The impact of key business relationships on the development of university spin-offs: the case of Nautes

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SHORT ABSTRACT

This study investigates how initial and key business relationships affect new business venture development by taking as empirical setting the case of an Italian University start-up, namely Nautes. The analysis focuses on the interaction between the focal firm and two other actors, the University where Nautes has been originated and one major customer, which have been involved in the creation of Nautes. We emphasize how business ventures are shaped and strongly affected by their initial and key business relationships, which can play at least, two different roles: facilitators or inhibitors of company development. This paper contributes to the IMP field first because it studies the issue of relationship development involving spin-offs and start-ups. Secondly, our study confirms the double edged-sword nature of these business relationships.

Keywords: start-up, new business venture, initial business relationship, case study
INTRODUCTION

New business venture creation and development has attracted the attention of many researchers and the debate in academia is still blooming. Within the domain of entrepreneurship studies how, why, when and under which factors new companies develop has been for long time an important research area (Shane and Venkataraman, 2000). As pointed out by Jones and Holt (2008), this phenomenon appears not yet enough clarified and considering its relevance from both the managerial and scientific perspective it deserves additional studies. It is, in other words, interesting and intriguing to shed more light on the “chaotic and complex” process of new business creation and development (Aldrich, 1999).

In this study we adopt an IMP perspective to investigate the process of development of a new business venture. By taking the IMP perspective, we focus on how initial business relationships develop, and how the start-up company connects to the existing network (Ciabuschi et al., 2012). Those patterns are rather difficult to follow over time due to their complexity. Moreover, start-ups suffer from several shortcomings such as a general lack of resources as well as of an established “position” in the business network context (Johansson and Mattson, 1992). The IMP approach might be very promising for analyzing the complexities in the development of start-ups because it takes as central element the dynamics surrounding business relationships, and hence how the business relationships unfold and then affect the new venture’s development. Therefore, our theoretical framework is centered on the assumption that business ventures are shaped and strongly affected by their initial and key business relationships, which can play at least two different roles: facilitators or inhibitors of company development.

Empirically, we analyze how Nautes, an Italian university spin-off, has been affected by its key and initial business relationships. This company was established in 2001 and rather soon the business relationships with Polytechnic University of Marche (UNIVPM) and that with a large company operating into the lighting business (iGuzzini) turned out to be central in the development of this small and new venture. An IT platform for supporting knowledge management activities was developed and sold to iGuzzini, which remained the most important customer of Nautes’ until 2009.

Our analysis focuses on the interaction between these organizations. More specifically, by taking Nautes as central actor we focus on how this new venture, managed by researchers with limited experience in how to commercialize their product, engaged with the large customer and learned, although in a turbulent way, how to go further with its business. The role played by UNIVPM as mediator when Nautes initiated the business with iGuzzini also has been investigate in order to capture broader network dynamics.

Against this background, the paper addresses the following research question: How is the
development of start-ups affected by its early and key relationships? This paper contributes to the IMP field first because it studies the issue of relationship development involving spin-offs and start-ups. Secondly, our study confirms the double edged-sword nature of these business relationships. The following section presents a theoretical background on new business development from an IMP perspective. The remainder of the paper is devoted to the case presentation and discussion.

THEORETICAL BACKGROUND

We investigate how the development of a new venture is affected by initial key relationships. For this purpose, our theoretical background deals with the positive and the negative side of building business relationships by taking the new business venture’s point of view: new business ventures embrace start-ups which can be considered to be a heterogeneous group of firms with varying needs (Aaboen et al., 2011).

The role played by business relationships in supporting company’s development is widely recognized within the IMP tradition (Håkansson and Snehota, 1995; Ford et al., 2003 and 2006). Developing new products with counterparts, entering new business, expanding the business operations abroad typically requires the creation and development of business relationships. But establishing business relationships is a complex task, both for established and new ventures (Håkansson and Ford, 2002; Gadde et al., 2012; La Rocca et al., 2013): “the development of a customer relationship requires coordination of the interactions between a customer and a supplier. This coordination entails costs and problems for both companies and it limits their freedom to coordinate with others” (Ford et al., 2011: 53).

