

## Conference Paper

# S-commerce transactions and business models in Southeast Asia: A case study in Thailand

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## Abstract

Social networking platforms such as Facebook, Instagram and Line have recently gained enormous popularity for commercial purposes among social media users, and is commonly known as C2C social commerce (SC). These new online businesses are continuing to flourish in Southeast Asia especially in Thailand where the C2C-SC market size is significant. To get a clear picture of C2C-SC in Southeast Asia, this study investigated the patterns of purchasing processes and business models being used in Thailand. The data was gathered from direct observations and an online survey. The findings revealed that the typical purchasing process of this channel consists of five basic steps: advertising, searching, negotiation and ordering, payment, and delivery. The business models can be categorized into five models: S-retailing, S-specific market, S-preorder, S-auction and S-reverse auction. The results may contribute to promote SC activities and value creation for the local business community in this region. Social networking users who wish to build their businesses on SC can reference our findings to provide transaction process effectiveness and promote more satisfactory services to their customers.

**Keywords:** C2C Social commerce, business models, s-commerce transactions

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## 1. Introduction

Social media, which was originally intended for socializing among virtual communities, has generated new business models for online transaction – social commerce (SC) [1]. Not only is it an efficient tool for online communication and information sharing [2], but it also allows various types of commercial activities such as sharing product information with the friends and selling products or services among social media users [3]. There is an increase in popularity of social media being used for different commercial activities that are taking place on social networking platforms such as Facebook (FB), Line and Instagram. Moreover, not only do firms use social media to create brand awareness but also social media users can act as sellers or buyers and conduct online

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transactions among members themselves. This particular phenomenon can be defined as C2C-SC. Although there is not a standard definition of C2C-SC, it is recognized that SC is a subset of e-commerce that uses social media to support the interactions of individuals on the Internet to assist e-commerce transactions and activities [1, 4]. Therefore, this study identifies C2C-SC as a variety of commercial activities, transaction processes conducted between social media users through social networking services.

Southeast Asia is a region which has the most active social media users in the world [5]. Over 60% of Southeast Asia's 150 million Internet users purchase online, and one third of the online sales take place on social media [6]. Additionally, more than half (51%) of online users in Thailand have purchased products by using social media channel [7]. Numbers were also high in Malaysia (31%), and Indonesia (30%) respectively [6, 7]. Because of the significant C2C-SC market size in Thailand, FB chose Thailand as one of the first countries to test FB SC payments, which has allowed users to pay for products on FB pages since June of 2016, and they plan to widen the trials to other countries in Southeast Asia afterwards [8]. Moreover, two months later FB also decided to launch the world's first FB Shop in Thailand. The new page features were created to enhance online businesses on FB [9].

According to the nature of C2C transactions, buyers can interact directly with sellers online and that can generate a variety of business processes based on interaction patterns and business arrangements. For example, the process of buying may start on FB, Instagram (IG), and Line. Sellers can offer buyers either new and second-hand items or services. Payment and delivery methods can be arranged depending on an agreement between buyer and seller. Particularly in Southeast Asia, people prefer to pay by bank transfer or Cash on Delivery (COD) [10]. Unlike traditional e-commerce (EC), there is no formal patterns for purchasing processes on SC in Southeast Asia. These flexible payment methods which are usually done offline, may not be available in traditional EC. The diversity of the buying and selling processes on C2C-SC may be complex, and not easily understood especially by users who are not familiar with SC. Even though, C2C-SC on social networking platforms is gaining enormous popularity in Southeast Asia, the transaction process of C2C-SC has not been methodically studied in the related research. To get a clear picture of SC in Southeast Asia, this study aims to explore the C2C-SC transaction process and business arrangements in this region. We collected data based on social media users and C2C-SC shops in Thailand since this country is the largest C2C-SC market in Southeast Asia. The findings of this study may help existing SC sellers to improve transaction process effectiveness and lead to value creation for the small SC businesses. For example, the results reveal that social

networking features such as FB live can be applied to conduct purchase transactions. Then sellers can apply these features to advertise products and to provide two-way communication with buyers in real time. By doing this, buyers can have online shopping experiences similar to purchasing in the real marketplace and that may increase buyers trust in sellers. Moreover, the results may allow individuals who are new to SC to better understand how to perform their own business on social networking platforms. Additionally, gaining knowledge in the SC evolving phenomenon may provide implications on transforming social networking platforms to a SC marketplace that can replace EC websites in Southeast Asia.

