

[Original Article]

Factors affecting social commerce acceptance - Perceived risks and social networking sites (SNS) use -

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Abstract

As social media penetrates more deeply into people's everyday lives, social commerce (a type of commerce that combines SNS features and possibility for commercial transactions) has enjoyed unprecedented growth. Shopping on Facebook is a representative example of social commerce platform that allows consumers to interact with other users, exchange information and purchase products without leaving a Facebook page. Social commerce presents great opportunities for marketers in terms of leveraging social aspects of shopping experience. It also offers a large potential for Korean companies to reach various target markets, as well as establish their presence abroad. Yet, acceptance of social commerce as a legitimate shopping channel has been slow, and consumers are still hesitant to shop via Facebook. This study draws on uses and gratification theory and the concept of perceived risk to examine how different motives for SNS use and the associated types of perceived risks can affect the purchase intention on the platform. Empirical data from 288 young users of Facebook were analyzed. Findings identified two main motives for SNS use: information-related motive and communication-related motive. Information-related motive significantly affected the intention to shop on Facebook, whereas communication-related motive did not have any significant influence. Risks associated with shopping via Facebook included delivery risk, security risk, social risk and economic risk. Overall, consumers perceived a higher level of security and social risk associated with shopping on Facebook. However, only social risk had a significant negative influence on the purchase intention. Awareness and previous experience of buying via social commerce platform positively affected consumers' purchase intention.

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I. Introduction

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The advancement of social media gave rise to social commerce that has been changing and challenging the landscape of online shopping. Social commerce can be defined as a type of e-commerce that utilizes the unique features of social networking sites (SNS), such as sharing information, photos, and videos, to conduct various commercial activities and transactions (Hajli, Sims, Zadeh, & Richard, 2017;

Liang & Turban, 2011). Although social commerce can take different forms, one of the most common method is building a storefront site within SNS platform where consumers can obtain information about the brand, its products, shop, and share the purchases with friends - all within bounds of one platform (Kang & Johnson, 2015). Although the idea certainly has its merits, consumers are still reluctant to purchase products directly from social media sites. This study, therefore, sets to explore the factors that can potentially hinder the acceptance of shopping via social commerce platforms. Facebook was chosen as a platform for this research inquiry as it is by far the most popular SNS worldwide and has wide-ranging demographics (Pandolph, 2018).

Social commerce is a critical area of interest for marketing scholars and professionals. It presents a great opportunity for retailers to expand into a new channel and to attract different customers. Although developing the online storefront on the platform requires initial investment, in the long run, companies can save on marketing costs due to word-of-mouth effect. In Korea, social commerce is growing exponentially, and Facebook engagement has been growing steadily from 13.69 million in 2013, up to 14.84 million in 2018, and the figure is projected to reach 15.74 million mark by the year 2022 (Statista, 2018). Social commerce thus presents a great opportunity for Korean companies, especially medium to small-size, to reach broader and possibly even international audience.

Social commerce has value for consumers as well. It introduces social component into online shopping that general e-commerce lacks, thus making it an overall more enjoyable and satisfactory activity (Arnold & Reynolds, 2003). Ability to interact with other people, share and exchange information is especially relevant in the context of fashion shopping. Kang and Park-Poaps (2011) showed that social shopping for fashion products contributed to increased product satisfaction and experience satisfaction. There-

fore, combining commerce and social media might be favourable for all parties involved: people already view social media as one of the major sources of information about brands, and at the same time, many companies use various SNS as their main marketing tools. In reality, however, there is still no evidence that consumers actually prefer to purchase products directly from SNS. Results of an online survey indicate that only 18.2% of users in the U.S. purchase products directly from social media platforms (Statista, 2016).

This research focuses on several potential factors that can influence intention of people to shop via social networking sites. One of the factors that can play an important role is different motives people have for using SNS. Uses and gratification theory applied to the realm of social media suggests that based on personal needs and different types of gratification that people seek, they will have various reasons for using social media (Raacke & Bonds-Raacke, 2008; Whiting & Williams, 2013). The application of this theory, however, has not yet been extended to the context of social commerce. At the same time, it is logical to assume that as people pursue personal goals on social media, their propensity to shop directly via SNS will also differ.

