Strategic Use of Corporate Venturing

A Case Study Analysis

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I hereby declare that I have created this work completely on my own and used no other sources or tools than the ones listed, and that I have marked any citations accordingly.

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Abstract

Strategic cooperations with aspiring start-ups and self-grown, ambitious spin-offs play a keyrole in a modern innovation strategy. In the last 20 years a lot of different forms of corporate venturing have been investigated theoretically and especially since the late 90's a lot of companies jumped on the bandwagon of venturing. Unfortunately, a lot of companys failed at using this strategic tool despite several theoretical guidelines and so called best practices from the field.

In this thesis we evaluated one of these guidelines from Miles and Covin [2002] based on a broad literature review and personal interviews with executives from four corporate venturing units representing four different industry branches. We come to the conclusion that Miles' framework is not the right tool for an executive deciding whether to implement corporate venturing in his company. Using our interview data, we were able to find success factors and best practices for corporate venturing. The combination of existing theoretical knowledge and practical data allowed us to give advice on which corporate venturing form and organizational structure is the best choice given the company's venturing objectives. Finally, we state hypotheses suggesting which kind of industry is most appropriate for specific venturing forms.

Überblick

Strategische Kooperation mit aufstrebenden Start-Ups und eigengeförderte Spin-offs spielen eine wesentliche Rolle in einer modernen Innovationsstrategie. In den letzten 20 Jahren wurden viele verschiedene Formen des Corporate Venturing theoretisch beleuchtet und insbesondere seit den späten 90ern von vielen Firmen in die Tat umgesetzt. Unglücklicherweise ist ein Großteil dieser Vorhaben fehlgeschlagen, obwohl viele strategische Rahmenwerke als auch sogenannte Best Practices bekannt waren.

Im Rahmen dieser Diplomarbeit haben wir das Rahmenwerk von Miles and Covin [2002] basierend auf einer breiten Literaturrecherche und praktischen Daten untersucht. Dazu haben wir persönliche Interviews mit Führungspersonal von vier großen deutschen Corporate Venturing Einheiten aus unterschiedlichen Industrien durchgeführt. Wir kommen zum Schluss, dass das Rahmenwerk von Miles nicht geeignet ist das Top-Management bei der Planung eines Corporate Venturing Vorhabens zu unterstützen. Dank unserer Interviews konnten wir danach Erfolgsfaktoren und Best Practices zusammentragen. Mit Hilfe der vorhandenen theoretischen Erkenntnisse aus der Literatur und den Einblicken in die Corporate Venturing Einheiten haben wir danach sinnvolle Kombination von Venturingzielen und Venturingformen identifiziert. Abschliessend haben wir Hypothesen aufgestellt, an Hand deren man für Venturingformen besonders passende Industrien charakterisieren kann. Diese werden wir in der Zukunft mit Hilfe einer quantitativen Studie endgültig verifizieren.

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Chapter 1

Introduction

Due to dynamic changes internal and external to a company, it becomes more and more important to permanently adapt strategically and structurally. Stringent objectives, strategies, meaningful innovations, and more than just operative management are a necessity. Dramatically reducing innovation and product life cycles force companies to invest scarce resources not only for their current operational costs, but for their future. Especially well-established corporations have lost their entrepreneurial spirit and lack innovativeness. To maintain the innovative and competitive advantage a well-thought and well-pursued innovation and investment strategy is more important than ever. Corporate venturing can be a meaningful part of such an investment strategy.

Direct corporate venture investments help in particalur to form and and to exploit synergies. Typical weaknesses of young companies and grown corporations can be compensated by the strengths of the other one and both companies achieve a win-win situation. Despite financial reasoning, the value added in terms of “window on technology” through venture investments is more often the main objective of corporate venturing activities. Other objectives include market nurturing through investments into the company’s customers and a more vivid and innovative business environment, which can bring back the company’s entrepreneurial spirit.

Although a lot of research has been done in the area of corporate venturing and a lot of guidelines exist, these guidelines only take few framework conditions into account and especially the venture's industry is never considered. This diploma thesis is therefore exploring the success factors and strategies for corporate venturing in general at first, followed by a more industry-based view. At first, a strategical framework that advises certain strategies based on the company's culture and its venturing objectives is examined using data from our survey of several German corporate venture units and relevant literature from the venturing community. Based on these findings, we depict effective ways of doing corporate venturing, sum up factors that can hamper successful use of corporate venturing and finally give suggestions on appropriate industries.

1.1 Overview

We first define fundamental terms and give an overview of the current state of research in Chapter 2 regarding benefits of corporate venturing for an entrepreneur and for the investing company. Afterwards, existing strategic guidelines and frameworks are presented, followed by the framework of interest. This framework is evaluated using the existing literature and an interim result is given. In Chapter 3 the theoretical base of our multiparty survey and the resulting questionnaire is presented. Our interviews with the corporate venture unit executives and the implications to the validity of the framework follow. Using empirical data and findings from current reserach, we then give a final valuation of the applicability of the framework in Chapter 4 and state success factors, strategies for corporate venturing and suggestions for adequate industries where corporate venturing works best.

Chapter 2

Theoretical Background

"Learn all you can from the mistakes of others. You won't have time to make them all yourself."

–Alfred Sheinwold

In the following sections, we will give an overview of literature from the field of corporate venturing relevant to this thesis. Potentially relevant literature was identified through a combination of keyword based searches and manual searches of journals known to publish articles relevant to the research topic (e.g., Entrepreneurship Theory and Practice, Journal of Business Venturing, and Strategic Management Journal). As suggested by [Cooper, 1998], we followed relevant references to older articles and for outstanding articles we also searched for later articles of the authors, yielding a broad spectrum of literature. Because general entrepreneurship is more studied, we compare the corporate venturing process and its participants to the well-understood general venturing process.

2.1 Definitions

Although corporate venturing has been researched since the early 80s the associated terms are ambiguous. Sharma and Chrisman [1999] therefore took a look at the different term interpretations and tried to find well-suiting and unambiguous definitions. A lot of authors have adopted these definitions since then and we are going to do so as well.

Foundation for all other definitions in the domain of corporate venturing are entrepreneur and entrepreneurship:

- *Entrepreneuership* encompasses acts of organizational creation, renewal, or innovation that occur within or outside an existing organization
- *Entrepreneurs* are individuals or groups of individuals, acting independently or as part of a corporate system, who create new organizations, or instigate renewal or innvation within an existing organization

Based on these two we now constrain these definitions to obtain further terms.

2.2 Corporate Venturing Benefits for an Entrepreneur

To point out the differences between classic "garage" entrepreneurship and corporate venturing we first take a look at the entrepreneurs.

Greene et al. [1999] presented their studies on the role of the venture champion in corporate venturing. Their understanding of corporate venturing is what we earlier stated as internal corporate venturing (see Table 2.1), i.e., a venture founded and controlled by a corporation, which resides within the organizational domain of the corporation. They define the corporate venture champion as "the individual who is responsible for

Terms	Unique Criteria
Entrepreneurship	organizational creation, renewal, or innovation
Independent entrepreneurship	organizational creation, + by individual(s) not associated with an existing corporate entity
Corporate entrepreneurship	organizational creation, + instigated by an existing organizational entity
Corporate venturing	organizational creation, + instigated by an existing organizational entity + treated as new businesses
External corporate venturing	organizational creation, + instigated by an existing organizational entity + treated as new businesses + resides outside of an existing organizational domain
Internal corporate venturing	organizational creation, + instigated by an existing organizational entity + treated as new businesses + resides within existing organizational domain

Table 2.1: Unique Features of Entrepreneurship Terminology, from [Sharma and Chrisman, 1999]

the entrepreneurial process of a particular nascent business entity within the organization" [Greene et al., 1999]. The role of the venture champion is to identify, assemble and deploy the corporate's resources to start the new corporate venture. The venture champion is seen as a corporate resource. His goals are similar to the ones of an independent entrepreneur, but he works in a different context and has to behave differently.

Three contextual conditions – time, success hurdles, and boundaries – are helpful to point out the differences between an independent and a corporate entrepreneur. Corporate ventures take twice as long to reach profitability as do independent [Starr and Macmillan, 1990]. Greene argues that the independent entrepreneur has less financial support and his own life is at stake. The independent entrepreneur is therefore more focused on reaching profitability than the venture champion who has better financial support from the corporation and a monthly paycheck.

Both entrepreneurs need to sell their businessplan to receive funding, but in case of the venture champion he will also have to argue for a fit between venture and corporation strategy [Venkataraman et al., 1992]. The independent entrepreneur does not need to deal with short term integration or cross-fertilization of the venture and the corporation [Ellis and Taylor, 1987].´ The third point is the mere existance of structures, policies, management styles, etc. in the case of corporate venturing. These boundaries can guide the venture, but it always limits the freedom of the venture champion.

From a resource-based view, Greene lists several differences in the resources that are available to an independent entrepreneur compared to the venture champion. The different kinds of resources are human capital, social capital, organizational capital, physical capital and as stated earlier financial capital. In the first resource field we see that Typical, i.e., independent, innovative start-up entrepreneurs are undergraduate students with a favor for engineering [Roberts, 1991]. However, the typical venture champion will be on a higher management level, which requires the posession of an MBA. Knight [1989] supports these statements in his comparison of independent and corporate entrepreneurs. The independent entrepreneuer has higher technical/industry experience and less evolved management skills, whereas the corporate entrepreneur has a background of some years in management, but is lacking latest technical knowledge.

The second resource is the social capital. Especially the social network of an entrepreneur is important for the venture's success [Davidsson and Honig, 2003]. The social network of an independent entrepreneur will mostly be based on his family and friends [Greene and Brown, 1997]. The venture champion has advantages due to the contacts provided by the corporation. He gains insight in the corporate capabilities and skills, well-proven strategies, and can learn from experienced managers in the corporation of ways to deal with the market [Burgelman, 1984].

As a third resource Greene lists organizational capital that consists of organizational relationships, organizational members excluding the founder, organizational information and knowledge as well as combinations of each of these [Tomer, 1987]. During the start-up process the independent entrepreneur has little to no organizational capital, whereas the venture champion may be able to obtain organizational capital from the corporation. Corporations that value change and innovation will be more willing to provide resources to the venture [Donald F. Kuratko, 1990]. The drawback is that the resources (like personnel) may not fit the needs of the ventures, but are taken simply because they are there [Starr and Macmillan, 1990]. The same is true for the physical capital which Dollinger [2003] describes as tangible goods needed to operate business and include raw materials, plant, property, and equipment. Like with organizational capital the venture champion may be able to obtain resources from the corporate, especially if the venture's resource requirements and strategy match the corporate's [Collis and Montgomery, 1995].

The last kind of resources are financial. These include money, assets, and stocks [Dollinger, 2003]. Although they are crucial for the venture outcome [Bruno, 1982], they are limited during the start-up phase. The venture champion has less freedom in choosing its funding partners, but he is much more likely to get funding – from his corporation.

As we can see, both entrepreneurs face the problem of starting with little resources and the need for fast growth, due to their personal financial needs or the corporation's demand. The venture champion is much more likely to obtain support than the independent entrepreneur, but he will very unlikely have the independent's freedom of decision.

A more recent study from Maula et al. [2005] about the difference between independent and corporate venture capitalists presents other facts. Their survey of entrepreneurs states that independent venture capitalists are strong at raising additional finance, recruiting key employees, and professionalization of the organization – steps necessary in the very beginning of the venture. The corporate venture capitalists instead help the venture to build commercial creditability and capacity, and provide technological support – more growth-oriented strengths. Their guess is that both sources of advice and support should be used when possible.

As we can see there is still no clear winner in the game of corporate vs. independent entrepreneurship. We therefore now take a look at the other side, i.e., the corporation, and the benefits it receives from supporting a venture.

2.3 Corporate Venturing Benefits for a Corporation

We saw possible benefits for an entrepreneur to found his start-up with the help of a corporation. We now take a look at benefits of corporate venturing for the corporation.