## 2. LITERATURE REVIEW

### 2.1. Social commerce (SC)

SC is known as social business which is a combination of commercial and social activities [11] and is considered as a subset of EC [1]. The other definition refers to SC as the use of social media to support the interactions of individuals on the Internet and to assist them in purchasing products [1, 4]. Previous study classified two major types of SC [1, 11, 12]. The first type is “social media applications on EC websites” [11]. In this case, traditional EC websites such as Amazon.com add social networking features to transform EC into SC websites [13]. Technical features such as online forums, chats, customer reviews and ratings can facilitate social interaction and encourage customers’ content generation regarding their products or services experience [14]. By leveraging Web 2.0 capabilities, firms can increase brand awareness and can improve customer relationship management from the customer generated content [11]. The second type is “e-commerce on social networking platforms” [11]. Commercial features are added to social networking platforms for advertisements and transactions [1]. On these platforms, such as FB, LinkedIn and Twitter, commercial activities can be easily conducted among members by providing an efficient communication channel for socializing and information sharing both C2C and B2C connections. Customers can interact with firms or other customers by posting comments and sharing information, pictures and videos over the platforms. With this type of SC, firms can promote brands and create brand loyalty with their customers [12, 15] such as [www.facebook.com/Starbucks](http://www.facebook.com/Starbucks). It also became a popular channel to attract individuals and small retailers marketing their products to potential buyers. Social networking platforms, such as FB, provide a free marketplace. Not only has it allowed sellers to benefit from a free of charge business

channel but it is also easier for buyers to interact with sellers directly. These are the reasons that may have led to the high popularity of SC.

## 2.2. C2C-Social commerce

SC is an emerging trend where buyers can connect with sellers through online social networks, and where sellers are individuals instead of firms [16]. It can imply that the connections of individual sellers and customers on social networking platforms are izi (individual-to-individual) or C2C (consumer-to-consumer) [17]. The transaction activity based on C2C-SC, refers to social media users (sellers) who leverage social technologies to post advertisements. Then other users (buyers) contact the seller directly to make a purchase which can include making inquiries about the details of the products, payment methods, and delivery methods of the product [18]. Hajli [19] stated that SC emerged from the increase in popularity of social media that combined commercial and social activities together. It can be implied that the most popular social networking services are the ones with the most popular trade channels for people who wish to exchange goods or services. C2C-SC can take place on FB, IG, WeChat or other social media platforms which are prevalent in a region. For example, FB groups are widely used to operate C2C commercial activities in Taiwan. The "Tainan market: buy and sell" ([www.facebook.com/groups/TainanMarket.BuyandSell/](http://www.facebook.com/groups/TainanMarket.BuyandSell/)) allows FB users to post either new or secondhand products to users in the group [18]. The transaction activity in this group consists of a buyer who is interested in a product contacts its seller directly to make a purchase arrangement, such as seeing or testing the product, making a payment and receiving the product. In China, WeChat is a popular social media platform which can also facilitate C2C transaction behaviors. WeChat functionalities such as "Circle of Friends" are used to post product information by WeChat users. When buyers purchase products through WeChat, they often use WeChat Pay (Quick Pay, QR Code Payment, In-App Web-based Payment) as the payment method for product payment on this platform [17].

In Southeast Asia, FB is the most popular social networking platform across all 11 countries in the region [11]. A great number of people are making sales on C2C-SC social network platforms [21]. It was found that there are two methods used in the SC purchasing process of this type of SC [10]. One is more formalized where the transaction is performed like one an e-commerce website. As social network platform such as FB provides a social commerce payments feature embedded on FB Pages [22]. Then all the transaction processes are operated inside a social networking platform. For instance,

a seller sets up a digital store on a FB page. A buyer who would like to purchase the product clicks on FB's 'Buy' button to buy directly from the page without leaving FB. The other way is an unstructured form where the transaction process is operated by technologies both inside and outside of the Internet. Nearly all transactions start on a social network platform but finish the payment method typically using a bank transfer or cash on delivery (COD).

