



Shapeyard allows customers to design their own furniture using natural morphologies

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In collaboration with LU Innovation & Leap Strategies

5 May 2011

shapeyard



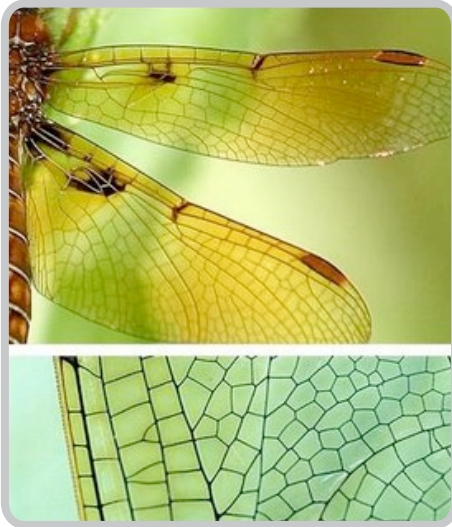
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Executive Summary

Shapeyard allows customers to co-create their own unique shelving, tables, lighting and more using morphologies that exist in nature. The morphologies are not only aesthetic and functional, but they are by their definition very stable and can be individualised to a previously unseen level. Customers have the chance to co-create designs choosing the shape, material and size before production.



Shapeyard uses a proprietary software platform developed at Lund University that lets customers co-create consumer durables, making choices about the furniture so it fits their needs and desires. The customer's personal design has its aesthetic, functional and production parameters concurrently met, enabling on-demand production of one-off items. Often customers want a product that is not available on the market or they may have an irregular space in their house. Shapeyard solves these problems.

Going to a designer and/or carpenter to make something specifically for you is slow, daunting and very expensive. Shapeyard offers customisable products at a competitive price with rapid delivery. From start to finish, the production process can be as little as two weeks (see appendix I).

Customers co-create their furniture based on pre-designs in consultation with our staff. We plan to build a website that would allow customers to designs online (further consultation may be necessary). Due complex software, the web-based service is not immediately available.

Shapeyard customers get the chance to create one-off, unique and environmentally friendly items of furniture that they otherwise would not have had access to. Initially, Shapeyard generates revenues by direct sales, then through shopfronts and later via the Internet.

Regarding intellectual property, we announced our software in public, forfeiting our chances of a patent. We will keep the code a trade secret, continuing to develop it, making it harder for competitors to imitate.

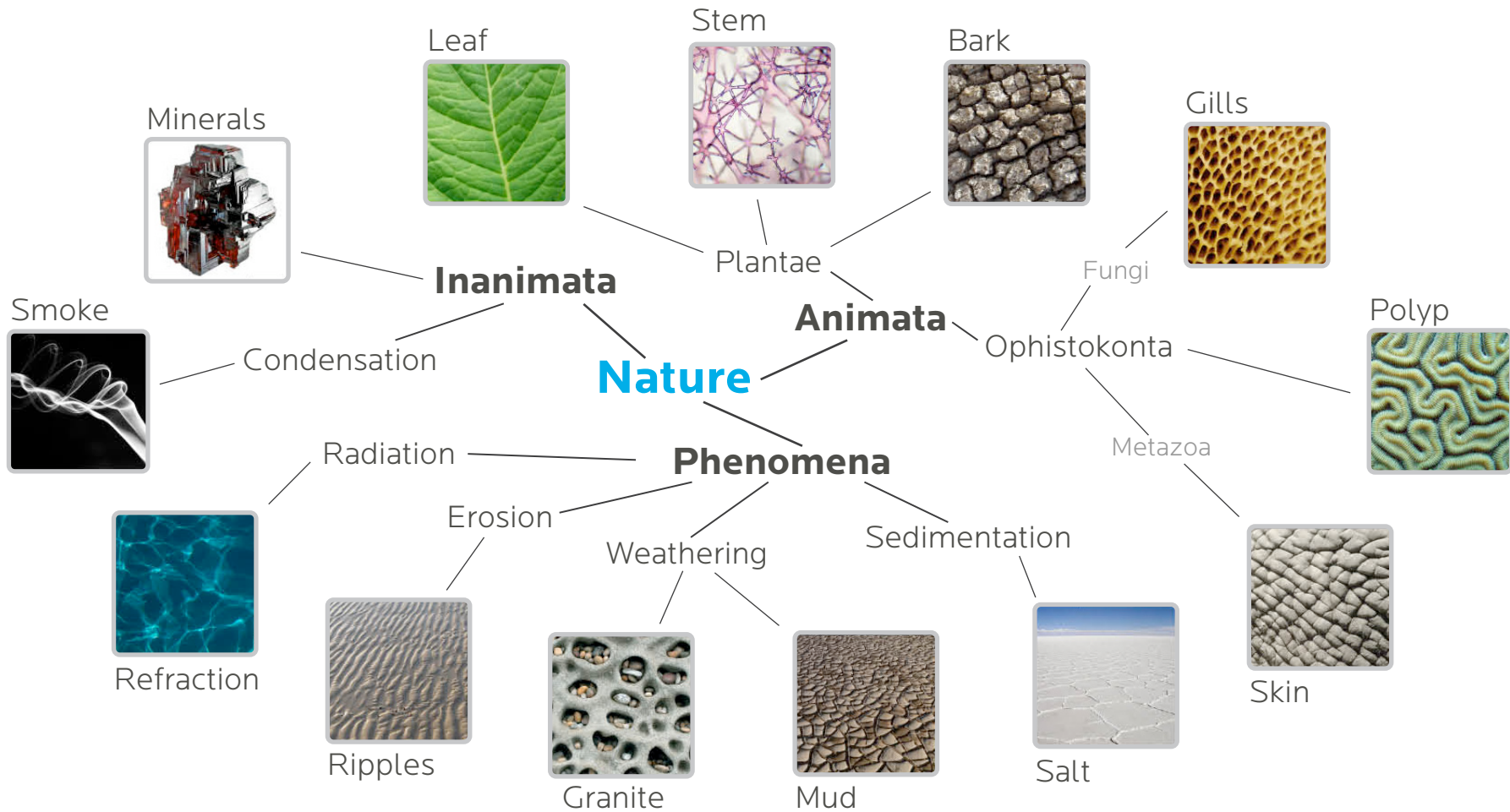
The team is comprised of communications manager Adam Mullett, production manager Birgir Hafstein and logistics manager Lea-Marike Karsten. The researchers are designer Andreas Hopf and engineer Axel Nordin.

We plan to make 36.1 million SEK in revenue by the end of the third year by selling an average of 20,000 SEK worth of products to around 2,900 customers.

