Virtual Community Ventures:
Success Drivers in the Case of Online Video Sharing

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ABSTRACT

A recent wave of Internet-related entrepreneurship focused on virtual communities. It produced User-Community-Driven Internet ventures (UCDI-ventures), characterized by (1) user-contributed content, (2) network effects, and (3), an interactive community. Whereas light pole examples such as YouTube, MySpace, or Facebook have received high capital market valuations, many other ventures have failed, making research on the phenomenon and related success drivers worthwhile. This paper integrates three general venture success drivers from the entrepreneurship literature and two specific UCDI-venture related ones. Drawing on the case of the online video sharing community Clipfish in Germany, it demonstrates the relevance of the proposed UCDI-venture success drivers. The paper concludes with an assessment of the five success drivers and suggests three steps of future research.

Keywords (Required)

Community, Success, Entrepreneurship, Venture

INTRODUCTION

During the first wave of Internet entrepreneurship starting before the year 2000, eBay, Google, Amazon, and Yahoo have achieved remarkable success stories. Other ventures, however, went out of business quickly (Barnes et al., 2004). A subsequent and still ongoing second Internet entrepreneurship wave brought up so-called User-Community-Driven Internet-ventures (UCDI-ventures). They produce virtual communities and aim at financial returns as any other for-profit venture. UCDI-ventures show three characteristics: (1) Their service provision includes user-contributed content; (2) their 'architecture of participation' implies network effects; and (3) their service offerings involve an interactive community (O'Reilly, 2005).

UCDI-ventures benefit from three recent technological evolutions. Firstly, advances in wireless and fixed-line transmission technology and competition in the market for Internet access have fostered the availability and affordability of faster Internet connections for domestic use and thus enhanced connectivity and interactivity of individuals in the society (Bargh and McKenna, 2004). Secondly, personal computers have increasingly offered integrated multimedia applications (Kuroda and Nishitani, 1998). Individual users can produce their own music and videos, edit their digital photographs, and share such content with others. Finally, advances in software for server-based media streaming and client reception altered the client/server relationship, as server-based streaming and only browser-based play-back on the client machine have become possible and common (e.g., Flash technology).

Building on the technological developments, prime examples of UCDI-ventures such as YouTube, MySpace, or Facebook have received high capital market valuations, an indicator of success; whereas many others have failed. This high failure rate (Arthur, 2006; Dvorak, 2007) makes the selection and investigation of UCDI-venture success drivers relevant to practice and entrepreneurship research, "the scholarly examination of how, by whom, and with what effects opportunities to create future goods and services are discovered, evaluated, and exploited" (Shane and Venkataraman, 2000, p. 218). Previous research on Internet entrepreneurship (Hall and Rosson, 2006) has indicated that Internet technology allows altering traditionally accepted norms of entrepreneurship.

In contrast to general entrepreneurship research, UCDI-venture research involves and emphasizes the user in the production and the diffusion of the service offering. With this specific focus, research on success drivers of UCDI-ventures extends the literature on entrepreneurship by involving social and cultural aspects (Matlay, 2004). Within the boundaries of UCDI-

venture research, the objective of this paper is to contribute a framework that helps to understand why and how such venture become successful.

METHODOLOGY

We develop a framework showing success drivers of UCDI-venture. It is well known that research on success drivers or success factors has been criticized for subjective selection and assessment, isolated investigation of interrelated constructs, oversimplification, and missing theoretical derivation (Kieser and Nicolai, 2005). Hence, we try to tackle some of that criticism in a three-step methodology.

In a first step, we define the concept of UCDI-ventures and subsequently, based on the literature, describe its three key characteristics. In a second step, we turn to the literature on entrepreneurship to derive general venture success drivers applicable beyond any specific venture focus and independent of the research context. To that purpose, we screen the literature for common success drivers, as we consider those general success drivers as basis for explaining venture success sufficiently. As general drivers do not fully cover UCDI-ventures as phenomenon under research (Andrews, 1987), we then - similar to Gengatharen and Standing (2005) - return to the literature to derive additional UCDI-venture related success drivers related to the characteristics of the UCDI-venture concept. Finally, we combine all drivers into a 'UCDI-venture success driver framework' in order to explain UCDI venture success. In a third step, concerned with the three UCDI-venture characteristics, we select the UCDI-venture 'ClipFish', an online video sharing community, for a single short case study. Using an exploratory approach and a narrative technique, we draw on a single case to explore the relevance of the success drivers. We collect mainly qualitative data from interviews and publicly available company data. We highlight facts and snapshots of events, specifically selected according to their relevance in the entrepreneurial context. before we demonstrate the relevance of the UCDI-venture success drivers derived from the literature. We argue how the success driver push the venture further towards success. Choosing a narrative technique, can be criticized for telling stories through other people's eyes (Hooks, 1991), however, they provide insights into how individuals and organizations understand their actions based on oral and written accounts (Riessman, 1993). Determining the robustness of factors across subjects and potential validation would certainly require further case studies.