Another potential factor is high risk associated with shopping on social commerce platforms. It is well-established in the literature related to online shopping for apparel products that consumers experience various types of risks that inevitably affect their purchase intention (Aghekyan-Simonian, Forsythe, Kwon, & Chattaraman, 2012; Cho, Lim, & Lee, 2001; Kim, 2001). However, along with "traditional risks" of online apparel shopping, social commerce also has risks that are more specific to the operational nature of social network sites. Previous literature indicates that lack of trust in social media platforms due to the issues of privacy and security can significantly affect the intention of people to shop on these platforms (Brock, Blut, Linzmayer, Zimmer, & Iyer, 2016; Hajli

et al., 2017). Whether these risks apply in the context of fashion online shopping, however, has not yet been examined. Consequently, this study seeks to fill the gap in the literature by exploring possible perceived risks regarding social commerce that can negatively affect the intention of consumers to shop on the platform.

This study contributes to the field of marketing and consumer behavior and has implication for marketing practitioners. By analyzing the relationships between SNS use, perceived risks associated with shopping on Facebook and consumers' purchase intention, this study provides a more in-depth understanding of the obstacles that hinders wide-spread acceptance of social commerce. Confirmation of the importance of perceived risks related to security and exposure of private information indicates that social commerce cannot become a legitimate shopping channel until consumers are certain that their private information is protected, and they can decide who to share it with.

II. Theoretical Background

1. SNS use and intention to purchase via social commerce

Purchase intention refers to a degree of one's intention to buy a certain product or service (Ajzen & Fishbein, 1972). In the context of social commerce, purchase intention can be defined as a propensity of SNS users to shop via a social commerce platform. The question is then: What can affect consumers' intention to buy products on SNS or to refrain from the purchase? One of such factors can be the motives that people have for engaging in social media use at the first place.

According to uses and gratification theory (U&G, hereafter), different people have different motivations for using media based on what needs they seek to gratify. Although this theory was originally applied to traditional media channels, such as TV and newspapers (Katz, Haas, & Gurevitch, 1973; MacQuail,

1983), it is also applicable to newer types of media (i.e. Internet) and even social media. An exploratory study by Whiting and Williams (2013) applied U&G to understand why people use social media. Authors identified 10 main motives: social interaction, information seeking, pass time, entertainment, relaxation, communicatory utility, convenience utility, expression of opinion, information sharing, and surveillance/knowledge about others. Similarly, Oh (2010) found that among various motives, "keeping in touch", "making new friends" and "to learn about events" were the most common motives for SNS use. Moreover, the theory states that different motives for using media will lead to different behavioral outcomes (Katz, Blumer, & Gurevitch, 1974). This statement is also true when applied to the realm of social media. For instance, Shao (2008) showed that users who consume social media for information or entertainment purposes, were not likely to create their own content or actively comment on other's posts. On the other hand, for users who seek self-actualization, creating and sharing content was an essential part of their social media behavior. Because shopping on SNS can be viewed as a type of behavior that presupposes active engagement, it is then logical to assume that willingness to buy products will depend on users' general behavioral patterns on that platforms.

The majority of existing research, however, does not look at the potential influence of motives to use social media and focuses instead on the role that social nature of SNS plays on the consumers' intention to buy from these platforms. Authors in general agree that the "social" part of social commerce (i.e., communication, opinion exchange, sharing and following) has an overall positive influence on purchase intention. Arguably, it helps to overcome the major weaknesses of general e-commerce platforms - a lack of genuine human interaction - and make online shopping more engaging and satisfactory (Arnold & Reynolds, 2003). For instance, studies found that an ability to exchange information improves trust in

both, company and the platform, which leads to greater intention to purchase (Hajli, 2015; Lu, Fan, & Zhou, 2016). Another research direction suggested that support from a network of friends or community as well as the quality of relationships within that networks plays an important role in future intention of consumers to participate in social commerce (Liang, Ho, Li, & Turban, 2011).

Limited number of studies, however, exist that focus on understanding the behavior of consumers who purchase apparel and fashion products via SNS platforms. Findings indicate that some type of correlation between motives to use SNSs and intention to buy certainly exists. Kang, Johnson, and Wu (2014) found that users whose primary motivation was to exchange opinions on SNS were also likely to purchase via these platforms. Similarly, Kang and Johnson (2015) discovered that people who used brand pages on Facebook to search for information about fashion products as well as to socialize were more likely to make a purchase on that pages. Research that explores such relationships, however, is scarce and not systematic. In addition, these studies, did not apply U&G theory in their inquiries, thus only limited number of motives were tested. As evidence presented above shows, various motives might be at play. Therefore, by applying U&G theory this research sets to explore how different motivations to use social media can influence users' intention to make a purchase via social commerce platforms.

