

Facebook Lessons for E-Business Startups

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Abstract—This paper addresses the fundamental requirements for starting an online business. It covers the process of ideation, conceptualization, formulation, and implementation of new venture ideas on the Web. Using Facebook as an illustrative example, we learn how to turn an idea into a successful electronic business and to execute a business plan with IT skills, management expertise, a good entrepreneurial attitude, and an understanding of Internet culture. The personality traits and characteristics of a successful e-commerce entrepreneur are discussed with reference to Facebook's founder, Mark Zuckerberg. Facebook is a social and e-commerce success. It provides a trusted environment of which participants can conduct business with social experience. People are able to discuss products before, during the after the sale within the Facebook environment. The paper also highlights the challenges and opportunities for e-commerce entrepreneurial startups to go public and of entering the China market.

Keywords—F-Commerce, Entrepreneur, Startup, E-Commerce

I. INTRODUCTION

FACEBOOK founder and CEO Mark Zuckerberg has been named Time's "Person of the Year" for 2010. Time said Zuckerberg was chosen "for connecting more than half a billion people and mapping the social relations among them; for creating a new system of exchanging information; and for changing how we all live our lives" [1]. Facebook, which is currently the second most popular site in the world (Alexa Top 500 Global Sites), has gone beyond what is expected of a social networking platform. It is an integration of technologies, communities, and businesses within which every participant can gain rewards and receive benefits [2].

A. The Facebook Social Graph

Facebook capitalizes on its ability to connect each user to a network of friends called a "social graph" (see Fig. 1). The social graph [3] is the digital mapping of people's real-world social connections through which people can share information such as profile data, photos, videos, web links, news stories, blog posts and notes with their friends, family and co-workers. Facebook has always focused on establishing real identity and user profiles. Misrepresentation of one's real self on Facebook is a serious violation of company policy. Anyone can thus interact with their friends in a trusted environment by signing up for Facebook. Since the Platform was launched in 2007, Facebook has been striving to map out the social graph as much as they can on their websites. 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.

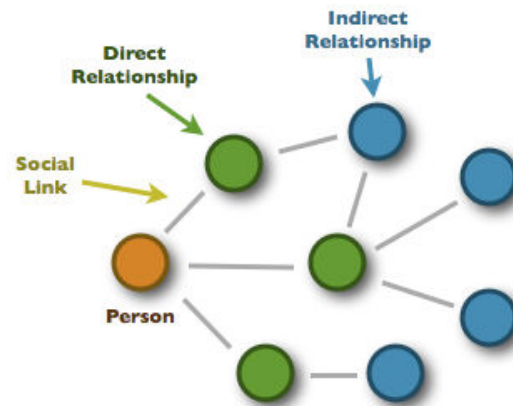


Fig. 1 Social Relationships between people on Facebook [3]

B. The Revenue Model of Facebook

With sponsorships and banner advertising primarily providing Facebook its resources, the social networking site endeavors to use its traffic volume statistics to determine other means to boost profit.

The current platform enables outside parties to build applications, which eventually has led to further site development that promotes more activity within the site, such as widgets and other kinds of application. According to Zuckerberg, "(Facebook's) platform strategy isn't about winning all the content or owning all the applications" [4]. This platform strategy adopted by Facebook creator Zuckerberg is effective, as evidenced by the series of attempts made by its competitors such as Google to apply the model established by Facebook. The site continues to develop the platform using its various features, making changes to the site from time to time.

Recently, Facebook has used its "news feed" feature to inform users of their friends' activities such as updating status, uploading pictures, posting links, and installing applications or widgets. This feature enables an active stream on the right panel that delivers news to the users, which may or may not prompt them to click on the event that interests them.

Marketers can make use of the many ad networks dedicated to serving the inventory created by Facebook platform applications. Inventory is sold on CPM (cost per mille, that is, cost per thousand views), CPC (cost per click), CPA (cost per action), and CPI (cost per impression) bases. Facebook's total revenue in 2010 was around US\$ 2 billion and estimated to reach over US\$ 4 billion in 2011. The explosive growth of Facebook from 2009 to 2012 is illustrated in Fig. 2.