In the last few years, interesting research findings have come from investigating the impact of business relationships in creating and supporting the development of new business ventures (Snehota, 2011; Ciabuschi et al., 2012). One challenging aspect identified is the specificity of the early business relationships in enhancing, or hindering, the new venture’s growth.

Some IMP studies have been carried out with the specific purpose of shedding light on such issues: for instance, Aaboen et al. (2011) analyze how start-ups develop their initial customer relationships. These authors clearly show that the product offered by the new venture has to fit with the customer’s resource structure with an important implication: in interacting with the customer the start-ups learn with whom they can develop future relationships (ibid: 56).

Besides certain positive aspects related to the development of initial relationships, new ventures face also several problems when interacting for the first time with counterparts (La Rocca et al., 2013). The product might be partly incomplete for being delivered to the first customer or the organizational form is still under development: the early relationships look undeveloped, unstructured and uncoordinated (ibid: 1026). Moreover, as showed by Johnsen and Ford (2007), since new ventures lack of experience in how to manage initial relationships they are likely very
much influenced by their counterpart at this stage.

Therefore, the influence of the initial key relationships on start-up development may turn out to be positive as well as negative. Håkansson and Snehota (2002) point out that business relationships always contain a certain burden. The authors discuss several reasons, motivations and factors which affect negatively the development of business relationships. For instance, the more the company is dependent on few relationships, the higher will be the burden of the relationships (ibid: 92). Often, new business ventures that are not yet established within the business network are dependent on few other counterparts, therefore the termination of a key business relationship may have overwhelmingly negative effects.

A NOTE ON METHODOLOGY

This paper relies on a case study focusing on the 13 years (2001-2014) of operation of a high-tech company, Nautes S.p.a. (Nautes), an Italian University spin-off from the Polytechnic University of Marche (UNIVPM). The case was chosen because it represents an intriguing example of a spin-off which was affected in its early development mostly by one initial customer relationship. Moreover, it can be considered to be the first academic spin-off originated from UNIVPM, with this actor playing a complex role in Nautes’ development. In order to investigate the pivotal role played of a couple of key business relationships for Nautes, we adopt a qualitative case study method (Yin, 2003). The empirical material was collected from January to April, 2014 by using two different and complementary strategies (Stake, 2005: 443): data collection was handled through in-depth interviews and public or internal documents analysis. Interviews were collected in a typical cumulative approach, by interviewing new informants as they were mentioned as “bearer of a specific knowledge and useful to reconstruct the facts” by other informants, while documents were double-checked with key informants to evaluate their internal validity, appropriateness and foundation.

The 5 face-to-face interviews conducted so far have been recorded, transcribed and jointly analyzed by the researchers, using a protocol of content analysis preliminarily shared among the authors, in order to deduct a “meaning of the meanings”. The people interviewed were 2 full professors at UNIVPM responsible of the “Liason Office” and 2 representatives from Nautes (Mr. Gialletti, CEO and Founder, Mario De Grassi, board member of Nautes).

Given this methodological perspective, the case analysis was developed using an abductive approach (Alvesson & Sköldberg, 2009: 7) for case analysis, which, according to Mayan (2009), aims to generate interpretations that ask for new data collection in a kind of snowball path. In other terms, we opted for “systematic combining” (Dubois & Gadde, 2002); an iterative process was used to analyze collected data in the light of an emergent theoretical frame.

The data collection is still in progress so the results presented in this paper are only preliminary. Hover, even if the phenomenon is still evolving, some elements allow us to reflect on the
possibility to refine and develop the existing understanding of new venture development if viewed from a network perspective.