2. Risk perception and intention to purchase via social commerce

Risk perception is defined as an uncertainty that consumers experience with regard to his or her intention to purchase (Simon, Houghton, & Aquino, 2000). Such uncertainty occurs when there is a discrepancy between the benefits and the cost of the purchase, and it often becomes a major factor that deters consumers from purchasing a product (Dowling & Staelin, 1994). Risk perception can also be con-

ceptualized as a loss that happens as a result of a purchase where degree of importance of such loss is an important factor (Bettman, 1973). Furthermore, risk perception can be interpreted as the possibility that a loss will repeat and that such repetition is an important factor that influences consumers' decision-making process (Sitkin & Weingart, 1995).

Any type of online shopping is generally considered an activity that involves high levels of potential risks (Garbarino, & Strahilevitz, 2004; Miyazaki, & Fernandez, 2001). Unlike offline stores, consumers are not able to directly touch, try on or otherwise test the product before purchasing it. Using credit cards can also be perceived as risky because consumers essentially expose their private information to the third parties when making a purchase online (Salisbury, Pearson, Pearson, & Miller, 2001).

Shopping for apparel has its own set of associated risks. Empirical study conducted by Cho et al. (2001) categorizes the risk perception of consumers who shop for clothes online into several types of risks: risks related to the quality of the product, time/convenience risk, economic risk, social/psychological risk, privacy risks, and size risk. They found that consumers who had purchased products online before, had overall lower scores associated with quality risk, time/ convenience risk, economic risk, and size risk compared to those who did not. Another study by Kim (2001) identified eight categories of consumers' risk perception related to clothing products, such as the size risk, time/convenience risk, privacy risk, economic risk, social risk, transaction risk, product uncertainty risk, and delivery risk. The author concluded that the six types of risk excluding the delivery risk and the transaction risk negatively affect the purchase intention of a customer.

Social commerce is a relatively new and developing area where consumers' perceived risks are expected to be high. While many perceived risks associated with online shopping in general will most likely to apply to shopping on social media platforms, it

is likely that shopping on SNS will evoke other perceived risks specific to the nature of social media. One of such risks could be the fear that one's private information can be exposed to others. As Brock, Blut, Linzmajer, and Zimmer (2011) aptly noted, when people shop from the brands websites or online platforms, only limited amount of private information is collected. Social network sites, such as Facebook for instance, collect and store much greater volumes of sensitive information that can potentially be accessed by retailers when an SNS user makes a purchase. Such fears are not groundless. In 2007 shopping on Facebook received a bad reputation when information about users' purchases were automatically posted on their friends' feed without any forewarning (Ente, 2011). Although Facebook has changed its privacy and data sharing policy, such blatant violation of customers' security cannot be easily forgotten. The perceived risk with regard to security of payment is also believed to be stronger for social commerce as compared to general online shopping. On SNS, there is a higher number of intermediaries that are involved in the process of commercial transaction which, naturally, can make consumers question the security of that transaction (Brock, et al., 2011).

Existing studies that try to answer the question: "what stops consumers from shopping on social commerce platforms?" do not distinguish between different types of perceived risks and mostly focus on trust (or a lack of thereof) as a core influential factor (Brock et al., 2016; Hajli et al., 2017). Indeed, a lack of trust in the platform will most certainly affect the propensity consumers to shop. It can also be argued that the lack of trust in the platform is where the majority of perceived risks stem from. However, reducing all potential risks to the absence of trust when analyzing consumer behavior on social commerce platforms seems to be counterproductive - research on social commerce is still in its infancy and more detailed understanding of different factors that hinders acceptance social commerce is needed. And currently,

it is still not clear how different types of risks - ones that are related to online shopping in general and ones that are specific to social commerce - affect the intention of consumers to shop on social networking platforms. In addition, different types of SNS users might perceive these risks differently. U&G theory suggests that different motives lead to different behavioral outcomes, so it can be assumed that based on user goals (or gratifications), not all risks will be equally important. Therefore, this study aims to comprehensively examine perceived social commerce risks by analyzing the relationship between SNS use motives as well as assessing the effect on the consumers' purchase intention.

