

A Model for Understanding Social Commerce

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Abstract

When it comes to purchasing products and services, customers usually display different decision making behaviors although most agree that decisions can be influenced by other people. Since the social web provides a discussion platform for customers, it can be leveraged by companies to lean the discussion to their advantage and influence customers' purchase decisions. Recently, an effort to study social commerce was started, with a focus on extracting value from the social web for both businesses and customers. In this paper we aim to contribute to that effort by evaluating the effects of the social web on various stages of purchase decision making and we propose a model for understanding social commerce.

Keywords: Social Commerce, e-Commerce, Social Web, Web 2.0

1. INTRODUCTION

Advances in web technologies, security, and payment systems increased the role of the Internet as a commercial tool and a marketing channel. Thus, businesses augmented their web presence and activities in order to benefit from a lower cost business channel and attract more customers. Meanwhile, the emergence of Web 2.0 technologies and the introduction blogs, wikis, and social networks, are dramatically changing the web collaboration structure, as well as empowering and sophisticating traditional customers. These technologies have altered the concept of web content contribution, provided new means for users to generate content, and made the web more social and interconnected. The ability of customers to interact and generate content is extremely important for web marketers since it usually facilitates crowd-sourcing - i.e., businesses leveraging user content and ideas (Howe, 2006).

Social networks consist of large numbers of individuals who are potential content generators and a massive source of information. Crowd-sourcing utilizes the potential of networked web users to generate new ideas, advertise, and create added value for a little (or no) cost while increasing effectiveness by understanding customer needs, identifying potential customers, and building customer loyalty. Recently, in an effort to leverage the power of crowd-sourcing, Volkswagen launched "the fun factor", an ad campaign using web media (particularly YouTube) focusing on environmental issues. The campaign encourages users to develop environmental solutions (with an emphasis on the "fun" element) and share them on the web. VW uses these ideas and embeds its own ad, and delivers it to customers by customers. The ad has been watched and shared more than seven million times at no cost to the company. Similarly, user generated videos on YouTube about the reaction of Mentos to Coca-Cola increased Mentos's sales without costing

the company. Mentos even went as far as providing free stock of its products to people in order to generate more videos.

Comparing Amazon and eBay with MySpace shows a decline in the daily reach of the two e-commerce pioneers while social networks are gaining more attention. Indeed, social networks saw a healthy 500% increase in traffic between 2007 and 2008 (Leitner & Grechenig, 2009; Palmer, 2008). It is therefore important for next generation web-based businesses to understand the value of online communities in attracting new customers (Lorenzo, Constantinides, Geurts, & Gómez, 2007; Wu, Ye, S. Yang, & Wang, 2009).

Although there is little doubt that Web 2.0 can generate value for businesses, the question of how, why and when remains under investigation. The answer revolves around the impact of Web 2.0 and user generated content on customers' decision making process (Kim & Srivastava, 2007). In the offline world, a customer's decision to buy a product or service is mainly influenced by friends, family, and colleagues. The same relationships exist in the online world, so individuals with online social ties can promote word-of-mouth and create niche groups of customers with similar shopping behaviors.

In addressing online businesses, we define e-commerce as a three stage process: (1) *before* (attracting customers to the website through online marketing); (2) *during* (offering online means for executing the transaction); and (3) *after* (offering online means for after-the-service interactions). A purchase involving one or all stages qualifies as an e-commerce transaction. Hence, a customer who discovers a product on the web, purchases it online, and goes to the physical store for service is engaging in e-commerce. Leveraging social communities in e-commerce provides multiple advantages for both customers and businesses as online shoppers have access to large amounts of information provided by their trusted parties (Leitner & Grechenig, 2008), while businesses employ Customer Relationship Management (CRM) to better predict market trends and maintain better relationships with their customers (Wu et al., 2009). Using CRM in the context of Web 2.0 and social networks is called "Social CRM".

