Social networks evolving into service platforms - the Facebook-case from a business model viewpoint

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Abstract: Considering Facebook as one of the most successful social networking platforms turning into a service-platform model, this case study indicates the reasons for this success from a business model point of view. The first section introduces a business model concept based on the latest research. Afterwards the concept has been applied to specify the most important elements of this business model case. This contribution focusses on the value proposition, the target customers, the platform-service and the financial domain of the social network case.

According to the official Facebook-site, the social network platform Facebook currently counts 400 million active users worldwide. 50 percent of the active users visit the site once a day[1]. According to [Bag10], the time visitors spent on popular sites like heise.de is approximately 6 pages, whereas the Facebook visits include 15 pages averagely. This means the site is not used for short stays but serves as a place for comparatively long-time browsing activities. Already in July 2008, the New York Times explained that the value of Facebook would be somewhere between \$3.75 billion and \$15 billion[2]. Nevertheless, due to the stock-absence of Facebook, the company does not publicly disclose its financial results. We consider the Facebook-platform to be a success story with one of the most mature business models in the social networking area. Therefore this paper outlines the Facebook-platform from a business model viewpoint. Although privacy protection is generally considered as very important for the Facebook business, this paper explicitly does not cover this technical and processual issue. In the following section a business model concept based on current literature is introduced. Afterwards the concept is applied to the Facebook case and the paper concludes by indicating the most important elements of this business model case and giving a perspective on future trends.

1 Business model research

A business model includes an abstraction of a company's business logic and provides an aerial view on several elements of a business like value proposition, target customers, revenues stream and processes. The term business model is still used in different meanings

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[1] Facebook-statistics in this paper originate from http://www.facebook.com/press/info.php?statistics, last access on June 22nd, 2010.

[2] These estimations are derived from a lawsuit between Facebook and ConnectU (\$3.75 billion) and a Microsoft investment deal of \$240 million leading to a cumulative valuation of \$15 billion. Source: http://bits.blogs.nytimes.com/2008/07/03/what-is-facebook-worth-part-37/, last access on June 22nd, 2010.

(see e.g. [GAV00]). Later research defines a company's business model as a set of building blocks containing elements and relationships (see e.g. [AZ01] and [Ost04]). We use a definition partially following the definitions by [Ost04] and partially[SYT08]. A business model is a conceptual tool containing a set of objects, concepts and their relationships with the objective to express the business logic of a specific company or a product-/service-offering. The development and observation of a business model is supported by related methodologies, software-tools, business strategies and market-data.

To describe complex contexts like a business model, ontology based approaches are well-suited as they allow a detailed expression of interconnected parts of a company and the changes which relate to all parts of a business. Osterwalders Business Model Ontology (BMO, see [Ost04]) and the STOF-model introduced by Bouwmann (*S*ervice Domain, *T*echnology Domain, *O*rganisational Domain and *F*inancial Domain, see [BVH08]) are examples of detailed ontologies. Sometimes a business model is used to describe only the parts of a business logic related to a specific offering instead of describing the whole company — a so called product or service-centric business model. This can be useful to describe very complex products or services like the iTunes-offering by Apple Inc. Another common case is to describe the entire business logic of a company integrating all product- and service-offerings, since only this considers additional relations between the various offerings. For example the iTunes-platform can be put in relation to hardware offerings (like AppleTV, iPod etc.), software offerings (Mac OS, iPhoto etc.) and media offerings (movies, music, eLearning content like iTunes U, podcasts etc.).

2 A business model concept

Figure 1 shows the essential parts of a business model. Generally all aspects of a business model concern an internal or an external point of view. Both parts contain elements playing significant roles in creating and running a successful business model. Within the external perspective the value approach, describing the value intention (value proposition in the narrow sense), the customer experience (the actual perceived value) and the partner experience (perceived value by the business partners) are included. The market interface is crucial to determine the target customers, the channels, possible partnerships and the competitive environment. The external perspective therefore describes the demand, the idea to satisfy this demand and the most important external actors engaging in the demand.

The internal perspective describes the products, services and the required processes and capabilities to realise the resultant offerings. Products and services are related to one or more value propositions and therefore connected to a target customer group. Additionally a description of future use case scenarios to drive product and service innovation can be realised. The value creation processes and the required capabilities are described. The availability of resources provides information for potential business webs with external partners. Business rules are established to define the operational frame for those partnerships.