3. Gender differences: SNS use, perceived risks and purchase intention

Despite the extreme popularity of social media, examining whether men and women differ in their online behavior has not yet become a subject of rigorous inquiry. The information regarding gender difference is scarce, and findings are inconclusive. While older studies suggest that women value interpersonal aspects of social media, whereas men use SNS for information purposes (Jackson, Ervin, Gardner, & Schmitt, 2001), more recent studies do not support these findings. Haferkamp, Eimler, Papadakis, and Kruck (2012) argue that the opposite is true: it is men who seek to build and maintain relationship on social media, and women pursue entertainment purposes. The authors suggest that men are more pragmatic, so, unsurprisingly, their social media use motives are more utilitarian in nature. Another study by Pujazon-Zazik and Park (2010) provides a summary of non-scholastic research on gender differences and internet use that shows another type of differences: men tend to use Internet for entertainment purposes, while women favor relational aspects. Consequently, there is a need to examine whether men and women differ in their motives to use SNS; and if differences exist how these differences affect the intention of men and

women to shop on social media platforms.

Perceived risk and gender differences in the context of online shopping has received much attention from marketing scholars. Overall, prior studies agree that women tend to perceive more risks compared to men when shopping online especially in terms of likelihood of risk occurrence, negative outcomes, and consequences of privacy loss, which negatively affect intention to buy (see Garbarino & Strahilevitz, 2004 for a comprehensive overview or prior studies). As was argued above, online shopping and shopping via SNS, while being similar (both activities happen online), have several distinct differences due to the nature of SNS platforms. The research, however, has not yet examined whether the gender differences with regard to perceived risks remain in the context of social commerce. Because women overall are more cautious compared to men when shopping online, it is likely that perception of risks associated with shopping via SNS will also be higher. Yet, as of now, there is no empirical data to support or disprove this claim. Therefore, this study aims at exploring whether women will have higher degree of perceived risks with regard to shopping on social media platforms, and whether the intention to purchase will differ.

III. Research Method

1. Research objectives

The purpose of this study is to explore the influence of SNS usage motives and perceived risks related to social commerce on the purchase intention. Specific research objectives are as follows:

Research objective 1: Analyze factors that characterize consumers SNS use

Research objective 2: Analyze factors that characterize consumers' perceived risks associated with social commerce

Research objective 3: Examine the effect of SNS use on perceived social commerce risks

Research objective 4: Examine the effect of perceived social commerce risks on purchase intention

Research objective 5: Examine the effect of SNS use on purchase intention

Research objective 6: Examine the gender difference for SNS use, perceived social commerce risks, and purchase intention

2. Measures

The survey uses a 5-point Likert scale where 1=strongly disagree and 5=strongly agree. Drawing on previous research (Oh, 2010, Whiting & Williams, 2013; Xu, 2011) an 8-item scale was developed to measure motives for SNS use and adapted for the purposes of this study. The eight motives were: "communication", "information search", "entertainment", "identity expression", "advertisement", "killing time", "image management". A 19-item perceived social commerce risk scale was adopted from Kim (2001). Questions were selected and modified in order to measure inexperience risk, privacy/transaction risk, economic risk, quality risk, and time/convenience risk. One question was designed to measure the purchase intention of respondents. Additional items aimed to measure respondents' online shopping use and Facebook use were also included.

3. Sample and data collection

Because Facebook was chosen as a main platform for this study, people in their 20s were selected as a target group as research findings indicate that that younger consumers are more frequent and motivated users of Facebook (Cheung, Chiu, & Lee, 2011; McAndrew & Jeong, 2012). To be eligible for this study, respondents must have made at least one apparel or fashion-related purchase online in the past month. Online shopping experience was chosen over experience of shopping on Facebook as in Korea Facebook has not yet become widely accepted shopping channel among users. Data were collected through

online survey company. The final sample size included 288 responses with balanced gender distribution (142 men and 146 women).

IV. Results

1. Respondents' SNS use

〈Table 1〉 shows the result of descriptive statistic with regard to respondents' SNS use. The survey measured the frequency of the respondents' SNS use. 52.1% ($n=150$) of the respondents stated that they used SNS daily. Because Facebook allows instant messaging and status updates, most users accessed Facebook multiple times throughout the day. 31.6% ($n=91$) used SNS once or twice a day, 9.7% ($n=28$) used SNS once or twice every three days, 4.2% ($n=12$) used SNS once or twice a week, and 2.4% ($n=7$) used SNS only once or twice a month.

The most commonly used device for SNS use was mobile phones, as 66.0% ($n=190$) of the respondents stated that they used their mobile phones to access the platform. 29.9% ($n=86$) used their laptops or desktop computers, 4.2% ($n=12$) used their tablet

PCs.