However, the impact of the social web on e-commerce is not always positive. For instance, the "keeping up with the Joneses" behavior

may translate into higher sales, increasing revenue by 5%, whereas seeking distinctiveness may decrease sales by 14% (Iyengar, Han, & Gupta, 2009). Social networks do not always influence to buy; they sometimes influence not to buy. The "minimalism" trend present on the social web (i.e., communities aiming to minimize purchases) has attracted many people during the last years, and more recently due to the economic breakdown.

The increased interest in Web 2.0 technologies and their e-commerce applications has led to a new shopping trend where customers leverage social networks to make more efficient and effective purchases. This is referred to as "collaborative shopping" or "social shopping" (Stephen & Toubia, 2009). In contrast, "social commerce" refers to businesses getting together to form networks of sellers (e.g., www.zlio.com). We use the term social commerce to refer to both "networks of sellers" and "networks of buyers" as we believe that social commerce should encapsulate both customers and sellers. We see social commerce as the evolution of "e-commerce 1.0", which is based on one-to-one interactions, into a more social and interactive form of e-commerce (Appendix 1).

While there is an agreement on social networks' impact on customer decisions, a systematic analysis of that impact is lacking. Our objective is to identify and discuss the various social factors influencing the different steps of a customer's decision making process, while presenting a model for understanding social commerce.

We continue the paper by surveying related work in Section 2. In Section 3 we present and discuss our model for understanding social commerce and support it with real life examples. Section 4 concludes the paper.

2. RELATED WORK

Analyzing the behavior of customers with regard to their purchase of products and services has been an interesting research issue, both in the context of traditional and online marketplaces. Customer buying behavior has been investigated from different aspects by psychology, social science, marketing, and recently information systems scholars. The most rigorous research regarding this issue provided models that capture customer shopping behavior including the Nicosia model (Nicosia,

1966), the Howard-Sheth model (Howard & Sheth, 1969), the Engel-Blackwell model (Engel & Blackwell, 1982), the Bettman model (Bettman, 1979), and the Andersen model (Anderson & Vincze, 2000).

The Nicosia model was first to shift focus from the act of purchase to a more complex consumer decision making process. As a communication model, it begins with advertising and ends with consumer feedback. Later, the Howard-Sheth model addressed customer behavior in the presence of multiple product choices, and the Engel-Blackwell model detailed the consumer's step-by-step decision making process. Based on these models and those of Bettman and Anderson, we identified the six basic stages of our proposed model for understanding social commerce presented in Section 3.

As web technologies matured and web applications became mainstream, the focus quickly shifted towards incorporating new business models in e-commerce (Guttman, Moukas, & Maes, 1998; Maes, Guttman, & Moukas, 1999). Older business models dealt with one-to-one interactions resulting in the development of customer-seller relationships (Dwyer, Schurr, & Oh, 1987). But social networks transformed customer-seller interactions from being one-to-one to community-based (Stephen & Toubia, 2009). Hence, the newer business models had to rely on community-based communications (Godes & Mayzlin, 2004; Jansen, Zhang, Sobel, & Chowdury, 2009; W. Yang, Dia, Cheng, & Lin, 2006) (Appendix 1).

Yet most research on community-based e-commerce revolves around increasing business revenue using word-of-mouth distribution and advertisement techniques as well as recommender systems. Little effort has been directed to researching the complete decision making process and ways of improving it. Although some frameworks have been proposed to explain the role of social networks in customers' decision making process (Kim & Srivastava, 2007; Leitner & Grechenig, 2008, 2009), most lack a systematic approach, and nearly all evaluate few stages of the process, giving way to an incomplete view of a community's role in the decision making process of its members (as customers).

Finally, with the aim of bringing "social features" to e-commerce, some researchers focused on the elements required for designing smart social shopping spaces (Leitner & Gre-

chenig, 2009). They analyzed the effect of social networks on e-commerce by looking at e-commerce websites, their structural elements, and applications that facilitate the creation of social environments. But since social networks that are built on top of e-commerce websites have not received enough attention, more research is necessary.