C2C-SC has been widely adopted on a daily life in Thailand. It was stated that people in Thailand prefer to purchase on C2C-SC using the unstructured method and 80 percent of transactions are executed across two or more social network platforms [8, 10]. However, the buying and selling process of C2C-SC has not been investigated in the related research. So, this paper aims to find out the purchasing process of C2C-SC conducted in Thailand.

### 3. Methods

The purpose of this study is to determine the pattern of C2C-SC transaction processes that are used in Thailand. The methodology of this study is a combination of direct observation and online survey. In order to partly understand C2C-SC transaction processes, the conducted literature review provides a general understanding of SC and existing C2C-SC transaction processes. The next step involved observation methodology. SC storefronts both on FB and IG were selected in order to investigate and classify the various existing business models on C2C-SC. To broaden the findings of the observation, online questionnaires were used to collect data from the respondents who were social media users and had online shopping experience on social networking platforms. The survey data were used for the verification of the findings from previous phases related to the buying and selling process and business models that are manipulated on C2C-SC in Thailand. Fig. 1 shows the data collection procedures for determining the C2C-SC transaction processes and business models.

#### 3.1. Observation Method

Direct observation was conducted to investigate the process of buying and selling on C2C-SC. In this step, we observed behavioral patterns of people about how they use social media for various commercial activities and the situations that take place during a purchase process. Due to the properties of social networking platforms, information posted or shared on these platforms is generally public by default and can be seen

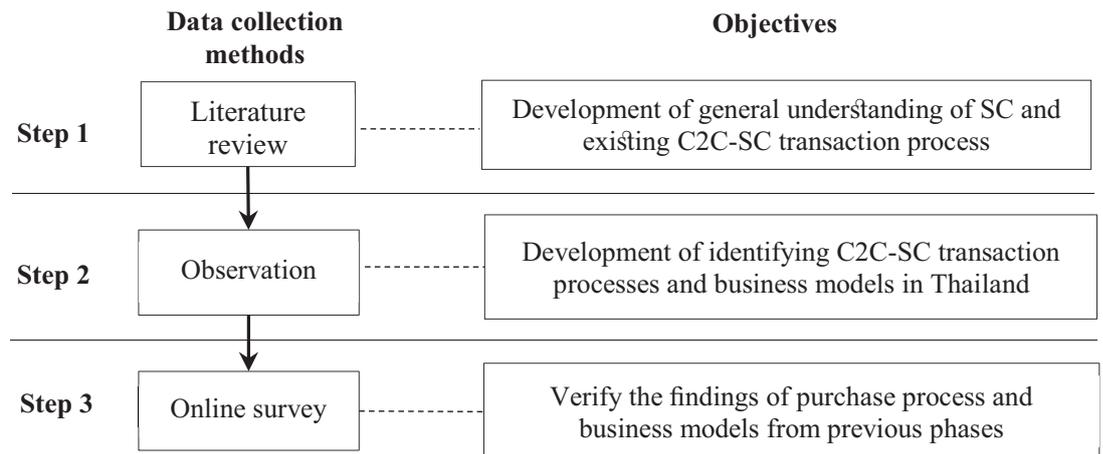


Figure 1: Data collection procedures.