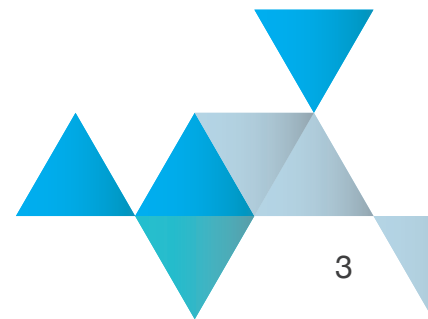
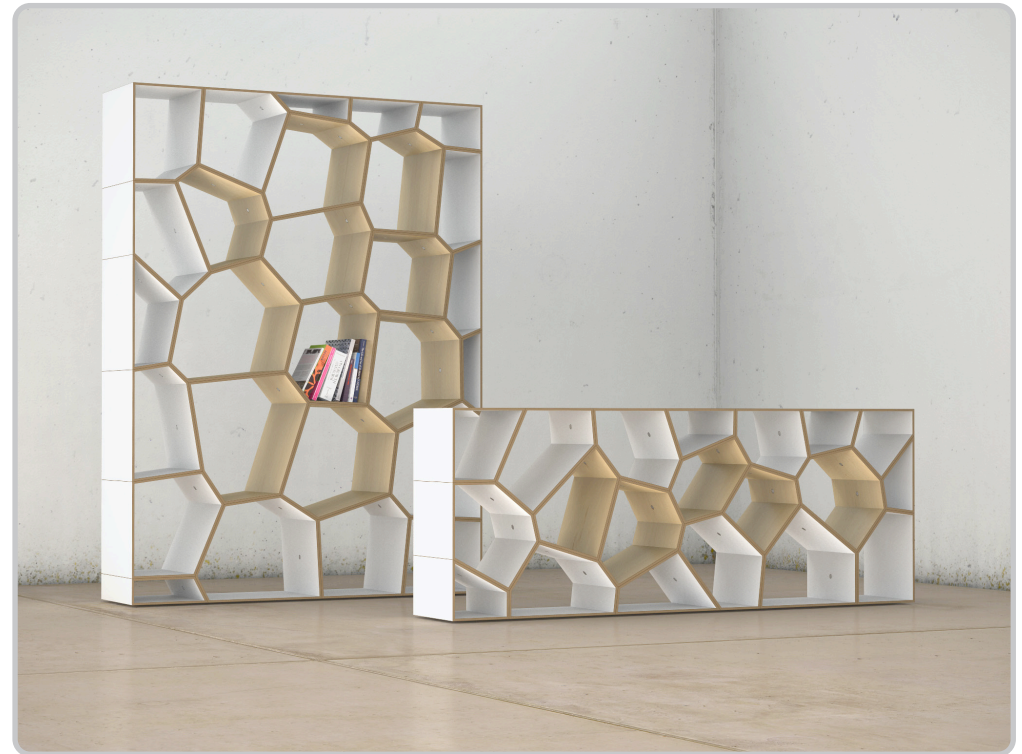
*"36.1 million SEK
in revenue by end
of year 3"*

Business Idea

Shaperyard is a company that brings co-created furniture based on natural morphologies to customers in the form of shelves, tables, lighting and other accessories for the home. High end furniture for the top echelon of society that is elegant, exclusive and personal.

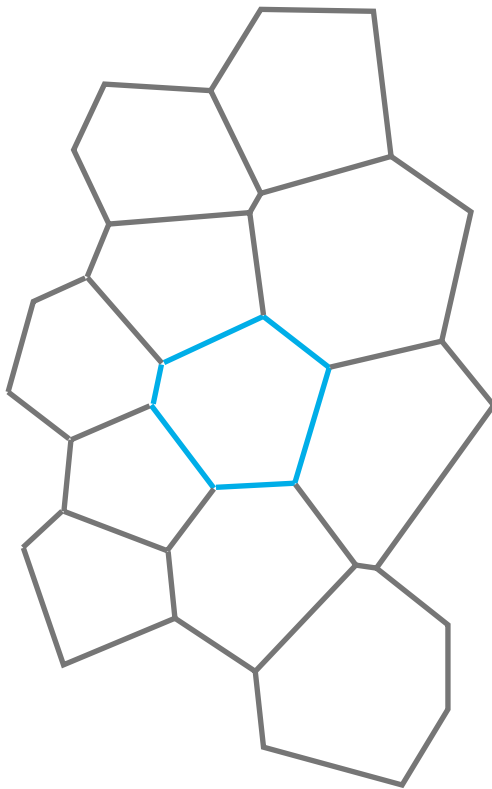


So far, we have made prototyped shelves and tables that are based on a 2D-tessellation, also known as the Voronoi diagram. Such tessellations occur often in animate and inanimate nature (for example on zebra skin or a dried river bed) where it emerges through processes resulting in a stable equilibrium of forces. We also have predesigns in the “Chinese Lattice” and four other tessellations to choose from.





Natural Morphology (Voronoi Pattern)



Designers often simply mimic nature for its aesthetics. By bringing natural tessellations or morphologies to design and using them actively in the design process you can make furniture that is both beautiful and structurally stable.

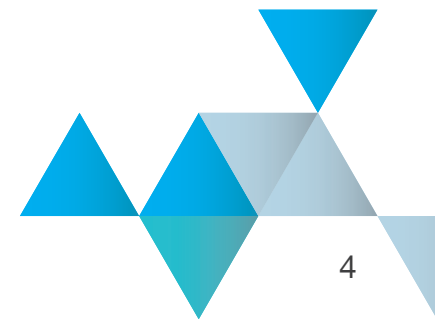
We add value by helping customers co-create unique items of furniture, out of materials of their choice. We exist in various stages of the traditional value chain: in the design, consultation, and service of the furniture. We outsource the production and delivery of the items, but we take responsibility for the final product.

Customers can choose from a range of materials that are available depending on what our producer has in stock. Today customer tastes are diverging more than ever. For example, our potential customer Fredrik Malmberg told us he wanted to buy a nice shelf from a place in Småland, but the choice of colours was limited to white and there was only one material available. Not only that, it would take six weeks to produce.

Shapeyard allows customers to produce their own design (based on a pre-design), choose the colour, size, shape and material type. Our prototypes were produced in less than a week and based on this time, we forecast that orders could be fulfilled in as little as two weeks.

In terms of intellectual property, a strategic move was made and we decided to announce our software to the public in scientific journal articles, trade shows and newspapers, forfeiting our chances of a patent. Instead we intend to keep the software code a trade secret, continuing to develop it, making it harder for competitors to imitate.