THE NAUTES CASE STUDY

OVERVIEW OF NAUTES IN 2014

Nautes S.p.a. (Nautes) is an Italian firm focusing on the design and development of software for Knowledge Management, e-learning, project management and HR management. The turnover in 2013 was more than 1 million € and it currently employs 30 people.

It develops and produces web solutions for medium large Italian companies such as Indesit (one of the largest European home-appliances producer), Maserati (producer of luxury cars which belongs to Fiat Automobile Group) and CheBanca (an Italian bank). Currently, three products are offered: Nautes SM (a Social/Project Management System), Nautes LM (a Learning Management System) and Nautes CM (a Customer Support System). Moreover, the company is engaged in the co-development with customers of customized and complex web and mobile platforms.

THE ORIGIN OF NAUTES

In 2000 the Departments of Civil and Building Engineering and Architecture of the University Polytechnic of Marche (UNIVPM) located in Ancona (in the Marche region), took part into an international consortium involving several European universities and companies. The consortium was formed to develop “W.I.N.D.S.\(^1\)”, a research project aimed at picturing a set of requirements for advanced design learning environments. One of the main goals of this project was the creation of a Web Based Intelligent Design tutoring system.

The researchers soon realized the need to acquire extra-competences in the field of informatics; therefore they involved three Ph.Ds students from the Computer Science Department at UNIVPM. These young researchers (Marco Gialletti, Marco Giretti and Gianluca Trombin) very much committed themselves to the W.I.N.D.S. project and learned how to develop software by taking an innovative approach. Particularly, Marco Gialletti recognized that users - with their own cognitive processes and behaviors- should influence software features over its development process. He also realized that “ergonomics” is a key factor of success in the development process of software for knowledge management and learning.

The engagement into W.I.N.D.S. also inspired Gialletti to take part to “e-capital”, a business plan

\(^1\) As the official project’s brief disclaims, W.I.N.D.S. involves the analysis of a number of students’ design review sessions in regular university classrooms, in order to point out the relationships occurring between the different forms of the designers’ cognitive involvement (conceptual, visual, social, emotional etc.) in design. http://www.dicea-bc.univpm.it/index.php/designstudies/web-based-intelligent-design-tutoring-system-winds
competition funding innovative ventures. Giretti and Trombin were involved from the beginning. This competition is still today supported by public institutions such as the regional government of Marche and UNIVPM and its first edition was arranged in 2001. Basically, participants have to present a business plan that is afterwards assessed and evaluated by a scientific committee (composed by researchers coming from several Universities from the Marche region). The best idea is awarded with financial grants.

In 2001, Gialletti and its colleagues succeeded and received a grant for setting up a new business venture: Nautes S.r.l. was born on June, 28th, 2001.

**EARLY STAGE OF NAUTES DEVELOPMENT**

Nautes was constituted as University spin-off by the three researchers employed at UNIVPM and from the beginning the idea was to make money out of the web-based software they learnt to build during the W.I.N.D.S. experience. The initial capital invested in the company was 15.000 Euro.

*Nautes was funded under the impulse of the vision of its founders. In 2001, we strongly believed that the knowledge management software industry could be strongly innovated, and just because of this idea we started our business. Once we received the winning-prize by e-capital, we set up our offices in Jesi, our home-town and we started to work to a new software idea. (Marco Gialletti, Nautes’ CEO)*

The founders were strongly related to UNIVPM, and the University appreciated a lot the efforts of Gialletti and his colleagues in setting up the first university spin-off of UNIVPM. Moreover, in a period in which there was a great expectation on the role that universities could play as innovation actor, Nautes was seen as an important test-bench of the spin-out process.