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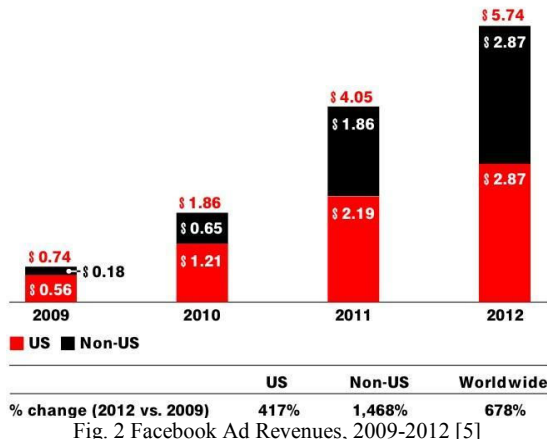


Fig. 2 Facebook Ad Revenues, 2009-2012 [5]

II. FACEBOOK COMMERCE (F-COMMERCE)

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. Almost all large, medium, and many small companies are on Facebook. That includes many government organizations. With more than 750 million active users (growing by many thousands everyday), Facebook has become a very desirable place to advertise, sell, and conduct other e-business activities.

F-commerce [6] is the ability to execute transactions in Facebook without leaving the network and by integrating Facebook into traditional site-based e-commerce platforms. And, more importantly, it ties each transaction to the social graph (see Fig. 1). The site has a number of features that cannot be found on other sites, and these features have been taken advantage of by marketers and entrepreneurs. The following sections discuss how Facebook can be used as selling and marketing tools.

A. Free Marketing Tools on Facebook Review Stage

Facebook offers marketers a bevy of viral channels that are free of cost. Here are some representative examples:

Facebook Pages - Facebook's Profile page essentially gives "life" to a marketer's product. This is the jump-off point of all Facebook users. They can learn everything about a service or a product simply from the Profile page. Facebook also provides Pages, which allow marketers to build their presence, engage their audience, and share their message. Through a Facebook Page, a marketer can post upcoming events, create discussion boards, upload videos and photos of products and marketing collaterals, and share just about anything about a product.

Facebook Groups - If a marketer wants to create a tight-knit community of fans and users, he can create a Group page. The Group page is different from Pages in terms of exclusivity. Moderators of groups can upload documents, create group events, and share news exclusively to the members.

Facebook Questions - Facebook Questions is another new feature that lets page owners answer questions on behalf of their business, with administrators able to post questions directly on their pages.

Facebook Connect - Facebook Connect is a way to get your audience to share your content. Not only has it removed the obstacle of remembering friends' e-mail addresses, but it has also created a socially acceptable broadcast communication channel for individuals. Facebook Connect helps bring traffic to merchants' websites (assuming the merchants know how to attract people to stay there). **Facebook "Like" Button** - Adding a Facebook "Like" button lets a user share content with a friend. For example, you can list your products and let your customers advertise your products for you on their Facebook pages. Their friends can see this and perhaps take enough of an interest in the item to become your customers as well.

B. Facebook's Social Ads

On the other hand, if a marketer wants to penetrate an even greater, more targeted market, Facebook offers Social Ads. Through Social Ads, a marketer can connect with more than 500 million potential customers. One of the greatest things about Social Ads is that a marketer can filter his audience further by choosing a specific location, age group, gender, and interests [7]. This feature allows a product or a service to be seen by a particular audience. Although using Social Ads entails cost, Facebook boasts of allowing marketers and advertisers to set their daily budget for promotion, offering payment options either by pay per click (CPC) or by pay per impression (CPM).

The impact of Social Ads is evident in the campaign of then U.S. presidential candidate Barack Obama, one of the most successful marketers on Facebook. He created a fan page that targeted the young and old. He shelled out a measly amount of \$500,000 on Facebook Ads. Through Facebook Groups and Pages, volunteers came up with ways to get everyone involved and inform voters of Obama and his campaign. Obama's landmark victory in the 2008 election was due, in part, to the groundswell of support among the "Facebook generation".

