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# Adding Social Features to E-commerce

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## Abstract

With the introduction of social media, e-commerce is being transformed from product-centered to a customer-centered social environment. Such changes strengthen customer relationships, increase traffic to e-commerce websites, generate new business opportunities, and support product and brand development. Although a variety of social media tools have been used on current e-commerce platforms, the social features of those tools are not well understood. Without a clear understanding of their social features, social media tools may not achieve their expected design goals. To this end, this study examines a selection of e-commerce websites, identifying existing social media tools, then grouping them into five social feature categories, namely social connection, social communities, social media marketing, social shopping and social application. To leverage these social features, some implementation issues are discussed. This contributes to understanding social design features, and supports designers in developing more social, collaborative and interactive e-commerce systems.

**Keywords:** social media, web 2.0, e-commerce, social commerce

## 1. INTRODUCTION

With the extensive use of web technologies, thousands of e-commerce websites become accessible via wired and wireless Internet, providing a wide range of business services. Such a fast growth rises from the way that e-commerce has dramatically changed the traditional business environment to improve user access and business service delivery. However, with the increasing demands for services and applications from both customers and business organizations, e-commerce is facing new challenges. One of them is how to

better engage customer participation and support business development. More specifically, today, it is no longer enough for customers to shop online in the traditional way. Indeed, they expect a more social, interactive, and collaborative online experience, where collective intelligence can be aggregated and used to support problem solving and decision making (Dennison et al. 2009). Business organizations on the other hand are looking for new ways to strengthen business relationships, identify new business opportunities and support product and brand development (Breslauer et al. 2009).

Social media applications seem to naturally support the e-commerce evolution. For instance, wikis enable multiple users to work collaboratively, encouraging them to generate content and share it with online networked people (Murugesan 2007). Forums allow users to create topics or hold conversations in the form of posted messages, presenting perceptions, exchanging ideas and expressing satisfactions (Serrano & Torres 2010). More significantly, social media applications benefit businesses in product development, market trend prediction and sales increases (Constantinides et al. 2008). For instance, Threadless.com leverages a peer community to motivate users to submit ideas for T-shirt design, and the best designs are selected as a part of products. Amazon tracks a user's preferences and online behavior to suggest products to other users. Moreover, iTunes utilizes forums and discussion boards to understand customers' interests and recommend relevant products to them. In this aspect, utilizing social media tools in e-commerce appears to be a new trend commonly referred to as social commerce (Serrano & Torres 2010). However, although a variety of social media tools have been implemented on e-commerce websites, challenges for social commerce design still exists. In particular, it is not enough to simply clone social media tools from one e-commerce website to another. There is a need to understand social features behind social media tools. Social features refer to the characteristics of social media applications in e-commerce. This study aims to examine a sample of current e-commerce websites, identifying existing social media tools. Based on the key features of the identified social media tools, we group them into categories. This can improve the understanding of social commerce, and guide designers in adding appropriate social media tools to e-commerce systems.

This paper is structured as follows: Section 2 introduces the concept of social commerce. Subsequently, the research method is detailed in Section 3. Section 4 presents the findings, identifying a number of social media tools. Based on the key features of these tools, a set of social features are proposed in Section 5. Implementation issues are discussed in Section 6. Finally, a brief conclusion is provided and future studies are suggested in Sections 7 and 8 respectively.

## 2. RELATED WORK

Social commerce is a recent phenomenon (Stephen & Toubia 2009), covering a wide range of disciplines, such as computer science, sociology and economy (Lee et al. 2008). As such, there is no universally accepted definition. It can be simply defined as an the integration of social media with e-commerce (Jascanu et al. 2007). However, many studies define it differently, focusing on various perspectives. For example, Constantinides and Fountain (2008) addressed the economic viewpoint, describing social commerce as a new application in online marketplaces, where business organizations leverage social media or web 2.0 as a direct marketing tool to support customers' decision making processes and buying behavior. Other social commerce definitions are presented in Table 1 (see appendix). Despite these diverse definitions, it can be argued that the fundamental idea behind social commerce is to apply social media to e-commerce systems (Dennison et al. 2009).

