

Social Commerce – E-Commerce in Social Media Context

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Abstract — This paper aims to address the new trend of social commerce as electronic commerce leverages Web 2.0 technologies and online social media. The infusions of new technologies on the World Wide Web connect users in their homes and workplaces, thus transforming social formations and business transactions. An in-depth study of the growth and success of a social commerce site, Facebook was conducted. The investigation is finalized with a triad relational model which reflects socioeconomic life in the Internet today. The following three concepts work jointly to form a global community that has already started to take the place of traditional commerce and socialization: Web 2.0 technology, E-commerce, and online social media. A discussion of the research findings indicates that social commerce networks are sustainable because of the various incentives given to users as they collaborate with others regardless of their identity and location. The focus of this article is to increase understanding on quickly developing Web 2.0 based social media and their subsequent effects on the emerging social commerce.

Keywords—Social Commerce, Web 2.0, Electronic Commerce, Social Media

I. INTRODUCTION

SOcial commerce is the use of social media, in the context of e-commerce, to assist with buying and selling products and services online. It evokes the fusion of two big digital trends, e-commerce and social media.

A. From e-commerce to social commerce

E-commerce is traditionally associated with web based communities. For instance, Zetlin and Pfleging [1] describe consumer-driven online markets in which most consumers' needs are arranged through a community Web site. This gathering of needs in one place facilitates vendors to have higher sales and more community members to obtain discounts. Therefore, web-based communication is said to substantially affect almost every company that provides services or produces consumer goods. It could change the

nature of community sponsorship strategies and corporate advertising, as well as the manner through which business is done [2].

One particularly powerful online communication platform nowadays is social media. Social media is defined as 'a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content' [3]. It uses Internet-based and web-based technologies to transform broadcast media monologues (i.e., one-to-many) into social media dialogues (i.e., many-to-many). Some examples of Web 2.0 social media sites include blogs, web forums, virtual communities, and social networks. According to [4], the world spends over 110 billion minutes daily on social media sites. The three of the world's most popular online brands: Facebook, YouTube, and Wikipedia, are social-media-related. Web-based social media has an enormous impact on the economy, including the digital economy.

In the era of digital economy, setting up a shop (physical or online) and waiting for customers to arrive is no longer enough. Instead, companies must be proactive by finding ways to engage customers, build relationships, and create communities. What differentiate social commerce from an ordinary e-commerce site are the social elements involved. Social commerce sites include features like customer ratings and reviews, user recommendations and referrals, social shopping tools and online communities [5]. These features create a trusted environment where friends, family and acquaintances dynamically contribute content to the referral and sale of goods and services though positive and negative feedback, reviews, ratings and testimonials regarding their experiences past & present. Thus, the research and purchasing cycle are shrunk by the establishment of a single destination powered by the power of many [6]. In short, social commerce is a trusted environment of which prospective consumers make buying decisions based on the advice of a network of friends and family, not strangers they don't know or trust [7].

B. Representative characteristics of social commerce

The trend of social commerce, as discussed earlier, is brought about by the merging of Web 2.0 technologies, e-

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business opportunities, and online communities. Representative characteristics of Web 2.0 social commerce are as follows [8]:

- Harnessing collective intelligence - Almost entirely, the competitive advantage of Web 2.0 social commerce sites lies from the critical mass of buyers and sellers. The key to market dominance is network effects from user contributions.
- An architecture of participation - Web 2.0 social commerce sites leverage algorithmic data management and customer-self service to reach out to the entire Web, that is, to the long tail and not just the head, to the edges and not just to the centre, so to speak.
- Viral marketing - Web 2.0 social commerce relies on word-of-mouth marketing. This is done when customers promote a product or service by telling others about their positive experience with it. As a result, branded communities can form longer-lasting customer relationship and deeper affinity.
- Market disruption - A good candidate for a market disruptor would be any business which makes a huge profit margin off its customers. Web 2.0 social commerce is about arguing on the consensus and creating something new of the difference.

Successful Web 2.0 social commerce stories demonstrate the above characteristics and principles in one way or another. The following is an illustrative case of successful social commerce.

II. A CASE STUDY OF SOCIAL COMMERCE

The case of Facebook illustrates how a US college-goer's portal has evolved into a full-fledged social commerce site in less than 3 years. Facebook is an example of successful e-commerce start-up with a clear value proposition and focused differentiation. It also shows how e-commerce can monetize social media potentials.

