

New Media Entrepreneurship: Success Drivers of User-Community-Driven Internet Ventures

Olivier Berthod, Claudio Huyskens, Claudia Loebbecke*

University of Cologne, Dept. of Business Administration and Media Management

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Abstract

User-community-driven Internet ventures (UCDI ventures), characterized by (1) user-contributed content, (2) an interactive community, and (3) network effects, have constituted a second wave of Internet-based entrepreneurship. While prime examples of UCDI ventures such as youtube.com or myspace.com have received high capital market valuations, many others have failed and thus have made such ventures and their success drivers interesting phenomena in the context of entrepreneurship research. In this context, the paper proposes a framework of success drivers relevant to UCDI ventures. To that purpose, the paper firstly defines UCDI ventures. Then it determines whether success drivers common in the entrepreneurship literature are applicable to UCDI ventures and suggests UCDI venture-specific success drivers complementing the ones from the literature. The paper continues by illustrating the application of the proposed framework to a brief case study of the online student community *Study lounge*. It concludes with a brief outlook to future research.

Keywords: Entrepreneurship, Venture, New Media, Community

* Author sequence for journal: Loebbecke, Huyskens, Berthod; contact during submission process via claudia.loebbecke@uni-koeln.de.

1 INTRODUCTION

During the first wave of Internet entrepreneurship starting before the year 2000, eBay, Google, Amazon, and Yahoo have achieved remarkable success stories, while other ventures went out of business quickly (Barnes et al. 2004). The ongoing second Internet entrepreneurship wave has introduced a new kind of ventures, so-called user-community-driven Internet ventures (UCDI ventures). Those UCDI ventures comprise three characteristics: First, their service provision includes end-user-contributed multimedia content; second, their 'architecture of participation' implies network effects; and third venture their service offerings ground on interactive communities of users (O'Reilly 2005; Stone, Levy 2006). While prime examples of UCDI ventures such as youtube.com or myspace.com have received high capital market valuations, many others have failed turning such ventures and their success drivers into an interesting phenomenon in the context of entrepreneurship research¹.

This paper proposes a framework of success drivers relevant to UCDI ventures. To that purpose, it is structured as follows: Firstly, the paper defines UCDI ventures. It then determines whether success drivers common in the entrepreneurship literature are applicable to UCDI ventures. In addition, it suggests complementary UCDI venture-specific success drivers. The paper continues with an exemplary application of the proposed framework to a brief case study of the online student community *Study lounge*. It concludes with a brief outlook to future research.

2 USER-COMMUNITY-DRIVEN INTERNET (UCDI) VENTURES

From the variety of different ventures operating on the Internet, UCDI ventures differ concerning the three characteristics they share. Those characteristics include *user content contribution* and *network effects* (O'Reilly 2005), and a service offerings with a focus on *interactive communities*.²

1 Entrepreneurship research is defined as "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 Venkatraman (2000, 218).

2 Different from Stone, Levy (2006), this paper does not consider business model adaptations a characteristic of UCID ventures.

2.1 User-Contributed Content

UCDI ventures are characterized by user-contributed content (Kautz et al. 1997; Korica et al. 2006; Tredinnick 2006), even if the importance of the user-contributed content to their service offering differs among UCDI ventures (Filimon 2006) along three dimensions, role of user-contributed content, its type and format, and its accessibility.

While some UCDI ventures ask users to only rate or comment on existing content, others create additional services based on the user-contributed content. Concerning the type and format of user-contributed content, UCDI ventures differ reaching from text, to sound, images and photographs, and finally animation and video. Some UCDI ventures such as flickr.com (photographs), youtube.com (videos), or wikipedia.net (text) focus mainly on one type of content and content format. Others such as myspace.com facilitate user contribution of various content types and formats (Kolbitsch, Maurer 2006). Regarding the accessibility of user-contributed content, some UCDI ventures make such content available to the public, while others restrict access to individuals affiliated with the contributing user (e.g., facebook.com).

2.2 Network Effects

UCDI ventures are subject to network effects (Fumero 2006; Millard, Ross 2006), meaning that the value of a network to a user depends on the number of users (Shapiro, Varian 1999; Shankar, Bayus 2003). UCDI ventures however differ concerning the source of network effects and regarding the degree of continuity and interaction required for network effects to occur.

Some UCDI ventures experience networks effects based on the connectivity among their users (Wilson 2006). An example is the case of linkedin.com, where users benefit from the service offering due to being connected with other users. Other UCDI ventures count mainly on liquidity-based network effects securing content supply (Stone, Levy 2006). One example is youtube.com, where users benefit from the number of further users owing to increased video content available. Another example is wikipedia.net, where users benefit from the increased validation of content thanks to the information review by many.