3. UNDERSTANDING SOCIAL COMMERCE

The concept of consumer buying behavior is not new. It refers to the decision making process which evolves in multiple steps including the act of buying and using products and services. Studying consumer buying behavior helps in understanding the influential factors on purchase decisions, and answers the question of why customers buy what they buy. It also enables firms to comprehend the reaction of customers to their marketing strategies. Understanding why, where, what, and how customers buy improves marketing campaigns and gives a better prediction of customers' response.

Although the research reviewed in Section 2 analyzed customer buying behavior in different contexts, it more or less pointed to six prevalent stages pertaining to customer behavior, namely Need Recognition, Product Brokerage, Merchant Brokerage, Purchase Decision, Purchase, and Evaluation. As the basis of our proposed model, we will detail these stages in the next sections. Note that although each stage represents a decision making step in the purchase process, not all customers follow them in the specified order. For instance, in traditional marketplaces most low cost purchases are made without previous intention or research as customers see products on the shelf and make the decision to buy or not to buy. Even for more expensive products, the order of the stages can change. For instance, to buy a laptop, a customer might be determined to buy a Mac, so he immediately starts browsing through Apple products, placing the Merchant Brokerage stage before Product Brokerage. Nevertheless, in most cases customers follow the stages sequentially.

The adoption of social networks introduced a new set of components to the e-commerce environment. Fisher (Fisher, 2010) divides these components into six categories: Social Shopping, Rating and Reviews, Recommendation and Referrals, Forums and Communities, Social Media, and Social Advertising. Each component

has brought new challenges and advantages to the online shopping experience, urging for the analysis of consumer buying behavior in the context of social networks. In our proposed model, we evaluate the effects of the above-mentioned components on social shopping behavior from the viewpoints of consumers and businesses. Including businesses in the model should improve the analysis since businesses are usually part of consumer networks and they affect consumer decisions. In the following subsections we detail the stages of our model (Appendix 2).

Need Recognition

The first stage in a customer's purchase decision making process is identifying the need for a specific product or service. Although this is considered the first stage in the process, the role played by businesses in creating brand and product awareness begins long before customers become aware of a need.

Need recognition is associated with many issues that must be addressed for a clear understanding of the entire social shopping process. One of these issues has to do with customer needs and wants. Campbell (Campbell, 1998) defines need as the requirement, necessity, or the feeling of deficiency; and associates want with phrases such as 'desire', 'fancy', 'love', 'attracted to', and 'fond of'. The contrast between need and want rests on the difference between deprivation and desire. Need refers to a state of deprivation, and it occurs when there is a lack of necessary items to maintain an existing condition, whereas want refers to a motivational disposition to experience the pleasure of owning a product or service.

Customer needs and wants can be motivated by social networks. For instance, two kinds of social influence correlated to the generation and recognition of customer wants and needs are observed (Bearden, Calcich, Netemeyer, & Teel, 1986). Normative social influence (aka subjective norm) creates a social and psychological pressure (i.e., want) on people to purchase a product (or service) - regardless of an individual's interest in the product - since not adopting that product may paint them as old fashioned in their society or network of friends. Therefore, some purchases have a positive correlation with prestige and competition. However, informational social influence is a learning process achieved through observing early adopters' experiences with a special product (or service) aiming to understand the

motives for acquiring it. The product can then be modified to address those needs more effectively, and the product profile should address the issue of attracting customers with similar needs. For instance, if your friend brags about his new phone that checks emails, then the need for checking emails on the go may be awakened in you.

Businesses, on the other hand, are interested in awakening the need or generating the want in customers. The key to make their products known to potential customers is effective advertisement. Note that CRM systems can assist businesses in predicting their potential customers and their potential needs.

