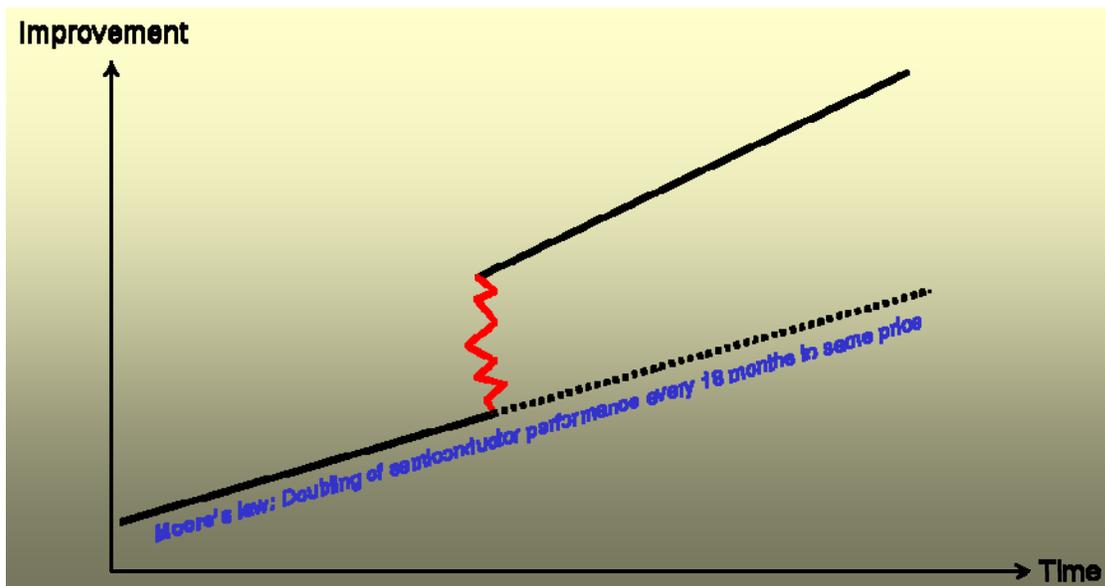


Organizing for Corporate Entrepreneurship & Funding the activity

“Radical innovations have the power to change customer expectations, alter industry economics and redefine the basis for competitive advantage”

(Hamel 2002)



Nils-Otto Ørjasæter, Professor Norwegian School of Management

Table of Content

1. Introduction.....	3
2. The Innovation Perspective	4
3. The Corporate Entrepreneurship Model	7
4. Organizing for Corporate Entrepreneurship.....	10
5. Examples from Norway	14
6. Funding the Entrepreneurial Projects.....	17
6.1 The company as the Investor	18
6.2 Private players as investors.....	19
6.3 Public funding.....	20
References:	22

1. Introduction

After an era focusing on cost-cutting, downsizing and reengineering, innovation and product development is on the agenda (Harvard Business Review 1999). Public authorities, universities and businesses worldwide are developing strategies, financial arrangements and allocating more grants encouraging innovation.

Due to increased globalization and more open and fierce competition, innovation is becoming progressively more important to a business' survival. It is the essence of economic growth and prosperity in today's global economy: it is inevitable and unavoidable. The average lifecycle of a business has decreased dramatically since the 20s and 30s, from 65 years to approximately 45 (Burns 2001). As business lifecycles are shortening, a unilateral focus on exploitation and improvement of existing business result in stagnation and crises. Companies that have been in the market for a long time and hold a relatively strong market position, have a tendency to invest in past solutions and status quo. At the same time, new entrants continue to emerge in the marketplace with pioneering and improved products and processes. In result, the list of market leaders with products that are "out-dated" is growing. According to research, innovative businesses; have a greater growth potential, superior value creation, experience a more profitable development, as well as higher sales turnover and export volume, than less innovative companies (Antonicic & Hisrich 2001; Schollhammer 1982; Burgelman 1983; Kanter 1984; Luchsinger & Bagby 1987; Guth & Ginsburg 1990; Zara & Covin 1995; PriceWaterhouseCoopers 2000; TBL, 2000, 2001).

The main focus of this paper is companies' commitment to renew themselves, through proactively initiating streams of sustainable, radical and disruptive innovation. It will address issues associated with companies that build and extend their existing competencies to develop innovations that create new markets and/or rewrite the competitive rules in existing markets. At last, the paper will address the problem of generating enough funds to support such an innovative commitment.

2. The Innovation Perspective

Recognition of the importance of innovation is not a new trend. Already in the beginning of the previous century, Schumpeter (1934), an Austrian economist, claimed that dependent or internal entrepreneurship, and later corporate entrepreneurship (or intrapreneurship), was an important key driver to economic development. Entrepreneurship was described by Schumpeter as an independent process, where the goal is to create something new, or to execute existing business in a new way. He further proposed that innovation of entrepreneurs allows economic systems to avoid repetition and progress to more advanced states. When introducing the concept of corporate entrepreneurship, Schumpeter extended the idea of entrepreneurship to include internal innovation or corporate venturing. More specifically, corporate entrepreneurship would be to internalize the process of entrepreneurship or as Sætre (2001) suggests: “To create new business within the confines of an existing business based on innovation.” In result, “new business” is established as a separate business unit, diversified into an independent company, or sold or licensed, for further commercialization, to an external company.