44.8% ($n=129$) of the respondents heard about social commerce, whereas 55.2% ($n=159$) did not. Although almost half of the respondents knew about the existence of social commerce, only 27 respondents (9.4%) had experience with shopping on Facebook.

Factor analysis with varimax rotation was conducted to identify empirical factors for motives for SNS use. Two factors were extracted that explained 63.46% of the variance. Reliabilities of factors were .78 and .70 respectively (Table 2). Cronbach's *alpha* of .70 was used as a cutoff point for overall reliable measures (Privette & Sherry, 1986).

The result indicates that people's motives for SNS use can be divided into two main categories: motives related to engaging in social interactions with others (labeled as "communication-oriented motive") and motives related to acquiring and exchanging information related to one's interests (labeled as "information-oriented motive"). Information-oriented motive can also be interpreted as a commercial motive. Mean score of each motive factor is shown in 〈Table

〈Table 1〉 Respondents' SNS use behavior

($N=288$)

Questions		Number of respondents	Percentage (%)
Frequency of use	Frequently (every day)	150	52.1
	Once or twice a day	91	31.6
	Once or twice in 3 days	28	9.7
	Once or twice a week	12	4.2
	Once or twice a month	7	2.4
Device used	Laptop, Desktop	86	29.9
	Tablet PC	12	4.2
	Mobile phone	190	66.0
Social commerce awareness	I have heard of it.	129	44.8
	I have not heard of it.	159	55.2
Social commerce experience	I have purchased a product via Facebook.	27	9.4
	I have not purchased a product via Facebook.	261	90.6

<Table 2> Factors for SNS use motives

Factors	Survey questions	Factor loadings	Eigen value	Variance explained % (cumulative)	Reliability (α)	Mean score of items
Communication-oriented motive	I can express my feelings.	.81	2.56	36.68 (36.68)	.78	3.78
	I can communicate with others.	.77				
	I can manage my image.	.71				
	I can brighten my mood.	.69				
Information-oriented motive	I can participate in various events.	.81	1.87	26.78 (63.46)	.70	3.44
	I can search for information related to my interests.	.78				
	I can tell others about interests or myself.	.63				

2). The results indicate that rather than using SNS as a means to acquire and advertise information ($M=3.44$), most users use SNS to express their identity, communicate with other users, and build social relationships ($M=3.78$). The results are in line with the results of a study conducted by Cheung et al. (2011), where authors argue that the primary reasons for using Facebook is to build and maintain social networks.

A *t*-test was conducted to verify gender differences with regard to motives for SNS use (Table 3). Results indicate that there were significant gender differences in communication-oriented motive. Communication-oriented motive was stronger for men than women. This finding is in line with the results of Haferkamp et al. (2012) who concluded that men tend to have more pragmatic motives as they prefer to use SNS to build and maintain social relationships. In terms of information-oriented motive, no significant gender differences were detected.

2. Factors: Perceived social commerce risks

Factor analysis with varimax rotation was conducted to identify empirical sub-dimensions of factors for perceived social commerce risks. Four factors were extracted that explained 66.28% of the variance. Reliabilities of factors ranged from .72 to .88 (Table 4). Perceived social commerce risks can be classified into more specific types of risks: delivery risk, security risk related to lack of experience and information exposure, social risk, and economic risk. Security risk was associated with lack of experience and transaction risk. Items measuring quality risk, and time/convenience were included in the survey questionnaire but were not identified as valid factors.

Mean scores for each factor of perceived social commerce risks are also shown in (Table 4). The table indicates that the average value of the participants' responses and a larger mean value refer to a larger perception of risk in social commerce. According to the results, the perception of security risk

<Table 3> Gender differences in SNS use

	Male ($n=142$)	Female ($n=146$)	<i>t</i>
Communication-oriented motive	3.99	3.84	2.05*
Information-oriented motive	3.50	3.42	.84