How can the social web improve the need recognition process? Within social networks, nodes are the individual actors and links are the relationships between these actors. A social network is simply a map of relevant links between nodes. Links usually represent common interests or needs between actors on which they establish their relationships (Schwartz & Wood, 1993; Wellman, 1999), and thus they often form a subgroup. We believe that social networks can improve the need recognition process using the following three methodologies.

Mutual Impact. A customer's decision to buy a product or service is often influenced by family, friends, colleagues, business partners, etc. Due to mutual influences, it is more likely to observe similar purchase behaviors among customers with strong ties in a social network. Adopting a product by a network of people connected to an individual may awaken the need for the product in that individual or create a desire (want) for acquiring that product or in some cases a similar product.

Back in 1996, Hotmail employed the effect of mutual impact to increase its user base. Hotmail increased its users from 0.5 million to 12 million by adding a simple message to the end of each sent email.

Viral Advertisement. While popular social networks base their business model on advertising (Trusov, Bodapati, & Bucklin, 2009), identifying the effective target for advertisement has always been challenging (Green, 2008). Indeed, only 40% of customers are source of positive social influence, while 12% create negative influence. Almost half of social network users have no social influence at all (Iyengar et al., 2009). A positively influential

customer offers the opportunity for targeting an effective, but maybe small, portion of customers, resulting in a decrease in advertisement cost. Observing similar purchasing behavior helps identify subgroups of customers with strong ties and likely common interests. Businesses can create profiles of their products within an online community to increase their interaction within that community. For instance, Kiva (www.kiva.org), a charity loan website, created a profile on Facebook so people can become friends with Kiva and promote its service. This resulted in the formation of support groups among Facebook members, some even launching campaigns and competing to show support for various causes.

A different methodology consists of advertising a product to an online community member who has strong ties to other members or is positioned between sub-communities. The community member may, then, intentionally or unintentionally mention the product in his/her posts which creates a special form of viral advertising called "blogvertising" (i.e., advertising a product indirectly by talking about it in blog posts). Seth Godin, a renowned business author, provided an electronic version of his new book for free to his blog readers, who are also bloggers and social network users, and asked them to post it on their blogs, twitter, etc. if they found it interesting. Also, several e-commerce websites provide the functionality of posting purchases on Facebook immediately after the purchase, so more people become aware of the purchased product.

Recommender Systems. Recommender systems use various techniques to make accurate recommendations (Terveen & Hill, 2001), social recommendations being among those techniques. After detecting the sub-communities and analyzing the behavior of individuals and their community-wide connections, recommender systems can be employed to better predict the current and future needs of the community. "Customers who purchased this also purchased ..." uses community behavior to identify similarities in the interests of people in products. The accuracy of recommendations increases by incorporating the different facts about users such as social ties and demographics (Terveen & Hill, 2001).

Product Brokerage

Product Brokerage (aka Information Search) is the stage where consumers determine what to buy after a need or want has been recognized.

This is achieved through a comprehensive search on products, followed by a critical evaluation of candidate products' information. The search procedure is normally conducted through "Internal" or "External" search or both. Internal search focuses on personal knowledge and past experiences, whereas external search utilizes marketers dominated sources, comparison shopping, public sources, and friends and relatives who can affect the decision through word-of-mouth. Social networks have the potential of improving the product brokering process by providing a resourceful environment of individuals with different experiences and specialties who spread the word-of-mouth and potentially lower the cost of search for different products (Guttman et al., 1998). Social networks can assist in achieving this lower cost search medium by providing the following:

Trusted Reviews and Power of Friends Network. Trusted reviews may appear in two forms, formal and informal. When customers visit a merchant's website, they provide formal reviews on the products there and then. In contrast, informal reviews are provided whenever customers informally share some opinions on products among their social network of friends. Informal reviews can have more credibility since they originate from members of the same online community who supposedly share the same values.