by anyone. Therefore, observed data was collected from past commercial activities generated by the users had been automatically recorded on a social networking platform. The collected data is related to products and shopping experiences that have been shown on SC shops. In the C2C context, the commercial activities are based on user-generated content. Starting a purchase process, users (sellers) post product information and the pictures on their page or wall. Users (buyers) can receive this up to date product information from their News feed (a function of FB) if they have ever clicked 'Like' on that sellers' page. Additionally, sellers typically announce the management policy and their contacts such as Line ID and telephone number to buyers for inquiring about product information or requesting price negotiation on the top of the pages. Payment methods and delivery method are usually posted on the seller's wall. Buyers can ask for the details of payment method and delivery methods on the seller's wall or FB Messenger. Sometimes, payment and delivery methods can be performed depending on a negotiated agreement. After buyers make a decision to purchase a product and make a payment, sellers can post pictures of the selected product and packaging of the product before delivery to generate a buyer's confidence. Furthermore, when the product is sent, the seller can show the picture of the parcel delivery receipt including a tracking number to confirm the exact date that the product will be delivered. By using social media features, a seller can present the whole purchase transaction to make buyers feel more confident in the seller's performance in offering good services. We also collected data from the historical messages of buyers, e.g. posting messages and interactions on a seller's FB wall throughout business process. Collected data were observed from previous transactions conducted by Thai users between September 1<sup>st</sup>, 2016 and March 30<sup>th</sup>, 2017 on FB profile, pages, groups and IG.

### 3.2. Online survey Method

According to the previous step, the processes of buying and selling products over social networking platforms were explored. By leveraging the features and functionalities of social networking platforms, business arrangements evolved into various C2C-SC business models. Sellers can gain greater benefits from these models by having more choices to conduct transactions among users.

At this stage, a quantitative survey was used to examine individuals' purchasing behaviour on C2C-SC. This survey was based on a descriptive approach that complemented findings from the observation phases. The results may help to clearly understand the purchase processes that individuals actually use to perform their commercial activities on C2C-SC. They were also employed to verify the categories of the existing business models on C2C-SC.

A questionnaire was designed to address the behavioural dimension of respondents. Question content was related to the respondents' habits and past and present actions about buying products online in the context of C2C-SC in Thailand. The survey questions were divided into 2 parts. Part 1 was the demographic part asking for general information about the respondent's background. For the questions in this part, the respondents were asked to select just one choice from a list. Part 2 was the behavioural part. Question items in this part were developed from the results of the observation phase in order to verify the findings. However, respondents may have a variety of shopping experiences related to using social media for various commercial activities. Then the question type in this section was multiple-answer that required respondents to choose more than one answers.

## 4. Results

This section describes the results of this study. It begins with an explanation of the observation phase that explored the buying and selling processes of C2C transactions. Moreover, the results also exposed various business models conducted on C2C-SC in Thailand. Subsequently, data collection and data analysis from the survey phase are described in detail.