Social commerce is increasingly drawing the attention of academia. A number of studies have been carried out to explore the impact of using social media tools on business applications and strategies. For instance, Serrano and Torres (2010) investigated social media applications in ERP products and the results show that utilizing social media tools significantly improves social and collaborative capabilities in business processes. Constantinides and Fountain (2008) explored the effects of social media on marketing. The study addressed the importance of using social media as a direct marketing tool in a company's commercial strategy. Furthermore, social media increases user power, extending the experience and knowledge of customers as participants in the business and social process, and transforming a market for products and services into a social and user-centred environment (Wigand et al. 2008).

Many studies have demonstrated the significant impact of social media on consumer interaction and decision making. Grange and Benbasat (2010) examined the effects of social media design in online shopping websites on customer purchase behaviours. The study found a set of social design features that significantly influence customers' interaction, including a list of favourite products, a list of online shopping friends, product reviews and customers' profile. In addition, a study by Kim and Srivastava

(2007) investigated the impact of social features on customer purchase decision making in e-commerce. The results show that sharing customer experiences through providing feedback, rating reviews and chatting among members are important social design features to help customers make better decisions. This is also supported by De Bruyn and Lilien (2008), who conducted a study to explore customer influence, focusing on the decision making process in e-marketplaces. The findings show that the different stages of customer decision making, including need recognition, product evaluation and final purchase are largely supported by social networking power.

Since the benefits of using social media in e-commerce became known, the industry sector, led by major software vendor, has tried to capture such benefits and rapidly developed their own social commerce products. Table 2 shows some social commerce products from a wide range of vendors (see Table 2 in appendix).

### 3. METHODOLOGY

This study aims to examine a sample of current e-commerce websites in order to draw conclusions on social features for e-commerce design. Specifically, we attempt to assess existing e-commerce websites from a user perspective, identifying the social media tools that are implemented on these websites. Based on their key features, the identified social media tools are grouped into categories. To that effect, twenty e-commerce websites have been selected, covering a variety of business models, from the 2012 list of top retail websites compiled by the Internet Retailer (<http://www.internetretailer.com/top500/list/>). All the selected e-commerce websites have, at some point, attempted to integrate social commerce concepts into their offerings.

We opted for a focus group evaluation since it is a rapid, simple, and effective way of inspecting website design issues (Parent et al. 2000). A focus group evaluation generally involves a small group of users to provide feedback about a website. Ideally, six to twelve participants can gain deeper insight into user perception of a certain service or product (Massey 2011). Other advantages of this methodology are reflected by its flexibility and efficiency (Wood et al. 2003). For example, it can be implemented within the online or offline environment, and combined with other evaluation approaches. Therefore, we

assigned five reviewers to evaluate the selected twenty e-commerce websites one by one. These reviewers were information systems researchers and computer science graduate students at the University of Ottawa. They all had good knowledge of social media applications and long term experiences using e-commerce websites. The evaluation was split up into small sessions, each focusing on a particular part of the target e-commerce websites. Two types of evaluation techniques were implemented: free review and task-based interaction. Free review allows the reviewers to freely look at the target websites so that a general perception and initial interaction are developed. Task-based interaction requires the reviewers to complete a set of simple practical tasks, such as information search and product identification. All reviewers followed the same evaluation procedure. First, they were given a brief introduction to understand the purposes of the evaluation, and then required to conduct a free review and task-based evaluation. During the evaluation process, the reviewers carefully recorded all relevant social media tools that have been found in the target e-commerce websites.

