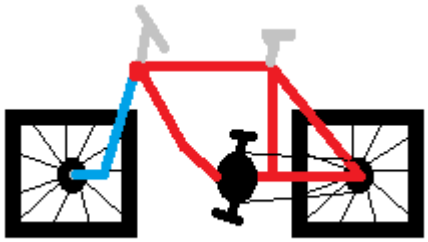
A quick lesson for future inventors



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Creativity for financial gain

The restaurant industry is probably the most creative of all industries in Sweden. It constantly pops up new products (food). But it has not always been like that. Even in the 60's, it was mostly the same dishes that figured in the menus all the time. A situation that well-travelled readers probably recognize from the situation in some other countries even today.

MÅNDAG

Stekt salt sill med löksås	7:50
Skånsk kalops med rödbetor	8:—
Kalmarlåda	8:25
Stekt falukorv, skånsk potatis	5:25
Gräddstuvad lever med lingon	7:—

TISDAG

Tunna fläskpannkakor	7:—
Stekt rödspätta med citron	8:—
Svensk panna	8:50
Oxhjärpe med gräddsås och lingon	7:—
Isterband med stuvad potatis	5:75

ONSDAG

Köttbullar (eller fläsk) och bruna bönor	7:25
Kroppkakor med skirat smör	5:25
Pepparrotskött	8:50
Strömmingflundra, potatispuré	6:—
Oxragu med brytbönor	8:—

TORSDAG

Ärter och fläsktärningar	5:50
Stekta kroppkakor med lingon	5:25
Halstrad makrill med spenat	6:—
Svensk biffstek med lök	8:75
Kokt kalv med dillsås	8:—

FREDAG

Gratinerad slätvarfilet med champignoner	8:50
Sillbullar med korintsås	5:50
Köttgryta	8:—
Raggmunk med fläsk	7:50
Fläskkotlett med curryris	9:—

LÖRDAG

Sotare med puré och dillsmör	5:25
Skomakarlåda	8:25
Pannbiff med lök	7:—
Laxpudding med skirat smör	8:50
Panerad fläsksnitzel med ärter	9:—

Varje dag iskällarsaltad lax med stuvad potatis . . 12:—

1965-year standing menu at a famous restaurant in Stockholm, with five dishes every day that were the same throughout the year.

What happened in Sweden in the late 60th century was that some creative people, such as Tore Wretman, began to bring inspiration from abroad.

Tore Wretman was restaurateur at the restaurant Riche in Stockholm in the 60:ies. He made several pioneering efforts in the Swedish cuisine, such as composing the popular appetizer ”skagenröra”.

The contemporary chef’s in Stockholm continuously presents new concepts and every tavern with a little more ambition creates their own dishes. For example it is common to bring inspiration from foreign kitchens

and transform the recipes from those into Swedish conditions with Swedish ingredients. However, few of these ideas form the basis for large scale concepts.

In 1968, opened Max's founder, the then 19-year-old Curt Bergfors,his first fast food grill in Gällivare. Then he continued in Skellefteå, Luleå, Piteå, Umeå, Boden and further south. Now the company is more or less nationwide and a serious competitor to McDonalds. Which other competitors as Big Burger and the state owned and subsequently listed hamburger chain Clock failed to do. And this without a lot of capital in the back, also at a time when there were far more other competitors than when Clock and Big Burger existed.

In the industrial part of the food sector it is also bigger creativity today than in 50/60:ies. For example offered Arla's predecessor in the early fifties only a few different varieties of milk (Gottliebsson, S. 1984), while the company currently lists 17 varieties on their website. The effect of this is not only beneficial for the industry. For example, each new milk product requires a shelf place in the milk disks, forcing the shop owners to continual rebuild their shops. Although regular standard-, medium-and low-fat milk still accounts for over 90% of the milk sales (Karlsson, S. & Moback, J. 2001).

Another industry that is characterized by great creativity is the cultural one. Though despite this, it is rarely any ideas in the cultural sector that leads to a sustained commercial success. Among imaging artists, it is particularly unusual. The most famous exception is perhaps Andy Warhol, who in the early 60:ies, made artworks that looked like stylized comic panels. These artworks he then mass-produced with different printing techniques. He further developed the concept by making stylized depictions of celebrities like Marilyn Monroe and commercial products such as Campbell's soup cans. Then he developed the concept even further through hiring a staff who continued in the same style.