As part of our strategy development, we are incorporating the recommendations of Leap Strategies, an environmental strategy development consultancy that will help us work to make our company green. Leap Strategies will help us choose various production methods, materials, transport and disposal schemes that will both work in terms of business, but also work in harmony with the environment.



Marketing Plan

Market Description

The target customers of Shapeyard are affluent and have relatively high amounts of disposable income. They are male and female, between 35 and 55 and fit into the highest income bracket, earning more than 400,000 SEK per year. Our customers are interested in design, furniture and exclusivity. They are interested in attractive and inspiring items of furniture and want to be involved in more than just making a purchase decision. They are willing to spend extra money in order to accentuate their uniqueness and engage in a creative process. Though affluent, they are time-poor and would need a consultant who assists in development.

As seen in table 1, the segment is primarily located in the Stockholm, Gothenburg and Skåne regions. The high income earners in these regions amount to 361,141 people, or 69.9 percent of the country's population in this segment.

Table 1 - Analysis of High Income People by Regions

Region	# of High Income People	% of Country	% of Regions
Sweden	540,109		
Stockholm Area	210,492	39.0%	58.3%
Gothenburg Area	88,768	16.4%	24.6%
Skåne Area	61,881	11.5%	17.1%
Total	361,141	66.9%	

Data source: www.scb.se [2]

We are targeting the domestic furniture segment initially because it has the least amount of regulations and we have good access to producers suited to small scale production.

Our contact with potential customers, suppliers and industry experts shows us that we need to create pre-designs that customers can modify to add their own personal touches to. Heavier and more detailed design requires expertise that consumers do not have.

Customer Profile



“I’d prefer to have some do the design for me using pre-designs...meet a consultant who says they can do what I want. They can show me some suggestions with this trim and that trim and give me tips and so on,” Fredrik Malmberg, a potential customer told us (see LOI in appendix II a).

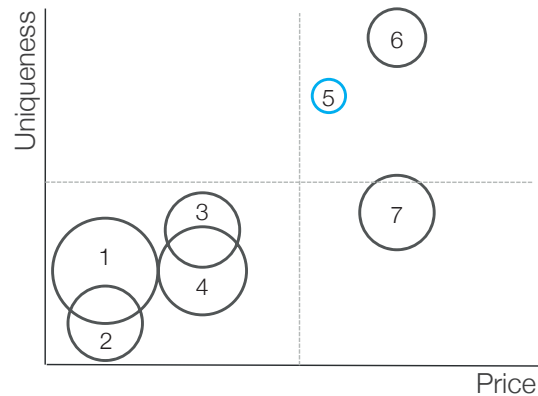
Industry Analysis

The furniture industry in Sweden is one of the European Union’s biggest per capita. The massive players in the industry dominate and make furniture for the masses at affordable prices. The size of the Swedish furniture market is 22 billion SEK annually [1].

The competition in the field is intense. The furniture market as a whole is highly developed and very competitive. IKEA, Mio and Jysk dominate the market in Sweden to a large extent.

Mass-customization and co-creation are the new buzz words in the industry and there are many companies who are entering this field in some way. Though many companies simply offer simple superficial changes (for example two distinct table lengths or three wood colours), we offer a greater degree of customization with a co-created design as well as the choice of morphology, material and size (down to the millimetre). Our company offers a new way to work in the furniture market. By streamlining the processes of design and production, customers, designers and producers are brought closer together than ever before.

Competition



- 1 - IKEA
- 2 - Jysk
- 3 - Mio
- 4 - Ilva
- 5 - Shapeyard
- 6 - Designers
- 7 - Carpentries

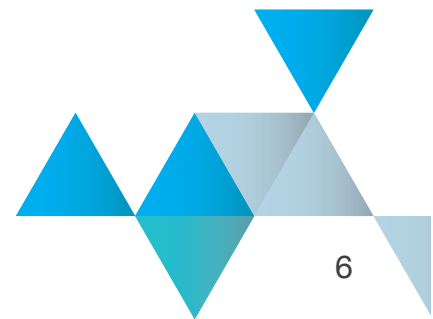
Market Strategy

We compete on the basis of new levels of product individualisation, unseen before in the furniture segment.

Another competitive advantage is the speed of production. We can deliver customized furniture in around two weeks (see appendix I), depending on material availability. This is possible due to the capabilities of our proprietary software, which automates structural feasibility analysis and production data output.

Compared to other players in the high end furniture market (designers and carpenters) we offer an affordable alternative to customers. We are able to cut costs and man-hours by automatically generating data for manual and CNC production.

To find our customers we will rely on our network and word of mouth marketing in the first year due to our lack of capital for marketing. We will sell furniture to people in our network who are also willing to present it to other potential customers such as friends, colleagues and clients.

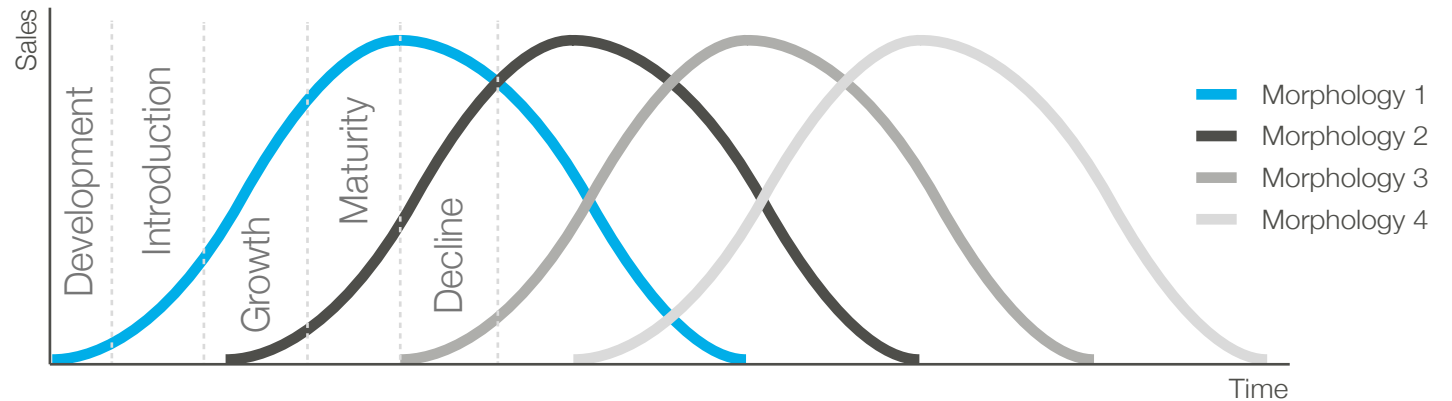




Product Roll Out

We start with a product line based on a certain morphology that we can design and also produce. Over time we will develop other morphologies and design tools that will become available to the consumer. We assume that some of our older patterns will go out of fashion or become superceded by newer ones.