A friend who uses Twitter to comment on his recent purchase and describes the product with passion or disappointment affects his friends more than a formal review. Plus, friends may re-tweet (i.e., repost) the comment if they trust the original author. The re-tweet may be re-tweeted again to reach larger communities. In open social networks such as Twitter, users can search for products and reach thousands of informal, and sometimes formal, reviews about these products.

Impact of Social Identity. Purchases and memberships can signal customers' social identity (Belk, 1988; Berger & Heath, 2007); therefore a customer's social identity may hinder the purchase of specific products. People may converge or diverge in their choice of products based on how much their choice will signal their social identity. A color, cloth, or hairstyle is socially accepted to represent a group, but if other people start to adopt the same style, then the meaning of adopting that specific style may become diffuse. For in-

stance, Berger and Heath (Berger & Heath, 2007) discuss the example of Harley motorcycles which are a symbol of toughness, so many buy a Harley to signal their tough social identity, and the social identity that is associated with Harley motorcycles may stop many people from buying them. However, if different groups, e.g., accountants, start to adopt Harleys, their tough social identity may disappear over time.

Synchronous Shopping. Social networks give users in different locations the opportunity to shop together simultaneously. With Web 2.0, web pages can be embedded into chat tools, and a group of people is able to browse the web together while they communicate regarding product profiles (Fisher, 2010). This synchronous shopping method preserves the fun of shopping together while benefiting from each other's ideas. Actually, this method mirrors the offline shopping experience where a group of shoppers visit a mall and help the potential buyer by discussing products and brands. Mattel, producer of Barbie dolls, provides synchronous shopping on its website, so kids in different locations can play together and design their own Barbie doll.

Merchant Brokerage

The Merchant Brokerage stage compares merchant alternatives. The result of the comparison may lead to the next stage of the social commerce process or a return back to the previous stage to conduct more searches (Appendix 2). In this stage, the buyer establishes criteria for evaluating merchant related product specifications, along with promotions and accessories that a merchant provides. Plus, the merchant-customer relationship plays a role in the buyer's decision to select a merchant. Scanzoni (Scanzoni, 1979) identified five phases in the development of merchant-customer relationships in a conventional marketplace, namely awareness, exploration, expansion, commitment, and dissolution. We believe the same phases apply to an online marketplace, the first two having a direct impact on merchant brokerage.

Awareness. Awareness refers to one party recognizing another party as a feasible exchange partner. That means customers will understand that a merchant provides their needed product or service in the desired condition. The presence of the merchant in social networks, whether formally or informally, amplifies the customers' awareness of the mer-

chant. Amazon developed a method to amplify its recognition by providing affiliated links to its users, so whenever users talk about a book on their blog they can use the affiliated link to direct others to the book description hosted on Amazon. In this win-win situation, book descriptions are readily available to customers, while Amazon benefits from recognition and increased sales.

Exploration. Customers evaluate the benefits, burdens, commitments, and conditions of the deal associated with the seller. Trial purchases are suggested as an enabler for the evaluation of benefits and drawbacks while increasing trust (Dwyer et al., 1987). But social networks help in skipping the trial purchase step and going straight to the exploration phase. The quality of the reviews and ratings associated with the merchant, especially those coming from trusted parties, speed up this stage. Customers usually rely on other people's recommendations. For instance, a Twitter account named "AskAroundOttawa" gives the opportunity to Ottawa residents to get fast feedback regarding Ottawa related issues. One user may receive hundreds of feedbacks for inquiring about a restaurant serving a specific cuisine. Moreover, merchants can provide promotions and discounts on their social profile which updates users more frequently than a website.

Techniques and applications discussed during the product brokerage stage are also useful for merchant brokerage if they are focused on merchants. For instance, if a merchant provides a synchronous shopping functionality on its website, users will be attracted and the fact that they are using the service means that they have already chosen the merchant to do their purchase.