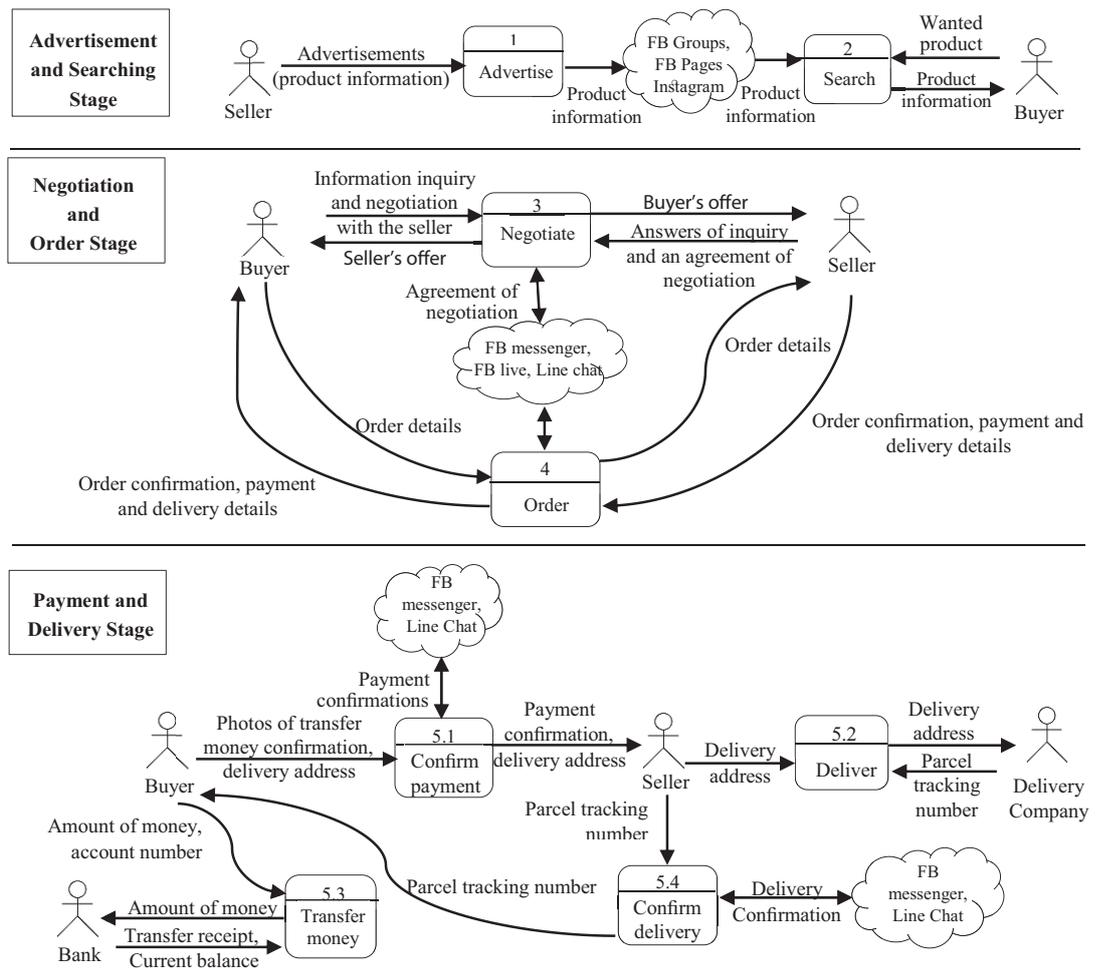


Figure 2: The steps of buying and selling process on C2C-SC.

#### 4.1. The buying and selling processes on C2C-SC in Thailand

When we considered the collected data from observation, we found the basic patterns of transaction process on C2C-SC. There are five steps: advertising, searching, negotiation and ordering, payment and delivery in the current purchasing processes of C2C-SC among Thai users. Social network features are applied in each phase of the transactions. Sellers in Thailand use FB and IG as a digital storefront and apply Line and FB messages to perform the purchase transaction and to connect directly with other members (buyers). An example of the buying and selling process on C2C-SC is presented by using the logical process diagram shown in Fig. 2 Purchasing stages of C2C-SC are based on the observation findings and are shown in Table 1.

TABLE 1: Purchasing stages of C2C-SC based on the observation findings.

Stage Name	Description
Advertisement	Users (sellers) use social networking features that are available to share their content and connect with people in order to advertise their products by posting details of products such as product picture, size, price and payment method. In Thailand, FB features such as a Wall, Pages, and Groups, and IG are utilized to merchandize among users.
Searching	Buyers can browse and seek products from online stores on social networking platforms such as FB page, group, and IG. They can use information about products and service quality of sellers posted by members and other purchase experiences shared by friends or peers when making a purchase decision.
Negotiation	Buyers can contact sellers directly through FB Messenger, other social messaging applications such as Line chat, or making a phone call. In this stage, buyers ask for the details of the products and negotiate the business terms such as the purchase price and delivery fees. At the end of this stage, buyers may agree or disagree with an offer.
Ordering	After an agreement of negotiation success, a buyer can place an order through FB messenger, Line chat or making a phone call to the sellers.
Stage Name	Description
Payment	After the buyer confirms the orders, the seller sends payment details via FB Messenger, or Line chat. There are two distinct payment options conducted on C2C-SC, and they are pre-paid payment and post-paid payment. Pre-paid payment: there are two options for this payment type. 1.) Buyers pay for products by bank transfer through ATM, online banking, mobile banking or transfer at the bank. 2.) Installment payment: This type of payment is usually offered to buyers when purchasing high price products, because it spreads the cost of expensive items so that the buyer can use a staged payment plan. However, with this payment type the buyer usually transfers money to the sellers' account in small payments at set times until the total paid equals the full price of the product. Then, the seller deliver the product. Post-paid Payment: There are three types of this payment offering on C2C-SC in Thailand. 1.) Cash on delivery (COD): buyers can receive products before payment. 2.) On Demand Delivery: Sellers can use courier services who offer on-demand delivery if buyers are in a supported area. By using this method, products are delivered directly to the buyers' address and the seller can receive money from the buyer faster than cash on delivery method. 3.) Meeting In-Person: Buyer makes an appointment with seller through FB Messenger, Line chat to see the product before payment.
Delivery	The postal service and delivery company are used for delivering a product if a buyer pays for products by pre-paid payment or buying on the installment method. If a buyer chooses the cash on delivery option, they have to pick up their purchased items at the post office or at an appointed destination depending on the delivery company. Sellers can use courier services such as on demand delivery or freelance messenger if buyers are in a supported area.

