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Social Commerce In Retailing – Why You Use IT?

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**SOCIAL COMMERCE IN RETAILING – WHY YOU USE
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Abstract

Social media has not only reshaped the way people make decisions, but also changed the norms of how people interact with others. Due to the popularity of social media, social commerce is becoming a new form of e-commerce approaches. This study attempts to investigate what motivates individuals' use of social commerce in the context of grocery retailing service based on the theoretical framework of the Uses and Gratifications theory. The empirical data was collected from a Finnish social commerce website offering a social media environment for social commerce in grocery services. Based on both survey data and clickstream data, we found that i) individuals are motivated to use social commerce in grocery retailing service mainly due to their utilitarian gratification in using it as social commerce platform can meet their functional needs; ii) social gratification plays weak role in determining social commerce in grocery retailing service as individuals has less social needs compared to their functional needs in social commerce; and iii) hedonic gratification might be a potential reason as the hedonic needs seems to be very weak. The functions (searching for products and recipes, compiling shopping lists and online shopping, etc.) offered by the social commerce services meet individuals' functional needs, and motivate them to use social commerce. Finally the limitations of the current research are discussed, and the directions for further research are also suggested.

Keywords: Social media, social commerce, uses and gratifications theory, e-commerce.

1 Introduction

Social media has experienced a rapid expansion of its popularity after its inception in the early 2000s. There are various social media channels for individuals to use, such as blogs, bulletin boards, chat rooms, discussion forums, newsgroups, wikis, email, personal web pages, social networking websites, and virtual communities (Litvin et al. 2008; Reichheld et al. 2000). According to a recent report released by Facebook, currently the most famous social networking site, it has an estimated 800 million active users. Madden et al. (2011) found that approximately 65% of adult Internet users visit social network sites, such as Facebook, Twitter, LinkedIn. Social media has gained substantial popularity among users.

Recent research indicates that more and more people are using social media for various reasons, such as making friends, searching information, keeping connected with friends or for entertainment. Social media has also been widely used by business communities to accommodate the growing trend of social media for business values, such as increasing sales, raising customer loyalty and retention, improving customer satisfaction, customer support and branding (He et al. 2013). Qualman (2009) argued that social media has not only fundamentally reshaped the way people make decisions, but also profoundly changed our lives and how we interact with others.

Nowadays, consumers rely more on social media to find the information they need and gain substantially more power in making their decisions on purchasing products or services. The increased popularity of social media has opened opportunities for business considering the new innovative platform offered by the social media environment (Liang and Turban 2011). Social media has been widely employed in different industries, such as Facebook, Twitter, LinkedIn, Groupon and other professional social shopping communities (Harris and Dennis 2011; Olbrich and Holsing 2011; He et al. 2013; Xiang and Gretzel 2012). The new business model of using web 2.0 social media technologies to support e-commerce has been regarded as a new extension of e-commerce, and has often been referred to as social commerce (Liang and Turban 2011; Stephen and Toubia 2010; Zwass 2010).

Recently, social commerce has attracted researchers' attention from different disciplines, such as, marketing and information systems. Prior research has explored social commerce from different perspectives, such as user behaviour, social media techniques (e.g. tools, platforms and technology), and commercial activities or outcomes of social commerce (Pagani and Mirabello 2012, Liang and Turban 2011).

Prior research on social commerce has focused more on the process or the outcome of using social commerce, while limited efforts have been made to explore the motivations beyond users' usage of social commerce. In addition, social commerce fits well to the retailing industry, but research on social commerce, especially in the grocery retailing industry is still scarce. Furthermore, prior research mainly investigates individuals' use of social commerce based on data collected via survey, little effort has been made to integrate both real users' clickstream data and survey data to deeply investigate individuals' use of social commerce.

In response to the above research challenges, this study attempts to examine the factors motivating individuals' use of social commerce from the perspective of the Uses and Gratifications theory (U & G). The research was conducted in the context of social commerce in grocery services. Thus, our research questions is:

RQ: What motivates individuals' use of social commerce in grocery services?

