one-on-one consultation", and is composed of items of "interactive", and is "interactive". A factor 4 is constituted of items such as "originality", "up-to-date information", and "refund information", and is "informational". The reliability test was conducted to verify the internal consistency reliability of the factors derived from the factor analysis. The results confirmed that the Cronbach's alpha of all factors was over 0.615, thus ensuring internal consistency.

The results show that mobile social commerce service quality is composed of four factors:

**Table 1. Reliability and Validity of mobile social commerce Service Quality**

Factors	Variables	Factor loading	Eigen value	Cumulative (%)	Cronbach's alpha
Economic Efficiency	EE1	.801	2.373	16.952	.768
	EE2	.793			
	EE3	.759			
	EE4	.659			
Convenience	Con1	.813	2.284	33.268	.731
	Con 2	.769			
	Con 3	.680			
	Con 4	.640			
Interactivity	Int1	.879	1.972	47.355	.713
	Int 2	.818			
	Int 3	.658			
Informativeness	Inf1	.805	1.696	59.466	.615
	Inf 2	.782			
	Inf 3	.528			

#### 4.2 Investigating Factors Analysis and Reliability Test Results for Customer Satisfaction and Intention to Repurchase

A factor analysis was performed for validity verification, but a principal component analysis method was used for factor extraction, and a VARIMAX rotation method was used for factor rotation. The number of extraction factors was selected based on Eigen Value 1. The Kaiser-Meyer-Olkin is based on a strict 0.6, the Communality is based on a universal 0.4, and the Factor loading is based on 0.4.

The results of exploratory factor analysis and reliability tests are shown in Table 2. Factors analysis showed that factor 1 was "satisfied with product service," "satisfied with other e-commerce," "satisfied with all stages of use compared to other social commerce." "Inherent strengths" consisting of five items related to customer satisfaction, named "Customer satisfaction". Factor 2 consists of three items related to the intention of repurchase: "intention to repurchase," "recommendation" and "affirmative" and is named "intention to repurchase". Confidence in these factors is distributed in Cronbach's with alpha values of 0.798 or higher,

indicating that the derived factors consist of highly consistent items.

**Table 2. Reliability and Validity of Customer satisfaction and repurchase intentions**

Factors	Variables	Factor loading	Eigen value	Cumulative (%)	Cronbach's alpha
Customer Satisfaction	CS1	.804	2.970	59.407	.827
	CS2	.790			
	CS3	.786			
	CS4	.744			
	CS5	.728			
Repurchase Intentions	lor1	.855	2.139	71.315	.798
	lor2	.842			
	lor3	.836			

### 4.3 Hypothesis verification

#### 4.3.1 Hypothesis 1 (Mobile Social Commerce Quality → Customer Satisfaction) Verification Results

In order to verify hypotheses 1-1 to 1-4, price performance, convenience, interaction, and informativeness, which are the quality factors of mobile social commerce services, were extracted, and regression analysis was performed to see the impact on customer satisfaction. The results are shown in Table 3.

According to the regression analysis results in Table 3, the R<sup>2</sup> value is 0.417 and the regression equation accounts for 41.7% of the total variation. The value of F was 47.735 ( $p < 0.000$ ), which was significant at the significant level. As a result of the regression analysis, the statistical significance level is lower than 0.05, so the quality of mobile social commerce services is ultimately affecting customer satisfaction, and hypotheses 1-1, 1-2, 1-3 and 1-4 are all adopted. For the influence of each independent variable, price, convenience, interaction, and information are affected in order. In addition, a review of the multicollinearity among independent variables shows that the tolerance limit is greater than the general criterion 0.1 and the variance expansion factor (VIF) is less than 10, indicating that multicollinearity is not a big problem.

**Table 3. The impact of mobile social commerce service quality on customer satisfaction**

Independent variable	Dependent variable	Standard error	B	t-value	Sig.stat	Statistics
Customer Satisfaction	subj.norm	.045		.579	.563	
	Economic Efficiency	.045	.474	10.153	.000	R <sup>2</sup> =0.417
	Convenience	.045	.285	6.104	.000	F=47.735
	Interactivity	.045	.248	5.303	.000	P=0.000
	Informativeness	.045	.219	4.690	.000	

#### 4.3.2 Hypothesis 2 (Customer Satisfaction → Repurchase Intentions) Verification Results

To verify hypothesis 2, multiple regression analysis was performed to see the impact of customer satisfaction on repurchase intentions, and the results are shown in Table 4.

Looking at the regression analysis results in Table 4, the R<sup>2</sup> value is 0.657 and the regression expression explains about 65.7% of the total variation. An F value of 528.119 was found to be significant at a 0.05

significant level. Regression analysis showed that customer satisfaction had a positive impact on repurchase intentions because the statistically significant level was below 0.05 and hypothesis 2 was adopted.