Besides Warhol also the artist couple Christo and Jeanne-Claude, have lifted their concept to a higher level. The business idea is to, for a short period, convert various public places, such as sweeping the Reichstag building in Berlin with fabric. After photographing the creation, they mass copied the photographs and sold them through established channels for such products.

A Swedish example of an artist that has his own concept is the painter Bengt Elde. He definitely has his own artistic style, but he is not alone in having that. Instead his exclusive thing is that he mass copy his paintings on all sorts of everyday objects, that he sells in his own shop. You can say that he has done the contrary to other manufacturers of everyday objects. I. e. he began with the artwork.

Other artists, like writers and musicians, usually mass produce their work, but there are few examples of someone who managed to expand the business based on the same basic idea. For example, it is probably no musician who created a disc that then has sold very well and then with continued commercial success released it again several times with only slight changes in the songs each time. Perhaps because of this, the protection of artistic works is designed in a different way than for technological inventions. Artistic works, such as songs and novels may not be copied for commercial use or imitated during a period ranging from 50 to 70 years after the author's death. Unless the author, or the person who bought the rights from him, agrees to it.

Many commercial successes are, however, based on technical ideas. And according to researchers in the field (Mellgren, E. 2006) a disproportionately large proportion (20%) of all newly established technology companies in Sweden are built on ideas hatched in university research. But it need not be because the people involved in this are more creative than others, it may also be that the research institutions:

- Has specialized knowledge in one or more areas, which means that they keep track of what has already been done in these areas. This means in turn that they more than others have the opportunity to realize if what they come up with is new or not.
- Striving to bring something new to the former common knowledge. This means that they are forced to look where others have not and thereby increases the chance of finding something hitherto unknown.
- Has the equipment necessary to do the experiments needed.
- Have contacts that facilitate the efforts to move forward with commercialization of a good idea.
- Provides legitimacy to the inventor and credibility to the idea, which increases the chances of getting funding.

Additionally many new ideas that become commercial successes come from existing companies. It has about the same reasons. The biggest difference from public research is that it usually is the companies themselves who commercialize ideas and these, thus, forms no basis for new companies.

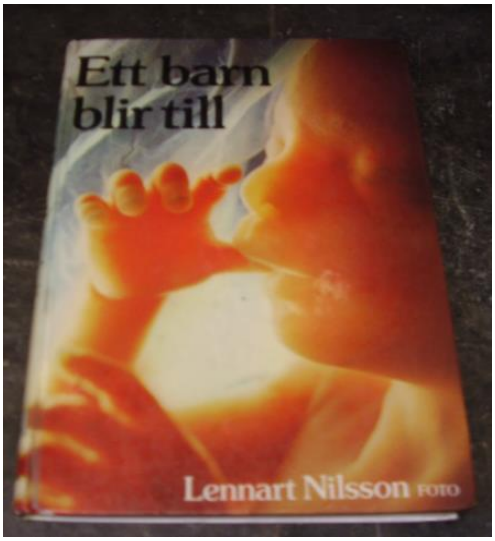
However, what might be missing in these environments is, in my experience, often the tradition of using knowledge and techniques from different areas and combines them into something that solves a problem in another area. There even a single creative person can have a chance, despite a lack of deep expertise and expensive equipment. The reason is that if no one yet has thought about to combine the techniques in this way, it is still no large organization that laid claim on the new territory.

The inventor of the telphone, Alexander Graham Bell, had the idea to take the technological advances in the electrical engineering field into the field of communication. But he was not a technician, instead he was a professor in voice physiology. To realize the idea he hired a mechanic (Thomas Watson). Watson managed it and the invention was a success.

The Swedish designer Lars-Anders Edström took the shovel from the garden to the kitchen when he came upon a plastic scraper to remove food waste from the sink. Edströms protected the design of the scraper and named it "Renzi". Renzis advantage was that it saved paper towels and that it could be stored in the immediate vicinity of the sink without being destroyed by water splashes.
But the design protection was not comprehensive enough, because just a few months after the design protection for "Renzi" had got public another Swedish company got design protection for a very similar product. The main difference was that the holes were oblong instead of round.

Another example of technology transfer from one industry to another is the explosive establishment of mail order on the Internet a few years after the World Wide Web became popular in the mid-1990s. Many of these early web entrepreneurs probably lacked both money and connections, but several of them did quite a lot of money before the IT-crash just after the turn of the millennium.