As the latest numbers from the European Venture Capital Association indicate, one benefit is high return on investment:
“ Strong 1-year and long-term annualised net returns of 36.1% and 10.8%, respectively, with top quarter private equity funds returning a hefty 23.3%. Both venture and buyout produced strong top quarter internal rate of returns (IRR) of 17.4% and 31.0% respectively.” [EVCA, 2006]
Besides these financial benefits, there are several other, more strategic, benefits to receive with corporate venturing. Winters and Murfin [1988] list a number of benefits and argue that “acquisition is the most perceived benefit”. Their whole list of benefits is as follows:

- Acquisitions
- Technology licenses
- Product marketing rights
- Window on new technology
- Internal venturing / Intrapreneurship
- Contacts

They argue that investing in a venture fund or venture company may help to identify better suiting acquisition targets. The corporation simply examines the ventures during their start-up process and invests only in ventures promising a synergistic fit. Acquisitions of really promising ventures unfortunately will not be cheap because professional venture capitalists want to maximize their return on investment and therefore will not sell shares at less than fair value.

Another benefit of contacts to highly innovative startups is to acquire licenses of promising technology in exchange for venture capital. This can help corporations that are struggling to bring out new and innovative products to compete in their market.
Even if the venture is not willing to license (and maybe lose) its technology it can sell the marketing rights to the corporation. The venture benefits from the much greater marketing experience and contacts of the corporation, and the corporation can offer new products to its customers.
Especially in technology-oriented markets, it makes sense to use corporate venturing as a window on technology. Winters and Murfin [1988] mention several examples where the detailed knowledge of venture company activities obtained by involvement in venture capital has influenced the strategic planning of major corporations.

Another possibility for corporate venturing is to support the founding of ventures from within the corporation, known as internal (corporate) venturing or intrapreneurship. There may be people within the corporation that have significant entrepreneurial skills, but have doubts to leave the company and found the venture on their own.
And finally, due to the mere activity in corporate venturing, the company will get contacts to "technology-based investment bankers, entrepreneurs, scientists, deal finders and makers, consultants and the whole network of people who drive the venture capital process" [Winters and Murfin, 1988]. The corporation gets in touch with the people during their usual operation, and these contacts may result in businnes opportunities, which would probably not have emerged in any other way. In a survey by Sykes [1990] this list gets support. Identification of new business opportunities and development of business relationships are on top of the corporate venture manager's list of strategic objectives.

In a later research by Dushnitsky [2004], we see whether these goals could be achieved. He presents his findings on the limitations to the knowledge transfer from venture to corporation. He solely observes external venturing used in the "classical" flavor as an instrument for external knowledge acquisition. His analysis is based on a sample of 258 entrepreneurial ventures and 74 corporate venture capitalists. Using this data he estimates the probability of an investment relationship between any entrepreneur – corporate venture capitalist pair. His analysis suggests that "the probability decreases if the [venture's] products are potential *substitutes* and increases when the products of the two are *comple-*

mentary" [Dushnitsky, 2004]. The probability decreases even more when the corporate venturing unit is organized under a tight structure.
He argues that corporate venture capital is a paradoxon: "The actions which aid a firm to assess and benefit from corporate venturing inhibit an investment relationship with an innovative venture." His reasoning is that, e.g., corporations that use corporate venturing as a window on novel and disrupting technology will unlikely get their hands on this technology because entrepreneurs often dislike to disclose their intellectual property early on. Without being able to correctly evaluate the technology, corporations will not invest in the venture. He concludes that mostly complementary technologies will be acquired throught corporate venturing.

2.4 Strategic Guidelines and Frameworks

As one of our goals is the search for best practices in corporate venturing it makes sense to compile the current state of research. We therefore take a look at recommendations and strategic frameworks on how to implement corporate venturing to fully achieve the chosen goals.

Winters and Murfin [1988] propose five ways to invest in ventures:

1. Invest in a venture fund as one of several venture partners
2. Establish an own venture capital fund as a subsidiary, that acts like a professional venture fund, which performs well if you have only financial goals in mind
3. Establish a venture development subsidiary to create new business opportunities through venture capital investing, technology transfer, or acquisitions
4. Direct investments into ventures without a special entity
5. Internal venturing, where an intrapreneur can utilize corporate technology and resources

Winters and Murfin [1988] compared several corporations and how successfully they followed which of these five strategies. The conclusion is that the corporation has to define clearly what its financial and/or strategic goals are ([Winters and Murfin, 1988], [Sykes, 1990]). They argue that the main determinants of successful corporate venturing are "organizational structure, creation of large, quality deal stream, and the involvement of high-quality people at the venture capital/corporate interface" [Winters and Murfin, 1988].

Although Sykes [1990] only evaluated external venturing they agree with the results. Their management guideline is to produce a mutually, i.e., supportive environment, where the interests of both participants are recognized. To improve the relationship the corporation can:

- Communicate awareness of each other's specific needs and interests between the individuals concerned,
- balance the needs of one party with the motivation to fill those needs by the other party, and
- build a long-term relationship.

Despite the more operative guidelines, like caring for the business partners, Miles and Covin [2002] proposed a strategical framework that gives strategic guidelines when to use which kind of venturing. We will skip the introduction of this framework for now. We will present it in great detail later in section 2.5 to examine its applicability in our survey in Chapter 3.

Chesbrough [2002] defined a framework for external corporate venturing. His definition excludes investments made through an external fund managed by a third party. His framework distinguishes corporate venturing activities along two dimensions – the venturing objectives and the degree to which the corporation and the venture is linked.
One the one hand we have strategic investments: "A company making a strategic investment seeks to identify and exploit synergies between itself and a new venture" [Chesbrough, 2002]. On the other hand there are investments with only financial goals. Finally, the venture can be loosely or tightly linked to the company. All in all this means that

corporation's venturing activities fall into four different fields (see Figure 2.1).

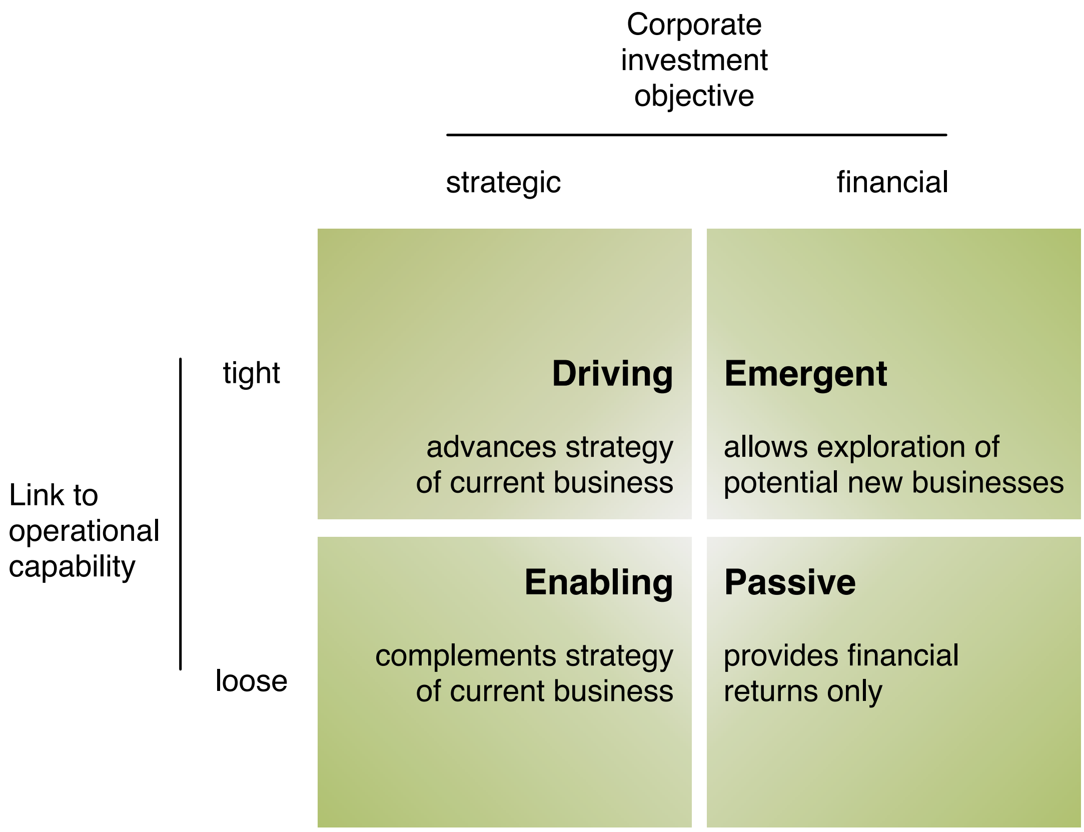

Figure 2.1: Mapping the Corporate Venture Capital Investments, ©2002 Harvard Business Review

Chesbrough names the types of investments that are characterized by a strategic rationale and tight links between start-up and corporation as *driving* investments. The tight coupling suites these investments to sustain the corporation's current strategy. Hence, they will be unlikely to help the corporation to pursue disruptive technologies or to support new business opportunities that are way beyond the company's current focus.
Using a more loose coupling Chesbrough comes to *enabling* investments. One possible use is to stimulate the development of its ecosystem. The company can invest in its suppliers, customers, or third-party developers to increase the demand of its products. The drawback is that only companies that have a large market share gain big benefits because

all competitors will also benefit from the growth of the market.
Even if an investment does currently not have a strategic benefit, it can make sense to pursue this as long as the investment fits the financial criteria. If it is tightly coupled Chesbrough uses the term *emergent* investments. While the immediate benefit is financial, the ultimate return may result from emerging strategic options. The major danger is that the company pursues weakly performing investments because it hopes that it eventually will be of strategic value. One way to achieve financial discipline is to partner with private venture capital funds. They will not support a bad investment for a longer time.
Finally, Chesbrough comes to loose coupled investments that only have financial goals. These *passive* investments are only another option in the traditional stocks and bonds market and will very unlikely yield strategic returns.

Donahoe et al. [2002] present a study from Bain & Co. They analyzed over 2000 companies with annual revenues of $ 500 million or more in the United States, Canada, Britain, France, Germany, Italy, and Japan. Only 14 % of these companies had achieved sustained, profitable growth over a decade. They defined *sustained* as real year-by-year revenue and *profitable growth* as over 5.5 % less the capital costs. They argue that these high-performers have a strong (or multiple) core business(es), and only those should think of capital venturing. The reasoning for this is that, except for some lucky ones, the companies who already had problems with their weak core business were unable to perform better and only got distracted by their corporate venturing ambitions. They state three strategies based on a strong core:

- Broaden or deepen the core
- Reinforce the core business by expanding into closely related businesses
- Explore new business models without distracting the core team

These strategies should be employed by the respective teams. This means venture ideas close to the business' core should be managed by the new business group and ideas that constitute to new business opportunities should be managed by the ventures group. Finally ventures that are supported or even bought for licensing purposes should be controlled by the intellectual property division which often resides close to research and development. For the venture itself the following advice is given: "If the idea is askew to the core business [..] – or is a defensive move that would cannibalize the core – it's best built outside the company to limit distraction, or worse, sabotage" [Donahoe et al., 2002].