CONCEPT DEFINITION

We define UCDI-ventures as for-profit ventures that offer immaterial and digitized user-contributed multimedia content via a website for direct consumption to an interactive community, where the number of users determines the value of the entire service offering to the individual user. UCDI-ventures show three common characteristics, (1) user-contributed content, (2) network effects, and (3) an interactive community.

UCDI-ventures are characterized by **user-contributed content** (Kautz et al., 1997; Korica et al., 2006; Tredinnick, 2006) such as video, music, pictures, or personal profiles. User-contributed content may, but does not need to be user-generated content. For instance, YouTube and other ventures show professional content recorded by users and cut to clip length. The relative importance of user-contributed content to the service offering differs among UCDI-ventures (Filimon, 2006). Based on the user-contributed content, some UCDI-ventures design services restricting to user ratings and comments, whereas other UCDI-ventures create more enhanced services (Pitt et al., 2006). Concerning the type and format of user-contributed content, some UCDI-ventures such as Flickr (photographs) and YouTube (videos) focus mainly on one content type and format. Others such as Myspace facilitate user contribution of various content types and formats (Kolbitsch and Maurer, 2006). Regarding content accessibility, some UCDI-ventures make their content available to the public, whereas others restrict access to individuals affiliated with the contributing users (e.g., Facebook).

UCDI-ventures are subject to **network effects** (Fumero, 2006; Millard and Ross, 2006), i.e., the value of the UCDI-venture to a user depends on the number of users (Shankar and Bayus, 2003; Shapiro and Varian, 1998). Network effects differ, however, concerning the degree of continuity and interaction required for network effects to occur (Stone and Levy, 2006; Wilson, 2006).

UCDI-ventures grow an **interactive community** in which users interact with each other via a website (Choi et al., 2006). Some UCDI-ventures such as YouTube mainly foster the consumption of user-contributed content; they facilitate commenting and rating only as add-ons. Other UCDI-ventures strive for ongoing interaction of users via instant messaging, chat rooms, or message boards (Korica et al., 2006). Examples of the latter category are Facebook or LinkedIn, both building a service model around iterative and sustained user interactions.

UCDI-VENTURE SUCCESS DRIVERS

General Venture Success Drivers

The entrepreneurship literature brings forward many diverse success drivers (e.g., Churchill and Lewis, 1986; Osborne, 1995; Roberts, 1991). Success drivers originate in two streams of entrepreneurship research. The first stream analyzes characteristics of ventures in a given environment from a natural selection perspective (e.g., Aldrich, 1979; Hannan and Freeman, 1977; Katz and Kahn, 1966). The second stream identifies success drivers within the organization that actively manages its environment to succeed (e.g., Low and MacMillan, 1988). It includes studies regarding individual success drivers (e.g., Begley and Boyd, 1987; Cross and Travaglione, 2003; Earl, 2003; Hadjimanolis, 2000; Kakati, 2003; Kelmar and Wingham, 1995; Krauss et al., 2005; Smilor, 1997; Starr and MacMillan, 1990; Timmons, 1982). It also contains works focusing on comprehensive models of success drivers (Baum et al., 2001; Chrisman et al., 1998; Rogoff et al., 2004 Vesper, 1980). It mainly covers psychological factors (e.g., Norton and Moore, 2002), cognitive factors (e.g., Gatewood et al., 1995; Sapienza et al., 2004), and resource-based factors (e.g., Cooper et al., 1994; Lee et al., 2001).

Across those studies, three general venture success drivers appear: (1) Personal Network and Personal Characteristics of Entrepreneurial Team, (2) Product or Service Idea in Business Model, and (3) Available Resources and Capabilities.

Ad (1) Personal Network and Personal Characteristics of Entrepreneurial Team. The personal network including family and friends originates in the entrepreneur (Starr and MacMillan, 1990; Teal and Hofer, 2003). It gives access to a secondary network of potential support (Florin et al., 2003; Greve and Salaff, 2003; Nijkamp, 2003). The entrepreneur's personal characteristics and traits as success drivers reach from behavioral aspects such as initiative, risk taking, and intentions to emotional aspects (Baum et al., 2001; Cross and Travaglione, 2003; Delmar and Wiklund, 2003; Goleman, 1995; 1998; Gundry and Welsch, 2001; Krauss et al., 2005; Rogoff et al., 2004; Smilor, 1997; Starr and MacMillan, 1990).