A. The history and growth of Facebook

Facebook, the second largest social media site worldwide was started in February 2004 by Mark Zuckerberg. Originally called 'thefacebook', the site started as an online directory of Harvard students. Membership to the site required student's college e-mail and digital photo. Once the profile was created, they could connect with each other. 'Thefacebook' became an instant hit within a month and subsequently expanded to Columbia, Stanford, and Yale. Zuckerberg was soon joined by fellow Harvard students Dustin Moskovitz and Chris Hughes for site development. The site was renamed 'Facebook' in August 2005 and the domain facebook.com was purchased for \$200,000.

To saturate the colleges nationwide with their site, Facebook needed financing. In August 2004, Zuckerberg

met Peter Thiel. Seeing Facebook's potential, Thiel decided to invest \$500,000 in return for 10% stake in the company. Zuckerberg used this money to open an office in Palo Alto, California. By the end of the year, the site had one million users. Facebook's second investment of \$12.7 million for 13% came in April 2005 from leading Silicon Valley venture capitalist Accel Partners. Facebook continued to see growth and by the end of 2005, it had more than 5 million visitors. The site raised another \$27.5 million in April 2006 in a joint financing by Greylock Partners and Meritech Capital Partners, and its existing investors Accel Partners and Clarium Capital. In the same month, Facebook expanded its reach beyond the world of students to selected companies, and in September 2006, opened up registration to every one worldwide.

B. The business model of Facebook

Facebook is a social utility that connects people with those who live around them. These networks of friends that make up the user base are called 'social graph' (see Figure 1). Zuckerberg described the three major components of the platform: deep integration into Facebook, mass integration through the social graph, and new business opportunities for developers.

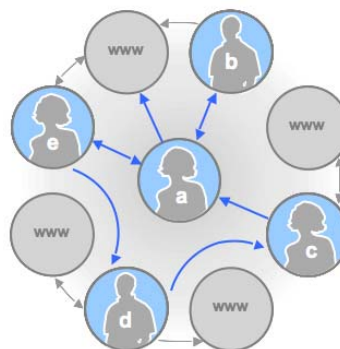


Fig. 1: Social Graph connects people on the Web [9]

Facebook focuses on finding ways to generate revenues, based on its traffic volume. Its revenue primarily comes from sponsorships and banner advertising. One was its decision to let outsiders write programs and keep all the advertising revenues they earn. This has led to all kinds of widgets or applications. The entire Internet industry believes this was a clever move and one that others like Google are trying to copy.

Facebook's second master stroke is its various features that appear on its site. The 'news feed' feature, for example, an event stream on user pages, keeps users updated about what their friends are doing – uploading photos, adding a widget, and so on. For many users, this is addictive and the reason they join and log in so often.

Facebook's revenues in 2007 were estimated to be only

\$100 million, mostly from selling ad space with little profits. The ads are priced not just by CPM (cost per mille), but also based on the success of the “engagement”. Facebook offers more integrated advertising opportunities to marketers with higher campaign budgets. Marketers can also target users with Virtual Gifts purchased from Facebook. Moreover, marketers can make use of the many ad networks dedicated to serving the inventory created by Facebook Platform applications. Inventory is sold on a CPI (cost per installation of your application) basis. Nevertheless, the Internet’s giants – Yahoo!, Microsoft and Google – are offering to buy Facebook or a stake in it, for a price that would value the firm at billions.

C. *The future of Facebook*

Facebook is facing a dilemma as it experiences growth potential. It can either sell itself off like MySpace and YouTube, build something by either staying independent, or give away a stake to a big company. Facebook has turned down acquisition offers from \$750 million to \$1 billion for building ‘something special’. Some sources believe an IPO (initial public offer) is imminent. Facebook’s top priority now is developing its own ad-platform and industry experts believe Facebook wants to be a Web-OS (operating system) in few years. It looks like the company may want more than what Microsoft is willing to pay, as much as \$15 billion. For now, Facebook’s investors seem to be content to let Zuckerberg chart his own course.

However, industry observers question Facebook’s decision in staying independent. Some even fear it would bite the dust much like Friendster. It is believed that Facebook could still wind up not taking an investment from either Microsoft or Google and take the IPO route once its business is well established.