Campbell et al. [2003] conducted interviews during 2001 and 2002 with more than 100 executives involved in corporate venturing. They could identify five objectives that were common among the examined venture units. As we can see in Figure 2.2 the objectives could not always be reached; they also suggest focussing on one objective. Contrary to numerous advices from other authors (see [Kanter, 1989], [Mehrdad Baghai, 2000], [Hamel, 2000], [Richard Leifer, 2000], [Landry, 2001]), their research does not suggest that incubating a portfolio or promising new venture can lead to the creation of substantial new businesses and growth.
We now present the objectives in detail and Campbell et. al's arguments for the different success rates.
The first presented objective is *ecosystem venturing*. The company hopes to improve the vibrancy of its ecosystem by venture capital support to entrepreneurs in the ecosystem. Campbell et al. argue that this makes sense as long as the business really depends on the vibrancy of its ecosystem and there is not already great support from other venture capitalists. Therefore, this kind of venturing is best applied to very new areas, where other venture capitalists could not set a foot in.
The most common pitfall for ecosystem venturing is to lose focus. Many interesting business plans will be examined by the venturing unit and it is very tempting to support more promising projects than would be necessary. To avoid this problem, Campbell et al. suggest that the objectives are clearly defined and are strictly followed. This includes the sectors in which the venturing unit is investing and the relative balance between strategic and financial value. For the financial aspect, performance measures can be used. Another idea, that Campbell et al. suggest, is to give existing business units a significant level of influence over the new venture.
The next objective is *innovation venturing*. The main purpose is to supplement the corporation's research and development unit. This venturing form is typically set up as a separate business unit. The unit should reward people for value created, invest in many projects to diversify its portfolio and also start joint ventures to reach its goals. Campbell et al. argue that "Innovation venturing is appropriate when an existing function is

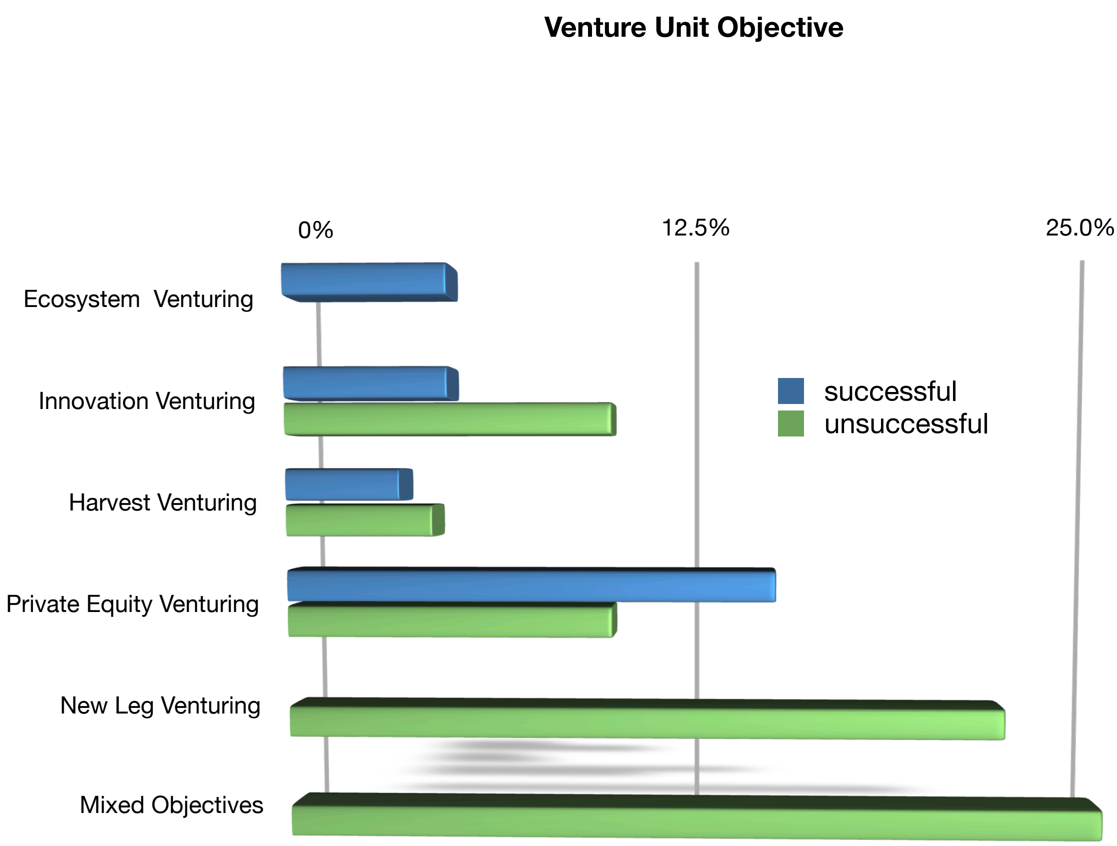

Figure 2.2: The unit was deemed successful or not on the basis of its financial performance, strategic achievements, the comments of the managers interviewed and the research team, ©2003 MIT Sloan Management Review

underperforming because there is insufficient energy directed toward commercially oriented innovation and creativity" [Campbell et al., 2003]. They also mention the chance that, given the right conditions like financial support for entrepreneurial projects, managers with entrepreneurial instincts will likely take more risks and invest more energy in developing new technologies or new ways of working.

The common pitfall in innovation venturing is to see it as an panacea for lack of entrepreneurial spirit in the whole company and not just as a tool to improve the effectiveness of the R&D unit. Campbell et al. suggest that the ventures should be governed by the R&D unit and managed by a small, senior-level team with its own operating budget. But it still has to be different enough from the core functions to yield different, i.e. innovative

and therefore better, technologies and products.
As a third objective Campbell et al. list *harvest venturing*. The idea is to convert existing corporate resources into commercial ventures and then into cash. Typical resources include technology, brands, managerial skills and fixed assets. Harvest venturing makes most sense when the following three conditions are met. First, there has to be some resources that are not fully exploited. Second, exploitation of these resources must require the funding of a new business or at least selling or licensing of the resource. Finally, the resource must not be needed for other business processes.
Although Campbell et al. found some successful use of harvest venturing their research suggest that "harvest venture units are frequently unsuccesful because they often attempt to turn spare resources into significant new revenue streams" [Campbell et al., 2003]. Managers often try to surpass the initial goal of just harvesting resources by creating new growth opportunities – new legs – for the parent company. Unfortunately different managerial skills are required for such an undertaking and the "new leg venturing" idea itself is flawed as stated earlier. The whole harvest venturing should therefore stick to a very cash-driven business model and forget about potential growth opportunities.
Private equity venturing is the fourth objective a corporation can aim for. The corporation invests in startup businesses as it were an independent venture capitalist with the usual financial goals. Maula and Murray [2002] found out that the corporate venture capitalists tend to perform better – a possible reason is that investments by a major corporation lends creditability to the venture. The conclusion of this would be that every company with a good corporate brand should perform well doing private equity venturing, but there are some prerequisites to this as Campbell et al. [2003] argue. The company needs a better access to a flow of deals than its competing independent venture capitalists. The rare examples of this situation that Campbell et al. found were companies that were able to leverage their position in the marketplace or a proprietary technology. In other cases the companies were hindered by the learning process while entering the private equity market and could not compete with the experienced independent venture capitalists which only aim for financial goals.
The main pitfall in private equity venturing is that managers enter markets too late. They are attracted to successfull markets where the real financial opportunities are already taken by other venture capitalists. They also excuse supporting poor projects for strategical reasons and stick too long by them. Campbell et al. suggest that in most cases the best bet is

to stay out of private equity venturing and let others do the business that have the necessary skills and experience. If the company believes it has to do private equity venturing, it should be set up in a fully separated company with an own closed-end fund with a maximum investment period of not more than five years. This company should be staffed with seasoned managers from the private equity industry and be rewarded like by an independet venture capitalist – based on return on investment of their projects.
The last objective is *new leg venturing*. Many companies with underperforming core businesses seek for new growth opportunities not only adjacent to their core, but more widely using new leg venturing ([Hamel, 2000] and [Markides, 1999]). They think of it as a low-cost way of experimenting and trying out new businesses. The study by Campbell et al. does not give any example of a success in this kind of venturing and most companies have stopped their new leg venturing activities. One has to mention that their criteria for a successfull venturing unit was very demanding: "We were looking for a unit that had spawned at least one significant business for the parent company (20% of sales or $ 1 billion in value)" [Campbell et al., 2003]. Campbell et al. give several reasons for this result. First, if the company is thinking of new leg venturing, its core business is flawed and the adjacent businesses are not promising – it is already in a bad situation to begin with. Second, the time it takes to develop a succesfull new venture is longer than the usual business cycle. This causes managers to quit supporting the venture too early if it is not successful after a short span. If it is successful or at least promising, it will want to withdraw resources from the core business, thereby conflicting with other projects. Finally, early-stage venturing is a tough environment even for professionals that do nothing besides early-stage venturing – "Companies that enter this tough environment without some advantage cannot expect to beat the odds " [Campbell et al., 2003]
All in all, Campbell et al. suggest to choose only one form of corporate venturing, state clear goals, and then follow these strictly. Then there are good chances for a success.

Birkinshaw and Hill [2003] did a survey of 95 corporate venture units to find out whether behaving like an independent venture capitalist is a good idea for corporate venture capitalists. They identified four typical charecteristics for an independent venture capitalists from the literature:

1. Substantial autonomy over investment decisions

2. The use of high-powered profit-sharing incentives
3. The practice of syndicating investment opportunities
4. Active involvement in the strategic management of portfolio firms

They evaluated the venturing units according to their performance and the presence of these characteristics. They could not validate their thesis which stated that doing venturing like independent venture capitalists improves performance: “ Specifically, the highly autonomous fund structure and equity-based incentives of independent venture capitalists appear to have low efficacy in corporate venturing environments. [...] Adopting syndication practices and maintaining high involvement in the venture capitalists community appear, however, to hold potential for corporate venture units in achieving strategic, investment management and productivity objectives” [Birkinshaw and Hill, 2003]. Considering the already mentioned literature, we agree with their suggestion that further research should distinguish between internal and external venturing and find out which kind benefits more of the independent venture capitalist’s architecture and management style.

Markham et al. [2005] present their work on the role external investments can play in bringing new technologies into the corporation using direct investing in a company and participating in venture capital funds. This means they do not consider internal corporate venturing. Like every other strategy, corporate venturing needs a focussed and coherent strategy: “A corporation needs to be clear on how it plans to create, capture and deliver value. Corporate venturing can deliver on all three, but probably not with only one CV approach.” [Markham et al., 2005]
They do not only list the usual reasons for corporate venturing like technology intelligence, ecosystem development, growth of existing businesses, entering new businesses, and so on (also mentioned among others by Donahoe et al. [2001] and Fellers [2002]). They also give tactical advices how to start venturing given the companies principal objective. This could be:

- Acquiring a window on technology
- Support and growth of the business

- Exploiting the expertise of (classic) venture capitalists

To actually do corporate venturing, a manifold of design decisions have to be made. To compare the different designs and their potential outcome, Markham et al. [2005] suggest several metrices (cf. Table 2.2). These metrices can also be used to compare planned and actual success.

Consolidated financial metrices	– Portfolio internal rate of return – Number of investments begun – Number exited – Capital deployed
Individual investment metrices	– Fit with strategic objectives – Milestones defined and their status – Cash flow history – Revised projections for additional investment – Probability of success
Strategic metrices	– Number of contacts between corporate personnel (outside the CV group) and portfolio company or venture capitalist – Number of new customer/market/technology contacts made via investment – Breadth of portfolio and alignment of portfolio with strategy
Process metrices	– Personnel development – Use of project management tools – Quality of communications with key stakeholders – Time necessary to reach investment decisions

Table 2.2: Corporate Venturing Metrices, ©2005 Research Technology Management

With the help of these metrices, managers can plan a corporate venturing program following the checklist from Markham et al. [2005]. This list includes questions regarding whether to invest internal or external, invest in a fund or company, minority or majority investment, risk tolerance, exit scenario, organization structure, strategy around intellectual property, incentives for the people involved, and much more.

At the end Markham et al. [2005] show what they found out in their workshops to be the major causes of corporate venturing program failure:

- Unrealistic financial expectations on timing and level of returns – inability to realize venture capitalist-type financial returns
- Inability of purpose and staff
- Failure to align venture's objectives with parent company, allowing ownership and control issues to get tangle, and making the wrong alliances

Especially to prevent the last point, it is "important for the two parties to reach agreement on expectations prior to the start-up getting its money. This is the time when the investing corporation has the most leverage." [Markham et al., 2005]
All in all they argue that the main challenge lies in matching the possibilities of corporate venturing in general with the company's specific requirements. This is especially true for the decision whether to directly invest in start-ups or invest in a venture fund.

The already presented literature often listed benefits of a internal or external venturing. In a paper from Hill and Birkinshaw [2006], the combination of both venturing methods is discussed. They argue that "ambidextrous" – exploitative and explorative – corporate venture units do indeed exhibit better strategic performance.
They base their statement on survey data collected from 95 corporate venture units. The executives of the venture unit where asked to which extent they made use of existing capabilities of the parent company and to which extent they built new capabilities for the parent company. Two hypothesis where tested using the survey data :

1. The stronger their relationships between the venture unit and (a) senior executives in the parent firm, (b) other business units, and (c) the venture capital community, the higher the level of venturing ambidexterity.
2. The higher the level of venturing ambidexterity (i.e. the interaction of exploitation and exploration), the higher the strategic performance of the venture unit.

The test data is proving enough, i.e. the correlation coefficients are significant, to accept the hypothesises. Combining both hypothesises, they conclude that a high grade of communication and interaction between the parent firm, other business units, and the venture capital community improves the overall strategic performance of the venture unit.