Ad (2) Product or Service Idea in Business Model. The linking of product or service characteristics to revenue streams as basis for a business model represents an often cited success driver (Earl, 2003; Rogoff et al., 2004; Timmons, 1982). Newness and idiosyncrasy of products or services are also considered important (Vesper, 1980).

Ad (3) Available Resources and Capabilities. The resources and the according capabilities serve as success drivers (Baum et al., 2001; Kakati, 2003; Kelmar and Wingham, 1995; Rogoff et al., 2004; Timmons, 1982; Vesper, 1980). Resource development is important towards a valuable resource base (Hadjimanolis, 2000).

Table 1 shows the three drivers along with their respective literature sources. The drivers are rather general and take neither the new technological developments nor the market opportunities into account. Hence the drivers seem insufficient to explain the differences in the success of UCDI-ventures. According to Andrews (1987), success driver research requires context-specific adaptations. Hence, two additional UCDI-venture related success drivers complement the three general venture success drivers.

Success Drivers	Literature Sources
Personal Network and Personal Characteristics of Entrepreneurial Team	Baum et al. (2001); Chrisman et al. (1998); Cross and Travaglione (2003); Florin et al. (2003); Gundry and Welsch (2001); Kakati (2003); Krauss et al. (2005); Rogoff et al. (2004); Smilor (1997); Starr and MacMillan (1990); Timmons (1982); Vesper (1980).
Product or Service Idea in Business Model	Baum et al. (2001); Chrisman et al. (1998); Earl (2003); Hadjimanolis (2000); Rogoff et al. (2004); Vesper (1980).
Available Resources and Capabilities	Baum et al. (2001); Chrisman et al. (1998); Hadjimanolis (2000); Kakati (2003); Kelmar and Wingham (1995); Vesper (1980); Timmons (1982).

Table 1. Three General Venture Success Drivers in the Literature

UCDI-Venture Related Success Drivers

Based on the specific characteristics of UCDI-ventures, we derive two additional success drivers from the literature.

One UCDI-venture-related success driver is 'Marketing Strategy with Viral Emphasis' or just viral marketing which stands for "the tactic of creating a process where interested people can market to each other" (Subramani and Rajagopalan, 2003, p. 300). Viral marketing emphasizes the linkage between organization, i.e., the UCDI-venture, and its users.

UCDI-ventures need to conduct marketing to reach potential users and raise awareness for the service (Sheth et al., 2006), but typically possess only scarce resources (Newbert, 2005). To overcome the resource scarcity, they may exploit their community as an external asset and focus on viral marketing (Helm, 2000; Miller, 2000; Sheth et al., 2006). To motivate users to get involved in the viral marketing efforts, UCDI-ventures may count on extrinsic motivation and pay their users a commission per newly acquired user (Kwok et al., 2002). Alternatively, they may count on users' intrinsic motivation by rewarding the users with a special position in the community, awards, or other publicity elements (Hars and Ou, 2002). UCDI-ventures can benefit from using the informal channels of its users on the Internet to spread a marketing message and hence achieve a higher credibility among recipients (Porter and Golan, 2006), a mechanism, previously referred to as word-of-mouth (Welker, 2002).

The second UCDI-venture related success driver is 'Speed to Market'. Network effects potentially offer an early mover advantage which could cause a market to tip to just one community or standard (Shapiro and Varian, 1998). Such tipping threatens late movers who lack the deep pockets for acquiring users (Makadok, 1998).

Hence, speed-to-market, i.e., a time-based strategy, is important to achieve competitive advantage in an environment of fast-changing technology and customer requirements (Chen et al., 2005; Suarez and Lanzolla, 2007). Speed-to-market is also relevant when competition is strong (Schoonhoven et al., 1990) as in many Internet industries with low entry barriers.

The third UCDI-venture characteristic, user-contributed content, emphasizes users as an external resource that enriches the success driver 'Available Resources and Capabilities'.