### 4. FINDINGS

Table 3 lists a number of social media tools as they apply or not to the twenty target e-commerce websites (see appendix). Overall, a wide range of social media tools have been identified by the focus group. Among them, the most common include reviews and ratings, like and share buttons, feedback mechanisms, referrals and recommendations, social community support, social storefront and wish lists. However, because of the different social commerce requirements, some social media tools have only been implemented on specific e-commerce websites. For example, in order to foster more customer purchases, Buy.com and Shopwithyourfriend.com allow a group of people who have similar shopping interests to purchase products together, offering competitive prices. Furthermore, to encourage customer generated content and utilize customers' collective intelligence to solve problems and make decisions, Apple and eBag.com provide customers with forums and discussion platforms respectively, motivating customers socially to communicate with and help each other. In order to expand social influence, Avon.com and NorthFace.com allow customers to create product videos and publish them on YouTube, which not only attracts more people's attention,

but also constitutes social advertisement (i.e., word of mouth). Additionally, with the purpose of having fun while shopping, Borders.com builds connections through notifications, inviting customers to participate in social events regularly. For keeping customers informed about the brand and tracking customers' fashion trends, blogs are particularly used by eBag.com, NorthFace.com, Levi's.com and CSN store.com. Moreover, Bestbuy.com and BlueNile.com provide mobile commerce applications, offering handy and flexible means to engage customers in business services.

Based on the results, it seems that all the target e-commerce websites are leveraging a range of social media tools. However, we notice that different social media tools are being used for different social interaction purposes. This indicates that in order to achieve the expected social design goals, it is important to understand the social features behind the different social media tools, so that the most appropriate tools can be properly developed and used for supporting social commerce.

## 5. SOCIAL FEATURES

Evidence from relevant studies indicates that a key feature of social media applications in e-business is to build a new communication channel, where customers not only have the bidirectional interaction with business, but also closely connect with other customers to share the shopping experiences. In addition, customers' participation forms a networked community, within which customers can collaborate and use their collective intelligence to support problem solving and decision making. Significantly, such network power generates social influence, which is beneficial for increasing sales and promoting brand loyalty. Furthermore, social media applications on e-commerce websites require a certain degree of flexibility. Social media tools can be flexibly used on various platforms, such as desktop websites and mobile phone apps, or a range of applications, such as Twitter and Facebook, providing customers with more opportunities to interact with business services. In view of that, we took the key features of the social media tools identified by the focus group and organized them into five social feature categories (Appelo 2010): (1) social connection, (2) social communities, (3) social media marketing, (4) social shopping, and (5) social applications (see Table 4 in appendix).

### Social connection

Social connection is about building a link between e-commerce and social networking sites, such as Facebook, Twitter and Myspace, providing customers with opportunities to communicate with a peer community in order to have richer social and interactive experiences. Such experiences foster customer power rather than having marketers in control (Murugesan 2007). This allows e-commerce to move into social and customer-centered marketplaces (Wigand et al. 2008), where customers can interact with more people and utilize their knowledge and experiences to achieve their desirable service outcomes. To build social connection, the "Share" button is one approach that enables users to post a link to their social media pages, allowing their friends to follow the link to review their content. Displaying a "Like" button on product pages is another way to establish social connection. When a user clicks on the "Like" button, the number of users who "Like" a site or a product rises and a link to the site appears on the user's activity wall. As the user's friends follow the link to visit the site, the "Like" button shows which of the friends also clicked on the "Like" button, showing their shopping interests in their profiles. Moreover, offering customer reviews and feedbacks builds a "bridge" between e-commerce and social networks, motivating customer generated content and involving real time participation, which empowers customer control and reduces the distance between companies and customers (Costa & Tavares 2011). In particular, rating customer reviews enables customers to further edit social content, which increases social engagement. For example, ebags.com not only allows customers to comment on their products, but also invites them to judge the level of the comments' usefulness, using a visual five star rating system.

### Social communities

Social communities refer to an aggregation of customer groups and constitute the network power that produces social effects. It involves customers with common interests to work together and utilizes their collective intelligence to support problem solving and purchase decision making. A number of social media tools have been applied for building social communities within e-commerce. For example, Apple builds product-oriented communities via their discussion platforms, where customers can

discuss products, exchange ideas, provide feedback and solve usage problems. Similarly, Bestbuy.com encourages customers to join an innovative peer community to post discussion topics, and share technology tips and tricks through blog and forum applications. In addition, expert communities are developed within e-commerce, providing customers with real time and authoritative support, which timely assists customers to overcome the uncertainty of shopping activities. For instance, Buy.com makes an expert community available throughout the site, offering special knowledge and advice whenever customers need it. Likewise, Lands' End.com develops its specialist community that can be reached through online instant messages, audio call and video chatting to better answer customer questions when they shop online.