The last work we present in this chapter is from Covin and Miles [2007]. In their article "Strategic use of corporate venturing", they describe several models that depict the ways in which corporate venturing and business strategy coexist as organizational phenomena. They justify their findings on a study of 15 Swedish, U.K.-, and U.S.-based corporations. They wanted to identify how companies are venturing in ways or through practices strategic to the parent company. They extracted five models how the business strategy and corporate venturing are connected in practice:

1. Corporate venturing and business strategy are weakly linked or unrelated
2. Business strategy drives corporate venturing
3. Corporate venturing drives business strategy
4. Corporate venturing and business strategy are reciprocally interdependent
5. Corporate venturing is the business strategy

In the first case, corporate venturing activities and business strategy are largely independent phenomena within a corporation, e.g. if the corporation's venturing activities were ignored or discouraged by the organization's top-management. The second possibility is that business strategy drives corporate venturing activities in a causal unidirectional relationship. The entrepreneurial activity could be influenced directly or indirectly through an intermediating variable, such as "organization structure, management style, the firm's reward system, [...] or the corporate culture" [Covin and Miles, 2007]. The third possibility is directly the other way round – corporate venturing drives business strategy. This means, the business strategy could emerge in response to the firm's autonomous venturing.

As a fourth model corporate venturing and business strategy are reciprocally interdependent, meaning causality flowing in both directions. The business strategy is "opportunistically redefined through the organization's willingness to acknowledge and encourage emergent, self-generating innovations [...] Strategy also specifies directions for potentially desirable future innovative activity, identifying domains in which the organization may achieve competitive advantage" [Covin and Miles, 2007].
A final, more theoretical, model is the case in which corporate venturing is the business strategy. In contrast to the similar model three (CV drives BS), the corporate venturing initiatives are those that respond to the innovation suggestions emerging from the firm's chosen operating environment. This should result in a more focussed strategy without the risk of diversifying into unrelated business domains.

During their interviews and workshops they found some "best-practices" many of the companies followed to strengthen their strategic position, fitting their CV-BS relationship model. These practices are summarized in their following propositions for successful strategic use of corporate venturing:

- Set formal corporate venturing objectives
- Recognize the role of corporate venturing in the realization of strategic intent
- Place greater weight on strategic fit or strategic logic than on financial analyses when evaluating corporate venturing initiatives
- Consciously assess the strategic relevance of corporate venturing initiatives.
- Treat corporate venturing as a learning tool
- Facilitate strategic conversations within your organizations
- Make external corporate venturing investments as complements to internal research and development (R&D) investments
- Engage in corporate venturing as means for appropriating greater value from your existing competencies

- Recognize and exploit the potential of corporate venturing initiatives to create new competitive games or new market spaces

2.5 A Managerial Decision Framework for Corporate Venturing

One of the goals of this thesis is to question the strategic framework developed by Miles and Covin [2002]. We now present this framework and try to evaluate its validity based on the just presented literature. The purpose of the framework is to suggest the best corporate venturing form given the corporations characteristics and its corporate venturing objectives. Miles and Covin [2002] developed it based on a field study with multiple extensive personal interviews and site visits with executives from 11 firms active in corporate venturing.
They classify corporations along three of the dimensions suggested by Jolly and Kayama [1990]:

- Need for control of venture
- Ability and willingness to commit resources to venturing
- Entrepreneurial risk accepting propensity

The second input parameter for the framework are the corporate venturing objectives. Miles and Covin picked the three most prominent from their field study:

- Organizational development and cultural change
- Strategic benefits and real option development
- Quick financial returns

Given these characteristics, the framework suggests one corporate venturing form. Miles and Covin differentiate corporate venturing along two dimensions. The first being the origin of the innovation: Internal, e.g. from the R&D department, or external, e.g. a start-up. The second is the kind of funding: Directly and solely from the company or indirectly as part of a greater venture fund. This results in four different corporate venture forms: Direct-internal, direct-external, indirect-internal, indirect-external. All in all, we get the suggestions as seen in Table 2.3.

	Corporate Venturing Objectives		
Corporate Management's Needs & Biases	**Organizational Development & Cultural Change**	**Strategic Benefits/ Real Option Development**	**Quick Financial Returns**
Need for Control of Venture			
- High	D-I	D-I,D-E	D-E
- Low	I-I	I-I,I-E	I-E
Ability & Willingness to Commit Resources to Venturing			
- High	D-I,I-I	D-I,D-E,I-I,I-E	D-E,I-E
- Low	I-I	I-I,I-E	I-E
Entrepreneurial Risk Accepting Propensity			
- High	D-I,I-I	D-I,D-E,I-I,I-E	D-E,I-E
- Low	None	I-I,I-E	I-E

D-I: Direct-internal venturing
D-E: Direct-external venturing
I-I: Indirect-internal venturing
I-E: Indirect-external venturing

Figure 2.3: Potentially appropriate forms of corporate venturing in various corporate contexts, ©2002 Entrepreneurship Theory and Practice

For example, a company with the need for high control over the venture and the primary goal of quick financial returns should directly invest in external start-ups.

2.5.1 Literature-based Evaluation of the Framework

After the introduction of the framework, we are now going to discuss it in light of some of the related work presented in Chapter 2. The article by Chesbrough [2002] that introduces a quartering of corporate venturing opportunities clearly falls into the direct-external investment category of Miles' framework. His four types of investments can all be found in Miles' framework:
Driving investments are comparable to corporations with high control over the venture and strategic goals, hence the framework's commendation to use direct-external investments. For Chesbrough's *enabling investments* that also have strategic orientation but a more loose coupling, the framework suggests a more indirect funding of the venture instead – indirect-external. This makes sense due to the following reason: If the business is complementary to the current business, i.e. not yet as relevant as the core business, it is a good idea to limit the venturing's downside risks by participating in a multiparty venture fund. The third option is *emergent investments*. They are also tightly coupled and primarily have financial goals, but will hopefully achieve strategic relevance. Here again the framework suggests direct-external investment as Chesbrough does. The last option is *passive investments* that have only financial goals and are loosely coupled to the corporation. Here again Miles suggests the use of indirect-external venturing instead of direct-external. We agree with him because trying to do "classic" venturing autonomously without expertise from other venture fund experts, which you would get from participating in a multiparty venture fund, is very unlikely to yield superior performance – a typical corporation is not a venture capitalist.

To compare the five main objectives of corporate venturing by Campbell et al. [2003] with Miles' objectives, we first try to map each of Campbell et. al's objectives to the framework and compare the suggested forms of corporate venturing.
Ecosystem venturing clearly falls into the strategic benefits category and due to their suggestions of "giving existing business units a significant level of influence over the unit" [Campbell et al., 2003] the control over the venture should be high. Consequently, the framework also suggests direct-internal or direct-external venturing. Although Campbell et al. suggest not to do *new leg venturing* at all, they would recommond a direct-external form of corporate venturing which is one of the options of the framework for real option

development.
Innovation venturing is similar to the organizational development category. Campbell et al. suggest that the ventures are governed by the function of wich its business idea is part of – the R&D department in most of the times. Depending of the needed control over the venture the framework commends direct-internal or direct-external venturing, just as Campbell et. al. *Private equity venturing* is identical to quick financial return in Miles' framework. Campbell et al. also suggest not to do this kind of venturing at all because it is very likely to fail in competing with the experienced venture capitalists. If one feels the need to do it, they suggest a restriction to an external venturing unit that is operated as a separate unit and behaves like other private equity companies. Miles agrees with the external view but also offers indirect-external as an option contrary to Campbell's strict direct-external approach. We tend to agree with Campbell et al.
The last form – *harvest venturing* – tries to generate cash from harvesting spare resources (intellectual property and technology) and has no long term strategic goals whatsoever. Although the primary goal is to generate cash, i.e. Miles' "quick financial return" category, the ideas obviously come frome inside of the corporation, which contradicts the framework's suggestion to use external venturing – a wrong suggestion.

Markham et al. [2005] presents strategies and tactics for external corporate venturing with primarily strategic objectives. Markham et al. agree with Miles that direct investments result in a higher control over the venture. They also argue that using direct investments "risks are higher with concentrated positions in relatively few companies in your portfolio " [Markham et al., 2005] than diversifying your risks with indirect investments. Conclusively, they agree with Miles' suggestion to use indirect investments for corporations with a low entrepreneurial risk accepting propensity.

As we can see the present research does not always agree with the frameworks suggestions. Especially because it is not always unambigous, and few of its suggestions should maybe be striken off the list. We will skip our final evaluation and improvement suggestions until after the presentation of the survey and its discussion.

Chapter 3

Survey and Evaluation of the Framework

"Experience is a hard teacher because she gives the test first, the lesson afterwards."
–Vernon Saunders Law

In this chapter, we will present the theoretical foundation for our field study, describe the survey method, report interesting facts from our interviews, and question the applicability of the strategic framework by [Miles and Covin, 2002] for each company. We will then conclude this chapter with our thoughts of the framework's applicability in general.

3.1 Research Method

Edmondson and Mcmanus [2007] compiled the state of research regarding field studies. They present a framework for assessing and promoting *methodological fit* as a criterion for ensuring high quality field research. We map our research onto their framework and will base our field study on its suggestions.
The framework's idea is to relate the stage of prior theory to research methods and type

of data collected. It differentiates between three maturity stages of prior research. *Mature theory* "... presents well-developed constructs and models that have been studied over time with increasing precision by a variety of scholars" [Edmondson and Mcmanus, 2007]. *Nascent theory*, however, "... proposes tentativ answers to novel questions of how and why, often merely suggesting new connections among phenomena". The third to mention stage is inbetween both and therefor called *intermediate theory*.
For each maturity stage different methods exist: The less known about a specific topic, the more open-ended the research questions should be. This requires methods that allow data collected in the field to strongly shape the researcher's understanding of the problem at hand [Barley, 1990]. In contrast, in a more studied area, researchers can use the existing literature to find spots of interest, and can improve existing models for specific settings and therefore refine the overall understanding. Here more quantitative methods are the tool of choice. For intermediate theory it makes sense to test hypothesises, but still be open to unexpected insights from qualitative data.
As we already showed in Chapter 2, corporate venturing research has evolved out of the nascent stage, but still there are no detailed, approved connections for successful use of corporate venturing for each given goal and company. This means our research falls into intermediate theory.
As [Edmondson and Mcmanus, 2007] suggest, we therefore combine a detailed survey with personal interviews to have quantitative data on the one hand, but due to open-ended interviews also new qualitative data.
The interviewees are executives in the venturing department, or subsidiary company of the corporation of interest. Although IBM, Microsoft, Motorola, and Nokia are acting as venture capitalists, we did not interview them. They all have subunits stationed in Europe, but these do not have any strategic competence. These units just scout for new ventures, arrange contacts, and so forth. Because we need to talk to the executives with strategic competencies and preferred personal interviews, we focussed on corporations that are based in europe. We restricted the discussions to investments that done by a corporation after the dotcom crash. This did not affect all industries equally, but we think this gives more comparable data from different ventures, because around 2000/2001 more investments were done based on a gutfeeling or industry trend than based on strategic rationale. As we can see in Figure 3.1, investments in information technology skyrocketed in 1999, crashed shortly afterwards and over the next years went back to a more stable state.