Morphology Development



Note: This graph shows how we intend to roll out morphologies. Each line represents a new style for a product line.

Once we have established our brand with suppliers and customers using tables and shelves, we plan to expand into other categories including lighting or decorative ornaments such as fruit bowls, which are easy to make. The easy-to-implement and high-profit tables and shelves will give us a stable base to work from because of the lead time we will have on sales. We have established relationships with suppliers in Germany and Sweden (see appendix I). Also, we have two willing customers, Fredrik Malmberg and Zac Mullett, ready to buy the first units that will come off the production line (see LOI's in appendices II a & b).

Market Analysis

	Domestic	Office	Children	Retail	Lighting	Accessories	Hotels
Production Ease	●	●	○	●	○	●	●
Profitability	●	●	●	●	●	○	●
Regulations	●	○	●	○	○	●	○
Competition	●	●	●	●	●	○	●
Market Size	●	●	●	●	●	●	●

● High Feasibility ● Medium Feasibility ○ Low Feasibility



Entry Level Pieces

Through our customer research and dealings with producers, we have encountered several market entry barriers. Most centre around unfamiliarity with morphology design and the process of co-creation. To ease people into the idea and to reduce every one's risk (less social risk for the client, less risk for the producer in terms of time and materials and less risk for us in terms of lead time in sales) we have added a line of entry level pieces. Though in a similar style, they will be smaller, mass producible and lower priced than our other pieces. We intend to sell them via design stores. Along with each piece, a booklet with more information and marketing material will be distributed. This is how we will get exposure and enter the market.





Marketing

Our marketing strategy is set out over a few years. We will begin with a direct marketing strategy when we are small, utilizing word of mouth advertising, our Internet site as well as trade shows. Later, we will find a suitable location to open our first shop, adopting a “brick & mortar” approach. Following this, when we have enough cash flow to develop our cutting edge website to a high level, we will adopt a “bricks & clicks” approach, using the Internet to complement our shop fronts.

Direct Marketing

Our first customers will come from word of mouth marketing from people who buy our prototypes or entry level pieces and use them as demonstrator pieces in the lobbies of public buildings and hotels and so on. From this nucleus of interest we will find more customers.

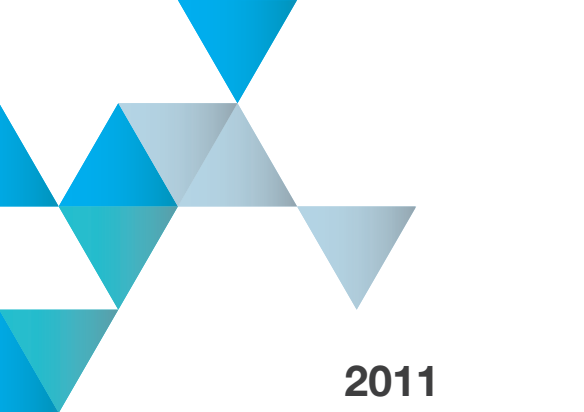
Using trade shows that focus on home furniture, but also shows that focus on design, will find huge amounts of qualified prospect customers who are highly interested and motivated to buy new and interesting furniture for their home.

At this stage, our website will serve as catalogue for our products to date. It will showcase information about how we came to our unique designs, but will also show some pictures of existing prototypes.

There will also be an interactive and fun element to the website. We will develop an easy to use web application for customers. They will type in parameters about the length, width, height and which morphology shape they would like to have. The design is not complete at this stage, but with our software we check if it's possible to build the piece as is and send them for a final quote or invite them for a further consultation.

During this first phase we will have a limited range of products due to the geographical scope of our production methods. Creating strong relationships with producers is crucial for our company's success and using the same producer repeatedly is something that will improve our product and our service.





2011

Direct Sales



2012

Brick & Mortar



2013

Bricks & Clicks

Brick & Mortar (shop fronts)

After one year of direct marketing sales, we aim to have enough capital to launch our first shop, which will continue to use the consultation method to sell furniture. By this time we will have expanded our product line. Choosing the location of our first shop is very important and we will do research into where our customers come from. However not only the current customer base is important. In terms of the design world, it is important to consider the implications of city launch choice. Berlin, Copenhagen, Stockholm, Barcelona, London and Milan have been preliminarily been chosen for future research.

Bricks & Clicks (shops and internet sales)

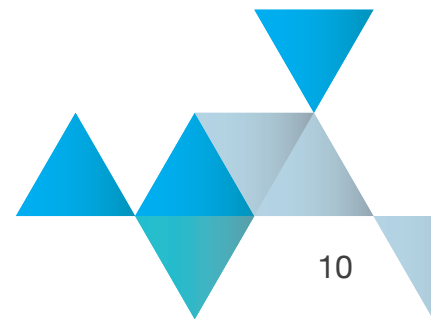
By the third year we would like to have a highly technologically capable website where users could actively invent their own designs, choosing from different materials, product categories, forms and structures. This would allow people to work creatively from home and increase sales due to that luxury. By this time the website would not just have a web application for making simple models, but would actually be able to make manufacturing calculations.

Producers

One of the cornerstones of our business are the relationships with producers. Developing good relationships means that we will have a quick turnaround on items produced and high quality products. Initially we will need to educate producers about our concept and work with them on the production process to find the best way to build the new and challenging designs that customers might order.

Due to this fact, one of our main challenges is to find reliable producers that are interested in our concept and willing to work with us. This process has already begun and we have produced five different prototypes with five producers (see appendix I) in Germany and Sweden. In addition, we have initiated relationships with six workshops in the Blekinge and Småland regions.

Production will be local in the foreseeable future, both in order to have good quality control and to maintain a good relationship with our producers. Initially, we expect the production to be based mainly in the Blekinge and Småland regions. While it is important for us to have good relationships with producers, it is also important that we cultivate a large array of contacts to hedge against potential risks such as bankruptcy of one workshop or a deferral of our orders for long periods of time.





Sales

In the first three years we hope to achieve a market share of around 0.5 percent of our target market. We assume that we will maintain this market share over the three year period, taking into account our expansion into new markets. Therefore, our projected sales revenues amount to roughly 36 million SEK in the third year, or just over 57 million SEK accumulated. Given our sales estimations and the fact that the annual furniture market of Sweden is estimated at around 22 billion SEK yearly [1], we would hold around 0.16 percent of the total furniture market at the end of year three.