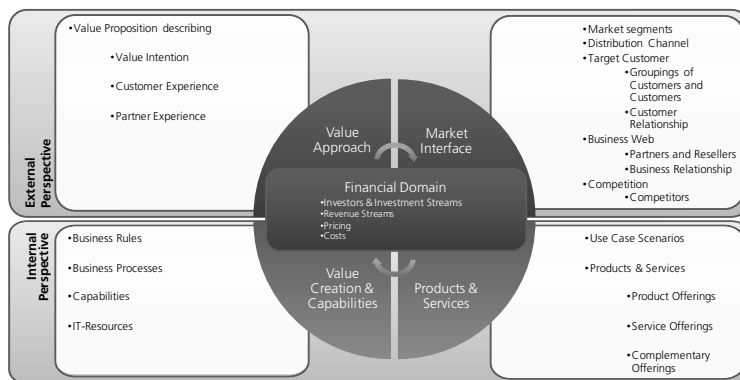The fifth domain of a business model is the financial domain. The financial domain is

Figure 1: Business model concept

closely connected to all other parts and contains revenues, costs, pricing models and investment streams related to investors. The following sections focus on the value proposition, the related services, the Facebook business web and important financial aspects.

3 The value and the target customers

The Facebook vision is to ≫make the world more open and connected≪. Facebook has two main target groups, private users and a growing base of business users. On the one hand the platform provides space for users, companies or even government authorities and other contexts. Today it is even possible to ≫become a fan of iTunes≪in Facebook. to publish and consume personal information, business information, events and to build and manage a network with friends, fans and customers. Recent trends indicate that more and more users use Twitter and Facebook instead of news-portals to stay informed (see [Bag10]). On the other hand the platform provides the customer-base and the tools to carry out advertising campaigns more effectively for business users. Whereas other companies must use special techniques to extract customer information from sites, social network platforms get the information directly via the user-profiles.

The key value of such a platform is to provide information. The main difference to a search engine is the up-to-dateness of the information. Search engines counteract by ranking current information higher, by providing special news-portals or by directly integrating social networking results. Recently Google announced to integrate Facebook Page-updates in the results set[3].

Facebook offers additional functionality for private and business users. Mainly for private

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[3]Source: http://social.venturebeat.com/2010/02/24/google-real-time-search-facebook-pages/, last access on April 23rd, 2010.

users the platform introduced virtual goods and games. Virtual goods are not fundamentally new to social networks. Facebook charges money to send another user a personal item like a virtual gift (basically an image) or an e-card. This gift can appear on the user's pinboard as an image. An example are sports items like football club fan shirts and emblems. Additionally charity gifts are available. Various organisations offer charity goods on Facebook. The revenue for the charity goods is forwarded directly to the organisation and is probably intended to expand the customer base of the platform and to positively steer the platform's image. Games and (third party) applications are additional offerings to expand the customer base and to extend the time the users spent on the site. This creates a social lock-in effect where more and more context of the user's social life is transferred into the virtual space. For professional business users, developers and companies, Facebook offers profiles and the related functionality as well. More important are customisable advertising campaigns and the open API (Facebook Connect) to use the available information in external applications. The advertising campaign system can be divided into brand advertising and performance advertising related e.g. to products, services and events.

Open APIs are a fundamental change of many current social networking sites. An external developer community is a crucial advantage to connect to external applications e.g. to mobile device applications and even other social networking sites. The Facebook-Twitter connection is one example of such an information integration. The overall intention is to integrate everything which is important for the social network of a user. This ensures many accesses and many page visits of users. Recently the platform published the so called Open Graph Protocol[4]. This protocol provides a simple meta-data scheme to integrate a Facebook »like this«-button on website-content via an included meta-data-tag. At this point the early approaches of the Semantic Web-Community are outrun by the platform because of the sheer mass of users and the simplicity to create those meta-data information. While integrating Facebook content on other websites is one of the reasons for the popularity of the platform, it is also one of the most criticised functions[5].

4   The turn into a service-platform

Social Network sites currently more and more extend the previously isolated service offerings to platform services. This is not merely due to open APIs, but is rather due to creating a business web with other platforms, hard- and software-providers as well as independent developers. Some interesting statistics available directly on the platform show the importance of this offering for the business model. »Facebook is connected to more than one million developers and entrepreneurs from more than 180 countries. Every month, more than 70% of Facebook users engage with Platform applications. More than 550.000 active applications are currently offered on Facebook Platform. More than 250.000 websites have integrated with Facebook via Facebook Connect. More than 100 million Facebook users

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[4]More information about the Open Graph Protocol at http://developers.facebook.com/docs/opengraph.