* $p < .05$

<Table 4> Perceived social commerce risks factors

Factors	Survey questions	Factor loadings	Eigen value	Variance explained % (cumulative)	Reliability (α)	Mean score of items
Security risk	I am afraid that if a problem occurs, it would not be resolved properly.	.76	2.71	20.86 (20.86)	.82	3.73
	The security of transactions on this website is questionable.	.75				
	I am worried because I am not sure if the stores in Facebook are real.	.71				
	I am worried that my financial information will be leaked when I use my credit card or when I transfer money from my bank account.	.67				
	I am worried that my private information will be exposed when I purchase products through Facebook.	.50				
Delivery risk	I am worried that my order will be delivered to a different location.	.79	2.28	17.57 (38.43)	.75	2.87
	I am worried that my order will be damaged or lost in the delivery process.	.71				
	I am worried that the delivery will take longer than expected.	.68				
Social risk	I am worried that my friends will have access to my purchase history.	.91	1.95	15.03 (53.47)	.88	3.67
	I am afraid that my shopping activities on Facebook will be exposed to other users.	.88				
Economic risk	I am worried that the price of products on Facebook will be more expensive compared to other online stores.	.79	1.92	14.82 (68.28)	.72	3.29
	I am worried that the price of products on Facebook will be more expensive compared to other offline stores.	.71				
	I am worried because I cannot compare prices on Facebook unlike other online shopping malls.	.70				

caused by lack of experience and private information leakage ($M=3.73$) was the most influential risk factor. Furthermore, due to the ease of information proliferation on Facebook, the social risk of having one's purchase history exposed to his or her friends ($M=3.67$) was a major factor that characterized consumers' risk perceptions. This finding can be supported

by previous studies that suggested that privacy and data sharing policy are main concerns for users who contemplate making a purchase on Facebook (Brock et al., 2011). On the other hand, consumers' perception of delivery risk and economic risk were relatively low compared to other types of risks, as these are risks also exist when shopping via general e-com-

merce platforms. Overall, the results indicate that consumers place higher importance on risks that are related to specific features of SNSs.

A *t*-test was conducted to verify gender differences with regard to social commerce risks factors (Table 5). Results indicate that there were significant gender differences in perceived security risk and perceived social risk. For both types, women perceived an overall higher level of risks compared to men. This result supports Garbarino and Strahilevitz's (2004) findings who concluded that women experienced security risks more than men when shopping online. It supports the suggestion that women perceive social commerce as no less risky than general shopping from brands or retailers online. In terms of delivery and economic risks, however, no significant gender differences were detected.

3. Effects of SNS use on perceived social commerce risk factors

To analyze the effect of motives for SNS use on perceived social commerce risk factors, regression analysis was conducted (Table 6). Each risk factor was set as a dependent variable for each regression analysis. By examining VIF, multicollinearity was checked for the regression analysis.

Motives for SNS use were found to have significant influence on delivery risk and economic risk. Communication-oriented motive had significant negative effect on delivery risk ($\beta=-.13$, $p<.05$) whereas for information-oriented motive, it had a significant positive influence ($\beta=.20$, $p<.01$). In other words,

users who had communication-oriented motives for using SNS did not consider delivery risk to be a risk. In contrast, those users who had information-orientation motives perceived a higher level of delivery risk. This result is not surprising as people who constantly engage in different types of interaction on social media platforms believe they can resolve any issues easily by a virtue of communication. In addition, information-oriented motive to use SNS significantly affected the perception of economic risk ($\beta=.18$, $p<.01$). The result is interesting as scholars and marketing practitioners agree that information exchange feature of social media helps to increase trust in the platforms and thus decrease perception of risk (Brock et al., 2016; Hajli et al., 2017). However, in Korea shopping on Facebook is still a relatively new phenomenon and it is likely that retailers who currently sell their products on Facebook do not provide enough information about their products. Also, as not as many people use social commerce, available information with regard to users' shopping and product experiences on Facebook is limited. Therefore, for information-oriented users such lack of information might seem suspicious and thus contribute to higher degree of perceived risks. For social risk and security risk, however, no significant influence in terms of SNS use motives was detected.

4. Effect of perceived social commerce risks on purchase intention

A regression analysis was conducted to examine the effects of perceived social commerce risk factors

<Table 5> Gender differences in social commerce risks factors

	Male (n=142)	Female (n=146)	<i>t</i>
Security risk	3.57	3.88	-3.55***
Delivery risk	2.80	2.94	-1.60
Social risk	3.48	3.85	-3.09**
Economic risk	3.27	3.31	-.43

** $p<.01$, *** $p<.001$

<Table 6> Effect of SNS use motives on perceived social commerce risks

Dependent variables	Independent variable (β)		R^2	F
	Communication-oriented motive	Information-oriented motive		
Perceived social commerce risks				
Security risk	.02	.06	.00	.93
Delivery risk	-.13*	.20**	.03	5.35**
Social risk	.04	-.02	.00	.20
Economic risk	-.01	.18**	.02	5.46**