Projected Revenues (in millions of SEK)

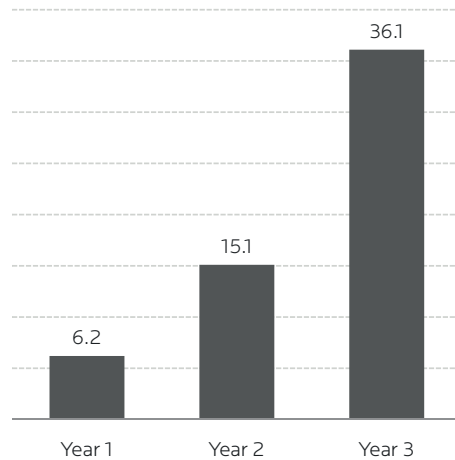


Table 2 shows our sales goals for the first three years. In year one we plan to reach 0.5 percent of the Skåne segment (309 customers). We estimate the yearly purchases of each customer to be 20,000 SEK on average.

In the second year, we will roll out to the Gothenburg market with the same market share goal of 0.5 percent (444 customers.) Finally, in the third year we plan to expand to the Stockholm region (1,052 customers).

Table 2 - Market Share Goals & Projected Revenues

	Year 1	Year 2	Year 3
Market share goal (% of high income people)	0.5%	0.5%	0.5%
Market share goal (# of high income people)	309	753	1,806
Market share goal (% of total furniture market)	0.03%	0.07%	0.16%
Projected customer spend p.a. (SEK)	20,000	20,000	20,000
Projected revenues p.a. (SEK)	6,188,100	15,064,900	36,114,100

Data source: www.scb.se [2]

Per capita, Swedes spend the most in the EU on household items and furniture at 2,380 SEK, almost double the EU average of 1,491 SEK. Since 2004, industry growth has averaged 13.5 percent per annum, compared to 5.5 percent in the EU as a whole [1].

According to the EU's statistics agency Eurostat, 2008 domestic furniture production segmentation was: kitchen furniture 56 percent; furniture parts 19 percent; bedroom furniture 10 percent; other furniture 6 percent; dining and living room furniture 5 percent and non-upholstered seating 3 percent [1].





Environmental Strategy - With Leap Strategies

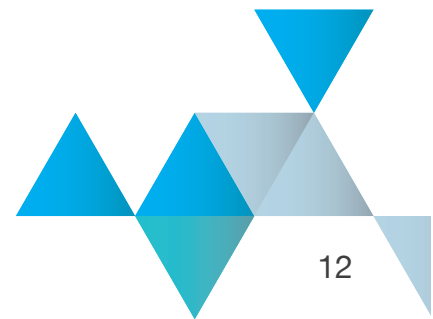
Shapeyard inherently generates lower environmental impacts than many other furniture manufacturers because our individual units reduce natural resource requirements. We focus on durable, high quality products with longer lifespan than many of the “throw away” models on the market.

Our long-term goal is to sell via our website, which will reduce the need for office and floor-space, lowering environmental impact. Considering that our target market are generally environmentally conscious, we plan to develop this into a focused competitive advantage by positioning ourselves as environmentally responsible furniture providers.

As advised by our environmental consultants Leap Strategies, we will address our environmental aspects throughout the product life-cycle by sourcing all our input material from environmentally certified providers (e.g. Forest Stewardship Council (FSC) certified wood/chipboard). We aim to use environmentally responsible transport providers. We are also investigating options to manage product “end of life” in a responsible manner. Options are a take back programme, where Shapeyard will manage end of life for customers, potentially recycling these materials.

A second option, although more research is required, is to develop a product service system (PSS), where furniture is leased over the long term (say 3-4 years) to individual clients, who like the novelty of new furniture every few years. Following the end of the term, the furniture is returned and replaced with the latest design.

These end of life options are not only more environmentally responsible, but also guarantee that Shapeyard maintains personal contact with the client post purchase, and is the primary option for repurchases. We are sure that our robust environmental profile will further differentiate us from our competitors and increase our attractiveness to our target customer. The end result is increased willingness to pay and improved brand value. This can be characterised as an “eco-branding” environmental strategy (see appendix III). [3]



Business Model

Shapeyard's business model is to generate revenue via direct sales, shops and sales from our website. These three revenue streams will be implemented in sequence as our cash flow and capital grow. In the first years Shapeyard will be a niche company growing organically.

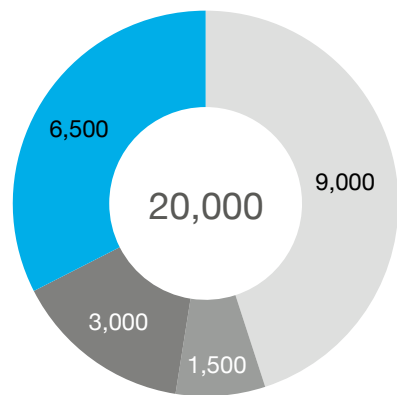
The aim of our business model is to create a novel and interactive way of creating and buying furniture. We enable customers to be creative, co-creating a unique piece of furniture for their home. Our design program makes it possible to cut out the time consuming and costly processes of making the product, because of the data that's generated by the program. In around two weeks we are able to produce the ordered piece of furniture for our customers.

The production in our business model is outsourced to producers in Sweden, located in Blekinge and Småland. Also the assembly and delivery of the end product is outsourced to freight companies. We decided to outsource these activities because the costs to build up our own production line would demand a high investment. Also companies that have the right capabilities to produce for us in Sweden have underutilized capacity, which they would like to fill with our production.

Our pricing strategy is value-based. Normally, customers purchase furniture from well know, high priced brands because they feel that their personal value is equal with the price. In our case, the perceived value is derived from in-depth participation in the product's development process and new level of individualisation.

We estimate that the average annual purchase per customer would be 20,000 SEK. For example, for a shelf at that price, production is around 9,000 SEK, delivery about 1.500 SEK and our service costs are approximately 3,000 SEK for consultation and organisation of the whole process. This leaves us with a profit of about 6,500 SEK or a profit margin of 32%.