The empirical data in the current study includes both clickstream data of real users and data collected via survey among a sample of the registered users. Therefore, this research might in essence offer a theoretical account of the motivations for individuals to use social commerce for grocery shopping through combining both data sources. The findings of the current study are also expected to shed light on how social commerce sites should be designed to attract more individuals.

The structure of the paper is as following: first a summary of the literature on social commerce and the U & G theory is presented. Then, the research strategy is introduced. After discussing the findings of the current study, the paper highlights the implications for both research and practices. Finally, the limitations of this study and the implications for future research are pointed out.

2 Literature review

2.1 Social commerce

Social commerce was first introduced in 2005, and has been driven more by practices rather than by research after its launch (Wang and Zhang 2012). In the literature there is still no universal definition of social commerce. According to Olbrich and Holsing (2011), social commerce is a new form of e-commerce, which connects consumers and shopping together due to the linkage of online shopping and social networking. Social commerce involves the use of Web 2.0 technologies to assist in acquisition of products or services, such as, social networks and virtual communities (Amblee and Bui 2011; Dennison et al. 2009). Wang and Zhang (2012) defined social commerce as a form of commerce mediated by social media involving convergence between online and offline environment. According to Liang and Turban (2011), social commerce is a subset of e-commerce that “involves using Web. 2.0 social media technologies to support online interactions and user contributions to assist in the acquisition of products and services” (p. 5). In essence, social commerce is a combination of social and commercial activities.

In a social commerce website, people can communicate with other users online, get advice from others, find needed information for goods and services, and conduct purchasing online or offline. Social commerce is posited to have the following three major attributes: social media technologies, social interaction and commercial activities (Liang and Turban 2011). The two major configurations of social commerce websites are: i) social network websites adding commercial features that allow advertisements and transaction; and ii) traditional e-commerce websites adding social networking capabilities to serve and understand customers better via taking advantage of the power of social networking (Liang and Turban 2011).

2.2 Uses and gratifications theory

The U & G theory has been widely used in mass communication research to investigate the reason why people choose a communication medium over alternative media to gratify their various needs (Katz et al. 1974). According to the U & G theory, people are active in choosing and using media based on their needs. They are aware of their needs and their behaviors are goal-oriented. The U & G approach has been widely applied in the traditional

mass communication research, such as radio (Mendelsohn 1964), newspapers (Elliott and Rosenberg 1987), and television (Babrow 1987), and was recently applied to explore the new media and communication technologies, such as social network sites (Xu et al. 2012), social media (Zhou et al. 2011) virtual community (Cheung and Lee 2009), as well as social network game (Li et al. 2013).

The U & G approach posits that people's use of a media mainly determined by the functions offered by the media. And the recent research results based on the U & G approach, such as in the research contexts of Internet (Stafford et al. 2004), social network sites (Xu et al. 2012), social network game (Li et al. 2013), found that people's use of the new medias are determined by not only functional need, but also social need and hedonic need (Li et al. 2013; Zhou et al. 2011).

Thus, we employed the U & G approach as the theoretical framework in the current study to explore individuals' use of social commerce, for that social commerce is based on social media platform and the U & G approach fits to our research context. The U & G approach provides a nomological network for research rather than the predefined set of constructs or factors. In this study, according to the unique features of the U & G theory, we do not suggest any predefined categories of needs, but examine the main needs motivating individuals' use of social commerce with both the survey data and the clickstream data.

3 Research strategy

In the current study, we collected empirical data in a Finnish social commerce website, Foodie.fm. It offers social commerce platform for grocery shopping in Finland, in cooperation with one major Finnish retailer, S-group.

Foodie.fm provides a social commerce platform to meet consumers' needs for grocery shopping, where consumers can engage and interact with other users in topics related to recipes or products, compile shopping lists based on the product and recipe information, order products or ingredients for recipes online and order delivery service to their homes. Consumers can access Foodie.fm via personal computers, mobile phones, and tablet devices.

We collected two datasets in this study to explore the factors motivating individuals' use of social commerce in grocery retailing services, one is the clickstream data from the server of Foodie.fm, and the other is survey data collected among Foodie.fm users.