* $p < .05$, ** $p < .01$

on consumers' purchase intention. The results of regression analysis are shown in (Table 7). Perceived social risks had overall significant effect on purchase intention ($F=3.68$, $p < .01$). However, among different types of risks, only perceived social risk ($\beta = -.21$, $p < .01$) negatively influenced purchase intention, and the remaining risk factors such as delivery risk, security risk, and economic risk did not affect consumers' purchase intention. When contemplating a purchase on Facebook, consumers are concerned that other users will be able to see their purchase history or shopping activity. Contrary to common belief that information exchange will bolster the credibility of social commerce, current results indicate that the ease with which information can be shared on Facebook hinders rather than helps the acceptance of the platform as a legitimate shopping channel. It is possible, however that a strong negative effect on purchase intention is related specifically to Facebook as it is well-known for constantly changing its privacy and data sharing policy without notifying its users (Ente,

2011). Therefore, perceived social risks might not be as strong for other social commerce platforms.

Several descriptive behavioral variables related to SNS use were analyzed in terms of perceived risks associated with social commerce. However, none of the variables were significantly associated with perceived risks. This means that regardless of how frequently consumers use SNS, what kind of device they use to access SNS, whether they had heard about social commerce before or whether they had experience with social commerce, did not have any significant effect in terms of sustaining or reducing risks associated with social commerce shopping.

5. Effect of SNS use on purchase intention

(Table 8) shows the results of a regression analysis conducted to examine the effects of motives to use SNS on purchase intention on Facebook. It was found that some motives to use SNS had a significant effect on purchase intention ($F=15.38$, $p < .001$). Specifically, information-oriented motive ($\beta = .23$, $p < .001$) had a

<Table 7> Effect of perceived social commerce risks on purchase intention

Dependent variable	Independent variable	β	R^2	F
Purchase intention	Security risk	-.04	.04	3.68**
	Delivery risk	.05		
	Social risk	-.21**		
	Economic risk	.03		

** $p < .01$

<Table 8> The influence of SNS use on purchase intention

Dependent variable	Independent variable	β	R^2	F
Purchase intention	Communication-oriented motive	.11	.09	15.38***
	Information-oriented motive	.23***		

*** $p < .001$

positive effect on purchase intention. In other words, stronger information-related motives lead to a higher level of intention to purchase via social commerce platforms. Communication-oriented motive did not have significant influence. This finding contradicts the results of (Kang et al., 2014) who found that desire for opinion exchange lead to greater purchase intention on social commerce platforms. However, as U&G theory applied in this study suggests, motives to engage in the media use define the behavioral outcomes (Katz et al., 1973). Therefore, it is not surprising then that people who use SNS to maintain social relationships to keep in touch with friends will be less interested in shopping on the platform because their motive (communication with friends) cannot be gratified by the act of shopping.

To examine the effect of different characteristics of SNS use motives on purchase intention, a t -test was

conducted (Table 9). The frequency of SNS usage did not have a significant effect on purchase intention. Device that consumers used to access SNSs did not have significant effect on purchase intention.

Also, the significant differences in purchase intentions between people who were aware of companies that sold products via SNS ($M=3.12$) and those who were not ($M=2.64$) was significant ($t=4.27$, $p < .001$). In other words, people who were more familiar with the existence of social commerce, perceived the purchase and sale of products on SNS as a more natural process compared to those for whom social commerce was an unfamiliar concept.

There was also a significant statistical difference ($t=3.15$, $p < .01$) in the purchase intentions between people who have purchased products through social commerce ($M=3.41$) and those who have not ($M=2.79$). Although there were only 27 participants who had

<Table 9> Effect of SNS use behavior on the purchase intention of social commerce

Dependent variables	Independent variable groups and means		t
SNS use frequency	Frequently ($n=150$)	Occasionally ($n=138$)	1.86
	2.95	2.74	
SNS use device	Laptop/Desktop ($n=86$)	Mobile ($n=190$)	.36
	2.87	2.83	
Social commerce awareness	Aware ($n=129$)	Unaware ($n=159$)	4.27***
	3.12	2.64	
Social commerce experience	Experienced ($n=27$)	Inexperience ($n=261$)	3.15**
	3.41	2.79	
Gender	Male ($n=142$)	Female ($n=146$)	2.20*
	2.98	2.73	

* $p < .05$, ** $p < .01$, *** $p < .001$

shopped on Facebook, the results hold significant value, as it shows that experienced users do not perceive risks in a way that many inexperienced users do.

Gender differences also affected purchase intention. According to the results, men ($M=2.93$) had a higher purchase intention than women ($M=2.73$). These results need further investigation because the gender characteristics of involvement in product category and involvement in shopping medium may have a mediating influence.