Cost Structure
(Shelf - 20,000 SEK incl. VAT)

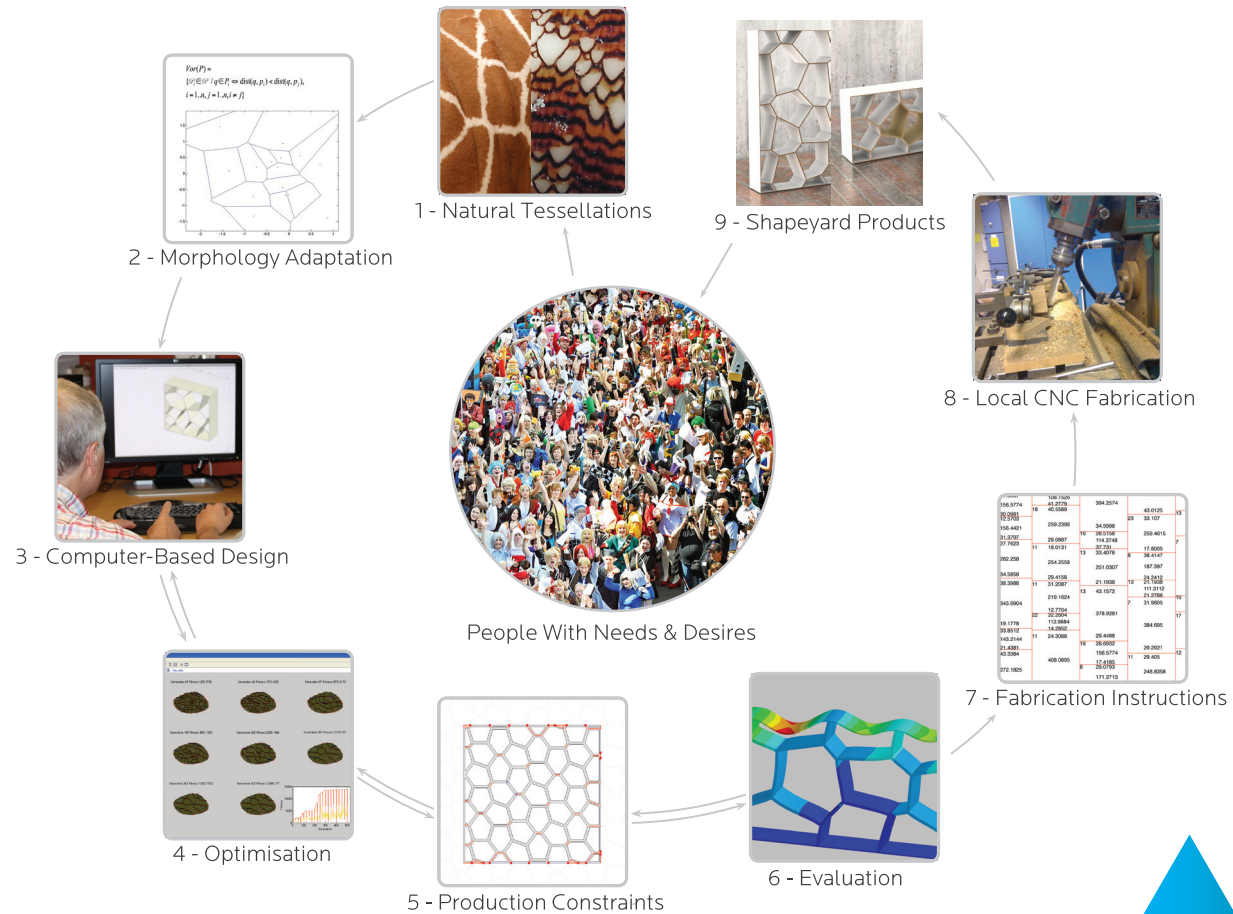


- Production
- Transportation
- Service
- Profit

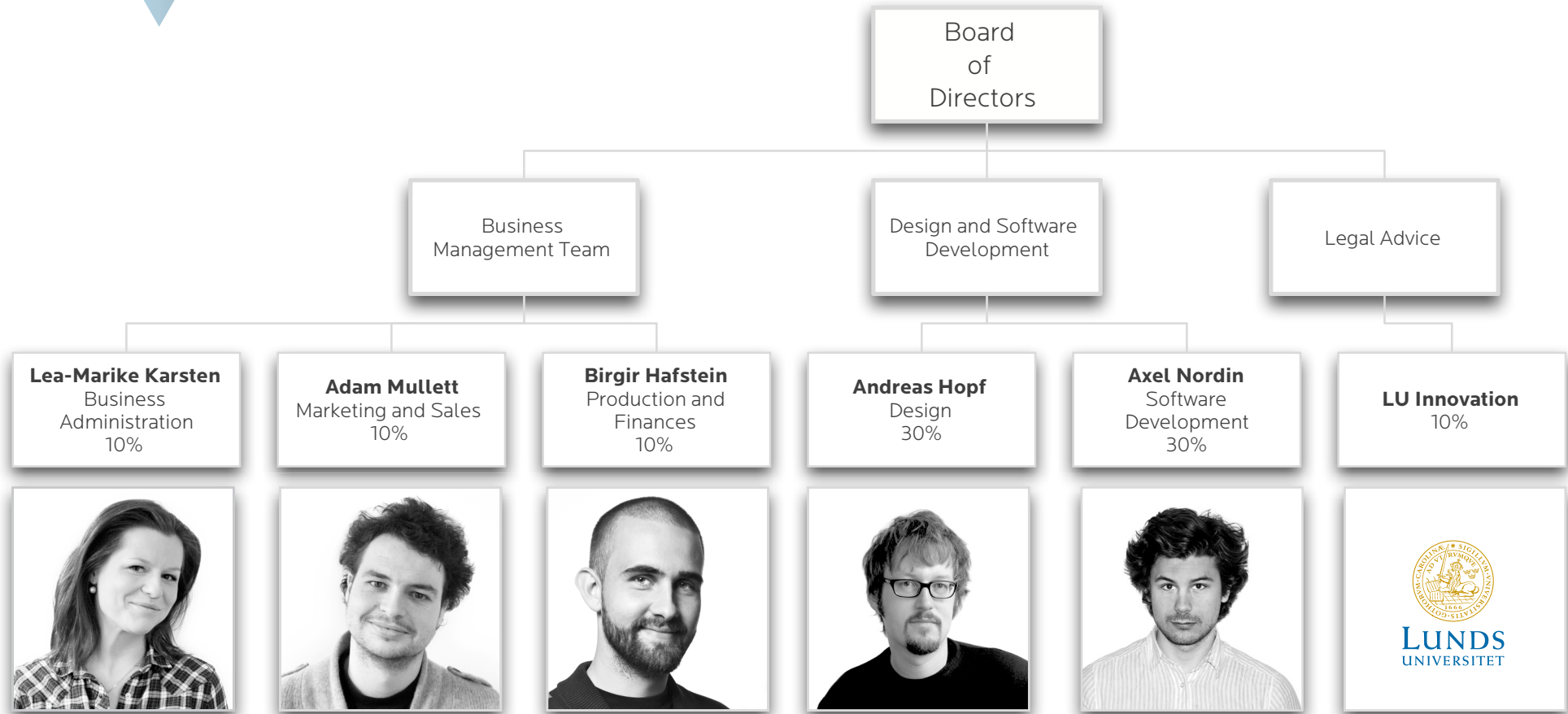
Our value chain looks different to that of the global furniture market because the customer drives our development. Most of our furniture will get produced in an order-based and customized fashion, but our entry level pieces will be mass produced. Making large orders of entry level pieces will help us create a good relationship with producers in terms of volume commitments. Also we will discuss the pre-designs and the customizable options with the producer first to ensure the production friendliness and efficiency of designs.