### **Social media marketing**

Social media marketing is another social feature, which attempts to achieve branding and marketing communication goals through the participation in various social media networks (Rognerud 2008). This form of marketing is driven by user generated content and social influence, which may produce significant commercial output, such as enhancing website traffic, increasing sales and promoting customer engagement. Social advertisement is a typical application, which harnesses user created advertisement to attract attention within social media networks. When such social advertisements have been endorsed by peers, they can be perceived as more credible and be more effectively disseminated throughout social networks (Constantinides et al. 2008). For example, ebags.com offers product advertisement videos and such videos can be commented on and shared throughout the Facebook platform, which increases the look-to-buy conversion rate (Najjar 2011) and spreads brand awareness. Similarly, Avon.com not only provides professional videos from fashion experts, but also encourages customers to create featured product videos and post them on YouTube. Moreover, providing social events is another popular application to extend social commerce. One example is the online bookstore Borders.com which organizes a number of regular online and offline events to attract customers' attention. Additionally, some e-commerce companies offer a social storefront enabling customers to interact with social media marketing and follow a brand on social

networks. For instance, Best Buy developed a Facebook storefront, where customers can receive the latest promotional information, search for products, and review and comment on products.

### **Social shopping**

Social shopping involves customer interaction with others through online social networks in the process of shopping for products (Grange & Benbasat 2010). It enables businesses to maximize the effectiveness of their marketing campaigns and provides customers with rich hedonic online shopping experiences (Constantinides et al. 2008). Various approaches for social shopping have been implemented in e-commerce. For example, e-commerce websites such as Gap.com, Stila.com and Eddie Bauer.com bring like-minded people together, utilizing the wisdom of crowds to discuss and purchase products. In addition, these e-commerce sites allow customers to create shopping lists (or wish lists) and share them with friends, entailing more social shopping. Furthermore, product recommendation systems are another approach used for social shopping, which utilizes collective intelligence to provide helpful advice to customers. For example, when customers purchase specific products, BlueNile.com presents other relevant products that are likely to interest customers, hence encouraging additional purchase. Amazon also recommends products to customers based on their past behaviour and the past behaviour of similar customers. Moreover, some e-commerce websites enable customers to buy together, benefiting from lower prices. An example from the target e-commerce websites is Shop with Your Friends.com, which enables customers to invite friends from social networks like Facebook and Twitter to participate in synchronous shopping at wholesale prices. Within social shopping, consumers can receive real-time advice from friends or inspire others by providing suggestions to buy, which facilitates the online buying process. Buy.com provides the ShopTogether tools that allow customers to ask questions, share products and have fun while shopping with their friends, inviting friends to join a conversation around a purchase through email, instant messages, or Facebook. In addition, to increase customer engagement, some e-commerce websites let customers customize products and share them with a peer community. M&M's for instance motivates customers to design their own personalized

candy and snacks by choosing favourite colours, inserting images and writing messages. These customized products can be shared within the M&M community, allowing other customers to review, comment, and even buy them.

### **Social applications**

Social applications are mainly about mobile commerce, Facebook commerce and other relevant applications that provide customers with opportunities to interact with business services. Mobile commerce moves online shopping from websites to mobile devices, where customers make purchases through their mobile phones. The popularity of mobile commerce can be explained by its mobility and broad reach. For example, Amazon mobile commerce enables customers to purchase products away from computers, and customers can be reached at any time via their handsets. As such, a number of mobile commerce applications have been developed, such as mobile financial applications, mobile advertising, mobile inventory management, locating and shopping for products, proactive service management and mobile auctions (Ngai & Gunasekaran 2007). Facebook commerce refers to business applications on the Facebook platform, taking advantage of the fact that Facebook is a powerhouse for advertising, marketing and selling of products with 500 million users using the service to communicate and share information with their friends (Shih 2011). For example, Organic Bouquet.com uses its Facebook shop as a major advertising and marketing channel, attracting potential customer attention. The North Face Facebook store allows customers to review product photos and find a specific store location. NikeID.com Facebook storefront enables users to search for products and select and move them into a shopping cart.