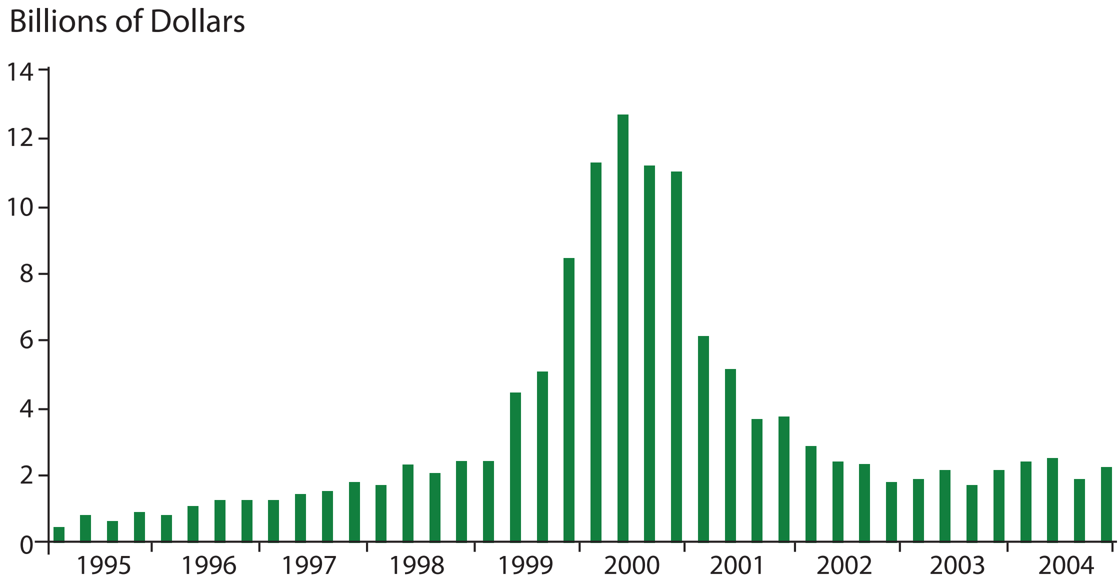

Figure 3.1: U.S. venture capital investments in information technology, ©2004 PricewaterhouseCoopers

3.2 Questionnaire

We developed a questionnaire to have a major thread throughout the interview we could follow. The interviewees got a copy of the following questionnaire and had roughly two weeks time to prepare themselves for the personal interview, i.e. collect data for the questionnaire and gather their thoughts on the open questions.
After some introductional chit-chat, interviewer and interviewee went through the questionnaire and discussed each question and why the interviewee chose a specific box in the multiple-choice part. Every interesting remark of the interviewee was followed to find out more about the corporation's own experience and best practices in corporate venturing. The whole interview was microphoned so that a more elegant discussion atmosphere was established and the interviewer could focus on the interview and not its transcription.
The whole interview can be found in Appendix A. Due to the fact that all our interviewees were Germans, we presented a German version of the questionnaire to them, which is also available in the appendix.
The interview is seperated into three major parts. In the first part, we ask for the strategic,

financial, cultural, etc. objectives the corporation tried to achieve by using corporate venturing. In the middle part, we ask how the corporation and especially its venturing unit is structured and how it tried to achieve these goals. Finally, we ask how well their plans went and what best practices they could identify.

3.3 Empirical Evaluation of the Framework

We are now going to present the interviews in excerpt and discuss the implications for the applicability of the framework. We were able to contact and have personal interviews with:

- SAP Ventures Europe
- T-Venture Holding
- Vattenfall Ventures Europe
- Volkswagen

For each of these companies, we first present the company. Based on our interview, we present what they wanted to achieve, how the tried to achieve it and finally how well their strategy went and what lessons they learned. We then characterize the company based on Miles' framework, and compare the framework's suggestions and the company's success. Based on the interviewee's remarks, we give a guess on the utility of corporate venturing in their industry.

3.3.1 SAP Ventures Europe

SAP Ventures Europe is a purely financial venture capitalists that has the competitive advantage to have good access to ideas and ventures in SAP's ecosystem. It was founded twelve years ago and has grown steadily since then and even survived the burst of the

dotcom bubble around the year 2000 without greater harm. Its general business plan can be described as finance-oriented ecosystem venturing. Typically third party developers of applications based on SAP Software like the NetWeaver platform are supported, but this is not a necessity - purely financially promising investments are done anyway. Its primary strategic goal is to have a window on innovation - in this case innovation stands for technology and new business models. As a typical representative of license based software contracts, SAP is very interested to have a finger on the pulse of time regarding novel business models like Software as a Service or Open Source.
On the financial side the primary goal is return on investment. The formal goal is to be better than the average capital cost, but they were proud to say that their performance is way better than that. Slow break-even and late exit point are not so much of a problem as long as they do not interfere with a high return on investment - short term investments of only some months with a very high return on investment are the preferred kind of investment but three to seven years until exit are more often the case. Trade sale is the preferred exit strategy if possible - direct cash is more interesting than to be locked in a deal for sometime after the initial public offering.
SAP Ventures Europe is the corporate venturing arm of SAP AG and is positioned directly under the Chief Financial Officer. He demands a specific number of investments per year and a high return on investment. This high position is backed up by commitment of resources to the venturing unit, top management support, and general acknowledgement by other business units. SAP Ventures Europe only invests in external ideas and is always investing with different other venture capitalists. Off-balance-sheet financing is the method chosen to support the venturing unit.
This general setup allowed SAP Ventures Europe to reach its goals - a high return on investment and also the window on innovation is wide open. Their idea to strongly focus on financial goals had success and the SAP AG also has a more vibrant ecosystem on top of it.

Fitting SAP Ventures Europe into Miles' framework according to Table 2.3 is straight forward. Its primary objective is purely financial, it has a low need for control of venture, is willing to commit resources, and accepts the immanent risks. Based on these parameters the framework suggest indirect-external venturing opposed to SAP Ventures Europe being successful with a direct-external approach. If we omit the category "need for control of venture", the framework also suggests the direct-external approach. As we will show in the other cases, the category "need for control of venture" is always a problem and we think that a strong control of the venture can destroy its entrepreneurial spirit. The innovativenes and different thinking often is the main reason for venturing in the first place and therefor a loose coupling will always be more beneficial than thinking of the venture as a new R&D unit, which is part of the company.

As we can see, the focus on pure financial goals delivers high financial gains and additionally strategic benefits due to a more vibrant ecosystem. The main reason for this success is that SAP has a very good market position and its software platform is well suited for novel ideas from third party software developers. We think that other companies that have a similar fertile ground would benefit from such an approach - unfortunately not every company has the standing of SAP.

3.3.2 T-Venture Holding

In 2001 T-Venture Holding was restructured from a pure financial venture capitalist unit of Deutsche Telekom to a corporate venturing unit. They have a strong focus on strategic goals, especially a window on technology was the primary ambition for doing corporate venturing. Although they are also interested in a high return on investment, they understand that growing companies need time to evolve and therefore do not care for a fast break-even or very early exit points as long as the venture's evolution is promising and not to high of a burden for the fund.
They dislike the traditional Initial Public Offering (IPO) exit strategy due to the fact that in some countries, e.g., USA, one is still bound to the company for the next 180 days. Their experience is that after these 180 days the stock price will fall again, so one is eager to sell the shares early on, which presumably is the reason why the stock price falls in the first place. Another reason is that Deutsche Telekom is listed at the Wall Street and is therefore obligated to disclose every stock sale. Additionally, they are also an insider of the venture, therefore they can't make money out of their inside money and are left as a minor share holder with no control over the venture and with shares that they can't sell

like they wish to. Instead, their preferred exit strategy is a trade-sale. They directly get money in return and can decide whom they are going to sell the venture, which can be strategic for the corporation. To get rid of unfortunate ventures the secondary purchase option is chosen - the shares are sold to a third party fund.
Concerning the cultural goals, the T-Venture Holding is strongly interested in fostering entrepreneurial spirits inside the company. They organized their venture funds according to their business units, i.e. one for T-Mobile, one for T-Home, etc. This helps to support more innovative and creative business units like T-Mobile to be way more active than more traditional and calm like the conventional telephone network department. For example the T-Mobile fund is therefore provided with more money than other less promising funds.
Summing up their interest, the T-Venture Holding wants to find promising ventures that have synergies to Telekom's own business units and it is willing to give the ventures time to evolve.

To achieve these goals T-Venture Holding founded a hefty fund of €400 Mio. It also generously commits other resources to its ventures. To avoid destroying the entrepreneurial spirit in the venture, T-Venture Holding does not require a high control over the venture. It is instead willing to take entrepreneurial risk in reasonable amount. Based on its big fund, T-Venture Holding is always funding ventures on its own without any third party involved in financing. Over 90 percent of its investments are going to external companies and only 5 percent are spin-offs based on internal ideas. They think this is due to the fact that, although many good ideas exist inside Deutsche Telekom, most employees like their egular paychecks more than the risk of being an entrepreneur: "Entrepreneurs do not work in big companies for a long time" (interviewee). To describe the integration of the T-Venture Holding in the Deutsche Telekom, it is enough to say that the chief of the supervisory board of T-Venture Holding is a member of the manangement board of Deutsche Telekom – Deutsche Telekom is considering corporate venturing as an important part of its strategy. The Deutsche Telekom is giving three strict objectives that have to be achieved. A certain number of investmens has to be done per year and the costs have to be under control. The last objective is that the number of upward revaluation of investments has to be higher then the number of downward revaluations – a healthy portfolio.

Retrospectively, T-Venture Holding is content with its strategy – although more markets could have been explored, a lot of market changing technologies have been found and could be integrated into Deutsche Telekoms business units. They are also satisfied with the financial performance of their portfolio. Due to the fact that only ventures with a synergy to the Deutsche Telekom were supported, some financially interesting opportunities could not be taken. This yields an internal rate of return of the fund which is less than that of a "classical" venture capitalist, but still a nameworty return in addition to inestimable strategic values. They were also pleased with the long-term relationship to the ventures, because this indicates high synergies between two parties – the reason Deutsche Telekom started corporate venturing. The preferred point to stop the relation is when the start-up exceeds its maximum growth. The venture is now grown enough to exist on its own and also its rate of return turns down. As the last reason for the corporate venturing offensive T-Venture Holding has to acknowledge that no real corporate-wide change in the entrepreneurial spirit could be measured. But this may not stay this way. The higher the hiearchical level of the Deutsche Telekom, the more the people are open-minded for corporate venturing and innovative thinking in general. Deutsche Telekom recognized that its old core business, i.e. conventional network telephones, is not the future and then decided to invest in new promising technologies and business areas. This spirit will potentially sink down to the still more conservative thinking lower hierarchies that are afraid of novel ways of doing business – "a process of creative destruction" Schumpeter [1942].

A typical problems for a corporate venture capitalist like T-Venture Holding is that it is hard to get into a deal at first. They argue that there is more money in the venture business than promising ventures and the competition is high. The proximity to the Deutsche Telekom can be benificial but also a burden. Taking into account that in some areas only a small number of consumer exist for mobile devices (Deutsche Telekom, Verizon, etc.) an investment in such a supplier could lead to conflict of interests. The other way round it could be interesting for other suppliers to get in contact with T-Mobile to sell their products exclusively (think of an iPhone – not from apple, but from an unknown startup).

We will now fit T-Venture Holding into Miles' framework and see whether theoretical suggestions and practical experience are alike. As we mentioned above, T-Venture Holding focusses on strategic goals and does not have a high need for control of the venture.

Referring to Table 2.3, we see the suggestion of an indirect venture form. This contradicts the practice of T-Venture Holding and also does not make sense in this context. An indirect venturing would not give the close contact that is needed to establish long-term relationship with the venture. If we take a look at the other rows, i.e. resource commitment and entrepreneurial risk acceptance, we see all forms of venturing as suggestion. Although this is no contradiction to the practice, this makes the framework not very guiding for managers planning corporate venturing in their company.

Concluding this interview, we see that corporate venturing can be a very valuable strategic tool. T-Venture Holding set out a clear strategy, commited resources to the ventures, and the top management supported this strategy. All participants recognized and accepted the drawbacks of this venturing form, i.e. only small return on investment and no fast break-even, and they also faced the general entrepreneurial risk.

Especially in the mobile phone industry, corporate venturing should be a good tool to find new technologies and business ideas. In the days of powerful mobiles and accurate GPS data, location-based services are one area for future market growth. Some smart ideas from unknown ventures can have great impact on this fast moving industry and the big players in the market will need to have an eye on these. The increasing integration of web-based services and mobile phones opens new markets for fast and innovative companies.

3.3.3 Vattenfall Ventures Europe

Vattenfall Ventures Europe was restructured in 2001 to support Vattenfall's core business. It is divided into three units: renewable energies, energy efficiency, and energy services. One has to mention that reneweble energies were not so important and vivid back then as they are nowadays. The same is true to an extent for the other two units. They all were established to explore new markets and see whether they can be beneficial for Vattenfall's portfolio.