James G. March (2001), Professor of International Management, considers the relationship between the exploration of new possibilities and the exploitation of old certainties in organizational learning. In his article, “Exploration and Exploitation in Organizational Learning,” March examines the complications in allocating resources between the two, particularly those introduced by the distribution of costs and benefits across time and space, and the effects of ecological interaction. According to March a company that is concerned with exploitation focuses on production, efficiency, refinement, choice, selection, implementation, execution and short-term benefits, whereas a company that is concerned with exploration focuses on search, variation, risk taking, experimentation, play, flexibility, discovery and innovation. Both exploration and exploitation is important for organizations, but they compete for scarce resources. In his article, March suggests that adaptive systems, which engage in exploration to the exclusion of exploitation, are likely to find that they suffer the cost of experimentation without gaining many of its benefits. He claims that they exhibit too many undeveloped new ideas and too little distinctive competence. On the other hand, systems that engage in exploitation to the exclusion of exploration are likely to find themselves trapped in suboptimal stable equilibrium. In result, maintaining an appropriate balance between exploration and exploitation is a primary factor in system survival and prosperity. Additionally, Noteboom (1999) proposes that the balance between exploration and exploitation should change in accordance to the independent business’

lifecycle. Interestingly, the larger and publicly enlisted organizations tend to be more exploration-oriented and small-medium-enterprises (SME) tend to be more exploration-oriented (Burns 2005).

The complications intensify further when we regard the type of innovation that is executed inside organizations. Incremental changes in the production processes, products, business models and/or the organizational structure is far more common than radical and significant innovations. In Norway product innovation within the food sector accounts for 2.2% out of a total 70% for all production innovations. These product innovations are the most radical ones. Moreover, a study undertaken by Professor Waage (2003) shows that only 0,5-0,25% out of 30 000 companies in Norway each year are intensively generating knowledge based and companies and significant companies. The residual are less innovative and a limited growth potential.

Radical innovations differentiate significantly from current products, technologies and practices, and are significantly new to the company, the competitors and customers. In recent years, researchers have addressed the importance of introducing ground-breaking innovations to the market. Harvard Business School professor Clayton Christensen (1997), in his books “The Innovator’s Dilemma: When New Technology Cause Great Firms to Fail” and “The Innovator’s Solution: Creating and Sustaining Growth” discuss the inevitable need for companies to break out of old paradigms and introduce the concept of “Disruptive vs. Sustaining Innovations.” According to Christensen, successful companies tend to swim upstream, pursuing higher-end, higher-margin customers with better technology and better products. Sustaining technologies can be simple incremental improvements or radical up-market technology innovations that leap-frog ahead of the competition. They boost profitability and shareholders return as well as reflect good management. Few companies have introduced disruptive innovations, which create entirely new markets and business models. Management tends to stay with yesterdays success, not realizing that it might be tomorrows failure. They ignore disruptive technology because it initially provides neither a better product nor acceptable margins or they understand that significant, new, sustainable growth comes from creating new markets and ways of competing, but few of them are willing to make such investments when times are good and core business are growing robustly. By ignoring disruptive technology, however, they are sacrificing the opportunity to endure long-term growth and prosperity. Therefore, Christensen argue that leaders must help their organizations develop new business models that utilize the disruptive technologies if they are to survive and evolve over time. Professor Gary Hamel (2002), one of the world’s most profound business thinkers, emphasizes the necessity to expand on the innovations and think “conceptual

innovations” rather than “product innovations.” Abernathy and Utterback (1978) agree with Hamel. In their article, “Patterns of Industrial Innovation,” they introduce the dynamic model of product and process innovation, proposing that industries follow life cycles of innovations. In short, they emphasize the importance of viewing technological innovations within a commercial context.

In light of this, corporate entrepreneurship can be considered an integral part of the organizational setting, the instrument and the processes that ensure continuous generation of significant and innovative business ideas and concepts within the organization, and that these are evaluated, developed and commercialized in a way that is profitable to the organization and makes it progress and endure.

The business idea can be recruited internally or externally and then developed further through commercialization. In doing that, the organization can redefine or expanding its business idea, establish a new and independent business unit, create a spin-off or create a licensing agreement with another company. The process is illustrated underneath (figure 1):