### **6. IMPLEMENTATION OF SOCIAL FEATURES**

Now that various social media tools have been identified and grouped into social feature categories, a key interest to business organizations is how to efficiently harness social features and derive value from these different social media tools (Parise & Guinan 2008). Hence there is a need to address implementation considerations in order for business organizations to develop better social marketplaces.

First, companies should implement social features creatively, based on what works and what fits in their business strategies, particularly with regards to customer generated content. Business organizations are striving to understand their customers. Social features provide them with the potential to not only communicate with customers through traditional means such as broadcast ads, but allow customers to participate in marketing activities such as product design and service feedback. With this opportunity, companies could utilize social media tools to learn more about customers by encouraging them to share personal interests, and to provide their preferences and needs. It results in companies obtaining precious insight into customers' perception, performance and reaction to products. Moreover, in order to increase business profit and optimize store management, social features can be employed to assist in direct sales. Companies can use blogs or their social storefront to deliver messages to a targeted group of users in real time to advertise "flash sales", and manage its inventory turnover. Likewise, to meet product cost effectiveness requirements and customer participation targets, companies could involve customers in the process of product development, leveraging their collective intelligence to examine design ideas and eliminate poor products before injecting resources into their fabrication. Similarly, to satisfy customer service needs, company-sponsored wikis can be implemented to create documents relevant to products, such as Frequently Ask Question documents. The documents can be started by a company, and edited by a wide range of customers. Moreover, to motivate social interaction, companies should provide a sense of customer identification and awareness that can be recognized by their peers. Such recognition can be perceived as social proof to motivate other customers' participation.

Second, building communities through customer conversation is another important target for organizations that implement social features. An effective community can be built by providing opportunities for customers to network among themselves. Another way to build a networked community is to group customers with common interests. These communities are expected to support collaboration and gather collective intelligence. Conversation plays a fundamental role in establishing a community, providing customers with collaborative interaction and

bidirectional communication. It should enable customers to not only receive social content, but also to generate social content. To support community development, companies could provide incentive mechanisms to drive community growth, and offer diverse online and offline events to maintain customer relationships. More importantly, as customers share their experience and knowledge within the community through e-commerce systems, attention should be paid to usability. Indeed, it is necessary to provide user-friendly systems for customers to exchange experiences and knowledge when they interact with social media tools.

Third, business organizations should aim for the authenticity of messages coming from their customers. Negative customer comments may create a risk for a product because customer generated content may influence how a product is perceived in the marketplace. Companies could monitor social media, such as forums and discussion boards to listen and understand the voice of customers. These messages seem more authentic to customers when they come from other customers. By using such authentic information, companies may solve specific product problems and strengthen brand reputation, which is beneficial for motivating positive customer attitude and developing long-term loyalty.

Finally, as a variety of social media features become available, business organizations should employ experimentation so as to better attract and serve customers. For example, to increase sales, providing real time online chat can allow customers to interact with a company's representative in real time to get more information about a particular product. Similarly, in order to enhance interactivity, companies could experiment with rich social content provision in multiple formats, such as text, photo, video and audio. Moreover, with the purpose of promoting customer shopping experiences, companies could use interactive product displays, such as 3D graphical presentations to allow customers to closely look at different aspects or features of products. Additionally, in order to expand product influence, customer created product videos can be experimented as a way of advertising a product or as an informational tool.