After two years the management board downsized the venture group because it wanted to focus on its core business. It beliefs that these non-core business are better handled by an own internal unit or not at all. They are sure that venture capitalism is not useful in

the power industry. This resembles the experience and decisions of E.on, RWE, and other companies in the power industry as stated by the interviewee. He sees corporate venturing as a more powerful tool for developers of technology and not for users of technologies like Vattenfall. However, there are still a few investments in Vattenfall's portfolio but they are not actively managed by the ventures group and will eventually be sold.
Their corporate venturing offensive was strongly focussed on strategic objectives, especially the window on technology was very important. The financial goals were not set and the ventures did not have to achieve high return on investment, fast break-even, or an early exit point. Instead, it was hoped that an entrepreneurial spirit would be brought into Vattenfall through the communication with innovative ventures.

The significance of the corporate venturing to Vattenfall's overal business strategy is easily described by the venturing unit's organization. They had €300 Mio. under management and the unit's leading managers are both member of the management board of Vattenfall. The unit typically invested as a minor share holder in external ventures. It had to do at least three investment in a venture per year. The ventures were financed with Vattenfall equity.
Due to the fact that the active engagement was stopped after two years the strategic long-term goals could not be reached. However, the corporate venturing helped in identifying market changing technologies that were pursued using internal R&D. As already mentioned above, some of the funded ventures are still in Vattenfall's portfolio and give an average rate of return. The typical exit point for a healthy venture is as soon as the venture has reached break-even and can live on its own.

Retrospectively, Vattenfall does not value corporate venturing as a useful tool for their business and technology development because it did not deliver the promised strategic value. For a company that is developing basic technology, it is a necessity to have early access to important upcoming technologies or else the company will lose track of the market. Instead, as an user of technologies, i.e. a customer of the first-tier developers, there are other, more secure, ways to observe markets and get the hands on new technologies (own R&D, acquire grown companies, etc.). These users are therefore not primary users of corporate venturing. Another point is that it is not typical for a company like Vattenfall to have gross amounts of unused intellectual property coming out of the huge R&D

department (like in a first-tier developer, e.g. Bosch, Siemens, etc.) that should be turned to value using venturing methods, e.g. create spin-offs.

Due to the fact that Vattenfall's strategy is alike to T-Venture's the same is true for the evaluation of the applicability of Miles' framework to Vattenfall's venturing process. The major difference is that Vattenfall was unsatisfied with its corporate venturing. We think that the decision to stop the venturing process was quite early after only two years of active venturing – maybe some of its ventures would have performed well and given significant benefits to Vattenfall's overall strategy. However, as we already mentioned above, the power industry itself may be not the perfect field for corporate venturing. This fact is completely ignored in Miles' framework – no hint on what industries are well suited for corporate venturing.

3.3.4 Volkswagen

Volkswagen founded a corporate venturing division as part of its business development subsidiary AutoVision GmbH in 2002. The division's activity has dropped during the last year due to unsatisfying performance.
The Interviewee states that the main reason was that Volkswagen's culture is not entrepreneurial. The support from internal commitees and the top management was lacking: "The company is used to think in parts list. Not in funded ventures". Without top management support and with ignorance or misunderstanding from most deciding commitees, even good plans will fail. Additionally, the more complex structure of a big corporation slows down the decision process and will eventually stop it before it's over. In small fast reacting "classical" venture capitalists there are less than a tenth of the people that have to agree to new ventures.
One reason for longer discussions with internal commitees is cannibalism – a venture could develop a technology that rivals a technology proposed by the own R&D development. It sometimes does not make sense for the company to support both technologies. Therefore, you end up with a promising venture you could invest in and a technology that you will have 100 percent control over – the venture's idea must be quite better to get the support. Another topic is that during economically stressing times where you

have to think about spending money twice, it is hard to argue for downsizing the R&D department while investing in risky ventures. The typical reaction is to focus on the core business and get rid of every non core activity like corporate venturing.

Coming to our survey, the inital goals for corporate venturing were strategic and financial. On the strategic side only the window on technology was important. Volkswagen thinks that other tools are better suited to nurture their market – car retailers – or to explore new markets. Interestingly, the financial objectives, which were implicitly imposed by the deciding commitees, were very challenging. The venture had at most three years time to break-even, and it had to achieve a high return on investment (20 percent per year for the whole portfolio). If the venture was generating profits the exit point was not pretermined, but should be in the range of five or six years. Due to the fact that most of the supported companies were tier two or tier three suppliers, Volkswagen had less interest in buying the whole company afterwords as a vertical integration which resulted in trade sale as the typicial exit strategy. Buyback was included in the venture contracts, but due to the reason that most of the entrepreneurs money is already invested in the venture, this option was never used. Although innovative thinking is present at Volkswagen, the entrepreneurial spirit was missing and corporate venturing should support its introduction.

Regarding the company's culture, Volkswagen committed numerous financial resources and even manpower to its venturing unit at the initial stage. Unfortunately, as already mentioned above, the operative implementation was hampered by hesitant internal commitees and lack of top management support. In addition Volkswagen needed very high control over the venture – thereby hindering entrepreneurial spirit and flexibility – the advantage of small ventures over big corporations. Despite the financial support, the risk acceping propensity was low, which is another reason for problems communicating new ventures to the deciding commitees.

Volkswagen's portfolio does not contain any spin-offs and is equally divided into ventures with 100 percent Volkswagen financing and minor share financing. Although there are lot of promising ideas present at Volkswagen, no employee was ready to skip his comforting monthly paycheck and found a spin-off.

As a hard constraint for the venturing unit's management, two goals were specified. The first constraint was 20 percent return on investment per year over the whole portfolio.

Although this is challenging enough even for purely financial venture capitalits, the venturing unit additionally had to present written agreements from adequate departments that stated the usefulness of the venture to the corporate strategy.

Retrospectively, the initial strategic goal could be met. Every supported (and successful) venture helped to identify new technologies. One has to remark that often promising ventures had not been supported due to the above mentioned complicated integration process and could have improved the corporate venturing success. Financially the corporate venturing initiative was way below the high expectations. The profits over the whole portfolio were marginal and the requested break-even of two years was not reached by any venture. The exit point for ventures was roughly five years as planned – as long as the venture did not fail earlier. Although no entrepreneurial spirit could be fostered, the cross-department activity of the venturing unit helped to communicate problems that existed inbetween different units. One example was the introduction of a document management system which operates along the supply chain and could vastly improve the communication. This system was discovered while searching new ventures, so corporate venturing indirectly improved the corporations internal efficiency.
As a lesson learned, the interviewee argues that it makes sense to focus primarily on one objective – be it strategic or financial, because corporate venturing is not a panacea that will give both benefits at the same.

Using Miles' framework we see ambigous commendations. Volkswagen cleary focussed on strategic objectives and had a need for control over the venture; this combination results in a direct-external suggestion by the framework like Volkswagen did. If we take a look at the other columns of Table 2.3, we see a contradiction: Volkswagen was definitively not accepting entrepreneurial risks – indirect venturing should have been the right solution. The conclusion is not that the framework is wrong or misleading, but that a decision for high control over the venture implies a close connection to the venture, which in turn results in a strong connection to the venture's performance and also failure. This means that high control plus low risk is not a realistic outcome for corporate venturing initiatives. Unfortunately, this is not clear at first sight on the framework.

Volkswagen's decision to reduce their corporate venturing efforts is typical for the automotive industry. BMW, Porsche, Audi, Daimler, Opel (as part of General Motors) never had any corporate venturing plans or already stopped their activities. As we argued above, Volkswagen's biggest problem was to identify with the risky, fast moving venture world. Due to the similar size and age of the other companies they probably had similar problems. Despite the problems with the implementation of a corporate venturing strategy, the industry itself may not be very suited for corporate venturing. The direct customers are car retailers that can be taken care of with other strategic in better ways. Directly behind the car retailers, we have the endcustomer where corporate venturing is not applicable. On the other side of the supply chain, we have several levels of suppliers, where either the company is the number one customer, i.e. already can control the supplier and its technology development, or is one of few big customers, which implies that the supplier may have a conflict of interest to strongly bound with only one of its customers.

Chapter 4

Conclusions

"Having ideas is like having chessmen moving forward; they may be beaten, but they may start a winning game."
–Johann Wolfgang von Goethe

In this chapter, we evaluate Miles' Framework, give a summary of best corporate venturing practices, well-suited industries for corpore venturing, and present the successfactors we were able to idenfity.

4.1 Concluding Evaluation of Miles' Framework

Without taking a closer look at the framework's suggestions, it is affected by the wish to include every possible combination of objectives, culture and environment. Especially the mapping of a specific company to only two axis has two problems. Not every company can be clearly mapped, like in the case of Volkswagen, where the need for control of the venture was high, but risk accepting propensity was low, which resulted in contradicting suggestions. In other cases, the mapping was consistent among the three parallel axis (control, resource commitment, risk acceptance) but the framework suggested every venturing form, which is not helping at all. Another problem with the structure of the framework is that it allows only zero or one decisions, e.g, high or low need for control of the venture. We sometimes had problems to fit the venturing initiatives described in the literature clearly into each category - and surely spent more time with the framework than an executive would do. Another important dimension that is completely left out is the company's industry or at least the structure of its supply chain which vastly affects the venture's performance, because as in the case of Volkswagen a strategy like market nurturing is hard to pursue, whereas Intel is increasing its market nurturing ambitions in its network chip unit. Also market nurturing is not a good idea if one has low market share because the competitors will gain more from the investments - this is also completely ignored.

We think that it is very hard to correctly develop such a framework if it is restricted to only two dimensions and Miles' did not achieve it. Instead, we will now present our ideas on successful corporate venturing.

4.2 Successful Corporate Venturing

First of all, we think that corporate venturing has system immanent properties that have to be accepted or else this strategic tool will fail. As the name suggests corporate venturing is about investing in small growing companies. No matter how careful the ventures area selected, some of these investments will fail. Two years ago, the investment in forward-looking biogas plants would have been an interesting option, but from todays situation with tripled wheat prices (cf Figure 4.1) the investment would have been a desaster. Therefore, a company thinking of corporate venturing has to accept this entrepreneurial risk or stick to traditional internal R&D or acquire only grown companies.

Another choice offered by Miles' framework is the extent to which the company needs control of the venture. Although our case study is comparably small, the companies that did not oppress the venture performed way better. The advantages of young companies are their innovativeness and different thinking in contrast to grown corporations. We think that a strong control over the venture can destroy this entrepreneurial spirit. A loose coupling will always be more beneficial than thinking of the venture as a new R&D unit,

Figure 4.1: Wheat prices from 01.01.2006 to 14.03.2008 WKN 530278 / ISIN US12492G1040,©2008 GodmodeTrader

which is part of the company. All in all, companies should therefore restrain from imposing its aged management styles to the young venture. Obviously, it should still offer support and its knowledge of relevant markets, etc. to the venture and be a guiding mentor.

The third corporate context mentioned by Miles' framework is the ability and willingness to commit resources to venturing - to take the venturing initiatives serious. As with every other activity relevant to the strategic planning, it is important that the top management stands behind the activity and supports it with money, manpower, and guidance. The case of Volkswagen perfectly backs up this thesis, because the lack of top-management support and lack of acknowledgement by deciding commitees was the major problem that killed the venturing initiative. SAP Ventures Europe and T-Venture also back it up because in these cases top-management support was present and their goals could be achieved. In the case of Vattenfall, we could not clearly recognize a very strong or weak support that could have influenced the withdrawal out of the venturing market. All in all, if the venturing unit is of strategic value to the company, it needs nameworthy resource commitment to achieve its goals.

4.2.1 Matching Objectives and Venturing Forms

We will now discuss the different venturing objectives and show our suggestions for fitting venturing forms to achieve given objectives, show what kind of industries are most suitable for a venturing form / objective combination, and what else needs to be taken care of.

Window on Technology

Window on technology is one of the top reasons for corporate venturing. One has to differ between two kinds of window on technology - active and passive. In the first case, the company is actively searching for a solution for a problem. In the latter case, the company wants to keep its fingers on the pulse of time. Especially in the latter case external input and expertise are a necessity, which means that external venturing is the method of choice. To actively steer the search for new technologies or get the latest innovations, a direct approach with no financial intermediary is required.
Due to the entrepreneurial risks of direct-external venturing one has to question whether the gain justifies these risks. Concluding from the related work and our survey we state our hypothesises.