We collected the user clickstream data from the server of the company based on a defined period for 3 months. Our data span the period from March 1st to May 31st, 2012. The clickstream data recorded the pages viewed, the viewing duration of pages and each session happened in the 3 months. User actions are also recorded, such as a user's viewing a specific product or recipe, or adding a product to the cart. There are 22 different user actions coded in the clickstream data as events according to the coding methods used by the company (See more details in Table 4). In the clickstream data, every event is stored to the server of this site based on the move of the mouse and change of action of each user. The product and recipe view actions were not stored from mobile user interface. Totally there are about 20 million user events collected in the three months. The clickstream data offers us accurate information about individuals' activities in using Foodie.fm.

Based on the clickstream data we can have a better understanding on what individual users really do while using Foodie.fm. In order to understand what motivate them to use Foodie.fm, we also performed a survey to collect empirically data among the registered users. Both structured questions and open questions are included in the questionnaire. In the structured question part, the respondents were asked to indicate their perceptions on the importance of some predefined reasons why they use Foodie.fm and the importance of some predefined features of Foodie.fm. A five-point Likert-scale ranging from *Not Very Important* (1) to *Very Important* (5) was used to measure each predefined reason or feature. In the open question part, the respondents were asked to answer questions regarding what are the most important reasons for them to use Foodie.fm, and the other reasons that were not listed in the questionnaire.

The survey questionnaire was delivered to 1500 registered users of Foodie.fm by email and we received 146 valid responses. More detailed demographic information on the respondents is presented in Table 1. We employed SPSS to conduct analysis on the data collected from the structured questions and conducted content analysis on the data collected via open questions.

Demographic profile	Category	Frequency	Percentage (%)
Gender	Male	67	45.9
	Female	79	54.1
Age	20-30	24	16.4
	30-40	35	24.0
	40-50	41	28.1
	More than 50	43	29.5
	Missing value	3	2.0
	Where do you live	City centre	20
Suburb		97	66.4
Small town		18	12.3
Countryside		10	6.9
Missing value		1	0.7
Social media use	Facebook	108	74
	Google+	52	35.6
	YouTube	94	64.4
	Twitter	39	26.7
	LinkedIn	45	30.8
How often do you use Foodie.fm	Very rarely	2	1.4
	Once per month	55	37.7
	Once per week	35	24
	Once per day	46	31.5
	More than once per day	6	4.1
Devices	Computer	95	65.1
	iPad	32	21.9
	iPhone	48	32.9
	Windows phone	13	8.9
	Android phone	16	11
Using Foodie.fm to do online shopping	Yes	101	69.2
	No	45	30.8

Table 1 Demographic information of the respondents

4 Research results

4.1 Research results from survey data

Based on the answers to the structured questions, we found that individuals mainly use Foodie.fm to meet their needs for searching product and recipe information and for planning grocery shopping (See Table 2). The most important features of Foodie.fm for the users are planning shopping list and search products (See Table 3).

Motivations	Mean	S.D.
I use Foodie.fm to search information about products and recipes.	3.86	1.327
I use Foodie.fm only if I am planning shopping.	3.21	1.435
I use Foodie.fm to always know beforehand what products and recipes I am interested in.	2.77	1.292
I use Foodie.fm to order food to home.	1.92	1.424
I use Foodie.fm to see what updates my friends have made.	1.46	0.926

Table 2 Motivation results

Foodie feature	Mean	S.D.
Search products with keywords.	3.93	1.219
Planning future shopping (shopping list).	3.86	1.349
Browsing products and product categories.	3.59	1.269
Finding products to suit diet.	3.40	1.402
Getting familiar with nutrition information of products.	3.21	1.448
Advertisements and bargains.	3.13	1.298
Ordering groceries from the web.	2.51	1.699
Barcode scanning.	2.34	1.568

Table 3 Foodie.fm feature results

The respondents were also asked to list the main reasons for them to use Foodie.fm in an open question. Based on their answers, we found that individuals use Foodie.fm mainly for the following three reasons:

- To search product or recipe information;
- To plan shopping lists;
- To conduct online shopping.