C. Sponsored Stories on Facebook

Facebook has a tool that enables advertisers to pay to "sponsor" comments people make about businesses, places, or products at Facebook. A Sponsored Stories tool allows advertisers to take word-of-mouth recommendations and promote them to eye catching notices on Facebook's user pages. Sponsored Stories are updates or location "check-ins" that Facebook members post to be seen by friends and are only shared with those in a person's chosen circle of contacts at the online community.

The Sponsored Stories feature is based on a viral marketing approach which customers promote a product or service by telling others about it [8]. It turns users into marketers. As people purchase any product, they tend to pass on the messages and are paid very little or nothing for their efforts. It is reported [9] 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 right on, say, a Facebook page, why send our customers to a third-party site?

D. Selling on Facebook

Launching a product campaign is one thing; selling a product is another. Several models of selling on Facebook (e.g. see [10]) are as follows:

Facebook Webstore - This option is an alternative to a full-scale f-commerce effort, but still allows for Facebook shopping. By pulling a product feed into a Facebook Page tab, shoppers can browse products and share with friends, but are directed to the company's e-commerce site to purchase.

Facebook Marketplace - It is a kind of classified ad section (stuff, vehicle, rental, job, etc.). You can also "give it away," "ask for a product/service," and buy and sell among friends.

Facebook Deals - It is a check-in feature that gives brick-and-mortar stores the chance to offer deals to Facebook mobile users.

Facebook Mall World - This is a place for people to build boutiques and sell virtual items. Many businesses have taken advantage of the above features to boost their online presence. Delta Airlines has launched a Facebook Store application, allowing customers to book and pay for a flight without having to leave the page. Procter & Gamble has done the same, selling 1,000 packs of diapers in one hour, through its Amazon.com-powered Facebook application. Disney sold cinema tickets for Toy Story 3 across Facebook. The company is expanding the service.

E. Shopping Tools on Facebook

Facebook, along with the features mentioned above, has established a virtual marketplace, bridging the gap between sellers and buyers. It provides several tools to assist shoppers.

Facebook Shopping Mall - It is an application that gives buyers a place to grab the latest deals on top merchandise and then share their favorites with their friends.

Facebook Credit - This is a private currency. People buy it from Facebook and use it to pay for games and products and services they buy on Facebook. Facebook gets a 30 percent cut for the credit transactions. **Product Recommendations** - Facebook teamed up with Amazon.com to provide product recommendations and upcoming birthday reminders.

"Presence" location-based data - Facebook handed out an RFID tag that allows you to swipe it at kiosks to indicate your location on every friend's page. Launching a product campaign is one thing; selling a product is another. Several models of selling on Facebook (e.g. see [10]) are as follows:

F. Payvment and its Social Mall on Facebook

Hundreds of apps were created to support shopping on Facebook. One of the popular ones is Payvment. Payvment (see Fig. 3) is a comprehensive e-commerce storefront solution that lets you create your own custom store to sell your products directly from Facebook. You can easily add new product listings, create categories, upload product images, add custom HTML, and more. Product listings can be edited and changed at any time, and inventory is automatically tracked. One particularly cool feature is the synchronization of the shopping cart with your own website. Payvment is available for a free download at facebook.com/payvment.

Payvment created the previously mentioned platform for businesses to open shop on what it calls a social mall (or social shopping mall). In February 2011, the first month of opening, Facebook signed over 50,000 retailers, mostly small retailers and many are independent clothing manufacturers. Initially, there were 1.2 million items on display. The mall starts with a display of products that friends in your Facebook network have liked and recommended. That will help shoppers find items they might not have known about before. It is like going shopping with your friends.

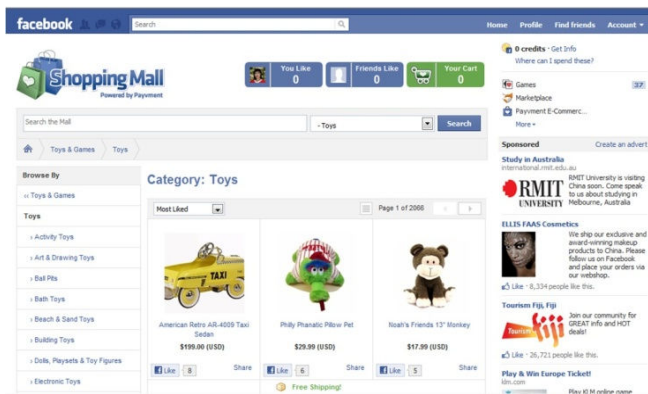


Fig. 3 The Payvment Social Mall on Facebook (Courtesy of Facebook.com & Payvment.com)