- H1: Direct-external venturing as a means for a window on technology makes most sense in industries where the knowledge of this technology yields a sustainable competitive advantage (cf. Porter [1985]).
- H2: The greater the ratio between

- development cost plus production cost of the basic technology
- and the value of the technology for the companies in that industry, i.e. expected sales price,

the greater the gained competitive advantage.

We will now compare these hypothesises with our survey results. Taking a look at western base technology developers we see that especially for western corporations price competition is no choice due to high production and labor costs. Instead it is a huge competitive advantage in a fast moving industry (H2) to be at the bleeding-edge of innovation. Being one step behind allows the competitors to sell their products and the own market shares shrinks. There are several german developers of basic technologies that are in the corporate venturing. Bosch founded recently a riskcapital fund of €200 mio to keep track of new technologies because "technology transfer only with internal R&D and new ideas from universities is not sufficient" Handelsblatt [2008]. Siemens also has a venture capital unit since 1999 and has invested €700 million in over 100 startup companies and is still actively looking for new technologies for their products.

If we take a look at the venturing history of the power industry we see that the four german key players: E.ON, EnBW, RWE, and Vattenfall experimented with corporate venturing and had little success and stopped/reduced their initiatives as stated by our interviewee from Vattenfall.
One could contradict our hypothesis and argue that especially renewable energies are an example of the fast movement of the power industry and therefore corporate venturing would be the right choice. We have to disagree because for a company like Vattenfall and its customers nothing much changes if they build geothermic power plants instead of coal power plants. Especially because it takes long time to turn the technology into products and then profits the term "fast moving" does not fit. However a company that actually develops the base technologies for renewable energies will benefit from new technologies that, e.g. increase the energy efficiency of their solar cells, because this technology will directly return a competitive advantage over its competitors, which use less efficent cells. Although we mainly argued for new technologies that resolve in actual physical products, our thoughts should be applicable to services as well. Especially new web-based services

that have small development effort, zero to little production cost but sometimes huge value for the customer are worth mentioning and therefore interesting venture targets.

For the succesful implementation of any direct venturing approach it is necessary that the company has at least a small trend towards entrepreneurial thinking to be able to understand the ventures way of thinking - what will happen else can be seen in the case of Volkswagen. If this basic attitude is apparent, the corporate culture will be drawn even more towards entrepreneurial and innovative thinking as it had been drawn in every of our cases. Based on this entrepreneurial culture the company can better support its ventures and will have greater return on their invested resources.
The corporate venture unit should only support ventures that could yield synergies to the current core business and competencies. It should not support purely financially interesting ventures or else it will very likely only get deals with less promising ventures and finally fail at competing with the professionals from the field, i.e. financial VCs.

Ecosystem Venturing

Another common objectives is to stimulate the company's ecosystem. For example, SAP succesfully invests in third party developers of software for its NetWeaver platform and Intel regularly invests in companies that produce network hardware. Both benefit from the indirect sales growth of their products - more licenses for SAP and more network chips for Intel.
Obviously this objective requires external venturing; more interesting is the choice of direct or indirect investment. We think that a direct investment method makes it easier to control the decision which venture to support. Instead with a financial intermediary other companies and therefore other interests may be apparent, resulting in less than perfect venture support decisions.
The whole point of ecosystem venturing is to indirectly increase the company's sales in one of the company's core markets. If the company is not already gaining profits in a market, it does not make sense to nurture it (exluding possible break-even points due to economies of scale). It also is a necessity that there are no competitors that will have a greater benefit of market growth. Because the designated result of ecosystem venturing,

i.e. sales growth, is primarily financial, it makes sense that the venturing unit is governed with pure financial goals in mind. For example, SAP Ventures Europe has no strategic objectives at all. If a financially promising venture can be supported it does not matter what business it is operating in. However, due to the fact that it is primary searching and signing investments in SAP's ecosystem most of its investments will benefit SAP's license sales indirectly and also increases the financial performance due to the return on venture investments. One problem that might occur consists of ventures that endanger the success of the parent company - hands-off is the right decision.
Regarding matching industries for this venturing form, we think that:

- H3: Direct-external venturing as a means for ecosystem venturing makes most sense in industries where the ratio between venture investment volume and increased market sales (absolute and shares) is highest.

Harvest Venturing

The third common objective of corporate venturing is to encourage employees of a company to start spin-offs based on otherwise unused intellectual property - harvest venturing. Although the idea to turn unused resources into new products and business ideas sounds promising, we found no evidence of successful intrapreneurship in our cases and other case studies only found few successful ventures (e.g. [Campbell et al., 2003]). Although good business ideas may be present, it is hard to find intrapreneurs. Companies that can afford big venturing activities, i.e. do not "miss" several million euro in their balance sheet, often are somewhat older resulting in more complex bureoucratic structures. Generally speaking, these companies attract employees that value security of a job over high payment and freedom to be their own master - the typical reasons not to be an entrepreneur. " The 'cool' entrepreneurs do not work in such companies, they already started their venture after college" [Volkswagen interviewee].
However, if entrepreneurial energy is latent in a company, it makes sense to undertake traditional functional activies like research and development in a "venturing" way. This venturing activity should be governed by the function it supports, e.g. the R&D department. As soon as interesting ideas are identified, internal managers with entrepreneurial

instincts can be supported to found a new venture. If the company does not have this kind of manager but is in good contact to external entrepreneurs – maybe due to other venturing methods – the company can place these ideas in a new venture controlled by these entrepreneurs and still benefit from synergetic effects.
The main factor for the right venturing form is the reason why the intellectual property or business idea has not been pursued in the first place. We think that the following items are the main reasons:

1. Too risky due to low chance on success
2. Too risky due to high investment needed, which may not be present in the current R&D budget
3. The idea is good but can not be pursued in the current corporate frame
4. The idea is good but does not fit the R&D strategy

In the first case, the idea should be omitted. In the second case, it makes sense to offer this idea (and if present the intrapreneur) to an external venture fund in order to have only small risk capital invested and a second opionion, i.e. the fund management, that has a more objective view on the venture's chances, thus only accpeting very promising ventures. The third case should be taken care of with direct funding methods to have better coupling between corporation and venture thus making it easier to achieve synergies. In the fourth case the missing fit to the R&D strategy means that the idea is not close to one of the core businesses and therefore synergies are unlikely. The benefits of investment in such a venture are purely financial and therefore it should be supported by private equity venturing methods – see next paragraph for details. The decision which idea gets support is finally made by the head of the R&D department. It is a good idea to support him with an expert from the venturing unit, who will be better at estimating the practicability of a venturing idea.

Private Equity Venturing

The last option that we will present in our work is private equity venturing. This form of corporate venturing tries to have a look at as much business plans as possible and support only the financially very promising plans – it acts like an independent venture capitalist. It therefore should be setup like its competitors: A separate business unit with experts from the field and performance-based financial incentives. This venturing unit can only be successful if they have a better deal flow than other independent venture capitalists. As we already mentioned above, this venturing form can also be used to turn some of the, otherwise unused, intellectual property into cash. For external ideas however, it is argueable whether the overall return of investment less management cost is higher than the return of an investment in a fund of an full-time private equity company.

4.2.2 Best Practices

Based on the empirical data we presented in Chapter 3.2—"Questionnaire", we were able to identify several factors for a successful use of corporate venturing as a strategic tool.

- Top-Management support
- Entrepreneurial culture
- Risk acceptance
- Low need for control over venture by the venture unit
- Clear focus on strategic OR financial goals
- Only one venturing objective

Although the first four points were already discussed in detail in the preceding chapters, we want to come back to the results of Hill and Birkinshaw [2006] in the light of our survey. They conclude that a high grade of communication and interaction between the

parent firm, other business units, and the venture capital community improves the overall strategic performance of the corporate venture unit.
Although we agree with their findings, one could possibly go one step backward and find the reasons for strong relatonship among the listed groups, that are the primary reasons for a succesful corporate venturing use. We assume that the following factors are important for the intra- and inter-corporational bounds.
First, a companywide acceptance of corporate venturing as a useful strategic tool. As seen in the case of Volkswagen the absence of the intra-corporational support definitively hinders corporate venturing efforts. Instead, if the top management stands behind the corporate venturing efforts and advises the middle management to believe in the venturing doctrine, the corporate venturing unit will have less resistance in communicating new ideas and thinking. New ideas from external start-ups can result in new products or business ideas and fresh, entrepreneurial thinking inside the company will possibly lead to spin-offs based on up to now unused intellectual property.

Despite the poorly manageable cultural parameters, the last two points can at least be planned quite easily. We saw that although the examined venturing initiatives vary a lot in their goals and respective success, all interviewees agreed with the statement that it makes sense to focus on only one objective: strategic OR financial. This means that first, no different venturing objectives should be mixed, because the companies structure will lack an alignment and the unit's managers will find themselves pushed in different directions. This clear focus is also supported by Campbell et al. [2003], who found zero successive venturing units that had mixed objectives, and a lot of other authors ([Winters and Murfin, 1988], [Sykes, 1990], [Markham et al., 2005]). The second reason is that the wish to achieve financial and strategic goals will lead to the excuse of weak financial performance of a venture with its strategic relevance, resulting in the continued support of a designated failure. The other way around, one can lose track of the strategic goals while investing only in seemingly financially interesting short-term investments that might even conflict with the overall corporate success.

Chapter 5

Summary and Future Work

"I am not young enough to know everything."
–Oscar Wilde

In this final chapter we will summarize our research, state the contributions to the corporate venturing research community, and give an outlook on future research ideas.

5.1 Summary and Contributions

We started with the definition of fundamental terms and presented the current state of the art in corporate venturing. Afterwards, existing strategic guidelines and frameworks were presented, followed by the framework from Miles and Covin [2002]. Its evaluation was one of the main goals of this thesis. It was evaluated using the existing literature and practical data, which was acquired through several interviews with experts from the field. For these interviews a theoretical base was established and a questionnaire created. The interviews with the corporate venture unit executives were done personally at the company's location. Based on this empirical data and the existing literature, we came to the conclusion that Miles' framework is far from being the perfect tool. Although its suggestions sometimes coincide with the companys' best practices, it leaves too much room for misguidance and misinterpretation.

Using the acquired knowledge, we have shown four successful ways of doing corporate venturing:

- Keeping the window on technology open
- Ecosystem venturing
- Harvest venturing
- Private equity venturing

For each long-term goal of venturing, we could identify a suitable venturing form: Direct-external to keep an eye on new external technologies and for ecosystem venturing, direct-internal for harvest venturing. In the case of private equity venturing internal and external venturing can be combined to maximize deal flow and support only the (financially) most interesting ventures.
Based on the empirical data we were able to identify several factors for a successful use of corporate venturing as a strategic tool:

- Top-Management support
- Entrepreneurial culture
- Risk acceptance
- Low need for control over venture by the venture unit
- Clear focus on strategic OR financial goals
- Only one venturing objective

We were also able to find characteristica for suitable industries for a venturing form.

- H1: Direct-external venturing as a means for a window on technology makes most sense in industries where the knowledge of this technology yields a sustainable competitive advantage (cf. Porter [1985]).

- H2: The greater the ratio between

  - development cost plus production cost of the basic technology and
  - the value of the technology for the companies in that industry, i.e. expected sales price,

  the greater the gained competitive advantage.

- H3: Direct-external venturing as a means for ecosystem venturing makes most sense in industries where the ratio between venture investment volume and increased market sales (absolute and shares) is highest.

Although a quantative analysis with a lot more companies involved is necessary to set these characteristics in stone, we are confident that such an analysis would support our findings.

The main benefits of this thesis are:

- The knowledge that two-dimensional frameworks like Miles' are not capable of covering all corporate venturing forms and giving meaningful guidance
- An up-to-date overview of the current venturing initiatives of Deutsche Telekom, SAP, Vattenfall, and Volkswagen
- Success factors for corporate venturing

The contributions to the corporate venturing research community are primarily our findings on most suitable industries for a given venturing form and venturing goal.

5.2 Future Work

We would like to continue our work in the area of the quadruple:

1. Venturing form
2. Venturing goal
3. Company's industry
4. Company's culture

We think that especially the connections to (3) are not fully explored. In this thesis, we started with some hypotheses regarding industry characteristics and companies doing direct external venturing as a means for window on technology and ecosystem venturing. In future work, we would adress a lot more of these companies with very specific and very short questionnaires to yield quantitative data on our hypothesises. In parallel, we will try to find more industry characteristics for other internal venturing forms and afterwards validate with quantitative data similarly.