If Zuckerberg’s primary goal is freedom to build something big, then he should take an investment now from venture capitalists or go for an IPO. A venture capitalist investment would free Facebook to experiment outside the glare of the stock market and maintain independence, lock in a big valuation, build up infrastructure, and make some quality hires and acquisitions as necessary. There may be proponents who think Facebook needs to sell, by arguing that social media sites have the potential to become multi-billion-dollar machines on its own. It seems quite plausible that MySpace and YouTube lost out on their site’s potential to make it big, by selling off to the giants.

III. DISCUSSION

In the digital economy, ideas are more highly valued than innovative technology. Facebook is popular not because it

introduced a breakthrough technology, but because it was able to understand a college’s mind – to come up with an idea to collaborate and share information. Web 2.0 is not only all about reforming what is already found on the Web but also how things work in the Web. Thus, those organizations that understand the new applications and accompanying technologies of Web 2.0 social media are expected to greatly be enhanced in terms of their internal business processes. Better collaboration with customers, suppliers, partners, and internal users is certainly one of the biggest advantages. All users, enterprises, and developers can ultimately enjoy the rewards of this new method of consumerism and communication.

In today’s global village, Facebook is considered the most popular online metropolis. It is an example of how social commerce, a marriage of social media and e-commerce have given birth to exchanges that cannot be found outside the Internet. Among other social media sites, Facebook affords its users the ability to share one’s images and ideas to families and friends, upload an original video production for anyone to watch, meet a knowledgeable buyer who would set true value for your objects, shop for a product and purchase an experience. Indeed, where else can you become well-known for your contributions without being well-known? Facebook stands as pioneers in creating socioeconomic opportunities that were unrealized until recently. With tremendous growth and unique technologies, it provides services that become integrated into daily life for many users around the global network. Such growth gives rise to new e-commerce initiatives, and these innovative business models are based on the power of friendship and word-of-mouth.

A. *The power of friendship*

Most social commerce sites can be viewed as phenomenal networks of democratic participation [10] wherein the people create what the people want and need on an equal basis. A social commerce site like Facebook, as discussed earlier, combines a selection of social media tools like blogs, photo sharing, etc., to give the author a venue wherein he or she can express their passions and preferences, while at the same time serving as a central communication hub for a group of friends. Whereas only start-ups would build online fan communities to promote their products or services, now even brands like Adidas, New York Times, BMW and Coco-Cola have created circles of “friends” that have become brand-building hubs [11].

What makes these social media so appealing for marketers is the ability to build a “friends” network of people who are passionate about the particular brand, and consumers can add a brand as a “friend” and use the brand’s images, logos, sounds, and other widgets to personalize their profile. More

importantly, a “momentum effect” is achieved as a brand receives added exposure when its “friends” pass along the brand message and images to everyone in their network. According to [11], the return on investment of the momentum effect is so strong, that “friending” has become a mainstream form of advertising.

B. The power of word-of-mouth

Viral marketing refers to word-of-mouth marketing in which customers promote a product or service by telling others about it [12]. Though this marketing approach has always been used for generations, its speed and reach are multiplied by blogs and wikis. It is reported [13] that an average consumer mentions specific brands more than 90 times per week in conversations with family, friends and co-workers. These friends are the same folks these consumers speak to on social media sites. And when we can sell items (the commerce part) right on, say, a Facebook page, why send our customers to a third-party site?

Moreover, the viral advertising model can be used to build brand awareness at a minimal cost. As people purchase any product, they tend to pass on the messages and are paid very little or nothing for their efforts. So strong is the effect of this phenomenon that Advertising Age magazine named “Consumer” as its “Agency of the Year” for 2006. In that issue, they acknowledged that this is a time of tremendous change in the way by which companies communicate with consumers. More importantly, they stated that “marketing world leaders (have) declared that it’s time to give up control and accept that consumers now control their brands” [14]. Through “viral marketing,” social commerce sites like Facebook and Twitter can, in lightning speed, accelerate and stabilize based on the notion: “if it works, great, let’s do more!”

IV. WUDER IMPLICATIONS

E-commerce aspects involved with the social commerce sites (e.g., Facebook, Twitter, YouTube) are rigorous and pervasive, although these are also innovative and subtle ways of collaboration and negotiation. E-commerce is often rooted in the online experience or linked to external sites. These meticulous but subtle ways of conducting business oftentimes attract and retain its users by offering free accounts and free usage of the sites. Moreover, knowledge systems, including the ability to offer feedbacks, edits, or even uploads of original content are offered as well. Companies that create and operate these value-added Web 2.0 sites do generate financial gain, though not as quick as traditional businesses, which further proves the viability of the Internet for investors and start-ups who are willing to

innovate.