G. Small Startups on Facebook

Most of the examples provided above involve large companies. An interesting question is what is going on in small and medium enterprises? According [11], even small companies can succeed in social commerce. Here are some examples of how small businesses are using Facebook:

The photographer and owner of Studio Seven, Lydia Schuster, started her business solely on the belief Facebook would work for her. She was looking at her friends list and she had more than 600 friends. She had always got a lot of really good feedback from any photos she posted on Facebook on her personal page. She then started her Facebook business page, and to attract customers, she offered some incentives such as the first person who responded would get a free sitting fee. She started receiving more fans, and her photos received thousands of votes. Schuster said she thinks people look at Facebook pages for photographers now instead of their websites.

Virginia McCoskrie, owner of Smockingbirds, started a weekly giveaway on her Facebook page. People need to comment on photos to enter their names into a drawing. Since she started doing the drawing, she had more people as fans of her business page, and her business grew dramatically.

Center Court Office Supplies uses its Facebook page to update its customers on what is new in the store and promotions being offered. It is able to decide on and run promotions quickly and the networking aspect has helped the small store.

III. FUTURE ADVENTURES OF FACEBOOK

The case of Facebook also outlines the dilemmas startups face as they experience growth potential [12]. The two main challenges facing Facebook are going public and entering the China market.

A. Facebook's Initial Public Offering (IPO)

Similar to many growing companies, Facebook is caught in a situation that requires it to decide whether to allow itself to be acquired the way its predecessors MySpace and YouTube ended, develop something novel to maintain its patronage and remain independent at least, or offer stakes to a huge corporation. Interested parties have reached out to Facebook for hundreds of million dollars to a billion, only to be refused. An IPO may be forthcoming, according to industry insiders. Currently, Facebook continues to develop its advertising platform, although many speculate its direction towards becoming a Web operating system (OS) in the near future. Seemingly, Facebook is not satisfied with Microsoft's \$15 billion offer, and its investors would rather entrust the future of the networking site to its creator Zuckerberg in the meantime.

Industry critics are skeptical about Facebook's decision to remain independent. Some say it will suffer the same end as Friendster did. However, others who believe that Facebook is a well-established business argue that an IPO offering is a wise move and that it will save it from having to take an investment from big companies such as Microsoft and Google.

Taking an action to resolve the dilemma between an IPO and taking an investment from venture capitalists is necessary if Facebook aspires to free itself from having to build something huge. If Facebook decides to share its equity with venture capitalists, then it would position itself away from stock market speculation and maintain its independence while focusing on developing infrastructure and freely making as many acquisitions as necessary. Still, others are adamant in the belief that Facebook should sell itself because of its potential to become a multibillion-dollar company. However, this action had a precedent in MySpace and YouTube when they allowed themselves to be acquired by giant corporations. For now, the industry can only speculate on Zuckerberg's next action.

B. Facebook China?

Despite the 750 million active users of Facebook, the social networking platform has yet to break through China's "firewall," which allows users to access only state-approved sites. China's appeal is understandable. The country is home to the world's largest internet market and it has a vibrant social-media scene, with successful social-media sites such as RenRen, Kaixin001, Qzone, 51.com and Weibo. The Facebook founder and CEO Mark Zuckerberg has been studying Mandarin, and during a speech in 2010 he asked, "How can you connect the whole world if you leave out 1.6 billion people?" (China's population is actually 1.33 billion.) Recently, there have been speculations that Zuckerberg may have struck a deal with China's leading search engine Baidu to launch a social network in the country. Although no formal announcement has been made, many see Zuckerberg's 2010 China visit as well as

Baidu executives' visit to Facebook headquarters in Palo Alto, California as signs of "great" things to come, most especially for the 450 million Internet users of China [13]. In more recent news, Business Insider, a business news website, reported that China is trying to buy "a huge chunk" of Facebook [14]. However, with the representatives of Facebook refusing to comment, this China-Facebook deal remains a rumor [15].