## 4.2. Business models on C2C-SC in Thailand

The findings from observation also reveal that there are various business models conducted on C2C-SC. We have classified business models on C2C-SC into five models. There are s-retailing, s-specific market, s-preorder, s-auction and s-reverse auction.

Table 2 shows the details of the each business model in C2C-SC on social networking platforms.

TABLE 2: Business models found in C2C-SC.

Business model	Explanation
S-retailing	Individuals or small independent retailers set up storefronts on social networking features such as FB profile, FB pages and IG to advertise and sell products among social networking users.
S-specific market	Social networking users create specific groups of members. This group interaction is called a community. As FB groups is a feature that is available for people to share their common interests, it can be applied for selling products among users who are interested in the same type of products such as cosmetic, children’s clothes, etc.
Business model	Explanation
S-preorder	Sellers can sell products without even having the products in stock. They can exploit social networking features such as FB pages or FB groups to post advertisements and lists of products. Then buyers use FB messenger and Line chat as a communication channel for ordering products.
S-auction	Social networking users can apply FB pages and groups as an online auction marketplace. Buyers can post their bids for wanted products under the product posts during specified periods. After the end of the auction, the sellers will announce the list of successful bidders. Then they contact the buyers through FB messenger for the details of payment and delivery method.
S-reverse auction	This business model is the other type of auction in which the roles of buyer and seller are reversed. Buyers can post details of needed items to virtual communities such as FB groups. Then they wait for other members (sellers) inside the group to offer the product’s price and other information under their post. After that the buyer will contact the seller who bids the lowest price via FB messenger to ask about the details of payment and delivery method.

### 4.3. Verification of the buying and selling process on C2C-SC

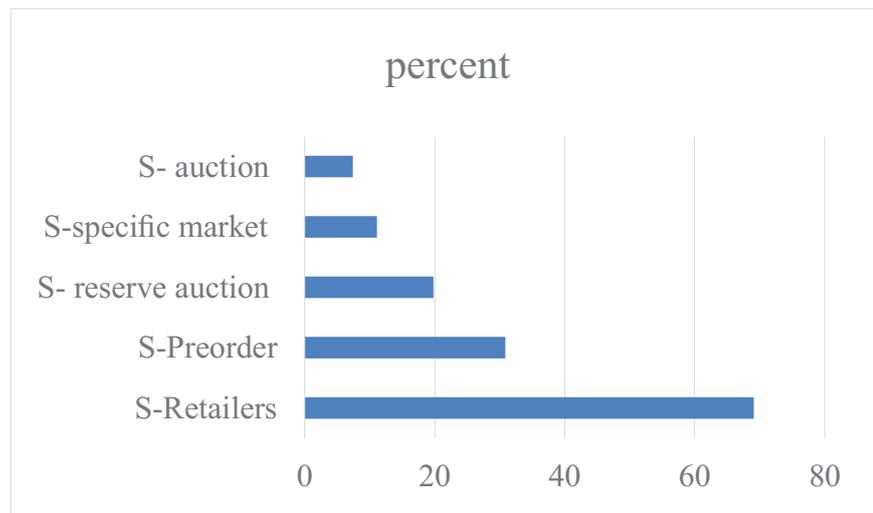
The confirmation of the observation’s findings was tested on several Thai C2C-SC consumers by a quantitative survey. An online questionnaire link was disseminated to five universities. The questionnaire was published from May 1<sup>st</sup> to May 20<sup>th</sup>, 2017. The respondents were invited to participate in this survey through university websites and FB pages of the Information Technology Department and Business Administration Faculty. The chosen subjects were respondents who had shopping experience on social networking platforms. Ethical guidelines were carefully followed. Their consent was required before the rest of the online questionnaire was shown to them. Data collection was based on volunteers without incentive. The details of collected data are described below.