Purchase Decision

This stage (aka negotiation) is where the price and other terms of the transaction are determined. Similar to the previous two, this stage does not always lead to the next stage. There is a possibility that the customer returns to the previous stages to do more analysis (Appendix 2). As social networks rely on members and communities, two types of purchases exist: individual purchases and group purchases (aka group buying). The value of social networks is more apparent in group purchases.

Once a customer decides on the merchant and proceeds to the purchase stage, the merchant will try to extract maximum benefit from the

purchase, for instance using recommender systems to suggest accessories or related products. Recommender systems leverage customers' activities within social networks to identify their interests and habits then recommend the right product to them. Bundled products which usually translate into better prices for the customer may start a new social shopping trend. If there is a choice in the suggested accessories, customers may go back to the product and merchant brokerage stages to revisit the decision on the choice of accessories.

The purchase process can involve multiple customers, especially when the merchandise is a subscription to a digital product (e.g., Safari Books). Although wholesale and group prices were always available for different products, most products are sold one at a time because customers usually need one item. However, social communities have the potential to change that. Communities within a social network can be formed to adopt a product, so sales increase and price decreases. CommunityShopper (www.communityshopper.com) has recently launched a service that enables customers to purchase products in groups. Customers can join the service and form groups by showing interest in different products, leading to a group purchase. CommunityShopper also leverages the power of other social networks, so any purchase or show of interest can be posted on the user's Twitter account.

In general, social networks potentially empower customers and merchants in the following ways: (1) Product Bundling: recommender systems recommend accessories or related products to customers based on their social relations. (2) Group Purchase: enabling customers to use their collective buying power to obtain lower prices.

Purchase

Although purchase is an important stage in social commerce, social networks do not affect it dramatically if the purchase is done offline. Based on what we described previously, the purchase can be done individually or in a group. In case of an individual purchase through a social network, the customer can leverage feedback from his network. For instance, the status of a member of Movie Fans (www.community.netflix.com) is updated when he purchases a movie ticket. If friends view his status and dislike his choice of theatre, they may suggest better venues. He may then consider their suggestion for his next movie out-

ing. In case of a group purchase, merchants, customers and their social network benefit from the purchase. Customers acquire the product for a lower cost, while social networks multiply sales for the merchants. Moreover, merchants can promote the product by enabling customers to post their purchases on their social profiles (perhaps to gain social acceptance). Also, the merchant may ask the customer to recommend a product to friends or recommend people who are interested in a product to the merchant.

Nevertheless, in some types of purchases where the purchase has "a duration" associated with it, the effect of social networks on this stage may increase. For instance, when a customer orders food in a restaurant, he is committed to pay even though the payment will be completed in the near future. The purchase action begins when the order is received. If the user posts his location and his intention to dine on a social networking site such as Foursquare (www.foursquare.com), friends (i.e., members of his social network) can join him. Foursquare encourages users to be frequent buyers and to post their status on the website, rewarding them with social recognition and promotions.

Evaluation

The post-purchase stage is the final and probably the most influential stage in the social commerce model. It affects all previous stages, involves customer service, and more importantly the evaluation of the satisfaction with the buying experience. It acts as a transition stage for customers to go from being influenced to becoming potential influencers. The rationality of the decision made by the customer is evaluated, leading to satisfaction or cognitive dissonance. Online reviews are important if we accept that online customer review systems are one of the most powerful channels to generate online word-of-mouth (Foster & Rosenzweig, 1995; Godes & Mayzlin, 2004). However, not all researchers agree on the impact of online reviews on sales. The disagreement results from the fact that some researchers focus on the persuasive aspect of online reviews and on assessing the quality of products in the reviews, while others focus on user awareness and spreading the word without paying attention to the quality of the products (Duan, Gu, & Whinston, 2008). Nevertheless reviews have a positive relationship with the quality of the shopping experience. If a

product sells well, then the number of reviews will grow and will eventually cause more recognition (Eliashberg & Shugan, 1997). The number of positive reviews during a certain amount of time is also indicative of more future sales, so merchants can predict sales and assign resources for more production.