**Table 4. The impact of customer satisfaction on repurchase intention**

Independent variable	Dependent variable	Standard Error	B	t-value	Sig.stat	Statistics
Repurchase Intentions	subj.norm	.035		.125	.901	R <sup>2</sup> =0.657
	Customer Satisfaction	.035	.810	22.981	.000	F=528.119 P=0.000

## 5. CONCLUSION

The study sought to understand the impact of mobile social commerce service quality on customer satisfaction and repurchase intentions. The materials for empirical analysis were conducted for 19 days from Feb. 16 to Mar. 6, 2021, using the Convenient Sampling Act for adults aged 18 or older in Seoul and Gyeonggi Province with experience in using mobile social commerce. A total of 300 copies were distributed and 287 copies were recovered, and a total of 280 copies were used for the final analysis, except for 7 parts not available for analysis.

The service quality in mobile social commerce has been selected as a factor of price, convenience, interaction and information through previous research. The results of this study are summarized as follows:

First, the mobile social commerce service quality attributes all affected significantly ( $p < .05$ ) customer satisfaction and the beta value of Economic Efficiency was the highest among the service quality attributes. Second, also the customer satisfaction influenced on consumer repurchase intentions significantly ( $p < .05$ ).

Based on the results of this study, we should strive to establish effective marketing strategies in the mobile social commerce industry. The mobile social commerce service quality requires a marketing strategy centered on price performance and it means companies should strive to increase customer satisfaction. Also it's very important to have a sustainable relationship with loyal customers because of the emotional impact on repurchase intentions, and the practical suggestions proposed based on the results of this study are expected to be of practical use to companies struggling alone in the highly competitive social commerce market.

## REFERENCES

- [1] Statistics Korea, *Online Shopping in September 2019 (Including Overseas Direct Online Sales and Purchases in the Third Quarter of 2019)*, November 2019.
- [2] H.J. Lee, E.H. Lee, K.H. Lee, "The Impact of University Students' Perceived Service Quality of Mobile Social Commerce on Their Satisfaction and Continued Usage Intention," *Journal of Consumer Culture*, Vol. 20, No. 2, pp. 234-254, 2017.
- [3] S.J. Lee, H.C. Lee, "A Study on Prediction Performance of Correspondence Average Algorithm in Cooperative Filtering Recommendation," *Information System Review*, Vol. 9, No. 1, pp. 85-103, 2007.
- [4] C. Zhang and L. Wan, "The Extraction Process of Durative Persuasive System Design Characteristics for Healthcare-related Mobile Applications," *International Journal of Advanced Smart Convergence*, Vol. 8, No. 2, pp. 18-29, June 2019. DOI: <https://doi.org/10.7236/IJASC.2019.8.2.18>.
- [5] K.D. Kim, Y.M. Yu, and J.L. Kim, "A Study on the Influence of Mobile Commerce Characteristics Perception on Mobile Shopping Intentions," *The Journal of The Institute of Internet, Broadcasting and Communication*, Vol. 13, No. 6, pp. 297-303, December 2013.

- [6] Y.C. Lee, Y.J. Choi, "An Exploratory Research on College Students' Usages of Mobile Commerce," *Journal of Communication Science*, Vol. 12, No. 4, pp. 382-418, 2012.
- [7] H.J. Lee, "A Study of Continuance Use for Hotel Booking Mobile App.: Assessing the Moderating Role of Online Review Credibility and Membership Benefit," *Korea Academic Society of Tourism Management(KASTM)*, Vol. 31, No. 3, pp 135~155, April 2016.
- [8] G.S. Kyoung, *The Role of Brand Application on the Satisfaction and Intention to Use: The Moderating Effect of Service Quality and KANO Model*, Ph.D. University of Kyonggi, December 2015.
- [9] H.J. Lee, "A Study of Continuance Use for Hotel Booking Mobile App.: Assessing the Moderating Role of Online Review Credibility and Membership Benefit," *Korea Academic Society of Tourism Management(KASTM)*, Vol. 31, No. 3, pp 135~155, April 2016.
- [10] H.H. Choi, *The Effect of O2O Service Quality on Customer Satisfaction and Continuous Usage Intention: Focused on Users of accommodation O2O service*, MA. Thesis. University of Kyonggi, June 2019.
- [11] G.S. Kyoung, *The Role of Brand Application on the Satisfaction and Intention to Use: The Moderating Effect of Service Quality and KANO Model*, Ph.D. University of Kyonggi, December 2015.
- [12] M.Y. Baek, "Analysis of Usage Motivation and Repeat-Using Intention in Mobile Social Commerce," *Korea Journal of Business Administration*, Vol. 28, No. 1, pp. 103~120, January 2015.
- [13] S.H. Kim, D.W. Jin, J.K. Choi, "An Empirical Study on Influencing Factors of Mobile Commerce User Satisfaction," *The e-Business Studies*, Vol. 7, No. 1, pp. 3~27, March 2006.
- [14] M.S. Choi, "The mobile service characteristics study on consumption value and consumer impulse buying: Focused on mobile Accommodation App", *The Korea Academic Society of Tourism and Leisure (KASTLE)*, Vol.28, No.5, pp.185-203, March 2016. DOI: <https://doi.org/10.7236/JIIBC.2013.13.6.297>.
- [15] X.F. Tian, *A Study on the Satisfaction, Reliability and Continuous Use Intention of Hotel O2O Application Characteristics in China*, MA. Thesis. National University of Kongju, November 2015.