## 7. CONCLUSION

With the increasing demands for services and applications from users and business organizations, e-commerce is facing new challenges of how to engage customer participation and support business development. Evidence from academic studies and the industrial sector indicate that leveraging social media tools is seen as a new approach to support e-commerce. Within this context, customers have easy access to social knowledge and experiences to support them in better understanding their online purchase purposes, and in making more accurate purchase decisions. Businesses can capture customers' interaction, gaining insights into customer shopping experiences and expectations, which is helpful for developing successful business strategies. However, although a variety of social media tools have been implemented in current e-commerce, the social features relating to these social media tools need to be understood. To this end, this study examines e-commerce websites, identifying a number of existing social media tools. These tools include "blogs", "reviews or feedbacks", "like" and "share", "discussion board", "referrals and recommendation", "forums", "peer community", "rating reviews", "social ads", "social media event", "synchronous shopping", "mobile commerce", "social storefront", "wish lists", "online expert support", "content community", and "customization products". Based on their key features, these social media tools are grouped into five social feature categories, which cover social connection, social communities, social media marketing, social shopping and social application. Some implementation considerations are then proposed, including applying social feature learning to meet marketing requirements, building community through customer conversation, using the authenticity of messages from customers and experimenting with social media tools. All this to facilitate the understanding of social design features, and support developers to leverage relevant social media tool in developing more social, collaborative and interactive e-commerce.

## 8. FURTHER STUDIES

However, this study has some limitations. First, the study uses a small number of reviewers to examine e-commerce websites; so it may provide a limited view of the social media tools landscape. In addition, data analysis is limited to

a descriptive analysis, which may influence social media tools identification. Furthermore, the study interprets social features mainly from the users' perspective, not considering the sellers' viewpoint. Still, this study is only a first step, and further studies will be conducted in the future. For instance, based on the identified social features, a model of social commerce design will be proposed, addressing a number of detailed design guidelines. In order to validate the proposed model and design guidelines, a social commerce prototype will be developed and evaluated. Furthermore, social commerce can be implemented based on e-commerce that harnesses social media features, or on social network sites that add e-commerce features. It would be interesting to know which design process is easier or better if we follow one or the other path to implementing social commerce.

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## Appendices and Annexures

**Table 1 Social commerce definitions**

Focus	Definitions	References
System evolution	A combination between social networking and e-commerce.	(Jascanu et al. 2007)
Marketing perspective	A new trend in the e-marketplace where business organizations harness social media as a marketing tool to support consumer interactions and purchase behaviours.	(Constantinides and Fountain 2008)
Computer technology aspect	Internet mediated applications, integrating computer technologies, such as Web APIs, XML and AJAX (Murugesan 2007) with collaborative platforms, such as podcasting, social networking and user generated content.	(Lee et al. 2008)
Consumers' role	A form of social media, encouraging consumers to actively engage in the marketing and selling of products in online marketplaces and communities.	(Stephen and Toubia 2009)

**Table 2 Summary of social commerce products from industry**

Vendors	Products	Explanations	References
IBM	Websphere commerce	Built on IBM e-commerce server and integrated with the IBM Retail Industry Framework platform, offering commerce collaboration, optimization, and business analysis capabilities.	(Dennison et al. 2009)
SAP	SAP Netweaver Portal	To align with processes and allow users to work together to achieve common goals, SAP Netweaver Portal provides discussion forums, involving users to comment on, rank and tag content, and integrates SAP content with other platforms.	(Elliott 2010)
Oracle	Weblogic Portal	Oracle Weblogic Portal is used to deliver web 2.0 capabilities with rich interface and simplified application building.	(Oracle Paper 2011)
Cisco	Cisco WebEx Connect	Has been used as a service or software as a service (SaaS) to support business performance, offering a collaborative platform for providing "real time presence" information, creating the potential to integrate a variety of web 2.0 applications into Cisco's Unified Communications Architecture.	(Cisco WebEx Connect Whitepaper 2009)
Microsoft	Popfly	A collaborative tool built on Microsoft Silverlight, which provides an easy way for users to create and share mashups, gadgets, web pages and other applications on social networks.	(Microsoft Center 2007)
Google	Google Buzz	A social networking service for Gmail users to share links, photos, videos, status messages. It can also integrate with other Google applications, such as Picasa and YouTube to increase communication beyond email and chat.	(Ho 2010)
Facebook	Social commerce platforms	Uses Facebook business pages to create a presence for companies on social networking sites. Facebook ads take advantages of hyper targeting and word-of-mouth to retain existing users and involve new users' participation.	(Shih 2011)
BT	BT Tradespace	An online community incorporating a business directory and marketplace. Customers buy and sell products, and find a business and network with individuals of similar interests.	(CISCO 2010)
Apple	iTunes	Provides "ratings and reviews" for App products, "forums"	(Anon