### 4.3.1. Demographic Profile of Respondents

The profile of respondents are presented in table 3. The results are described below. Out of 165 respondents, approximately, 67.3% of the respondents are females, and 32.7% are males. All of respondents are undergraduate students, university staff and lecturers. Most of the respondents were young, between 18 and 24 years old (79.39 %), therefore the survey might be biased followed by norm of the group. The most popular items bought among respondents are fashion-related products such as clothes. The majority of respondents have bought products 1-2 times during the past 12 months (48.48 %), and have spent 501-1,500 Baht per time to purchase items during the past 12 months (44.85%).

TABLE 3: Profile of respondents in this survey.

Measure	Items	Frequency	%
Gender	Male	54	32.7
	Female	111	67.3
Measure	Items	Frequency	%
Age	18-24 years	131	79.39
	25-34 years	16	9.70
	35-54 years	18	10.91
Personal income (Baht / month)	Not more than 15,000 baht	125	75.76
	15,001-25,000 baht	22	13.33
	25,001-35,000 baht	11	6.67
	35,001-45,000 baht	5	3.03
	More than 45,001 baht	2	1.21
Times per year purchased products from social media	1-2	80	48.48
	3-5	40	24.24
	More than 5	45	27.27
The price range of the items purchased from social media	Less than 500 Baht	46	27.88
	501-1,500 Baht	74	44.85
	1,001-5,000 Baht	40	24.24
	5,001-10,000 Baht	3	1.82
	10,001-20,000 Baht	2	1.21



**Figure 3:** Percentage of buyers who have purchase experience in each business model.

#### 4.3.2. Respondents experience using C2C-SC in Thailand

The majority of respondents indicated that they usually purchase products from S-retailers on FB pages and profiles (69.1%), followed by S-preorder (30.9%) and S-reverse Auction (19.8%), respectively. The percentage of buyers who have purchase experience in each business model is outlined in Fig. 3. In addition, FB pages and IG are the popular channels to search for shops with 57% and 33.9% respectively. With regard to payment method, pre-paid payment is the most popular method among the sample. This was followed by transfer money through ATM (67.9%), online banking (22.4%) and mobile banking (18.8%) respectively. Whereas, the Thai Post is the most popular delivery method when purchasing products from C2C-SC (95.2%), followed by delivery company (36.4 %) and meeting in-person (7.9%), respectively. Both FB messenger and Line application are typically used for communication channels between buyers and sellers with 70.4% and 69.1% respectively. The percentage of buyers dealing with the commercial activity in each transaction process is depicted in Fig.4.

Our examination reveals that there are different business models depending on user interaction patterns, and business arrangements. The common shopping process that is conducted on C2C-SC for all cases of business model is advertising, searching, negotiation and ordering, payment and delivery. For the stages of advertising, searching and placing an order, they are usually performed through social networking while the payment and delivery method is completed depending on the type of products or agreement from at the negotiation stage between buyers and sellers. According to the collected data, we found that the bank transfer method is the most popular payment