*In 2001, when Nautes was funded, UNIVPM was working on the development of a set of rules for the regulation of academic spin-offs. Nautes was therefore seen by UNIVPM as an “archetype” of what “transferring knowledge” would mean in the following years. There was a great deal of attention and a lot of interest about what was going on with Nautes. W.I.N.D.S. project director, and the Rector himself were enthusiastic about the initiative of Nautes, and they emphasized its value - even if symbolic - on several official occasions. (Alessandro Iacopini, UNIVPM International Liasion Office)*

According to Gialletti, the “Nautes experiment” caught the attention of several key actors related to UNIVPM. Historically, UNIVPM initiated collaboration and developed joint research

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2 http://www.ecapital.it/
3 The Italian legislation in the matter of academic spin-offs has been developed during the 90’s. Every University has to follow that general regulation, although there is a freedom of adapting it to particular needs. At UNIVPM, one condition of obtaining the official status of “academic spin-off” is either the company foundation by University’s employees or the financial commitment of the University when the company is originated.
projects together with private companies from the area surrounding Ancona. Those collaborations lead UNIVPM to gain trust among these companies.

The relation between UNIVPM and an Italian leading company operating in the lighting industrial sector, named iGuzzini, was particularly strong. iGuzzini was established in 1959, about 50 km from Ancona. The company employs currently more than 1,000 people and the turnover in 2012 was Euro 184 million. It operates at an international level with a number of owned retailers across Europe, Asia and America. Historically, iGuzzini have been working with the Department of Civil Engineering at UNIVPM for developing and testing new products. Also fresh graduate engineers from UNIVPM are regularly recruited by the company.

In October, 2001, iGuzzini put the first order ever to Nautes: they asked for the development of a new e-learning platform that would be used for training their own customers (installers and architects) all over the world. But what did make it possible, for a totally new company like Nautes, without a prototype or a pilot installation of its product, to make itself suitable to be considered as a reliable supplier by a big company like iGuzzini?

According to Professor Iacobucci, one of the promoters of UNIVPM’s first spin-offs regulation, the exchange of information among UNIVPM and iGuzzini was a preliminary condition that made the latter interested in Nautes as a potential supplier. Moreover, the W.I.N.D.S. project was a catalyzer of relationships for at least two main reasons. First, thanks to this experience, iGuzzini had the chance to get to know about the scientific background and genesis of Nautes. Second, Professor De Grassi, formal supervisor of W.I.N.D.S. project, endorsed the Nautes team, based on his direct work experience with their members. Moreover, the role played by De Grassi was essential in putting the two companies, Nautes and iGuzzini, in contact with each other. Not only, but as stated by Professor Iacobucci, “the role of De Grassi was essential to guarantee the rise of the trust needed to obtain the first order by a worldwide player in the international market of lighting design”.

The business relationship between iGuzzini and Nautes turned out to be fruitful since the very beginning. iGuzzini found a reliable IT partner who was suitable to provide knowledge management solutions, while Nautes got an excellent chance of selling the new technology immediately, which helped Nautes overcome the problem that the founder Gialletti did not have at that time experience in commercializing the technology. While some technical issues related to the complexity of the project were handled by Nautes while the interaction was developing over time, Gialletti negotiated several times the price of the technology to be provided with iGuzzini. But since the technology was offered to iGuzzini at a very convenient price, no particular problems arose. Gialletti was in fact strongly willing to establish the business relationship with iGuzzini.

During 2002, the commitment in the business relationship by iGuzzini grew stronger in response to the high quality of the technology offered, as well as to the strong commitment demonstrated
by Nautes. Therefore, iGuzzini decided to buy a stake corresponding to 30% of Nautes’ capital. Thanks to this operation, iGuzzini also acquired a place as board member of Nautes.

For six years, between 2002 and 2008, iGuzzini represented the main, indeed dominant, customer of Nautes’. With a total turnover over the years of nearly Euro 5 million, iGuzzini regularly accounted for about 80% of Nautes turnover. Other minor deals were closed with other clients, but iGuzzini influenced always these new business relationships: moreover, these “minor” clients were often business partners of iGuzzini themselves.