One can also find examples of how major companies have adopted ideas from other areas, thereby creating new and successful products. Like when Wasabröd came on the idear to add different cheese mixtures between slices of their crisp bread and pack the products in attractive individual packages. To then market these as an alternative to chocolate bars.



And ditto in the cultural field. For example, when Lennart Nilsson took advantage of technological advances in optics and adapted them so that it was possible to take pictures of the process in which a child grows in the mother's body. The images became a best-selling book and was also sold to a number of newspapers around the world.

There are surely even today a lot more or less untapped opportunities to transfer established techniques or methods from one industry to another, for example:

- Transfer the principle of managers from the music industry to that for artists who create physical works like paintings. He could have a group of artists that he sells to businesses to decorate their premises with various forms of artistic expressions and interpretations of their products.
- Mobile operators could do as the commercial radio stations and broadcast radio programs in their networks.
- Restaurants could compete with the manufacturers of ready made deep frozen food by selling leftover lunch food, frozen in individual portions.

The fact that some municipalities now allow private operators to take over much of the activities they previously operated, also opens new opportunities for creative entrepreneurs. Whoever gets the assignment to take over a business is reasonably the one that has offered to provide service at the lowest cost to the municipality. For it to be possible to do this with a profit for the contractor, it is required that he probably lowers the operating costs compared to when it was operated by the municipality. For this, in turn, to be possible, it can be fruitful to absorb creative solutions from other industries which have long been churning out profits from highly competitive businesses. It could be:

1. Running kindergartens or retirement homes in the same way as low-cost airlines and charge for everything beyond a certain minimum service.
2. Inserting cafe businesses in the public transport system trough forcing latch guards or bus drivers to also sell coffee and sandwiches.
3. Combining school activities with outdoor cleaning for the municipality. Letting the students do the cleaning on the pretext of giving them work experience training.
4. Running an elementary school in the same way as an outdoor kindergarten, i.e. have all lessons outdoors and thus save the costs for school facilities.

Sometimes there are also an economic potential in transferring ideas within the same industry, but from one country to another.

Januari 2010 Namn	Lösen-pris (kr)	Köp (kr)	Sälj (kr)
ERICB0M25X	25	0,5	-
ERICB0M30X	30	2,75	4,25
ERICB0M34	34	3,6	5,5
ERICB0M40X	40	6,25	7,5
ERICB0M42	42	6,25	8,25
ERICB0M46	46	8	10
ERICB0M50X	50	10	11,75
ERICB0M60X	60	15	17,75
ERICB0M70X	70	20,25	24,25
ERICB0M80X	80	27,25	31,25
ERICB0M90X	90	35	39,25

Olof Stenhammar in 1985 introduced the financial instrument call and sell options* in Sweden and he created a market where they could be traded, i. e. "Optionsmarknaden." The products became popular and the company he founded grew. A few years later it was listed on the Stockholm Stock Exchange and 13 years later the company bought the Stockholm Stock Exchange.

* A call option is a document that gives the holder the right to buy a certain share a certain date at a certain price. And a sell option implies a corresponding right to sell a stock at a given price. The point of these instruments is that it is much cheaper to buy a call option than the corresponding shares. Thus, the investor may be able to afford to buy 1 000 call options when he otherwise had only afforded 50 shares. If the shares increase in value, the option's value increases accordingly.

The further back in history, the greater the difficulty of transferring goods or ideas from one country to another. Thus there were probably also a larger potential for an individual entrepreneur to make money on this.

But some things can’t be taken over country borders so easily because of import restrictions or because it is about things like habits or attitudes. Drugs are examples of the foregoing. And it is, as familiar, an area where there are still opportunities for small entrepreneurs to make money. The latter, there are many examples of in the area of nutrition, like the consumption of fast food.

How to make inventions

An often successful way to come up with ideas that may have commercial potential is to look for gaps in existing technology. The results of these efforts can then be a new technical solution, that is, an invention. In order to find such deficiencies it can be good to have for example the following questions in mind:

A. What deficiencies are created by changes in our society? There are a variety of relatively obvious such things that could be fertile ground for profitable innovations, such as:

- Energy prices are rising.
- Concerns increases about various environmental threats.
- Urbanization increases, i.e. migration to urban areas.
- Increasing proportion of single-person households.
- Longer life expectancy and an increasing amount of healthy, alert and well-off pensioners.
- The interest in interior design is increasing.