A. The explosive growth of social commerce power

How could a social media sites become sustainable? It is assumed that each popular website offers users a common thread. Facebook started with college communities. By 2010, more than two-thirds of Facebook users are outside of college and the fastest growing demographic is those 35 years old and older. It has more than 200 million active users, of which more than 100 million login at least once each day. More than 850 million photos and more than 10 million videos are uploaded to the site each month. The site’s growth is the most successful, due in part to its lack of boundaries, loose content controls, and integration of corporate presence. The bottom line in social commerce, like in all other businesses, is not only traffic and users, but profit. The profit for these social media sites is mostly generated from business opportunities. The size of the population and the frequency of their visits generate the profit because users tend to purchase products that are recommended by the site’s other users [15].

B. A triad relational model of socioeconomic life style

Fig. 2 below illustrates a triad relational model of socioeconomic life (social commerce) on the Internet today. As a conceptual representation of the three spheres of human perspective with regard to this study, e-commerce, especially person-to-person interaction, is viewed as vital to the online social networks and Web 2.0 technologies.



Fig. 2: A Triad Relational Model of Socioeconomic Life on the Web

Technology is the pragmatic reality. Web 2.0 applications offer tools such as RIA, RSS, Wikis, blogs, and Mushups with which to integrate social media into e-commerce sites. For example, by making it possible for consumers to have RSS feeds of daily or weekly updates with community

feedback or links for collaboration, it becomes easier for niche market users to purchase products or services.

In terms of the social media participants, they receive benefits that are not merely financial, but also social and cultural. Humans are by nature social beings [16]. Social media participants want to be co-creators of their shopping and social experiences and have control of their socioeconomic lives on the Internet.

E-commerce is viewed as the rewards of the whole system because without its stronghold continued innovation and evolution could not be possible. Websites, web developers, and web maintenance teams along with IT personnel must be paid. Therefore, websites must generate an income through embedded advertising, direct advertising, Facebook advertisements, click fees, external links, and other means of selling products and services.

The conceptual map shown in Figure 2 illustrates that the integration of technologies, communities, and businesses within a social commerce context can create success and rewards for participants in every cluster. Every participant in the conceptual map gains rewards when the relationships are bound by quality, respect, and fulfillment.

C. Business opportunities

The Web 2.0 technological phenomenon is controlled by niche markets. Businesses that allow person-to-person e-commerce, such as Amazon, and eBay, realize that the consideration of consumer feedbacks provides insight into consumer desires. In addition, it allows the user to return to a specific Web site regularly as long as his or her desires are met. Web 2.0 enterprises should be willing to open up their marketing to those less-controllable social media where content is user-generated and often not edited or filtered. By giving up their control of advertisements, successful social commerce players can generate tremendous word of mouth and draw hundreds of thousands of visitors to their promotion websites.

Web 2.0 enterprises are best off building their own networking platform in terms of increasing sales. Online forums, chats, product-focused blogs, customer reviews and ratings, and video mash-ups that offer brand insight are the kinds of features an e-commerce player can borrow from the social networking niche. Users can interact with each other via the brand by networking through the products and services, which can thus create a deep affinity and longer lasting customer relationship.

V. CONCLUSION

In the last decade, electronic commerce has grown phenomenally. By the end of 2010, Internet business

transactions are forecasted to double its figures [17]. This global transformation has a direct and major impact on commerce and social networks, sometimes rapidly in huge numbers and sometimes causing disruption. There has yet to be research in the social commerce field (e-commerce leverage social media and Web 2.0 technologies) that will fully evaluate and determine these changes. This is very important because the future may change as rapidly as the present

Through this paper, an overview of the epistemology and ontology of the World Wide Web as a social commerce network, along with a thorough case study analysis of current trends and changes, has been provided. Its aim is to define the future direction of e-commerce and social media on the Internet. In the future, the best e-commerce companies are likely to be the companies that will create ground-breaking ways to facilitate collaboration between the hundreds of millions of users in the World Wide Web. The big winners will be those that allow and encourage customers to take control, play a part, shape, and direct the designs of products and services that we will consume.

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