Regarding the necessary degree of continuity and interaction, UCDI ventures such as student and professional communities require ongoing activity by users and permanent interaction to facilitate network effects, whereas video and photography UCDI ventures depend mainly on one-time contribution by users to create network effects.

2.3 Interactive Community

UCDI ventures grow user communities that actively interact with each other via a website interface (Choi et al. 2006). They differ concerning the type and the openness of interaction within the community. Some UCDI ventures foster mainly the consumption of user-contributed content such as youtube.com with its video sharing service and facilitate commenting and rating as add-on.

Other UCDI ventures strive for ongoing personal interaction of users via instant messaging, chat rooms, or message boards (Korica et al. 2006). Examples of the latter category are facebook.com or linkedin.com with their communities building around personal information.

Regarding the openness, the majority of UCDI ventures, e.g., facebook.com, youtube.com; myspace.com, restricts interaction to registered community members, while other UCDI ventures allow even anonymous visitors to interact (e.g., many blogs offer anonymous posting functionality).

3 TOWARDS A FRAMEWORK OF SUCCESS DRIVERS RELEVANT TO UCDI VENTURES

3.1 Common Success Drivers in the Entrepreneurship Literature

Success drivers of entrepreneurship originate in two entrepreneurship research streams. While the first stream analyzes characteristics of the surviving ventures in a given environment (e.g., Katz, Kahn 1966)³, the other stream identifies success drivers within the organization that actively manages its environment to succeed (e.g., Low, MacMillan 1988). Studies in the second stream "usually start by identifying key success drivers that enhance the chances of survival" (Wickham 2001, 142).

Across those two main research streams, the variety of success drivers proposed by different theoretical approaches (Hannan, Freeman 1977; Low, MacMillan 1988) implies some redundancies. While individual success drivers mark the focus of some researchers (e.g., Timmons 1982; Starr, MacMillan 1990; Kelmar, Wingham 1995; Hadjimanolis 2000; Cross, Travaglione 2003; Earl 2003; Kakati 2003; Krauss et al. 2005), comprehensive models including multiple dimensions of success drivers are central to the research of others (Vesper 1980; Rogoff et al. 2004).

Individual success drivers originate in the ability to develop profit opportunities and the

3 Similarly Hawley (1950), Hannan and Freeman (1977), and Aldrich (1979) shape the central tenet indicating that the environment is the cradle for natural selection, i.e. company survival and success.

ability to find or create linkages between product characteristics and revenue streams (Earl 2003). They are inherent in the person of the entrepreneur, a finding supported by US and Swedish cases that illustrate the entrepreneur and his social network as source of resources, credibility, and legitimacy, and eventually success (Starr, MacMillan 1990). On the next level, the entrepreneur's social network in turn depends on drivers such as friendship, trust, gratitude, liking, and obligation. The success driver entrepreneurial orientation involves personal initiative, achievement, and risk-taking orientation (see Krauss et al. 2005 and their investigation of 248 South African entrepreneurs).

As success driver emotional intelligence refers to regulation and appraisal of emotions, empathy, communication skills, and manipulation of trust and climate (Goleman 1995 & 1998). It has become apparent as success driver from research on five Australian entrepreneurs (Cross, Travaglione 2003). Firm characteristics, firm competencies, and growth strategies describe a more competence-driven success driver (Kelmar, Wingham 1995). Based on a literature review by Timmons (1982), the success drivers 'personal characteristics and competencies' and 'capabilities towards a product or service underlying the business model' appear to be two sides to the same coin.⁴

With regard to comprehensive models of success drivers, Vesper (1980) describes the diversity of entry strategies for entrepreneurs. The success drivers newness and idiosyncrasy of products and services, resources and technical know-how, personal network, and customers result from the analysis of anecdotic examples. Internal success drivers are identified in individual characteristics, management issues, marketing activities, human resource issues, and product characteristics (see Rogoff et al. (2004) who survey two samples comprising US entrepreneurs, and a one sample of entrepreneurship experts).

In summary, the entrepreneurship literature points to three venture success drivers: (1) *Personal network and Personal Characteristics of Entrepreneurial Team*, (2) *Product or Service Idea in Business Model*, and (3) *Available Resources and Capabilities*. Table 1 shows a condensed list of three venture success drivers along with their respective literature sources. Figure 1 depicts the resulting basic framework - not yet specifically geared towards UCDI ventures. The next subsection investigates whether those three factors shown in Figure 1 also cover the specific UCDI venture characteristics as potential origin of success.