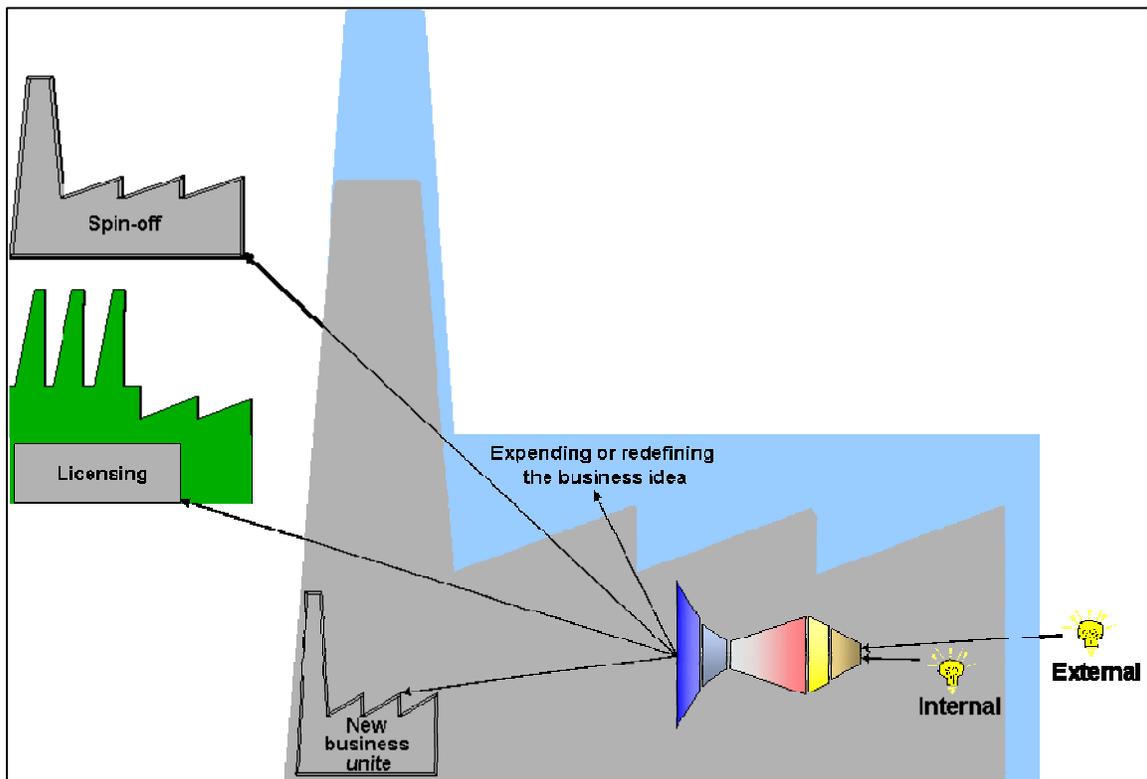


Figure 1: Commercialization

3. The Corporate Entrepreneurship Model

With this innovation perspective the challenges will be tied to how good the company is in organizing for innovation, how good they are performing the innovation process and how good a project and the portfolio of projects are managed for increasing growth, prosperity and profit. The model above (figure 2) gives a detailed explanation of the innovation process. In short, looking vertically on the trapeze step I, II, IV and V shows increased opportunities and possibilities, whereas narrow passage, step III, depicts selections, screening and exclusion of possibilities. The different steps are explained more in detail in the following.

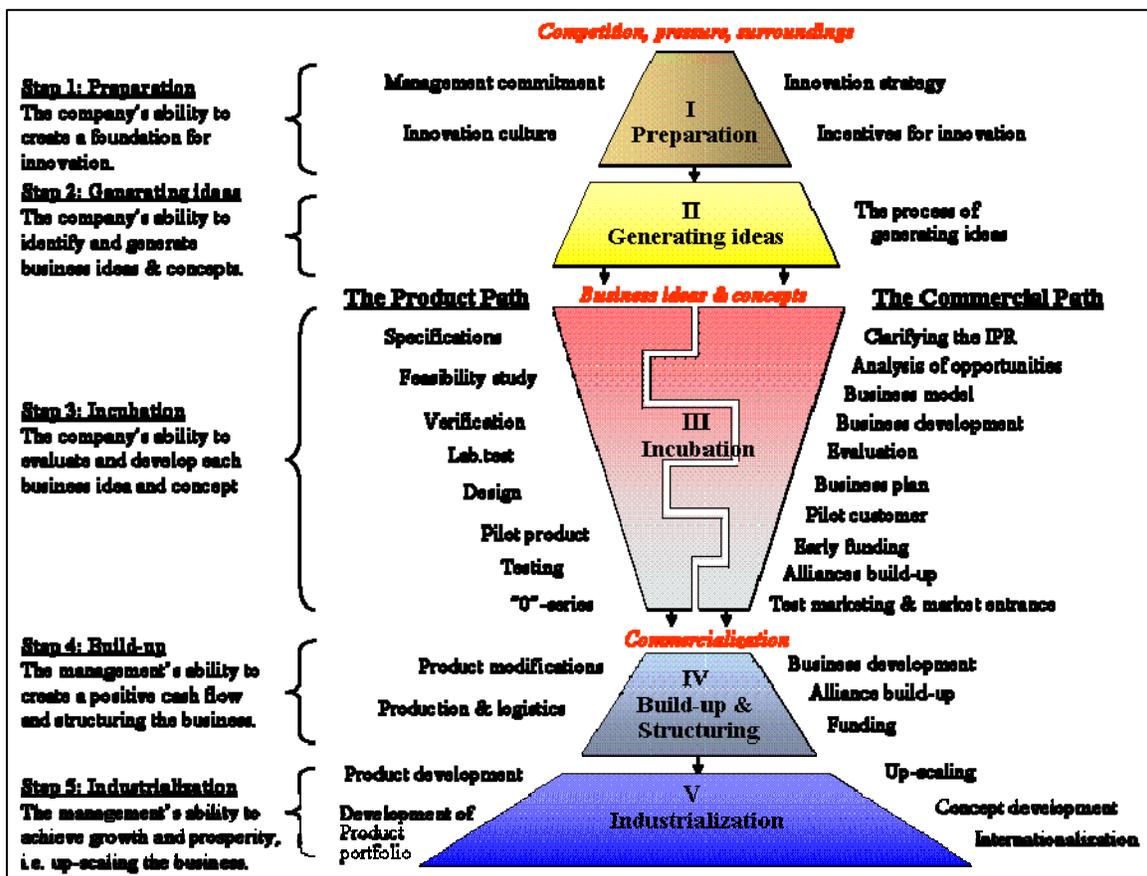


Figure 2: The Corporate Entrepreneurship Model

The drivers for innovation differs, but in general companies are affected of an increasing competition characterized by increased globalization, rapid changes, more open environment, shorter strategy life cycles and shorter product life cycles. This forces the management to respond in being more open for changes, more flexible and innovative, i.e. they start preparing and organize for innovation.

Step 1: Preparation

Preparation is the first step in the innovation process. It involves the company's ability to mobilize the employees, so that the company is ready to generate and develop viable business ideas and concepts. The most important elements are as followed:

1. *Management's knowledge, skill and motivation* to use innovation as a strategic tool to develop the company. This includes the development of innovation strategies, implementation of reward systems and allocation of resources to innovations. Promoting innovation is indeed top management's responsibility and should thus be evident in the overall strategy.
2. *Innovation culture*: The Company should encourage creative thinking, initiative and risk-taking amongst employees - Support the revolutionaries within the company as Gary Hamel (2002) puts it. Management support, organizational structure and the reward system are crucial elements in the establishment of an innovation-oriented company culture.

Step 2: Generating ideas

The company's ability to proactive use sources for identification of valuable business ideas and concepts, i.e. the system, procedures and ability of identifying, generating and selecting interesting business ideas and concepts. The ideas are raw materials for the further corporate entrepreneurial process. The ideas can be produced internally or obtained from external sources.

Step3: Incubation

The ideas and concepts generated in step 2 are now being evaluated, screened and developed further. It is important that the people in charge of incubation have commercial responsibility, an in-depth understanding of the company and its industry and have commercial and product competence.