[5]In some cases, the integration of Facebook content leads to information-forwarding to Facebook directly from external websites. This currently requires the use of cookies and the use of the iframe-technology to embed the content.

engage with Facebook on external websites every month. Two-thirds of comScores U.S. Top 100 websites and half of comScores Global Top 100 websites have integrated with Facebook. There are more than 100 million active users currently accessing Facebook through their mobile devices.≪

As the statistics show, the company heavily invested in the platform functionality to use the scaling effect coming with it. The openness of the platform is one of the most important success factors, but also the most criticised functionality. For the long term the open platforms will put more and more pressure to closed and isolated platforms. The users are going to be very selective with their network-sites and will prefer sites integrating all the information they need. For business users, open platforms provide another opportunity to stay connected to customers and thus open new doors of customer relationship. Many companies like Navigon, Microsoft and Apple already use Twitter and Facebook to keep the customers informed without the disadvantage of time consuming publication of press releases.

5   The financial domain

According to not official sources, Facebook can pass $1 billion in revenue in 2010[6]. The same source estimated the revenue in 2009 with $635 million. This revenue estimation consists of $225 million with brand advertising, $50 million with Microsoft ads, $10 million with virtual goods (Facebook Credits) and $350 million with performance advertising. Nevertheless, those estimations are highly speculative.

In contrast to the revenue estimations, the pricing is publicly available. The advertising service is very dynamic and depends on various factors. The minimum budget for an ad is $1,00 per day. The maximum cost per day depends on the customers needs and can be formulated in a daily budget. As an example, I want to advertise a fictive bike-shop selling bicycles and bmx-bikes. With the keywords bike, bikes, bicycle, bicycling, biken and bmx you can reach 11.060 German users[7]. The people used those keywords in their profiles or hold links to other pages using these keywords. If I decide to pay per 1000 impressions, this is the number of appearances of our ad on the Facebook-site, Facebook suggest to pay between $0,29 and $0,34. If I decide to pay $0,34 per 1000 impressions, I could reach 34.000 impressions per day. The other model is pay per click. If I decide to pay $0,70 per click, Facebook estimates 72 clicks per day. The higher you are willing to pay for a click, the more popular the position of the ad is in comparison to other, competitive ads on the website. In both cases, the pay per impression and the pay per click model, Facebook suggests a price level and provides an estimation about the potential result (clicks or impressions). This simple pricing is quite fast. If you are properly prepared with a pool of pre-selected keywords and with a specific target customer group, the creation of a customised campaign is done within minutes. Therefore the tool qualifies, e.g. for fast campaigns related to upcoming events or a recently published book.

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[6]Source: http://www.insidefacebook.com/2010/03/02/facebook-made-up-to-700-million-in-2009-on-track-towards-1-1-billion-in-2010/

[7]As of April 24th, 2010, Facebook advertising campaigns can maximally reach 7.781.620 users in Germany.

Another revenue stream is the Facebook Credit. Credits represent a fictive currency and can be used to buy Facebook virtual gifts or items within some of the Facebook-related games. At the time of this paper, $1 equals 10 Credits. Virtual currencies already appeared in different social networks like Second Life in the past. Facebook typically charges 10 Credits for a virtual gift. Credits can be productive when directly related to a customer-value. The customer value of virtual gifts is questionable and can not be, at least today, the only financial base of a social network.

6 Conclusion

The complex and innovative business model of Facebook is a nice example to show the potentials of social networks and how they change with the current service-trend in the internet. Oftentimes believed to have no viable business model, social networks keep being one of the most frequented space in the internet and evolve to search engine and information-portal competitors. Although criticised, the open platform functionality can be regarded as the key success factor to expand the business and to keep the users spending their time on the site. The revenue stream of advertising only works with an appropriate customer base and remains the main business backbone, even though many social networks experiment with other revenue sources. The main goal keeps to motivate the users, including the participating companies, to share there information. Thereby the main difference to search engines and other information portals is to provide the latest news in a very short and informal way. This case shows the requirement of open standards to generate business growth. Service-platforms will have to be based on open connectors and heavily integrate with other sites and platforms and to gain popularity and acceptance.

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