4 According to Hadjimanolis' (2000) survey of 25 Cyprian cases, success drivers can be explained with the resource-based view, and specifically root in the personal ability by the owner or manager to strategize the resource development, as well as trigger innovativeness in order to provide a specific product. Similarly, success drivers are spotted in resource-based capabilities and entrepreneurial qualities by Kakati (2003) surveying twenty-seven venture capitalists with both failure and success experiences.

Success Drivers	Literature Sources
<i>Personal Network and Personal Characteristics of Entrepreneurial Team</i>	Cross, Travaglione (2003); Kakati (2003); Krauss et al. (2005); Rogoff et al. (2004); Starr, MacMillan (1990); Timmons (1982); Vesper (1980)
<i>Product or Service idea in Business Model</i>	Earl (2003); Hadjimanolis (2000); Rogoff et al. (2004); Vesper (1980)
<i>Available Resources and Capabilities</i>	Hadjimanolis (2005); Kakati (2003); Timmons (1982); Vesper (1980); Wingham (1995)

Table 1: Venture Success Drivers in the Literature

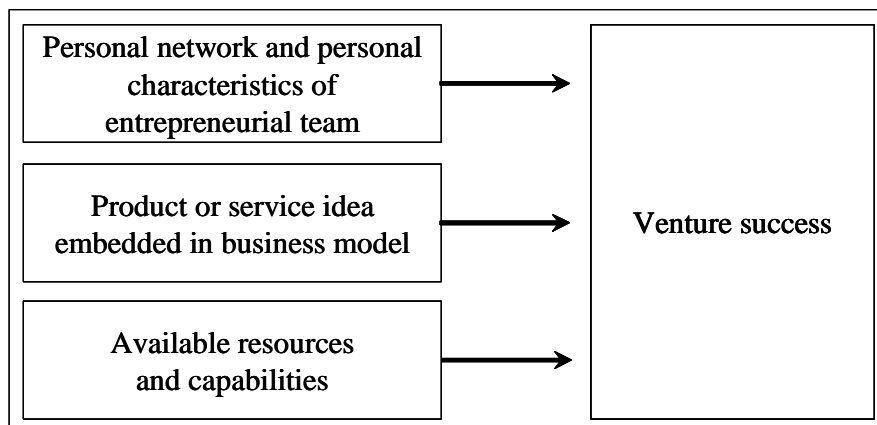


Figure 1: Venture Success Drivers

In order to assess the applicability of the venture success drivers for explaining success of UCDI ventures, we match each of the drivers to each of the three UCDI ventures characteristics. Possible discrepancies between the venture success drivers derived from the literature and the specific UCDI venture characteristics would be an argument for extending the success driver framework.

The venture success driver *Personal Network and Personal Characteristics of Entrepreneurial Team* is not directly related to any of the three UCID specific characteristics. Neither the entrepreneur nor the entrepreneurial team and the network appear to exert influence on the level of user-contributed content, interactive communities, or network effects. Similarly, the success driver *Product or Service Idea in Business Model* does not interrelate strongly with the three specifics of UCDI ventures. Even though, user-contributed content and the reliance on network effects with regard to a viable business model seem to be crucial elements of the service offering, they are not accounted for in the relevant literature. Finally, *Available Resources and Capabilities* certainly also determine the success of UCDI

ventures but neglect specific opportunities resulting from the digital business nature of UCDI ventures. For instance, they lack the external resources in the form of user-contributed content and user engagement in the dispersion of the community.

One can come to the intermediate conclusion that the venture success drivers in the entrepreneurship literature are applicable, but are not sufficient to analyze the success of UCDI ventures with respect to the specific characteristics of such ventures. This demands a success driver framework extension with additional UCDI ventures-specific success drivers (Andrews 1987).

3.2 UCDI Venture-Specific Success Drivers

We propose to extend the success driver framework with two additional drivers to reflect two specific characteristics, the interactive community and network effects. The third UCDI-venture-specific characteristic, user-contributed content, does not trigger the inclusion of a new success driver. Instead it leads to adding an emphasis on external resources to the success driver *Available Resources and Capabilities*.

The first UCDI venture-specific success driver that we propose to add to the framework in Figure 1 is *Marketing Strategy with Viral Emphasis*. UCDI ventures need to conduct marketing to reach potential users and raise awareness among them for the service (Sheth et al. 2006). However, as new ventures in general, UCDI ventures usually possess only scarce resources that limit the scope of potential marketing strategies (Newbert 2005). Owing to this limitation, UCDI ventures require a marketing strategy that exploits one of its core assets, the community of users, at low cost (Sheth et al. 2006). To that purpose, UCDI ventures may apply viral marketing which respects the scarce available resources and creates reach by distributing the marketing message via the community, using "the tactic of creating a process where interested people can market to each other" (Subramani, Rajagopalan 2003, 300).