In technology based companies it is often more focus on the functional specifications than the user specifications, on the pilot solutions than the pilot customers, the physical development of the product than the early user and distribution elements. Crucial elements in the incubation phase are as followed:

1. *Early evaluation (the acid test)*: It is important to identify the most critical factors and narrow down the options, to separate those factors that are most crucial for success. The earlier the better. Wrong decisions in the early phase can be very costly later in the development process.

2. *The development of a business plan* is an important milestone for further execution. The company's ability to develop a realistic and feasible business plan is often crucial to the company's success. The business plan is a tool for management and others touched to the project for being on the same level of understanding, make and understand the opportunities and risks of decisions, a basis for further funding etc.
3. *Verification and testing of the business idea or business concept*: Early proof of concept both to fulfillment of user needs and technological or practically feasible is conclusive to the future of the project.
4. *Pilot customer or customer observations*: One should always seek to create a customer relationship and/or observe potential customers early in the innovation process. Observe or listen to potential customers; they might give significant information on the functions a new product should have. Also, they might influence the commercialization process and help defining the "rules" of the market (the products, adds-on and pre-post sales services). The company responsible for the project can in some cases take on the role of a "pilot customer" for the new idea as long as this decreases the hurdles for commercialization of the business concept and not increases these hurdles.

Step 4: Build-up and Structuring

The business ideas that "survive" step 3 in the commercialization process are now being developed further into profitable and successful commercial projects. It is important to administer the intellectual property rights (IPR), the ownership and licensing agreements in a way that gives the company increased prosperity, growth and profit. During the development process it is common to consider alternative development strategies, and then chose the most favorable alternatives based on a thorough risk and profitability analysis. It is often more sensible to organize the project internal in the early phase of commercialization than to establish a daughter company, to spin-out or to hand over to a independent company for example by licensing.

Step 5: Industrialization

When the company has proved its justice and is stabilized, the next step in the innovation process is up-scaling, growth and industrialization. The characteristic of this stage is: Management and different functions of the established business are professionalized, production is increased significantly, new capital inflows, and strategic alliances are created, i.e. especially alliances strengthening and increasing the distribution system, market size and customer relations.

4. Organizing for Corporate Entrepreneurship

A courageous leader is required to resist the temptation of focusing on effectiveness, productivity and short-term profits, instead of seeking equilibrium between “Exploitation” and “Exploration.” Impatient shareholders and top management usually give emphasis to “Exploitation.” They normally prioritize a narrowing-down of the company’s core business, rather than expanding it or make it more dynamic. Radical changes of organizational structure, business models, technology and products that brake with existing practices are usually ignored. Such strategies are only established when the company’s position in the market is threatened or a crises situation is evident. With shrinking product life cycle and increasingly fierce competition the crises are more frequent, more profound and hit progressively more businesses. Examples of this are many. IBM almost went bankrupt when they kept focusing on their Mainframe as core business. Only, in the last minute, were they able to change the focus to include desktops and laptops. Norwegian Data collapsed during this transformation. Tandberg went bankrupt because it didn’t manage to change its organizational structure, business model and products, and thus it was unable to fight competition when it undercut their prices.

How can the company be prepared to both generate and handle more viable and radical business ideas that are also “disruptive”? As previously mentioned, Christensen (1997) discussed exactly this in his book “The Innovators Dilemma.” The more “disruptive” the technology is, the better reason to outsource it; to set up an independent business unit working solely with the commercialization of this specific innovation. It does not matter whether the innovation is radical or incremental, it must be independent from the core business. An incremental innovation that is disruptive should then either be closed down or become independent of the original company.

To run the corporate entrepreneurial innovation process and to manage radical and disruptive innovations the company should establish an independent unit, a strategic business unit (SBU). The SBU should focus solely on commercialization and be anchored in the top management. It should be a vital part of in the company’s overall strategy of value creation.

The SBU must also be highly involved in the various areas of the company and its industry, so that it can actively participate in the innovation processes. This is illustrated by figure 3, underneath. The horizontal paths show the mechanism that fulfills this role. The radical business ideas are identified by this mechanism, collected, evaluated, screened and developed further into a possible new product, brand, solution, area of operation, etc. The incremental and sustainable

innovations which have impact of the business unit where it is created should be developed within this unit, and the responsibility should also be theirs.