Over time Gialletti and his colleagues realized that the business relationship with iGuzzini could lead to potential issues. Although iGuzzini provided most of the turnover, they often constrained Nautes in respect to the development of new customer relationships. In the long term, Nautes might incur also in serious problems, such as becoming incapable of developing new products. Between 2008 and 2009 some tensions between Nautes and iGuzzini emerged. One reason, as already mentioned above, dealt with the clear aim of iGuzzini to influence Nautes’ commercial activities. In several occasions, iGuzzini’s management tried to “obstacle” attempts made by Nautes to develop customer relationships, while Gialletti was clearly focused on pushing its technology on the market by offering it to other potential customers.

“RECOVERING” FROM iGUZZINI: THE DEVELOPMENT OF NEW CUSTOMER RELATIONSHIPS

As a result of these tensions, in 2009, iGuzzini sold their shares and exited from Nautes, stopping at the same time to buy from Nautes. This caused of course a major financial problem: Nautes’ turnover was dramatically reduced, and in order to avoid a lethal crisis Nautes had to start searching immediately for new potential customers. The importance of the business relationship with iGuzzini has been well pointed by Mr. Gialletti: “The business relationship with iGuzzini S.p.a. was essential for our development. Their international and complex profile, stressed for continuous improvement of our software, and gave us the chance of learning from the best players, not only regarding products, but also managerial practices”.

iGuzzini had provided to Nautes commercial opportunities and was fully engaged in supporting Nautes’ R&D activities. It was clear that iGuzzini considered Nautes as an its own “spin-off” more than a university spin-off.

In order to create and develop new customer relationships, during 2009, Nautes engineers had to redesign the software originally developed for iGuzzini. The new product design was market-driven, meaning that Nautes, for the first time since its birth, applied a systematic review of potential customers’ needs and competitors’ offering. Because of this analysis, a completely re-designed software interface was introduced, and the entire software suite was made suitable to be used on the web through browsers or mobile devices.

In one interview Gialletti stated: “A high-tech new venture, especially when it’s an academic spin-off, is based on a big innovation. These kinds of companies are often mostly involved in
technical details of product development and they risk neglect the importance of understanding deep needs of customers and competitors offering. After iGuzzini’s exit, we had to systematically identify our unique selling proposition, while creating a sustainable business model and reinforcing our business relationships.”

At the same time, all the sales activities were re-organized: the management team focused on the creation of relationships with new customers. Once again, UNIVPM played the important role of “facilitator”: during official events, workshops and conferences, Nautes was mentioned as a successful experience of knowledge transfer from university to business. In the meantime, Nautes developed its organization by hiring two salesmen. Furthermore, Nautes created commercial partnerships with companies that were operating in complementary sectors, such as organizational consultancy, communication and IT. Already in 2009 Nautes developed and then sold a customized solution for learning management to Che Banca: this new customer balanced the losses caused by iGuzzini’s exit, and avoided a huge reduction of sales.

PRELIMINARY FINDINGS AND DISCUSSION

Our discussion now addresses our research question, namely how is the development of start-ups affected by early and key relationships?

The origins of Nautes have to be traced back some years before 2001, when the founders took part in the W.I.N.D.S. project. W.I.N.D.S. was relevant for at least two reasons. First, it allowed the founders to be aware of the opportunities of developing a new and innovative web-solution. Second, that project was the spark for understanding the enticing opportunity of making business out of the software. Once Nautes was established in 2001 as a university start-up, a first problem was to find a suitable customer to whom selling the technology. What is clear is that Nautes had more or less an already product to be sold, therefore it was almost ready to commercialize it. But, how to get the customer was an open issue, and here come into the picture the key relationships in focus in our research question. To be able to answer our research question, we have to identify how and to what extent UNIVPM and iGuzzini influenced the development of Nautes.