The second UCDI venture-specific success driver to be added is *Speed to Market for First Mover Advantage*. Network effects imply the potential for first mover advantages, which can in turn cause a market to tip to just one standard (Shapiro, Varian 1998). As such a tipping implicitly threatens the success of late-moving UCDI ventures, the achievement of a first mover advantage plays an important role. Second mover UCDI ventures can compensate first mover advantages if they possess deep pockets to acquire users (Makadok 1998). By definition many UCDI ventures – as many new ventures in general – have only scarce resources and therefore cannot fight any first mover.

3.3 Framework of Success Drivers Relevant to UCDI Ventures

As a result of the previous arguments, the proposed framework of success drivers relevant to UCDI ventures grounds on the three venture success drivers derived from the entrepreneurship literature and two newly added UCDI venture-specific success drivers. Figure 2 illustrates the framework of success drivers relevant to UCDI ventures comprising the five drivers. While two success factors from the entrepreneurship literature, *Personal Network and Personal Characteristics of Entrepreneurial Team* and *Product or Service Idea in Business Model* remain unchanged, the driver *Available Resources and Capabilities* requires further specification with regard to UCDI ventures. It requires emphasis on external user-contributed resources both in terms of content origin and in terms of content dispersion to users. Further, 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 needed flexible sourcing offers such as on demand solutions have recently become feasible especially in the context of Internet-based ventures.

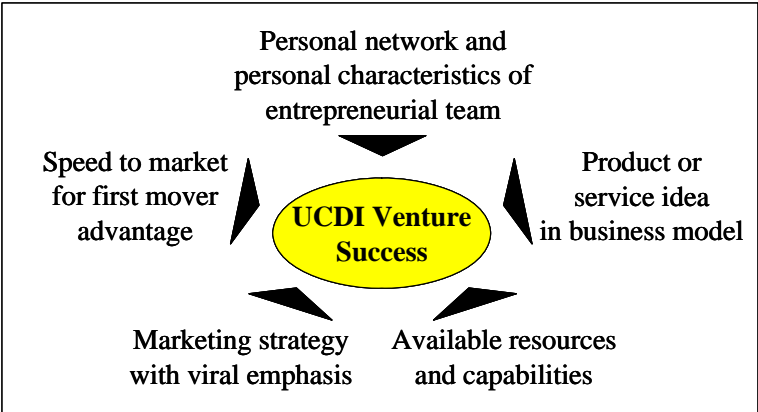


Figure 2: Framework of Success Drivers Relevant for UCDI Ventures

4 FRAMEWORK APPLICATION

This section illustrates how the success drivers in the proposed framework play out for the case of the UCDI venture *Study lounge*, an online student community (see Figure 3).

In March 2006, Studylounge, an online student community was a newly founded joint-venture by parent companies Intergen AG and I12 AG, two German Internet entrepreneurship veterans. Studylounge grounded on an idea by Christoph Berger, co-founder and board member of Intergen AG, to connect students of German universities via the Internet. The Studylounge business model involved selling ad space on its website and thereby generating revenues from page impressions and clicks by its users. Studylounge launched in April 2006, when its main competitor in the German market for student communities, StudiVZ, already had about 50,000 users. Studylounge achieved almost 7,000 users in 30 days. However, by mid August 2006, when about 700,000 of Germany's two million university students participated in one community, 90% of those students had chosen StudiVZ, only about 6% Studylounge, and the remaining 4% split among ten other communities.⁵ Clearly facing such a second mover disadvantage in Germany, in August 2006 Studylounge shifted its attention to Italy, where, after a slow start, in February 2007, it counted approximately 15,000 registered users. With about 6,000 more users than StudiVZ counted in Italy and with about 250 new registrations every day, Studylounge expected to be the first mover in Italy when exponential growth of online student communities would start - supposedly at an installed base of 18,000 to 25,000 registered users.

Figure 3: Case of Studylounge

Personal Network and Personal Characteristics of Entrepreneurial Team. Based on his observation of similar new ventures and the assessment of a viable business opportunity, Berger proposes to the board to set up an online community for students. As co-founder and board member of Intergen AG, he brings his experience to the table, takes an entrepreneurial role, and extends the responsibilities of his regular position. As entrepreneur of the first generation of internet ventures, Berger has established a personal network comprising Internet entrepreneurs, marketing contacts, financiers, and business angels. He initiates Studylounge by informally contacting his counterpart at I12 suggesting to start a joint venture. With his fellow Studylounge team members, Berger contributes informal contacts, adequate resources, and transaction know-how. Overall, the success factor *Personal Network and Personal Characteristics of Entrepreneurial Team* plays an important role for the early success of Studylounge.