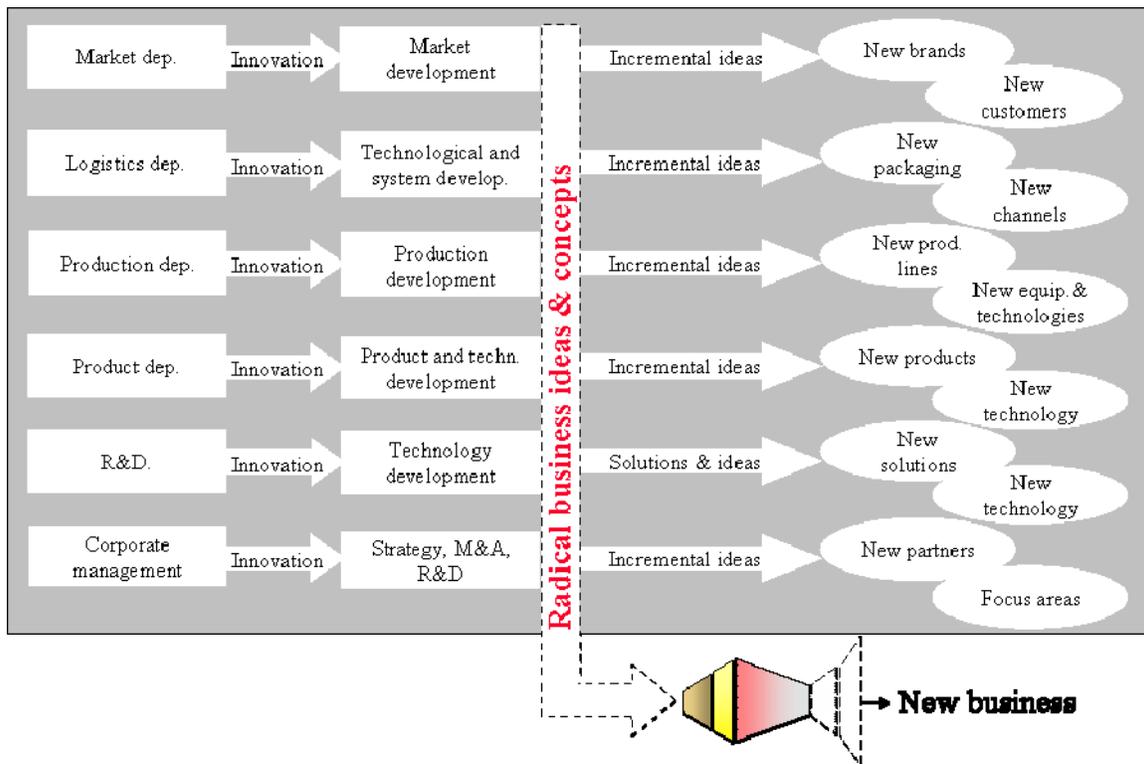


Figure 3: “Strategic Business Unit” identifies, develops and commercializes the business ideas

In short, the SBU’s responsibilities are to identify, collect, evaluate and develop the various business ideas to an extent that they are qualified or are new area business areas within the company, spin-offs or new licensing agreements are made.

More specifically, the SBU main responsibilities and tasks should include:

- Assisting top management with the development of the company’s commercialization strategy.
- Investigate and carry out analysis that supports the corporate entrepreneurial part of the business, i.e. monitoring trends, new products, technology, observe user needs, carry out surveys.
- Manage and control the company’s mechanism that identifies, generates, collects, stores, evaluates and screens new business ideas and that develop radical and disruptive business ideas.
- Manage and coach the commercial processes of the distinct entrepreneurial project from its very inception to implementation and market penetration.

- Manage, develop and take care of the company's intellectual property rights, including participation in, or responsibility of, the administration of the company's patents, portfolio of shares and licensing agreements.
- Management of the corporate venture fund.

To ensure the success of each project or innovation it is important to give the persons in charge sufficient authority, competence, capacity and capital. The "free capital" in SBU should cover the capital needed for developing the projects to finished business plan.

Often, it is recommended that the company establish a separate venture capital account for the funding of the further development of the commercialization, until it can manage on its own. In figure 4 this type of financing is illustrated.

Venture capital can be organized in different ways, for example:

1. The establishment of a closely-held company/private limited company with its own employees.
2. The establishment of a formal group of investors appointed by the CEO without any employees.

If the company does not want to establish an independent investment fund or allocate venture capital to arising projects, it could propose the business plans to the CEO or/and the board of directors if its vital to the prosperity and growth of core business.

Having said that, the allocation of capital to an investment fund for arising projects can be divided further:

1. The company put aside a set amount of money each year to the free disposal of the commercial entity.
2. Or it can transfer a certain amount of money to an investment fund for arising projects. It is then the commercial entity's responsibility to allocate the money wisely to promising projects. This is the most common way to organize private venture funds.

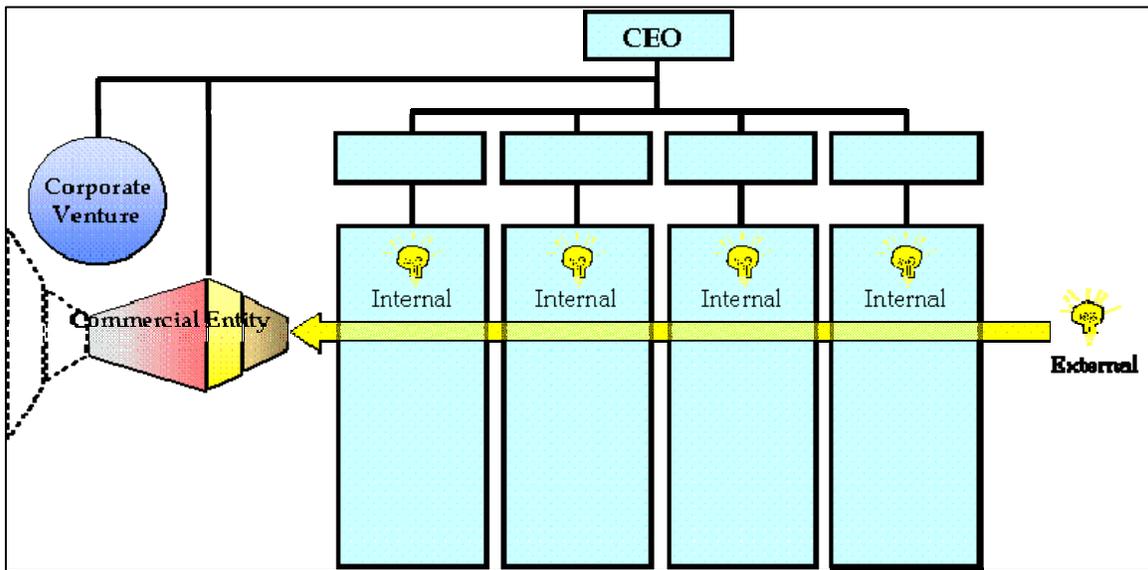


Figure 4: Structuring of intrapreneurial activities and allocation of money to arising projects

5. Examples from Norway

A lot of enterprises in Norway have established independent commercial entities and new venture funds. The most advanced companies have autonomous profit units due to this business. Statoil Industrialisering (Industrialization) and Kommersialisering (Commercialization) (Statoil I & K) is one example of this. The SBU or commercial entity is handling both internal and external business ideas through various means. I & K run its own supplier development program called LUP. The supplier development program focuses on the commercialization of superior business ideas and concepts, which means new technology for Statoil and new business to its supplier. Basically, LUP promotes new business development and allocates initial capital to up-coming and promising projects. Statoil get paid in royalties for its contribution. However, the reason why they are involved in LUP is not to be paid royalties, but rather give benefits for Statoil providing more cost-effective means of production, increase efficiency, increase the oil recovery in the oil and gas reservoirs and ensure a more secure and environmentally friendly production.