B. What is, or will shortly become, a lack of resources? The resource that is most in the news right now is oil. But there are also other phenomena that decrease, for example:

- The presence of quiet environments.
- Various metals.
- Our physical activity.
- The population of many fish species.

C. What takes time, is tedious, or difficult to get a good result when doing?
Here it may be worthwhile to look at your environment and consider what feels annoying in any way. It could for example be:

- It is time consuming to wipe oneself dry after a bath or a shower.
- It is difficult and time consuming to get the lid off on previously unopened jars.
- It is heavy to carry home glass packaging from the store and they are pretty easily smashed and they require special handling when they are empty.
- The flavour of a cheese quickly degenerate after the vacuum package is opened.
- Potatoes have a short shelf life in the refrigerator.
- Bicycle tires often get punctures.
- Smoke alarms howl when they should not.
- Candles often drip down on the table.
- Bread is rarely even close to perfectly toasted in the toaster.
- Many homes are too hot at night but cold in the morning.
- It is difficult to cook stuff just perfect.
- It is difficult to maintain the correct temperature in the pan.
- It's hard to keep track of all digital codes.
- It is awkward to have the quilt in place in the duvet cover.
- It gets embarrassing tracks in the toilet when the shit falls down.

Solutions eliminating shortcomings are often generated through:

a. Formulate a problem, i.e. describe the functions required and the framework conditions for the solution.
b. Examine how similar problems have been solved in other areas.
c. Consider whether these solutions are transferable to the area without exceeding the framework conditions.

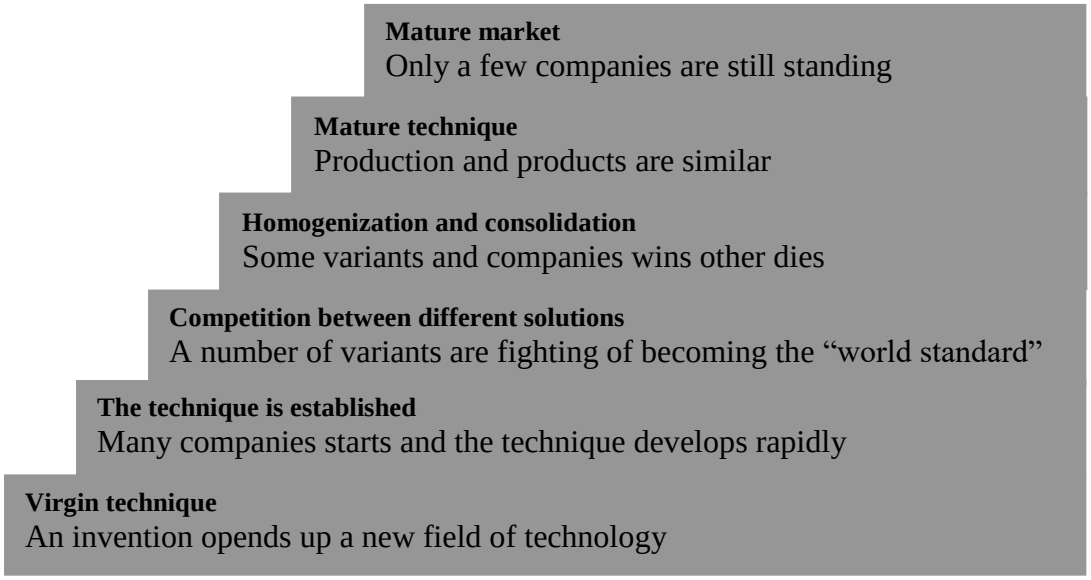
Last spring, I talked to a ventilation expert who described that the air flow in a ventilation system based on natural ventilation, unfortunately, is inversely proportional to the outside temperature. This means that the colder it is outside, the more indoor air escapes through the chimney. Which is a drawback in the system that causes unnecessary energy losses and reduced comfort indoors when it is cold outside.

It would therefore be desirable to have some form of automatic valve that reduces the flow area with decreasing outdoor temperature. The framework conditions seemed, at first, to be that the valve should be cheap and it should not require any electric drive.

During our conversation, it struck me that, for instance electric thermostats utilize the fact that some metal alloys (so-called memory alloys) changes shape with temperature and thus closes or cuts the power to the radiator. With such metal, it would be easy to make a valve, whose flow area decreases with decreasing temperature. If the valve is mounted on top of each canal on the chimney, the flow area would be controlled by the outside temperature automatically and without that any electrical energy would have to be added. We discussed this and concluded that it would be worthwhile to investigate.