Product or Service Idea in Business Model. Studylounge is inspired by the success of facebook.com, a similar community for US college students which builds a viable business model around an interactive community of students. Studylounge maintains its focus on profitable service provision with its shift to other lucrative markets such as Italy towards a European expansion. It offers users the possibility to register and login to an interactive community of fellow students, providing each member with new contacts and user related information. Studylounge also aggregates information with regard to typical student activities, e.g., forming study groups and sharing information on living on campus. Even though the

⁵ In February 2007, Studylounge Germany had around 48,000 registered website users, but growth was marginal.

portfolio of features differs slightly among online student communities, any innovative feature rapidly becomes subject to competitor imitation. Studylounge offers the service to its users for free and instead identifies the profit opportunity to sell advertising companies access to its users via advertising space on the website allowing for specific user segmentation based on user profiles. For Studylounge, *Product or Service Idea in Business Model* is relevant for business success that reached beyond mere appreciation by users of the community.

Available Resources and Capabilities. For access to resources, Studylounge initially depends heavily on its two founding parent companies, Intergenica and I12. It achieves server housing and network management from Intergenica and website programming and maintenance from I12. Due to its relationship with Intergenica, Studylounge has the opportunity to exploit the Intergenica marketing management to acquire marketing partners for its website. Further, it benefits from the expertise I12 had with its skilled programmers developed in content management. Concerning flexible sourcing, Studylounge deploys Intergenica and I12 workforce on demand to balance peaks in required service provision. Further, it goes back to its core asset, students, and employs them to contribute to the work processes where necessary on a part time basis. Studylounge provides the architecture for users to participate by contributing content to the community, triggering interaction and with this, keeping the platform alive. The success driver *Available Resources and Capabilities* plays an important role for Studylounge with regard to both, internal resources and capabilities and external user-contributed resources.

Marketing Strategy with Viral Emphasis. In order to reach the potential core community users while saving marketing expenditures, Studylounge tries various marketing instruments emphasizing viral marketing when entering the Italian market.

In Italy it exploits active users and their willingness to also participate in marketing of the community, both via the website interface and the real-world interface on campuses. Applying viral marketing allows Studylounge to accommodate its comparatively small marketing budget and offers their users the opportunity to reach a distinguished position within the Studylounge community. Compared to previous, more classical marketing approaches in Germany, Studylounge in Italy observes superior results with its viral marketing strategy concerning the image and credibility. Hence, the success driver *Marketing Strategy with Viral Emphasis* is especially relevant to Studylounge as it fits both the scarce marketing budget and the user-to-user marketing potential inherent in the community.

Speed to Market for First Mover Advantage. Studylounge experiences that student

communities follow either a virtuous or a vicious cycle based on positive feedback. Its own user growth rate in Germany plummets as it observes accelerating user growth rate for StudiVZ in August and September 2006. As it suffers from the growth of its competitor StudiVZ, Studylounge – due to relative time disadvantages – does not have the chance to catch up anymore. It shifts its strategic focus abroad and manages to inverse the situation with regard to Italy, where it remains ahead of StudiVZ. The success driver *Speed to Market for First Mover Advantage* is supported by the Studylounge case. It leads to negative consequences for Studylounge in Germany and has positive implications for Studylounge in Italy.

Overall, all five success drivers in the framework of Success Drivers relevant to UCDI Ventures find initial support in the Studylounge case. The case does not only gather evidence for the two success drivers left unchanged from the entrepreneurship literature. It also points to the relevance of the adapted success driver and its two extending points of emphasis. Finally the two additional success drivers derived from the characteristics specific to UCDI ventures have also shown important to the success of Studylounge – in Italy.

5 FUTURE RESEARCH

Towards establishing the framework of success drivers relevant for UCDI ventures for contemporary entrepreneurship research, future research needs to gather further evidence for the framework via conducting multiple case studies on UCDI ventures. Analyzing such case studies along the lines of the framework shall provide additional insights into the UCDI venture-specific success drivers, enable a detailed operationalization of variables, and also further support for the success drivers entailed in the framework. Thereupon quantitative surveys should contribute to validating the framework. Finally, future studies may also apply the five success drivers to other new media ventures to extend its relevance beyond UCDI ventures.

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