Statoil I & K also manages the company's intellectual property rights (IPR), investment portfolio and licensing agreements. They have also established their own investment trust company, Statoil Innovation Inc. This is a private limited company that functions as the investment trust or corporate venture. Any decisions in regards to the allocation of investments are determined by the company's board of directors.

Shell Technology Norway (STN) is another corporation quite similar to Statoil's LUP program. The purpose of the corporation is to make offshore related technology available to Shell. Their contribution all-inclusive: providing financial support, competence and industrial know-how as well as an extensive network that push new technology to qualification. High-quality business ideas and concepts usually transpire along the supply chain.

Indeed, genuine business ideas most often transpire in the supply chain. Therefore, suppliers together with STN and other operating companies as well as Norwegian Research Council develop the new technology. STN usually do not get paid, however, in the form of royalties for their contribution, but enters a discount scheme or sign a discount agreement supplying Shell with the product.

Startkraft, another Norwegian company within the energy business (electric power), has a research department that initiates and manages promising projects of the company. The department leads and coach research or development projects and commercialization projects.

More than 60 % of the activity is commercialization activities. Startkraft is also a part-owner of Energy Future Invest AS. This is a venture company, independent of Startkraft's research department, focusing on energy technology in Scandinavia.

Telenor New Business (TNB) is a commercial entity organized more or less as a cost-center tied to the top management TNB is responsible for the development of new technology and business concepts that support and/or extend Telenor's core business. They normally identify new business internally and process these further into commercialization. An investment proposition is then given to top management when the project is fully incubated, and in need for substantial investments.

Interestingly, Telenor is one of the main investors in Telenor Venture I and II, and the sole owner of Venture III. These funds generate investment capital intended for growth-promoting companies within the telecommunication industry. It focuses mainly on more mature projects, than Telenor New Business. The funds are administered by Tele Venture Management AS, where Telenor is the minority shareholder.

Norwegian Hydro has established Norwegian Hydro Technology Venture for investments in internal and external projects, as well as investments in other venture funds.

SINTEF has a commercial company, Sinvent in which owns the investment company called SINTEF Venture. Sinvent functions as a commercial entity for internal business ideas and as a "consultant company" for SINTEF Venture.

Furthermore, Kongsberg Innovation provides an instrument for growth in its region through its commercialization of business ideas. The company was funded by leading industrial organizations and public authorities through SIVA and Innovation Norway. The concept is interesting because it represents a network of organizations that cooperate in the commercialization of business ideas.

The Research Center of Norway is, in many ways, similar to Kongsberg Innovation. Ever since 1995, the research institutes in Norway have cooperated in the commercialization of research results with Norwegian Research Council and Innovation Norway through the so-called Forny-program (R&D based commercialization). In relation to this, the Science Parks of Norway provides good help for the research institutes by giving advice, introducing them to an extensive network of companies, and by granting initial capital to promising projects. The Science Parks, different research institutes and entrepreneurs usually all take ownership in such projects.

After a changing the law of property rights for employees at the universities in Norway, colleges and universities across the country now have the right to exploit patented inventions done by lecturers and scientific staff members. As a result, five “Technology Transfer Offices” (TTO) have been established with the aim to make the conditions favorable for increased utilization of research results within a commercial context. Those five TTOs are:

1. Forinova, University of Bergen
2. University of Tromsø
3. Norwegian Agricultural College
4. Birkeland Innovation, University of Oslo
5. NTNU Technology Transfer Office, University of Trondheim

6. Funding the Entrepreneurial Projects

Problems in regards to funding usually emerge in the early stages of an entrepreneurial project. This is also evident in both radical and disruptive projects of a company (corporate entrepreneurial projects). Innovation-oriented companies, which have a strategy and system for managing entrepreneurial projects, usually do not experience financial hardship until later, when the need of investment capital becomes substantial. This is usually after the business plan is developed and is ready to be implemented. The technology or concept shall now be developed further into products, production plants must be established, strategic business alliances created and the market evolves. In the early stages the cost are insignificant, and is comprised of time consumption and one's own initiative. The figure (figure 5) below depicts the funding gap that transpires in the early stages of such projects. At the same time, it shows how different sources of funding can fulfill the relative need of capital over time.