A first important observation is that UNIVPM played a crucial role in supporting Nautes although its financial support was minimal. In this case the University contributed in giving to the start-up a different support. UNIVPM had already a significant relation with iGuzzini and acted as a mediator in enabling the establishment of the business relationship between the two companies: Nautes did not do business before with iGuzzini. It is quite clear that UNIVPM influenced positively the development of the new venture by providing a suitable commercial opportunity. Such an impact role on the development of a university spin-off company corresponds to the mediating or network role function taken by incubators (Bergek & Norrman, 2008: 24-5; Ahmad & Ingle, 2011).

Looking instead at the business relationship between Nautes and iGuzzini, the picture is
different. Clearly, the development of Nautes has been affected in a positive manner by iGuzzini, at least until a certain point in time. Nautes’ growth has been possible by making money out of the first deal with iGuzzini. Also, Nautes learned how to “negotiate”, to a great extent, by interacting with iGuzzini although Nautes is a very small firm compared to iGuzzini. This situation has many disadvantages such as reduced bargaining power. However, on the other side, it also provides an important opportunity to connect (and then exploit) significant resources held by iGuzzini once the relationship was established.

But as soon as the key and early relationship with iGuzzini developed over time, tensions and conflicts showed up. The relationship with iGuzzini became a clear problem. iGuzzini, just after the decision to increase their control of the relationship with Nautes (by acquiring Nautes’ shares), limited the freedom of Nautes to expand their network horizon (Ford et al., 2011) by finding new customers. Without any doubts Nautes has made business out of the relationship with iGuzzini, but iGuzzini acted from a certain point on more as a hindrance to the development of Nautes. Therefore, the new venture rather soon had to take measures to leave this key relationship and had to reorganize also its internal resources in order to be able to grow by finding new customers. To sum up, the development of Nautes has been positively as well as negatively affected by the key relationship with its first main customer.

CONCLUDING REMARKS

This study adopted the IMP perspective to investigate the impact of initial and key relationships on the development of new ventures, focusing empirically on an Italian university start-up which soon after its birth commercialized a knowledge management IT software. This case study has showed interesting although preliminary findings concerning how the new business venture has been affected by two main business relationships. One of the two business relationships, the one with the customer, turned out to exert a positive for a while, but afterwards it started blocking the company’s development. This dynamics witnesses what many IMP studies have showed in terms of “burden of relationships” (Håkansson and Snehota, 2002), but our contribution rests in showing that such burdens hold also for newly started companies, and hence relatively new relationships, rather than long-term, established and hence institutionalized relationships (Håkansson & Snehota, 1995: 10). The case suggests that next to age of a relationship also the power unbalance in a relationship connecting a small and new firm with an established and large one can be a source of problems, at least for the less powerful party.

On the other hand, the very same “burdening” relationship can also entail positive impacts for the small party, as we observed that Nautes has “learned” (e.g., negotiating and exploiting its technical knowledge) by interacting with the same counterparts. In some way, despite the tensions and the break caused by a troublesome relationship, the very same relationship can also prepare the ground for further developments of the new venture. There is, however, in the background also another relationship, which although probably not directly involved in daily
operations, can be activated when needed, namely the one with the “mother” university, which acts as a *bridge to other relationships*. Thus, the relationships with both UNIVPM and iGuzzini clearly have had consequences on how new business relationships have been sought for and developed by Nautes in order to overcome the crisis with iGuzzini. Therefore, both the learning process based on interactions and the dynamics of single relationships affect and shape the pattern of future business relationships.

To sum up, what we can learn from this case study is the importance of the initial and key business relationships in “shaping” the next development of new relationships, particularly when the actor has limited resources available and is new to a network. In line with Ford et al. (2011), the understanding of interactive behaviors in one or more business relationships represents an important element in explaining how other business relationships develop.

One managerial implication that stems from the case study is the importance of identifying possible factors that act to favor or hinder the development of specific relationships, but emerge in other relationships.
REFERENCES