These results are consistent with the results from the structured questions.

Users can search the products or recipes they like or prefer, and further see the ingredients or product information. When users make the purchasing decision, they can easily make a shopping list to aid their shopping later in the shop, or to purchase the products online. Users can access Foodie.fm at the shop via mobile phone to support their shopping. The functions for searching products or recipes and making shopping lists help users to make decisions on their future shopping or real-time shopping at shops. As indicated in the answers to the open-ended questions the reasons why individuals use Foodie.fm:

“At home while I am planning grocery shopping and sometimes at the shop as a shopping list”

“ When I am planning grocery shopping or menu for the whole week. ”

“When I need food stuff from shops I will add recipes or products to my shopping basket. I also check the prices.”

Some users indicate why they prefer to do online shopping:

“I am an older lady and I have no strength to go shopping very often.”

“We do not have a car, but a small child, so this helps our life.”

“Orderliness of grocery shopping, avoiding impulse buying, easiness and saving time”.

In addition, some users list some other reasons why they use Foodie.fm, such as getting inspiration for cooking or having fun for some specific groups, such as those who are allergic or on a special diet, they use Foodie.fm also because it offers them accurate product ingredient information.

“I can order products, which I have checked beforehand and which are suitable for me.”

4.2 Descriptive statistics of the clickstream data

According to the major attributes of social commerce, we categorize all 22 actions in using Foodie.fm into 3 high-level activities: i) general activity, ii) social interaction, and iii) online shopping. User actions on logging in or creating new account are grouped in the *general activities*, all actions related to votes, likes, comments and invitations are included in *social interaction*, and all actions related to online shopping are categorized as online shopping activities, such as product or recipe view, adding products to cart, ordering grocery stuff, ordering delivery service and checking out. Table 4 presents more details about the actions individuals have done in the three months based on the clickstream data. Clearly, Foodie.fm retained its current users as well as attracted new users. Product view and recipe view actions are the most popular actions, followed by adding products to the shopping cart. In the social interaction activities, users make more actions on votes and likes on products and recipes.

Activities	1.1.1 Action Name	1.1.2 Action Description	Code	1.1.3 Count
General activity	CreateUser	A new user is created	4	48012
	ReturningUser	A registered user has logged in	5	61674
Social Interaction	EntryVote	Voted product	13	14735
	RecipeVote	Voted recipe (thumb up, thumb down)	14	13735
	EntryFavourite	Added the favourite product	15	3841
	EntryUnfavourite	Removed the favourite product	16	278
	RecipeFavourite	Added favourite recipe	17	6864
	RecipeUnfavourite	Removed favourite recipe	18	495
	EntryComment	Commented on product	19	86
	RecipeComment	Commented on recipe	20	75
	InvCreate	Sent a family member invitation	21	38
Online shopping	EntryView	Viewed a product.	1	16361002
	EntryToCart	Added product to shopping cart	2	291210
	EntryAdToCart	Added advertised product to shopping cart	3	114546
	RecipeView	Viewed a recipe	6	2618092
	OrderNew	Started the order process	7	16515
	OrderCheckout	Checked out the order, i.e. actually ordered something	8	7327
	EntryFromCart	Removed product from shopping cart	9	71306
	EntryAdFromCart	Removed advertised product from shopping cart	10	20774
	RecipeToCart	Added recipe to shopping cart	11	8681
	RecipeFromCart	Removed recipe from shopping cart	12	2376
	OrderSelectDeliverySlot	Selected delivery slot for order	22	7490

Table 4 Actions based on clickstream data

The use of online shopping features is quite high whereas the use of social interaction feature is relatively low. The results indicate that users are more interested in conducting online shopping related activities, such as, searching products or recipes and ordering online. These results are consistent with the findings from the survey data that individuals really do more product and recipe views and making shopping lists for online shopping or future shopping at shops when they are using Foodie.fm.