IV. LESSONS LEARNED

Facebook has grown from a dorm-room project into a \$100 billion company in less than 5 years. It is an example of a successful online business with a clear value proposition and focused differentiation. From nothing Mark Zuckerberg has risen to the youngest billionaires in the world. What can we learn from the startup story of Mark Zuckerberg and his Facebook Company? Here are some lessons:

Have a Vision. Zuckerberg had a vision, and this vision has brought the company to where it is today. On an open letter, Zuckerberg writes, "When I made Facebook two years ago, my goal was to help people understand what was going on in their world a little better. I wanted to create an environment where people could share whatever information they wanted, but also have control over whom they shared that information with. I think a lot of the success we've seen is because of these basic principles" [16]. That's why Napoleon Hill (1883-1970) said that "Desire is the starting point of all achievements."

Think Big but Start Small. Facebook may be an online giant, trumping its competition left and right. Nevertheless, it started just like any other business - from the ground up. Zuckerberg envisioned a billion-dollar company, but instead of waiting for big investments, he started in his dormitory with very little equity. Yet today, Zuckerberg is among the youngest billionaires in the world. As quoted from James Cash Penny (1875-1971), "It is always the start that requires the greatest effort." An important lesson entrepreneur can learn from Facebook and Zuckerberg is to think big but start small.

Stick to the Process. Building a business from scratch is a process that is laden with challenges. The key is strategic planning. A business can only move forward toward success if it sticks to the process. Facebook was not an overnight success. It took years to work out, and the people behind it are still hard at work. Businesses should remain patient and embody the spirit of continuity, just like what Zuckerberg did [17].

Have a Clear Value Proposition and Focused Differentiation. What is the differentiated value proposition of Facebook's business model? It is making the site a one-stop shop for user needs. Facebook is meant to only connect people; it's a 'utility'. Its user interface is clean and tidy (see Figure 3), and the whole idea about using Facebook is efficiency. Other social networking sites such as MySpace, on the other hand, are a bit chaotic, loud and packed [18]. Facebook has become what it is today because it defined its value proposition clearly and has stayed on course ever since, and this is one thing business startups should work on.

Understand your Customers. For what will Facebook's customers pay a premium? Based on the customer priorities, Zuckerberg designed Facebook to recreate online what is called

'social graph' – a network of friends that make up the user base (see Fig. 1). This was different from most other social networks. Sites like MySpace encouraged users to create new identities, meet and link with people they barely knew. Facebook, instead of building new connections, mapped them out [18]. Facebook is popular not because it introduced a breakthrough technology, but because it was able to understand what people wanted – an efficient way to communicate and share information [19]. In the digital economy, ideas are more highly valued than innovative technology.

Be Ready to Take Risks. No entrepreneur ever became successful without taking a fair share of risk. When Mark Zuckerberg dropped out of Harvard to start up Facebook; he took risk. By turning down offers from Yahoo!, Microsoft and Google; he took risk. Facebook's recent attempt to enter the China market is risky. For Facebook not to be in China is a huge business risk. Facebook itself is a risky venture that paid off immensely [17]. As point out by Robert Kiyosaki (1947-), "In today's rapidly changing world, the people who are not taking risk are the risk takers." Entrepreneurship is all about risk taking.

V. CONCLUSION

The emergence of the Internet has opened various venues for individuals to interact, learn, and play. A doctor can now join medical forums and offer free medical advice. A teacher can now go online and download visual aids and other teaching materials. An aspiring dancer can now post her dance videos for the world to see. Unbelievably, the Internet has given us a platform to stay connected, even to people at the other side of the world. The marketing industry has become broader, with the potential target audience tripling in size and with campaigns getting more visibility with just a click of the mouse. This is a terrific time to be an entrepreneur. The availability of cheap computer hardware, free or inexpensive software, and high-speed Internet access has created a powerful base from which to launch a new business and expand or transform existing ones. Indeed, barriers exist in what they now call F-Commerce. Buyers and sellers alike have issues on usability, privacy, and security. However, with the continuous evolution of the Internet and the people behind Facebook addressing all the important issues, the future of F-Commerce is limitless.

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