The results from the investigation are described under "How you test your ideas."

Instead of searching for deficiencies, one can also search for options. This is done by looking for techniques that are so new (virgin), that it probably still is a lot that is undone. When such an area is identified, it is appropriate to proceed by looking for shortcomings in the technology and/or possible transfers from other areas.



At the advent of a new type of technology it is in a virgin state. This means that the technical solutions and production processes are far from optimal. If so there is often a chance for a farsighted entrepreneur to create a company that gets a decent share of the market, and if he succeeds, the company may eventually become large.

Jens Nylander launched in 2003 a Korean MP3 player under the brand name "Jens of Sweden". His players had a significantly more delicious design than what the competitors had, on the then virgin market for such devices in Sweden. The company was in the onset of the trend with such devices, market leader. He managed to sell 80 000 MP3 players during the first 18 months (Alexander, A. & Osterman, M. 2006). Eventually, however, the competitors caught up, partly because Jens of Sweden had problems with their suppliers, and in 2005 the company went bankrupt.

Virgin technique

The first real car was developed by the German Carl Benz and the sample was first run in 1885. But it looked more like a rickshaw than a car. Benz had many followers, and before the year 1900 came a number of the technical solutions that today characterizes a car, such as steering wheel and air-filled rubber tires. The following decade a lot of important features were introduced, like: battery, drum brakes and the ability to control the speed using a throttle.

The technique is established

In 1908 the T-ford was launched. It contributed greatly to establish the technology. This is primarily due to that it was mass produced in an efficient manner and thus could be sold cheaper than the competitors cars and thus the technology became available to a wider group of customers. The T-ford was built on a frame of steel beams with a bodywork partly made of wood. It had a four-cylinder engine with a maximum output of about 20 hp and the gearbox had two gears, which could push up the car to about 65 km/h.

Competition between different solutions

In the 20s there were a lot more manufacturers than today. For example the most common brands in Sweden 1926 were (Tidens Förlag, 1926): Scania-Vabis, T V (Thulinverken), Minerva, Rolls-Royce, Berliet, Citroën, Peugeot, Renault, Voisin, Fiat, Diatto, Lancia, Benz, Daimler-Mercedes, Horch, Presto, Ajax, Buick, Cadillac, Chevrolet, Chrysler, Cleveland, Dodge, Durant, Essex, Flint, Ford, Gray, Huson, Hupmobile, Jewett, Nash, Oakland, Oldsmobile, Overland, Packard, Rickenbakker, Studenbaker and Willis Knight.

Homogenization and consolidation

Even before the year 1930 some of these car manufacturers had disappeared and a large part of today's automotive technology had been introduced (though it was far from being on all cars). For example, there were: alternator, starter motor, electric lighting, brakes on all four wheels, front wheel drive, compressor, self supporting body structure, hydraulic telescope dampers, hydraulic brakes, wipers and automatic transmission.

Citroen B11 went on sale in 1934 and the company continued to sell it until 1957. From the outset, it had a self-supporting all-welded body, front-wheel drive, independent suspension and hydraulic brakes.

Mature technique

Then is not so much happened with car technology until the 50's, when many convenience-enhancing solutions were launched. For example: power-assisted brakes and steering systems, electric windows, electrically adjustable seats, air conditioning, fuel injection and seatbelts. And in the mid 50s the car technology can probably be regarded as mature. Afterwards not so much happened again, until the electronics made its foray into the automotive world with innovations such as airbags and anti-lock brakes (80s) and computer-based networks (90s).