UCDI-Venture Success Driver Integration

Following the previous arguments, the UCDI-venture success driver framework (Figure 1) comprises five success drivers. Two success drivers from the entrepreneurship literature, 'Personal Network and Personal Characteristics of Entrepreneurial Team' and 'Product or Service Idea in Business Model' remain unchanged. The third driver from the entrepreneurship literature 'Available Resources and Capabilities' requires further specification with regard to UCDI-ventures. It demands an emphasis on external user-contributed resources both in terms of content origin and in terms of content diffusion to users. Resources and capabilities need to be available in a flexible manner especially when exponential network growth causes service peaks - as to be expected in markets with network effects. The two additional UCDI-venture related success drivers, 'Marketing Strategy with Viral Emphasis' and 'Speed to Market', are derived from the UCDI characteristics. Each of the five success drivers supposedly has a positive influence on UCDI-venture success.
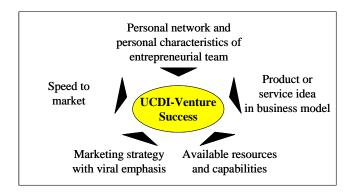

Figure 1. UCDI-Venture Success Driver Framework

UCDI-VENTURE SUCCESS DRIVERS

Investigating the relevance of the five drivers in a practical case serves to illustrate the relevance of the UCDI-venture success drivers. Toward a specific UCDI-venture, the idea of an online video sharing community has already been established in the US by YouTube. As the development of online video sharing communities in Germany follows the US development only with a time lag, investigating German online video sharing communities enhances the chances not to follow one of the many dead ends of UCDI-ventures (Arthur, 2006). In the German market for online video sharing communities, three UCDI-ventures (MyVideo, Sevenload, Clipfish) lead the pack in terms of user number and page views. We select one of them, the online video sharing community Clipfish to illustrate the UCDI-venture success drivers.

The Case of Clipfish

In April 2006, the largest European TV broadcasting company RTL, a subsidiary of Bertelsmann, saw video sharing communities emerging, both abroad (e.g., YouTube.com) and on their home turf, the German market (e.g., MyVideo, Sevenload). RTL Interactive, an RTL business unit, explored the opportunity to establish their own online video sharing community. Reflecting on their general TV broadcasting environment and their core competencies, user acquisition and revenue generation through selling access to viewers, RTL decided to launch such a UCDI-venture.

RTL Interactive set up a project team consisting of two operative members, a manager and a technically oriented website designer and assigned an executive manager to the team to secure access to resources and report to the board.

Soon the project adopted the name Clipfish and developed a working alpha version of the website in April 2006. Upon quick load and stability testing, Clipfish launched the website on June 14, 2006. During the post-launch phase, Clipfish built on RTL's strengths and gained key supporters to grow the community. They observed how the word spread. First generation adopters uploaded content, invited friends to join the community, and engaged in community building activities like commenting, rating, and messaging.

In August 2006, a beta version had just been released, Clipfish noticed increased popularity of their site combined with accelerating user growth and network traffic. However, it could not predict yet when user growth and thus network traffic volume would take off. Following the slogan "don't crash your beta", Clipfish avoided heavy marketing expenditures. They did not want to put their website on the line with massive traffic in a beta stage. In late September 2006, RTL's commercial TV rival ProSiebenSat1 took a 30% stake in Clipfish's competitor MyVideo (the first German video sharing community, officially founded in April 2006 and operated mainly from Romania). Thereupon RTL decided to announce Clipfish on their prime time TV news, even though the website was still in beta phase. Within minutes after the announcement, traffic on the website exploded. Clipfish worked heavily on the infrastructure to cope with the user load. Some availability bottlenecks slowed down the speed. The website did not deny service or go offline at any time as Clipfish quickly designed a scalable architecture to manage traffic peaks. Following the hassle, Clipfish convinced RTL to invest in higher capacity infrastructure, server architecture, human resources, and marketing to further proceed on the successful path it had entered. Clipfish achieved funding for massive online advertising campaigns, TV commercials, and cross-promotion activities with selected TV shows. For instance, Clipfish set up a branded portal for the German counterpart of 'Pop Idol', the music entertainment TV show where they offered registered users the opportunity to upload their self-produced casting videos. Following the example, Clipfish also set up further portals with exclusive and branded content which could neither be imitated nor copied, and thus strengthened the brand association with their parent company RTL. Even though Clipfish had entered the German markets two months after MyVideo, they depicted continuously accelerating user growth rates. The market allowed both online video sharing communities to co-exist. To further exploit Clipfish, RTL in January 2007 arranged for a Clipfish collaboration with Giga TV, a special interest TV channel to produce and air a daily TV show called ROFL TV, involving selected uncommented Clipfish videos. Typical license agreements with uploaders allowed Clipfish to also use videos in other media at no cost. In February 2007, eight months after the launch, Clipfish became an official unit of RTL. They counted some 190,000 registered users, gained about 2,800 new registrations per day, and received approximately 5,000 videos from registered users per day. At peak times during the day, usually between 6 and 10 o'clock p.m., Clipfish observed approximately 75,000 visitors simultaneously on their website. In August 2007, Clipfish parent RTL extended the successful exploitation of Clipfish on TV. It started producing Clipfish TV. The show involving a well-known host and about 100 studio guests was aired weekly on Saturday showing a selection of Clipfish video clips along with comments by the host. By December 2007, Clipfish counted 3.5 million monthly visitors and more than half a million registered users.