Reviews can be divided into three categories: Customer Reviews, Expert Reviews, and Sponsored Reviews. Although it is expected that expert reviews have the most effect on customer decision making, in reality, informal and user generated reviews affect customers the most (Eliashberg & Shugan, 1997). Businesses should therefore focus on encouraging customer generated reviews.

In social networks, customers are encouraged to leave reviews for several reasons. An important one is that social network members seek recognition and try to show that they are always first in line, which is more verifiable in social networks where members know each other, hence they expect social satisfaction. Foursquare, for example, provides badges to grant social recognition to its users when they post reviews. Another incentive for leaving reviews is to help friends with decision making by providing personal experiences and history of products or services. While the number and quality of reviews change based on products, more attention is directed towards the comments of a critic (Eliashberg & Shugan, 1997). Trusting a critic's reviews in a network of friends is easier since the users are aware of the background of the critic (Kim et al., 2008).

In light of the above, social networks are better for review generation than merchants' websites.

4. CONCLUSIONS

Web 2.0 generated a new e-commerce stream named social commerce, enabling customers to harness the power of the social web to make more accurate decisions. Although social networks have an impact on customers' purchase decisions, few studies have focused on such influences because until recently data about the effects of social interaction on sales has not been adequately captured. With more customers using the social web, businesses developed tools to reach more of them to create product and brand awareness.

This paper reviewed and leveraged existing frameworks to present the influence of the so-

cial web on e-commerce decision making in a comprehensive model. The model guides all actors involved in the social commerce (businesses, developers, and customers) in leveraging the power of social networks. This includes enabling businesses to improve their marketing campaigns and increase sales. On the other end, customers are empowered through more informed purchases. All of this is possible when the developers build more focused tools to target the communities.

By using the right tools in the right way, e-commerce companies can ultimately increase sales while lowering marketing cost. We believe that e-commerce companies can benefit from the analysis of customer behavior in the social shopping experience. They should also recognize and apply the right strategies at the right purchase decision making stage. The model guides business through the process of selecting the right strategies for different products and different target groups, as the model provides a comprehensive overview of possible techniques for employing social networks in business and their positive and negative effects. The result makes the social web an additional tool to be used by businesses in influencing customer purchases.

The model explores various social commerce tools with their advantages and projected deficiencies. Developers of social commerce systems can use the model improve current technologies.

Customers who may not have complete information about a product or service are eager to learn from other customers. Furthermore, human psychology suggests that people are interested to own what their friends have, whether they need it or not. Viewing products or hearing about them may awaken needs in customers. High quality reviews and functionalities on e-commerce websites that connect merchants to customer networks may encourage or discourage purchases of specific products from specific merchants. Customers are the ultimate beneficiaries from the model since it improves the services provided to them by business and developers.

In conclusion, our findings show that the main driver for social commerce is user interaction and involvement. Companies should encourage users to engage more in providing product and merchant related comments on their social networks and a comprehensive understanding

of social commerce strategies is required for managers.

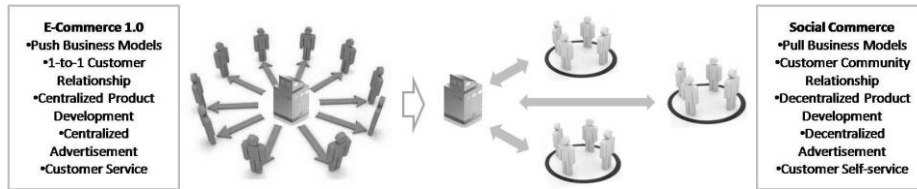
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Appendices and Annexures

Appendix 1. From e-commerce 1.0 to social commerce



Appendix 2. Model for understanding social commerce