Mature market

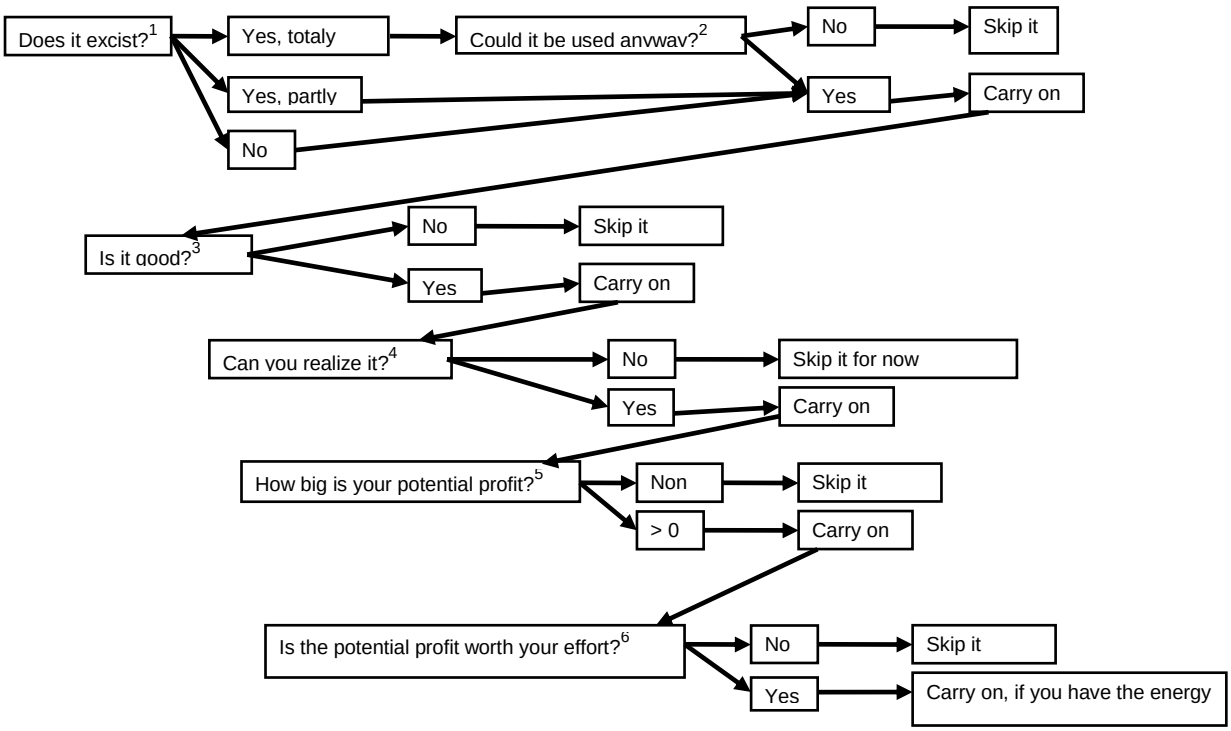
Today (in 2009) there are only a few automakers left. The largest of these is the Toyota (about 9.5 million vehicles / year), GM (8.8 million pcs.), Ford (6.4 million pcs.) And Volkswagen (6.2 million pcs.). Whatever the brand of the car is, the technical content is relatively similar and the prices are, relative to the average wage, lower than ever.

There are, still today, techniques that are virgin, with respect to the potential for improvement without new technological break through, even if the technique in fact is old. The smaller the market is for the type of products, the more likely the chance that it is the case.

There are probably greater opportunities to further improve the design of mobile stone and asphalt crushers as this one, compared to, for example, articulated haulers.

How do you test your ideas?

If you can not an idea out of your head, and wants to something with it, you should start by asking yourself the following questions (see also the numbered explanations after the figure):



1. It might be good to take the issue about if the idea is new before the question whether it is good or not, because the former is often easier to answer. Moreover, it is very common that ideas already exist, even if you yourself have never seen them realized. Start by critically examine if your and maybe also someone else can recollect that it exists. Continue to look on the internet using a search engine and clever keywords.

   If the idea is an invention go to your Patent Office's website and search, especially in the European patent database espacenet. With the right keywords, you will get information about related patents, decided in recent years in any country which patent office is included in the database. The database also covers patents that were originally developed in other countries, where the patentee has chosen to also apply for a patent in one/some European countries. What, however, you do not a get answers to, no matter how appropriate keywords you use, are:

   - If there's an old patents.
   - If there are a patents only in countries outside the database.
   - If the idea is realized or otherwise published without being patented.

2. If the idea is an invention, and the idea is to apply for a patent on it, you can skip the project as soon as you realize that the whole of your idea is already in the data base. But if the existing solutions, on at least one important point, differ from yours, it can still be worth going on. If your idea consists of for instance a business concept, it may have potential even if it is already available in its entirety anywhere in the world. It might even be an advantage, because someone has already done some of your research work and perhaps aroused people's interest.

3. The question whether the idea is good can be difficult to answer on your own, because it is easy to be blinded by its advantages. It may therefore be helpful to discuss it with appropriate persons. But it can be difficult to find such people, as many probably just will say that it sounds good, since they do not want to offend you or because they haven't really analyzed the problems truly enough.