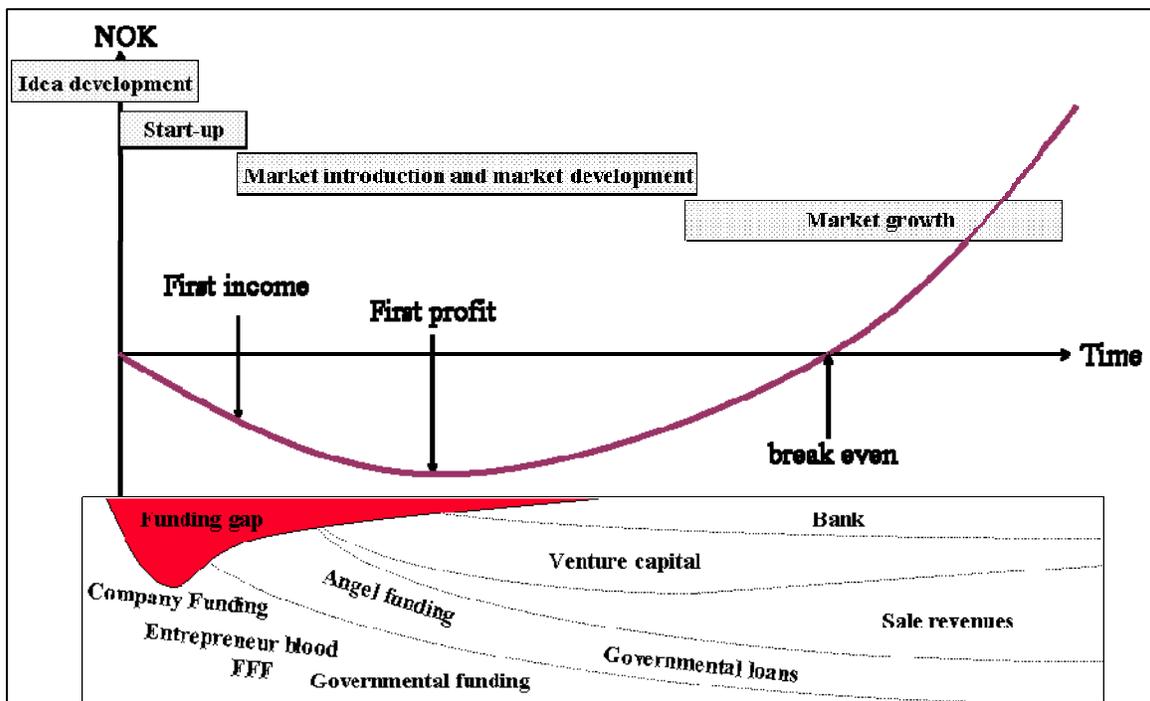


Figure 5: The funding gap and financing

The three most important sources of funding of intrapreneurial projects are the *company itself* as the investor, *private players* and/or *public players* as. Figure 6 shows how these three different sources of funding are interacting with each other with regard to a company and its stage of development at a certain time. The different sources are explained more in detail in the following.

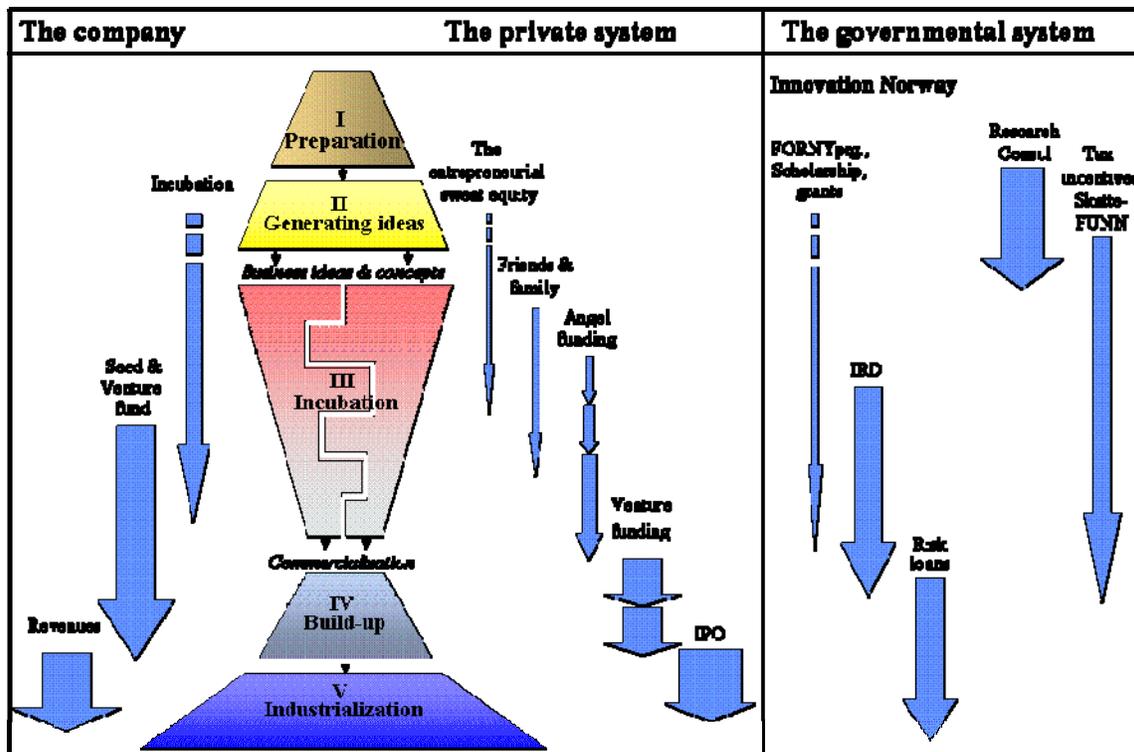


Figure 6: Funding in the Corporate Entrepreneurial process

6.1 The company as the Investor

In the earlier stages of the Corporate Entrepreneurship Model, the company itself commonly is the most important initiator and source of funding, at least as long as the project has been given clearance by top management to be realized. For companies that have a separate commercialization entity or SBU responsible for the development and implementation of projects, the initial stages are usually covered by their own budgets. The available funds are normally distributed to internal and/or external consultants with particular skills and expertise. When the business plan is ready to be executed and it requires additional funding the company ought to use their own investment funds especially assigned for the implementation of innovative projects, i.e. resources set aside in an independent corporate venture unit as with Statoil Innovation and SINTEF Venture. If the current project is interrelated with or critical to core business, it is common that the company has exclusive control in all phases of the project. On the other hand, if it is not interrelated with or critical to core business, the company can open up for internal and external investors. They will then share the risk as well as possible success of the project.

Private players as investors

To promote motivation and create a feeling of ownership in the project as well as the company, it is a common practice to issue shares to the inventors. In doing so, the company not only capitalizes on their intellectual capital and expertise, it also generates additional funding and often extra enthusiasm and energy to the project. Having said that, the inventor's intellectual capital is of most significance to the company and not their financial contribution. In other words, the shares issued are more a symbolic gesture to tie the inventors to the project and is not intended to be an important source of funding. It is then important to balance personal risk and future returns of investment.