With these characteristics, an executive can easily categorize its industry and company and see which kind of venturing is most appropriate. This can reduce the amount of failed corporate venturing initiatives, increase the number of successfully supported ventures, and improve the company's innovation strategy. As a result, the company to gain competitive advantages and not to be trapped between price pressure and the need for more innovative products.

Appendix A

Questionnaire

Due to the fact that all our interviewees are native German speakers, we gave them a German version of the questionnaire. You will find a copy of it after the English version.

RWTH AACHEN UNIVERSITY

Successful Corporate Venturing

Questionnaire

I want to thank you in the name of Professor Bettel and also personally for the time spent with answering this questionnaire. I will send you my research findings as soon as a finish my diploma.
Yours sincerely

Maximilian Möllers

April 1, 2008

Figure A.1: Page 1 of the questionnaire

Successful Corporate Venturing

Maximilian Möllers

Instructions. This questionaire is the base for the following Interview. Therefore, you do not have to fully answer all question. Despite the multi-choice part, I would be pleased if you prepare the open-ended questions with some headwords. This way we can discuss these questions faster.

I would be pleased if you could only include the data and experience from the last six years - roughly from 2002 on. Do not hesitate to contact me, if you have any questions.

1. Please estimate the importance of the following strategic corporate venturing objectives for your company.

(a) Strengthen the core business through investments in in(direct) customers (market nurturing).

unimportant | less important | neutral | rather important | very important

(b) Have an outlook on marketchanging technologies.

unimportant | less important | neutral | rather important | very important

(c) Explore new markets (spearhead investment).

unimportant | less important | neutral | rather important | very important

2. Please estimate the importance of the following financial corporate venturing objectives for your company.

(a) High return on investment

unimportant | less important | neutral | rather important | very important

(b) Fast break-even

unimportant | less important | neutral | rather important | very important

(c) Early exit point

unimportant | less important | neutral | rather important | very important

Figure A.2: Page 2 of the questionnaire

Successful Corporate Venturing – Page 3 of 6 – Maximilian Möllers

3. What are your preferred exit strategies and what are their advantages?

4. Please estimate the importance of the following cultural corporate venturing objectives for your company.

(a) Foster entrepreneurial spirit and innovative thinking in the company.

unimportant	less important	neutral	rather important	very important

5. What other unstated goals are important for your corporate venturing?

6. Please comment on the following statements regarding your corporate culture.

(a) The company is able and willing to commit ressources to the venture.

does not apply at all	applies less	neutral	applies more	fully applies

(b) The company needs a strong control over the venture.

does not apply at all	applies less	neutral	applies more	fully applies

(c) The company is willing to take entrepreneurial risks.

does not apply at all	applies less	neutral	applies more	fully applies

7. What kinds of corporate venturing does your company use?

(a) Please state an approximate distribution of your investment

____ % self funded ventures with corporate internal ideas

____ % self funded ventures with corporate external ideas

____ % joint funded ventures with corporate internal ideas

____ % joint funded ventures with corporate external ideas

Figure A.3: Page 3 of the questionnaire

Successful Corporate Venturing – Page 4 of 6 – Maximilian Möllers

8. How is your CVC unit embedded in the company (hierarchical level)?

9. Do hard goals exist for your CVC unit (return, number of investments per year)

10. Where do you get the venture capital from ?

How successful where you at reaching your corporate venturing objectives?

11. The following strategical objectives were definitively achieved.
   (a) Strengthen the core business through investments in in(direct) customers (market nurturing).
      does not apply at all   applies less   neutral   applies more   fully applies
   (b) Have an outlook on marketchanging technologies.
      does not apply at all   applies less   neutral   applies more   fully applies
   (c) Explore new markets (spearhead investment).
      does not apply at all   applies less   neutral   applies more   fully applies

12. The following financial objectives were definitively achieved.
   (a) High return on investment
      does not apply at all   applies less   neutral   applies more   fully applies

Figure A.4: Page 4 of the questionnaire

Successful Corporate Venturing – Page 5 of 6 – Maximilian Möllers

(b) Fast break-even

does not apply at all	applies less	neutral	applies more	fully applies

(c) Early exit point

does not apply at all	applies less	neutral	applies more	fully applies

13. What is the typical exit point?

14. The following cultural objectives were definitively achieved.

(a) Foster entrepreneurial spirit and innovative thinking in the company.

does not apply at all	applies less	neutral	applies more	fully applies

15. What are your lessons learned regarding corporate venturing?

(a) Focussing on strategic OR financial goals makes sense.

does not apply at all	applies less	neutral	applies more	fully applies

(b) If you agreed: On what do you focus and why?

____ % of the objectives are strategic ____ % of the objectives are financial

Figure A.5: Page 5 of the questionnaire

Successful Corporate Venturing – Page 6 of 6 – Maximilian Möllers

(c) If you do not agree: What is the advantage of an integral pursuing of objectives?

(d) What are the typical problems and how could you solve them?

I want to thank you in the name of Professor Bettel and also personally for the time spent with answering this questionnaire. I will send you my research findings as soon as a finish my diploma.
Yours sincerely

Maximilian Möllers

Figure A.6: Page 6 of the questionnaire

Erfolgreiches Corporate Venturing

Fragebogen

Ich möchte mich im Namen von Professor Brettel und persönlich für Ihren Zeiteinsatz und damit Ihre Unterstützung meiner Arbeit herzlich bedanken. Nach dem Abschluss meines Diploms werde ich Ihnen die Ergebnisse selbstverständlich zur Verfügung stellen.
Mit freundlichen Grüßen

Maximilian Möllers

January 28, 2008

Figure A.7: Page 1 of the questionnaire

Erfolgreiches Corporate Venturing

Maximilian Möllers

Hinweise zum Fragebogen.
Dieser Fragebogen dient als Grundlage für das nachfolgende Interview mit Ihnen. Sie müssen daher nicht alle Fragen vollständig beantworten. Neben den Ankreuzfragen, würde ich mich bei allen offenen Fragen über Stichpunkte freuen, so dass wir diese ausführlicheren Fragen später im Interview schneller behandeln können.

Ich würde mich sehr freuen, wenn Sie nur Ihre Corporate Venture Ambitionen und Erfahrungen der letzten fünf bis sechs Jahre miteinbeziehen, also ungefähr ab dem Jahr 2002. Bei eventuellen Unklarheiten können Sie mich natürlich jederzeit kontaktieren.

1. Bitte schätzen Sie die Wichtigkeit folgender strategischer Ziele des Corporate Venturing für Ihr Unternehmen ein.

(a) Kerngeschäft durch Investitionen in (in)direkte Abnehmer stärken. (market nurturing)

unwichtig weniger wichtig neutral eher wichtig sehr wichtig

(b) Ausblick auf marktverändernde Technologien behalten.

unwichtig weniger wichtig neutral eher wichtig sehr wichtig

(c) Neue Märkte erforschen (spearhead investment).

unwichtig weniger wichtig neutral eher wichtig sehr wichtig

2. Bitte schätzen Sie die Wichtigkeit folgender finanzieller Ziele des Corporate Venturing für Ihr Unternehmen ein.

(a) Hoher Return on Investment

unwichtig weniger wichtig neutral eher wichtig sehr wichtig

(b) Schneller Break-Even

unwichtig weniger wichtig neutral eher wichtig sehr wichtig

(c) Früher Exit Zeitpunkt

unwichtig weniger wichtig neutral eher wichtig sehr wichtig

3. Was sind Ihre bevorzugten Exitstrategien und welche Vorteile sehen Sie darin?

Figure A.8: Page 2 of the questionnaire

4. Bitte schätzen Sie die Wichtigkeit folgender kultureller Ziele des Corporate Venturing für Ihr Unternehmen ein.

(a) Unternehmerisches / innovatives Denken im Unternehmen fördern.

unwichtig	weniger wichtig	neutral	eher wichtig	sehr wichtig

5. Welche weiteren nichtgenannten Ziele halten Sie für Ihr Corporate Venturing für wichtig?

6. Bitte nehmen Sie zu folgenden Aussagen bezüglich Ihrer Unternehmenskultur Stellung.

(a) Das Unternehmen ist fähig und bereit Ressourcen für die Ventures zur Verfügung zu stellen.

trifft gar nicht zu	trifft weniger zu	neutral	trifft eher zu	trifft vollkommen zu

(b) Das Unternehmen benötigt eine starke Kontrolle über das Venture.

trifft gar nicht zu	trifft weniger zu	neutral	trifft eher zu	trifft vollkommen zu

(c) Das Unternehmen ist bereit unternehmerische Risiken einzugehen.

trifft gar nicht zu	trifft weniger zu	neutral	trifft eher zu	trifft vollkommen zu

7. Welche Formen des Corporate Venturing setzt Ihr Unternehmen ein?

(a) Bitte nennen Sie die ungefähre Verteilung des Gesamtinvestitionsvolumens.

____ % Ventures mit unternehmenseigener Finanzierung und mit unternehmensinternen Ideen

____ % Ventures mit unternehmenseigener Finanzierung und mit unternehmensexternen Ideen

____ % Ventures mit teilfremder Finanzierung und mit unternehmensinternen Ideen

____ % Ventures mit teilfremder Finanzierung und mit unternehmensexternen Ideen

8. Wie ist Ihre CVC Einheit im Konzern eingebunden (Hierarchieebene)?

Figure A.9: Page 3 of the questionnaire

9. Gibt es harte Ziele, die Ihre CVC Einheit erreichen muss? (Gewinne, Anzahl an Neugründungen)

10. Woher wird das Venture Kapital bezogen?

Wie erfolgreich konnten Sie Ihre Ziele bisher verfolgen?

11. Folgende strategische Ziele konnten wirklich erreicht werden.

(a) Kerngeschäft durch Investitionen in (in)direkte Abnehmer stärken. (market nurturing)

trifft gar nicht zu | trifft weniger zu | neutral | trifft eher zu | trifft vollkommen zu

(b) Ausblick auf marktverändernde Technologien behalten.

trifft gar nicht zu | trifft weniger zu | neutral | trifft eher zu | trifft vollkommen zu

(c) Neue Märkte erforschen (spearhead investment).

trifft gar nicht zu | trifft weniger zu | neutral | trifft eher zu | trifft vollkommen zu

12. Folgende finanzielle Ziele konnten wirklich erreicht werden.

(a) Hoher Return on Investment

trifft gar nicht zu | trifft weniger zu | neutral | trifft eher zu | trifft vollkommen zu

(b) Schneller Break-Even

trifft gar nicht zu | trifft weniger zu | neutral | trifft eher zu | trifft vollkommen zu

(c) Früher Exit Zeitpunkt

trifft gar nicht zu | trifft weniger zu | neutral | trifft eher zu | trifft vollkommen zu

Figure A.10: Page 4 of the questionnaire

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13. Was ist der typische Exitzeitpunkt?

14. Folgende Veränderung der Unternehmenskultur konnten wirklich erreicht werden.

(a) Unternehmerisches / innovatives Denken im Unternehmen fördern.

trifft gar nicht zu	trifft weniger zu	neutral	trifft eher zu	trifft vollkommen zu

15. Was sind Ihre Lessons Learned im Zusammenhang mit Corporate Venturing?

(a) Eine Fokussierung auf strategische ODER finanzielle Ziele ist sinnvoll

trifft gar nicht zu	trifft weniger zu	neutral	trifft eher zu	trifft vollkommen zu

(b) Bei Zustimmung: Worauf fokussieren Sie Ihre Ambitionen und was sind die Vorteile?

____ % der Ziele sind strategischer Natur   ____ % der Ziele sind finanzieller Natur

(c) Bei Ablehnung: Was ist der Vorteil einer ganzheitlichen Zielverfolgung?

Figure A.11: Page 5 of the questionnaire

(d) Was sind typische Probleme, die Sie feststellen konnten und wie konnten Sie diese bewältigen?

Ich möchte mich im Namen von Professor Brettel und persönlich für Ihren Zeiteinsatz und damit Ihre Unterstützung meiner Arbeit herzlich bedanken. Nach dem Abschluss meines Diploms werde ich Ihnen die Ergebnisse selbstverständlich zur Verfügung stellen.
Mit freundlichen Grüßen

Maximilian Möllers

Figure A.12: Page 6 of the questionnaire

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