   If your idea is an invention, it may also be good to make a simple prototype. Since the development of the prototype breeds thoughts about it and it helps you to critically examine the idea, and with a prototype it is easier to present the idea to the people you want to discuss with.

4. There are many ideas that certainly are both new and good but the inventor's lacks possibilities to realize them, because they don't have sufficient knowledge, time, energy and/or capital. But the realization does not need to

imply any great effort from the inventor, it can also be that he tells it to someone who in turn can make something out of it. If he then do it and succeed, the inventor then got something to be proud of.

5. The profit doesn't necessarily need to be financial, it may come in the form of, for example, a more comfortable life.

6. If you answer yes to this question it may be difficult to skip the project, with good conscience.

Regarding the idea of using a memory alloy in a ventilation valve, described earlier, a simple search and examination on the Patent Office's web sight gave no hit. I then believed, quite uncritically, that the idea was good and I imagined that it probably would be possible to patent it and then sell licenses to suitable companies, with a small reward for me. Glad at heart, I began to sketch the technical design. After a while it occurred to me, however, that all possible solutions would reduce the flow area so much, that the ventilation system would not meet the ventilation requirements during hot periods of the year. Which in turn ruined the whole idea. So I had done some design work for nothing, because I did not, in a sufficiently critical manner, examine if the idea was good or not. Besides, I had been careless when I formulated the framework for the technical solution, since I did not take into account the very purpose of the ventilation, i.e., to always carry out an adequate amount of air out of the building.

Patents

The point of patenting something is that no one else has the right to manufacture and market the same thing in the countries where the patent is valid, during a certain period*, and that the patent can be sold.

* In Europe, at a maximum, 20 years if the holder pays the annual fees to the respective patent offices, but in reality the time is usually shorter, because the competitors finds out ways to circumvent the patent.

Requirement for an invention to be patentable

Technical
Patents can only be given to ideas related to technical artifacts such as machinery, chemical / medical mixtures, electrical components and materials.

Innovative height
It is not enough that it is something that only is in line with standard product development. The idea must have at least one untested approach to be patentable.

Technical effect
The invention has to work technically and solve a problem in a technical way.

Reproducible effect
This means that the intended effect shall allways occure when the invetion is properly used.

New
The invention must not be known before the patent application.

It's really not that hard to come up with something that might meet the Patent Office's requirements. But you should generally wait as long as possible to file a patent application, in part because:

1. A patent has a limited life and the sooner the patent is approved the sooner it dies.
2. To write a good patent application is considered to be difficult, and thus the risk is high that the patent does not provide adequate protection around the idea, for those without experience in the field who tries anyway. The longer the idea develops and the more potential business partners that are involved in the process, the larger are the chances to get financial support for professional help with the application.
3. It can be very important that you include many, if not all possible solutions based on the invention. If you are in a hurry, you may end up in that the solution that finally is realized is not listed in the original patent application. One can then apply for additional patents, but you can also have such bad luck that the final solution in some way is indicated in the original patent applications descriptive section, without being included in any of the claims, and thus your own patent application constitutes and obstacle for the new application.

Despite the above, it may sometimes be necessary, in a fairly early stage, to submit a patent application to be safe and/or to have something to show in negotiations with potential license buyers. Moreover, it is quite inexpensive to apply for patents (in 2008 it cost only 3 000 SEK to apply for a patent in Sweden).

Innovations at work

Few of the inventors I've met, have managed to live off their inventions. Although several of them had invested a lot of efforts into to commercializing them. The inventors who are employed in enterprises have a much more relaxed life. Since the job can supply the creative mind with ideas for inventions and also can take care of all the work after the bright idea was emerged. There is even a law in Sweden that protects the employee's right to compensation if he does an invention that can be beneficial to the employer. For the law to apply it requires that the invention is patentable, and that it falls within its scope of the company, and that the inventor was working at the company when the idea was born. The law came in 1949 under pressure from unions who thought that it was unfair that the employers only got the benefits of the employees' ideas. However, it is reasonable to believe that many brilliant ideas, for various reasons, are killed by smug managements. If so, the inventor has the legal right to commercialize the idea himself.