The graphic shows the value chain when the customer chooses to co-create a piece of furniture with our design consultant. To the customer the process is opaque: we take care of the entire process from start to finish for them.

Picture 3 - Value Chain



Organization





“LU Innovation will match external investment up to 300,000 SEK”

The Management Team

Lea-Marike Karsten - Business Administration and Logistics Manager

Lea is a 25-year-old from Germany. She has a Bachelor Degree in Technical Business Administration and Logistics as well as a certificate as a banking professional due to her working experience of six years in an international bank in Germany. Also she grew up in a business household holding two furniture stores and a carpentry. The former start-up experience of Lea is in the Logistics and the furniture sector. She already started up a logistics platform in Germany and the production of bamboo furniture. Both businesses are still running successfully. Lea can offer Bespoke Products a lot of former experience in the crucial sectors of the business and is putting in her main competencies which are organisation and structuring.

Adam Mullett - Marketing and Communication Manager

Adam is a 25-year-old journalist from Australia who lived for the last five years in Belgium, Germany, Lithuania and now Sweden. He has a Bachelor degree in Communications with majors in Advertising and Journalism. He has also worked in the television industry and in the exhibition industry. He successfully started and closed a tour company in Lithuania and was also the co-founder of the news website BalticReports.com. Adam is really passionate about writing and has excellent communication skills. Therefore he is responsible in Bespoke Products to develop the advertisement and marketing our customers like, also he is responsible for finding and attract our customers.

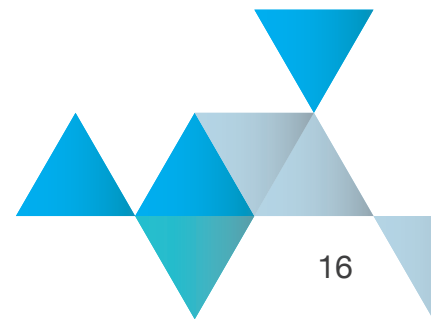
Birgir Hafstein - Finance and Production Manager

Birgir is a 28-year-old economist from Iceland who moved to Lund in summer 2009. He has a Master in Economics and in Iceland he worked for two years in the asset management department of Landsbanki as a fund manager. Also he worked as a woodworker for two years, which makes him competent for controlling the production of Bespoke Products and evaluate the results from our producers. Furthermore his financial skills add a lot of value to Bespoke Products financial planning and strategies.

LU Innovation

Sven Olsson - LU Innovation Representative and a Board Member

LU Innovation is Lund University Technology Transfer Office (TTO). They help researchers from Lund University to commercialize their research. In Bespoke Products they hold 10% ownership of the business and gives therefore legal advice and financial help. LU Innovation provides up to 50,000 SEK until May 2011 for Bespoke Products. Also they match up to 300,000 SEK in May 2011 if we find external investment of at least the same amount.





The Research Team

Andreas Hopf — Designer

Andreas is a 42-year-old designer from Germany. He has 18 years experience in designing consumer products for major brands and 7 years experience in design education at university level in Sweden. He has also been running a design consultancy with various partners for 11 years in the UK and Germany. Andreas is the responsible designer of Bespoke Products. He is designing the pre-designs and the customization possibilities as well as checking the production friendliness and cleverness of the designs. Andreas is also a member of the board of Bespoke Products.

Axel Nordin — Design Engineer and Programmer

Axel is a 24-year-old design engineer from Sweden. He has a Master Degree in Mechanical Engineering. Furthermore he has been researching and creating computer based tools for generating bespoke products over the last two years. Axel is responsible in Bespoke Products for developing the software to a bigger extent constantly. Also adding different product categories and controlling external IT deliveries.

The Board of Directors

In Addition to the aforementioned Andreas Hopf, from the research team and Sven Olsson, from LU innovation, the board includes the following members.

Bengt L. Andersson — Chairman

Bengt is currently active as chairman / member of a number of companies and consultants with a focus on mentoring and development of business. He was previously Global HR Director and CEO of Tetra Pak in Sweden.

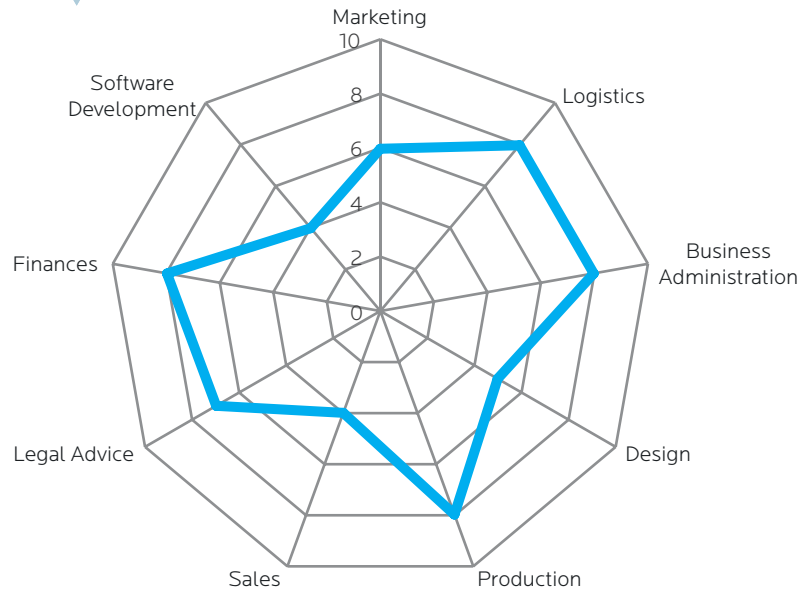
Peter Berntson — Board Member

Peter is a member of five boards from different companies. He is also an advisor in industry matters to IKEA having previously been MD and group head of IKEA AB's industrial group Swedwood, which Peter took from 2 employees to 14 000 employees in over 35 factories all over Eastern Europe. Since his retirement in 2006 he is active on different boards and studying as well as educating.