		and communities” on Apple Discussions, and “recommendations and referrals” in Genius social recommendations	2010)
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**Table 3 Social tools and applications within the selected e-commerce websites**

E-commerce websites	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Apple	x	x	√	√	x	√	√	x	x	x	x	x	x	x	x	x	x
Bestbuy.com	√	√	√	x	x	√	√	√	√	x	x	√	√	√	x	√	x
Amazon	x	√	√	x	√	x	x	√	x	x	x	x	x	√	x	x	x
Buy.com	x	√	√	x	√	x	√	√	x	x	√	x	√	√	√	x	x
BlueNile	x	√	√	x	√	x	x	√	x	x	x	√	x	√	√	x	√
eBags	√	√	√	√	√	x	x	√	√	√	x	x	√	x	√	√	x
M&M's	x	x	√	x	x	x	x	x	x	x	x	x	x	x	x	x	√
Borders	x	√	√	x	√	x	x	√	x	√	x	x	√	√	x	x	x
Avon	x	√	√	x	√	x	x	√	√	x	x	x	√	√	x	√	x
Stila	x	√	√	x	√	x	√	√	x	x	x	x	√	x	x	x	x
North Face	√	√	√	x	x	x	√	√	√	√	x	√	√	√	x	√	x
Orvis	x	√	√	x	x	x	√	√	√	x	x	x	√	√	√	√	x
Shop with your friend	x	√	√	x	x	x	x	√	√	x	√	x	√	√	x	√	x
Gap	x	√	√	x	x	x	√	√	x	x	x	x	√	x	x	x	x
Levi's (US)	√	√	√	x	x	x	x	√	√	√	x	√	√	x	x	x	x
NikeID	x	√	√	x	x	x	x	√	x	x	x	x	x	x	x	x	√
Eddie Bauer	x	√	√	x	x	x	x	√	x	x	x	x	√	√	√	√	x
Lands' End	x	√	√	x	x	x	x	√	x	x	x	x	x	x	√	x	x
CSN Stores	√	√	√	x	√	x	√	√	x	x	x	x	√	√	x	x	x
Organic Bouquet	x	x	√	x	√	x	√	x	x	x	x	x	√	x	x	x	x

(√=used, x=not used, 1=Blog, 2=Review or feedback, 3=Like and share, 4=Discussion board, 5=Referrals and Recommendation, 6=Forums, 7=Peer community, 8=Rating reviews, 9=Social ads, 10=Social media event, 11=Synchronous shopping, 12=Mobile commerce, 13=Social storefront, 14=Wish lists; 15=Online expert support, 16=Content community, 17=Customization)

**Table 4 Summary of social features**

Social features	Identified social media tools	E-commerce website
Social connection	Like and share, Review or feedback, Rating reviews, etc.	Buy.com; eBags; M&M's; Levi's (US); NikeID
Social communities	Blog, Discussion board, Forums, Peer community, Online expert community, support	Apple; Best Buy; Stila; Orvis; Eddie Bauer; Lands' End
Social media marketing	Social ads, Social media event, Social storefront, Content community, Broadcast content	Borders; North Face; Gap; CSN Stores; Organic Bouquet
Social shopping	Referrals and Recommendation, Synchronous shopping, Wish list, Social storefront, group buy, fun shopping, etc.	Amazon; Avon; Shopwithyourfriend; Buy.com
Social applications	Mobile commerce, Facebook commerce	BlueNile; Best Buy