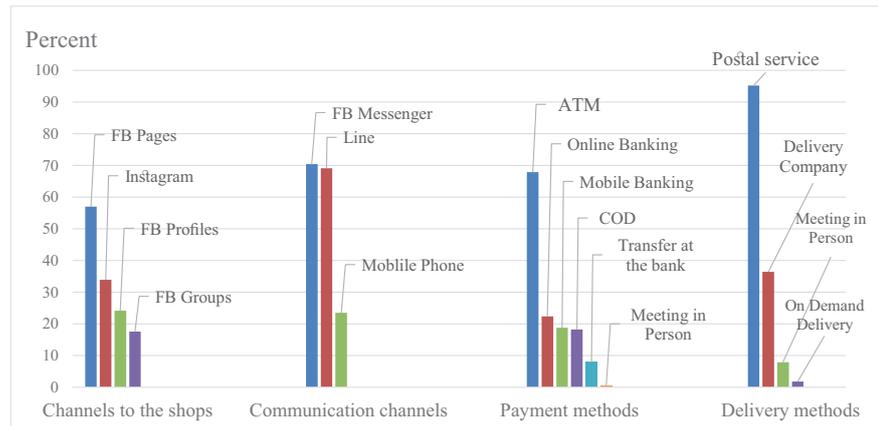


Figure 4: Percentage of buyers experience on each purchasing stages of C2C-SC.

method among Thai buyers and delivery of products through the postal service is the most common way for Thai sellers to conduct their delivery process.

## 5. Conclusions and Limitations

According to our findings, we found that the typical process of purchasing on C2C-SC in Thailand consists of five basic steps: advertising/marketing, searching, negotiation and ordering, payment, and delivery. We also categorized business models on C2C-SC into five models. There are s-retailing, s-specific market, s-preorder, s-auction and s-reverse auction. Each of the models displays significant differences in user interaction patterns and business arrangements. Finally, the findings related to transaction processes and business models were cross-checked quantitatively to confirm that each outcome was supported by the Thai customers who had shopping experience on C2C-SC.

This study has some limitations. There is the limited number of the sample size. The number of users in terms of age group and gender is not symmetrical. Therefore, the findings may be insufficient to cover all the purchasing processes or business models in this context. The sample should be increased to gather more data and should involve more respondents from different countries in Southeast Asia.

## 6. Discussion and implication

Through social networking features, users can conduct various commercial activities such as selling products, communication with buyers, and provision of customer services directly to their customers. Therefore, customers can have online shopping experiences similar to a physical store. By leveraging the capabilities of social networking platforms buyers can share product information and past online shopping experience in their community. The information from other buyers may induce potential buyers to trust in other members (sellers) from product comments and reviews on posts and number of “likes” [8, 18, 23]. Moreover, they can write a complaint for poor service by message instead of using an e-mail. The reviews from other customers may help buyers in filtering their choices to make purchase decisions more accurately in a shorter amount of time [24]. In terms of payment methods, consumers in Southeast Asia except Singapore are unwilling to share their financial information for an online purchase [25]. C2C-SC sellers can also offer buyers flexible payment options. Therefore, it is not necessary for buyers to have a credit card or to give personal or financial information when making a purchase. Consequently, for these are the reasons that may have led to the significant increase of the C2C-SC market size in Southeast Asia.

Considering the findings of observation and the results of the survey, there are theoretical contributions as well as practical implications in the following ways. Theoretical in the sense that the understanding of the business models, transaction processes and their alignment with business cultures may provide a good basis for further work on understanding SC. Researchers may examine the factors related to technological, environmental and cultural dimensions that influence Southeast Asia people’s intention to use SC on social media instead of an e-commerce website.

In addition, the results also indicate that the new features of FB such as SC payments were not adopted among our samples. As these new technologies were launched only last year, this might be a very early stage of technology adoption in Thailand. Therefore, future studies need to examine the progress and effectiveness of these functionalities in the C2C-SC context.

In terms of practical applications, the contribution may be useful for users in other countries to develop and design SC tailored to their cultures. In Thailand, the findings have indicated that individuals who wish to start up their own businesses on C2C-SC can start business by advertising through FB pages or IG, negotiating and receiving an order from FB messenger or Line, offering payment transfer and delivering products via Thai Post. This is a uniform way for conducting business on C2C-SC in this country.

By gaining knowledge from this study, practitioners may be inspired to combine business models with other marketing strategies. Then they may generate innovative and advanced business activities leading them to have a successful business on C2C-SC.

With respect to the technical aspect, feature sets for commercial activities on social networking platforms could be designed and developed more appropriately with our findings. Therefore, these new features could support each business model and improve process effectiveness on C2C-SC resulting in faster adoption among Thai users.

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