Success Drivers in the Case of Clipfish

The success driver Personal Network and Personal Characteristics of Entrepreneurial Team was relevant to Clipfish. Even though not in the sense of the entrepreneurship literature emphasizing the personal network outside the organization, the

success driver influenced Clipfish through interpersonal linkages within the organization. For instance, Clipfish established a link to the RTL board via an executive manager. It thus adapted to the established RTL decision making structure and accomplished quick access to resources needed in the volatile market environment.

The success driver Product or Service Idea in Business Model played an important role for Clipfish. As subsidiary of RTL, Clipfish had to show a product or service idea leading to a valid business case. Clipfish's idea was to enhance user segmentation based on user profiles within the community. The success driver enabled Clipfish to create revenue streams through advertising revenues. It let Clipfish focus on exploiting the potential of user profiles and create potential revenue opportunity to a media company such as Clipfish's parent RTL.

The success driver Available Resources and Capabilities was important to Clipfish. In particular, Clipfish had to adhere to conservative resource allocation structures. Convinced by Clipfish's service idea and the business model, parent company RTL unlocked the necessary resources to facilitate the technical setup and the commercialization of the website. Resource availability provided by RTL enabled the UCDI-venture to enhance the website performance and assure usability even with a tremendously increasing user number. Clipfish issued contracts to part-time employees, made use of on-demand and outsourcing offerings to be able to react to sudden demand changes concerning technology and technology related skills.

The success driver Marketing Strategy with Viral Emphasis was relevant for Clipfish. It enabled Clipfish to grow the community via user-to-user interaction, taking advantage of the viral marketing strategy in the form of invitation emails by users to friends who were not yet registered. It further supported Clipfish through forums, web portals, and a specifically designed application user interface (API) allowing users to post Clipfish-branded videos under external domains to promote Clipfish. However, due to its relationship with media company RTL, Clipfish also had access to costly traditional marketing instruments. It benefited from cost-effective cross promotion in RTL TV shows and on various RTL websites. Clipfish gained exposure through RTL's editorial advertising such as the prime time TV announcement. Clipfish's website traffic peaked directly following the announcement in prime time news. They also showed positive loads upon various TV spots.

The success driver Speed to Market also had only little relevance. Following MyVideo with a few months delay, Clipfish experienced the tendency of potential users to join the first mover. With Clipfish turning successful despite being late, though, speed to market did not determine success as explicitly as stated in the literature.

ASSESSMENT AND OUTLOOK

The paper emphasizes the development of the UCDI-venture success driver framework. For illustrative purposes, it reports on a rather exploratory investigation of the success drivers' relevance, which can be determined by retrieving evidence for the occurrence of the success drivers in a practical case.

At Clipfish, one of three successful German online video sharing communities besides MyVideo and Sevenload, four success drivers play a positive role: Personal Network and Personal Characteristics of Entrepreneurial Team, Product or Service Idea in Business Model, Available Resources and Capabilities, and Marketing Strategy with Viral Emphasis. Only the success driver Speed to Market is not apparent. Clipfish's success, despite being late, could be explained with the brand name and reputation of its parent RTL convincing users to join and the considerable resources provided by RTL, allowing Clipfish to catch up quickly.

To further establish the UCDI-venture success drivers in the entrepreneurship literature, future research needs to gather additional evidence of relevance. We are in the course of a three step procedure: Firstly, we study additional UCDI-ventures allowing for re-checking the relevance of the five drivers, operationalizing variables as required for a quantitative study, and investigating possible interdependencies and overlaps among the success drivers. Secondly, we prepare a survey among German UCDI-venture and a subsequent quantitative analysis of survey results to validate the drivers. Thirdly, we intend to conduct a longitudinal case study on a small number of UCDI-ventures in order to examine whether the success drivers remain equally important over time. However, at least the third step requires some patience, as the contemporary UCDI-ventures, of which many were at best founded and launched in 2006, would not allow for any longitudinal investigation before 2011.

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