On a large industrial company (car manufacturers) where I worked, the system worked so that whoever came up with an invention downloaded a form from the intranet, filled it with a description of the invention and emailed it to the patent department. The patent department investigated whether it would be possible to patent the idea and if so, they sent the proposal to appropriate technical experts within the company, which assessed whether the idea was useful or not. If the experts considered that it was the case, a patent agency was contacted, and they wrote a patent application. During this process, the inventor got compensation in three instalments. First (in 2004) about 6 000 SEK if the invention was considered to be good enough and new, then an additional approximately 6 000 SEK if the company tried to patent the idea and finally from 6 000 to 12 000 SEK, if the company went ahead and applied for patents in several countries (depending on how many additional countries they applied for patent in).

It can also be fruitful to be innovative at work without having ideas that are real inventions. Since many employers rewards new ideas. Large employers even have special systems for rewarding innovative employees’. System, which in my experience, are based on that the inventor fills out a form and sends it to a joint draft committee, which analyzes whether the proposal will be implemented and rewarded. In order to receive compensation for a proposal it shall provide the workplace with something new, have some "innovation height", provide demonstrable benefits, be an achievement beyond the inventors normal work and in addition the employer shall adopt the proposal. The compensation consists of a predetermined portion of the savings the employer makes in a year, if it can be calculated or estimated. Which can be much more money than what an outright invention gives.

My experience of these systems, at various workplaces, is that the attitudes to the proposals and the generosity vary from committee to committee. Some committees have refused further handling of proposals, merely because they have too little "inventive height". While others even have rewarded proposals that have been about introducing well known, but in that workplace, untested products or procedures. To minimize the amount of unnecessary work, it is therefore probably wise to consider the Committee's previous decisions before trying to figure out any own proposals.

Risks with inventing

There are risks with inventing. A major risk is that the great idea you believe you have, in reality, is quite poor. Anyone who does not realize this, risks losing money, energy, respect and time.

One example of this is the Cash Card, which a number of major Swedish banks introduced in the mid-1990s. The difference between Cash Card and Credit/debit cards was that the money was not linked to an account, instead they were only in a chip on the card. The customer charged the chip with cash at a bank branch or in a Cash Card charger in town. When the card was used the store did not have to connect to a bank and the customer did not need to sign anything, or enter any code, or showing any identification card. The customer paid the goods through inserting the card into a payment terminal. The amount was then stored in the payment terminal and at the end of the day, the store personnel connected the terminal to the bank's computer and the total sum was transferred from the bank to the merchant's account.
The banks aim was to reduce the costly cash management. The advantages for the consumers, the banks argued, were that the Cash Card was faster than other debit cards, and the customers would not have to bother with small change. The advantage for the shops was that they would have less cash and thus the risk for robbery would be reduced.

But in fact the system had a lot of serious drawbacks from the customers' point of view:

1. Far from all transactions could be carried out with the card, so the customers still had to walk around with cash.
2. It was not possible to see on the card if there was any money left, instead it required a special Cash Card reader, i.e. one more thing to carry around.
3. If the card was broken or if someone stole it, they where the rightful owners of the money (in contrary to regular credit card).
4. The extra hassle of both charging the card and go to the ATM, compared to just going to the ATM.
1. The card cost 50 SEK per year.

The system flopped and was terminated in 2004.

Another risk is that the idea is indeed good, but someone steals it and the inventor then sacrifices a lot of time, energy and money to obtain redress. An example of this is the Swedish inventor Håkan Lans with a series of brilliant inventions behind, such as colour graphics for computers. Most computer companies in the world pay him to use his colour graphics. But a number of U.S. computer companies have refused to do so. In autumn 1997 he began to sue the companies. The process was long, costly and mentally painful for Lans. It looked like he would win but he did not, because the computer companies found a loophole that was that the patent was owned by a company that he owned and not by him personally.

A third risk is that the idea is good and the inventor manages to successfully launch it, without someone stealing it, but he/she meets such great resistance in the community that it becomes over-powerful. Take the Englishman Hargreaves as an example, he invented the first mechanical spinning machine "Spinning Jenny" (named after the inventor's daughter). Hargreaves founded several spinning factories and everything was going well. But the plants were stormed by spinning workers who were worried about losing their livelihood, and the machines were destroyed. The inventor hence had financial problems and ended his days as a poor man.

A fourth risk is that the technology is launched before the necessary ambient technology is mature. Which could be the case if someone launched entirely new types of car engines based on new and environmentally friendly fuel, before it was possible for the customers to get the fuel.

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