5 Discussion

This study attempted to explore the motivations for individuals to use social commerce in the context of grocery services. The results show that the main reason for individuals to use social commerce in grocery service is that social commerce can gratify their functional needs for recipe and product search and view and for compilation of shopping lists. Social gratification and hedonic gratification might motivate them to use social commerce, but these two factors are not so important.

Consistently with our expectations, we found that individuals mainly use Foodie.fm to support their shopping, including both online and offline shopping. It is taken for granted, that the main service offered by Foodie.fm is primarily used for supporting individuals' decisions on grocery shopping, but not social interactions as in using Facebook and Twitter. The results based on the clickstream data (See Table 4) show that the use of social shopping features is quite high, whereas, the use of social interaction features is relatively low. These results indicate that individuals' use of Foodie.fm is really goal-oriented behaviour. Users are quite aware of the features provided by Foodie.fm, and understand that Foodie.fm can support their decision in grocery shopping no matter online or offline. This finding offers validation to the claim that social commerce offers strong instrumental value to users (Pöyry et al. 2013).

The second major finding is that social gratification is a reason but not an important reason for individuals to use Foodie.fm. This was partly out of our expectations as the IS literature celebrates the positive effect social interaction has on individuals' social commerce intention. For instance, Liang et al. (2011) found that social support is a main determinant of individuals' social commerce intention. It has also been shown that active social engagement reflects a stronger intention to use social commerce (Pagami & Mirabello 2011). This difference might be due to the different research contexts. As indicated in prior research, individuals rely more on WOM or social interaction to support their purchasing decision on heavy-involvement products, expensive products and experience-oriented services. The consumption of grocery stuff in consumers' daily lives happens very often and the price of grocery stuff is also cheap compared to some expensive products, which might lead to consumers' unwillingness to spend so much effort on social interaction or social engagement to get support for their purchasing decisions on grocery stuff. Another important reason is that Foodie.fm offers accurate information on the grocery products and recipes, which already offers strong support for individuals' shopping decisions, and consumers do not need further information via social interaction to support their shopping decision.

Thirdly, though hedonic gratification might be a reason for some users to use Foodie.fm, its role seems to be quite weak. Foodie.fm is mainly used as a utilitarian IS at the beginning. With the increased use of Foodie.fm, individuals might increase their need for hedonic and

social interaction. This might help to explain the weak role of both social gratification and hedonic gratification in motivating individuals' use of Foodie.fm. The finding still validate the findings from the prior research that both hedonic motivation and utilitarian motivations driving individuals' online shopping behaviour.

6 Implications for research and practices

The findings of this study have significant implications for both academia and practices relating to the issues of social commerce usage. Firstly, our findings add knowledge to social commerce research. This research integrates user perceptions and real use behaviour in examining social commerce, which offers more accurate findings on usage of social commerce. In addition, in this research utilitarian gratification was found to be the main driver for using social commerce in grocery retailing service, which reflects that individuals' use of social commerce in grocery retailing service is a goal-oriented behaviour. The finding indicates that the U & G theory can be a good theoretical framework to explain individuals' use of social commerce.

Practical implications for social commerce in the context of grocery shopping can be drawn from these findings. Firstly, considering the importance of gratifying individuals' functional needs in using Foodie.fm, Foodie.fm should develop the features related to online shopping to meet the needs of users, such as always updating products and recipes to offer more products and recipes to consumers, offering easy product and recipe searching navigation. Secondly, Foodie.fm can also try to offer some artefact related to hedonic activities, such as flash game involved in cooking, to meet the different needs of different user groups. Foodie.fm can also examine whether these strategies can help improve business, such as attracting new users, retaining users as well as making current users to be more active.

7 Limitations and Future Research

This study offers valuable insight into social commerce studies. However, this study involves a number of limitations that need to be acknowledged. First, the clickstream data time span is three months. The time period might be a little bit short to gain sufficient insight. In the future, we should make a further study on social commerce based on a longer time span, such as, one year or even longer. In addition, a deeper investigation on social commerce user behaviour should be conducted based on clickstream data, such as clustering user groups based on user activities and defining their behaviour features, examining the relationship between social interaction and online shopping behaviour.

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