In the early stages of commercialization it is also normal to invite friends and family ("Fool friends & Family") of the initiators to partake in the commercialization. This is often an important source of funding, as professional investors tend to be more risk-averse and thus would dismiss the project as too risky.

Another important category of investors are people with distinctive skills, knowledge and some money. They are often willing to work for a reduced salary or remuneration provided they get shares in the company or the commercialization ("Sweat for equity"). This category of investors is normally invited to join the team at the early stages of a project, before more professional and financially strong investors are invited ("Business Angels"). Industrial partners and larger corporations are next on the list of potential investors. They will only participate in the commercialization if:

1. The rate of return on investment is substantial.
2. There is a strategic fit between the investment and investing company's core business.
3. The risk is acceptable. This means that the first sales are realized and that the concept is welcomed by trivial customers.

In many cases, it is seen that larger corporations co-invest to reduce risk and increase their network. Indeed, overseas companies usually never invest alone in a Norwegian based commercialization. Participation is dependent on a co-investment from either a Norwegian company or a successful industrial organization.

There are, however, a lot of professional investors that invests in different stages of the development. The most important categories of such investors are as followed:

- "Seed-fund-capital investors".
- Public limited investors acting on a regional basis.

- Private ventures like TeknoInvest, Nortzone and Four Seasons.
- International venture investors with or without activity in Norway.
- Industrial venture investors like Telenor Venture Management, Hydro Venture, SINFEF Venture and Statoil Innovation.

A natural exit of venture companies are stock-exchange listing or trade sale by other international venture companies, industrial organizations. At this stage the need of capital is often a result of up-scaling and industrialization.

Public funding

Throughout the last years, supporting trade by giving direct incentives has become an increasing trend. In saying that, the so-called “SkatteFUNN-arrangement” is a very interesting mean to this end. Here, developmental costs up to 1.6 million Norwegian kroner (195.000 euro) per year in Norwegian industries will be deducted from the company’s taxes, or given back by the tax officer if the company is not in a position of paying taxes. In short, SkatteFUNN encourage incremental innovation and growth of core business. The public organization does to a less extent cover research and competence-intensive commercialization activities. SkatteFUNN is not an dedicated instrument for radical and disruptive ideas.

This is where the Research Council of Norway (RCN) and Innovation Norway (IN) become important contributors. Collectively they have established a program, Forny, which encourage more radical and disruptive innovations. The program does, however, only provide financial support and is not sufficient enough to bring a project to industrialization by itself. Forny is intended for the technological research environment and is of technological nature, i.e. technology pushed. IFU (Industrial Research and Development Contracts) and OFU (Public Research and Development Contracts) programs are similar programs that provide significant financial support. The IFU and OFU programs differ from SkatteFUNN and Forny as they emphasize participation from client businesses. They are demand pull oriented. Additionally, there are several public and governmental arrangements in Norway for companies to take advantage of.

In conclusion, with the right structuring and composition of investors and subsidy from various public and private programs, the potential of success is evident! This requires, however, a team of skillful and experienced managers and owners, who are willing to take the proper risks, are hungry for success and not afraid to invest in more radical and disruptive technologies and

business concepts. They have the power to change customer expectations, alter industry economics and redefine the basis for competitive advantage as Gary Hamel (2002) puts it.

References:

Abernathy, W., Utterback, J. 1978. "Patterns of industrial innovation" in *Technology Review* 80 (7).

Antoncic, B. and Hisrich, R.D. 2001. Intrapreneurship: Construct refinement and cross-cultural validation. *Journal of Business Venturing*.

Burgelman, R.A. 1983. Corporate entrepreneurship and strategic management: Insights from a process study. *Management Science* 29(12): 1349-1364.

Burns, Paul, 2001. *Entrepreneurship and Small Business*. Antony Rowe Ltd, Chippenham, Wiltshire.

Burns, Paul, 2005. *Corporate Entrepreneurship. Building an Entrepreneurial Organisation*. Palgrave Macmillan, New York.

Christensen, Clayton, M. 1997. *The Innovators Dilemma. When New Technologies Cause Great Firms to Fail*. Harvard Business School Press, Boston Massachusetts.

Clarke, Lis 1994. *The essence of change*. Prentice Hall Europe.

Guth, W.D. and Ginsberg, A. 1990. Guest editors' introduction: Corporate entrepreneurship. *Strategic Management Journal* 11:5-15.

Hamel, Gary. 2002. *Leading the revolution*. Boston, Mass.: Harvard Business School Press.

Kanter, R.M. 1984. *The Change Masters*. New York, NY: Touchstone, Simon & Schuster.

Luchsinger, V. and Bagby, D.R. 1987. Entrepreneurship and intrapreneurship. *SAM Advanced Management Journal* 52(3).

March, James G. (1991): "Exploration and Exploitation in Organizational Learning"
Organizational Science vol 2 no 1.

Noteboom, B. 1999. Voice- and exit- forms of corporate control: Anglo-American, European, and Japanese, *Journal of Economic Issues*, 33(4).

PriceWaterhouseCoopers. 2000. *Innovation and Growth: Thriving Beyond 2000*.

Schollhammer, H. 1982. Internal corporate entrepreneurship. In C.A. Kente, D.L. Sexton, and K.H. Vesper, eds. *Encyclopedia of Entrepreneurship*. Englewood Cliffs, NJ: Prentice-Hall.

Schumpeter, J.A. (1934). *The theory of economic development*. London, Transaction Books.

Sætre, A.S. 2001. *Intrapreneuship: An Exploratory Study of Selected Norwegian Industries*. Trondheim: NTNU, Norges Teknisk-naturvitenskaplige Universitet.

Teknologibedriftenes Landsforening. 2000 og 2001. FoU-rapport. Oslo.

Zahra, S.A. and Covin, J.C. 1995. Contextual influences on the corporate entrepreneurship-performance relationship. A longitudinal analysis. *Journal of Business Venturing* 10(1).

Waage, S. 2003. Undersøkelse presentert på NHO konferanse 2003.