V. Conclusion

This paper examined consumers' motives for SNS and analyzed the effect of the different types of motives on purchase intention via social commerce. Types of risk perception associated with shopping on social commerce platform (in this case, Facebook) and their influence on purchase intention were also analyzed.

The results of this study indicate that consumers' motives for using Facebook can be divided into two sub categories: communication-oriented motive and information-oriented motives. According to the study, more consumers used Facebook as a medium to maintain friendship and communicate with a wider audience. However, only the information-related motive had a significant influence on purchase intention. Although this finding contradicts results reported in previous literature (Kang et al., 2014), it is in line with U&G theory applied in this study. Specifically, people who put more emphasis on communication aspect of SNS will be less interested in engaging in shopping activity because their main goal (or gratification they are seeking) cannot be achieved by shopping. On the contrary, users who are driven by self-advertisement and participatory motives will be more inclined to shop via SNS because it aligns with their needs they seek to gratify.

With regard to SNS use motives and perceived risks, only users with information-related motive perceived higher levels of delivery risk and economic

risks, while for communication-oriented users these risks were not significant. It can be suggested that users who use SNS for the communication purposes did not perceived risks associated with social commerce because they had no intention to shop on the platform. However, as it was previously shown, users with information-related motive had a higher degree of purchase intention. Therefore, for them the perception of associated risks would inevitably be higher.

A close analysis of risk associated with social commerce reveals that many risk factors such as the delivery risk, security risk, social risk, and economic-risk characterize risk perception of shopping on Facebook. Among these risk factors, SNS users perceived higher levels of security risk, and social risks. Because shopping via Facebook is still a novel concept for Korea, people's lack of experience in using Facebook as a shopping channel might play a crucial role. In addition, previous bad reputation of Facebook (Ente, 2011) could lead to increased perception of risk that their private information will be exposed to other users when they make a purchase. Unsurprisingly then, social risk was the only risk factor that had a significant negative effect on purchase intention. This finding indicates that although the possibility and ease of sharing and exchange of information in the shopping via SNS is what initially attracts consumers to social commerce, the privacy concerns still prevail. In other words, although consumers would like to have an option of sharing their purchases with their friends, they need to maintain control over this process. Therefore, excessive exposure of the private information without a user's consent can negatively affect a consumer's future intention to shop from SNS.

Results also indicate that people who use Facebook on a daily basis are not necessarily more likely to become active social commerce shoppers. This result can be attributed to the fact consumers still perceive general SNS use (i.e. communication, sharing, liking) and social commerce use (i.e. shopping) as two distinct activities. The findings also indicate that experi-

ence in buying from social commerce platform can be a factor that affect subsequent intention to buy from that platform.

Regarding gender differences, this study shows that significant differences exist between men and women in their SNS use, perceived risks and overall purchase intention. Men use SNS for communication purposes whereas women use SNS for purposes related to information sharing and search. Men also perceive lower levels of risks associated with shopping on Facebook compared to women. Finally, men are more predisposed to purchase via the platform.

The results of the study suggest the following implications. First, careful management of consumers' private information is necessary to reduce the perceived social risk that was found to be a major factor negatively affecting purchase intention. While social component of social commerce is considered as a feature that will facilitate its rapid acceptance, it will not happen until consumer are certain that their private information is secure and that they are in control over what information is shared and what remains private. Therefore, companies should present clear standards and policies related to the protection of private information to consumers and compensate consumers if their private information was leaked. Moreover, as women overall have higher perception of risks, marketers should develop strategies to reduce such risks aimed specifically at women. Second, brands should put more effort in engaging consumers to try shopping on social commerce platform. This study shows that users who have purchased on Facebook before have a higher purchase intention compared to those who did not. Therefore, through sales and promotional events, marketers should encourage new consumers to complete a purchase via the social commerce platform. Also, more research should be conducted on analyzing difference in shopping behavior on social commerce and general online shopping platforms. As social commerce is in its initial stages of development, it is important to know what factors

can prompt consumers to choose to shop at a brand's page on SNS over shopping at a brand's webpage. Furthermore, more studies should investigate the differences between domestic users and users abroad. It is important to know whether users abroad, who had more exposure to Facebook compared to Korean users, perceive shopping on Facebook differently in order to strategize new ways to approach the Korean audience. These studies would be especially beneficial for domestic companies, as they can utilize Facebook as a platform to reach international customers.

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