As seen in the graphic some competencies are lacking in our company that need improving. For example, sales competency needs to be improved when opening our first shop.

Competence Net



- For the first year, the management team will be responsible for the sales. In the second year we will employ specialist people for sales.
- Over time we will introduce more product categories and we will need more software development power. Therefore we will have to employ another programmer. This goes hand in hand with the designing.
- The marketing section of Shapeyard needs more hands because of the high workload, particularly in addressing our customers and developing strategies to position Shapeyard in the market.

From the outset, our aim is to develop a culture of innovation in Shapeyard. Our company is living through customization and needs a constantly innovative approach to address customers who are interested in their complete individuality. This complements our vision of Shapeyard. We are aiming to become a well-known, mid-size company which is famous for their solutions in customizing not only furniture but also all different kinds of domestic products in the future.

Exit Strategy

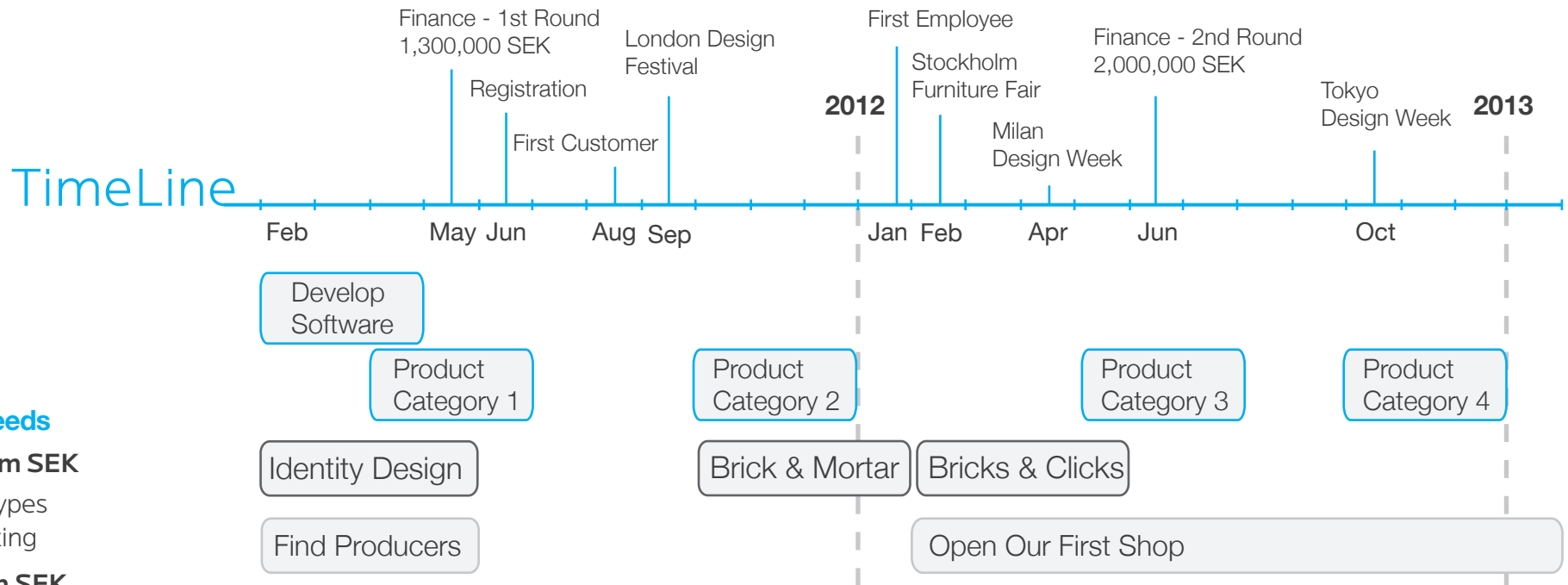
From a realistic point of view we know that there can be situations that our company is attractive for sale. We are aware of this and are open to sell the company if this is the most valuable option. We could also merge with other companies, which would be a useful opportunity to stabilize and grow our company.

An IPO is unlikely during the first five years, because we think we will not have the required size in terms of turnover and profit.

We are also prepared to dilute our shares in favour of external investors to guarantee a financial stability in our business in the early stages.

Implementation

We want to establish Shapeyard in summer 2011 and get our first customers at that time. We need investors for our company to secure our start-up financially. In the first quarter we will have a negative cashflow, so we need external investment before starting the company. Other milestones are the development of our business model in the next three years as well as finding further financing. (for a detailed gantt chart see appendix IV).



Capital Needs

Year 1 - 1.3m SEK

- Prototypes
- Marketing

Year 2 - 2m SEK

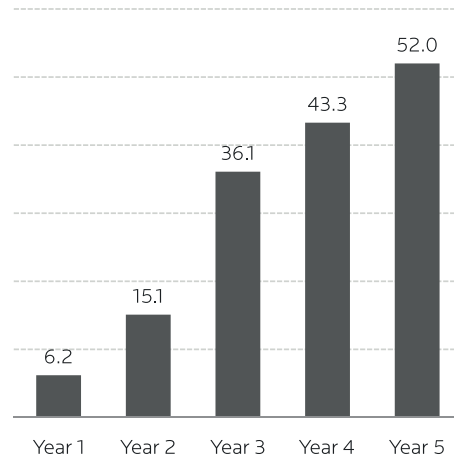
- Shop expenses
- Marketing

Currently the Management Team is developing market entry strategies, installing a webpage, designing a corporate identity, performing research about our customers and building prototypes at new producers to check their capabilities. The Research Team is developing the software and pre-designs for our first product lines and talking with producers about technical issues.

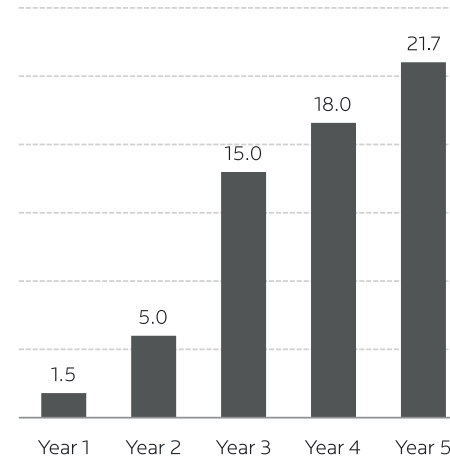
Profitability & Financing

A detailed financial analysis, along with all underlying assumptions are included in appendices VI a-c

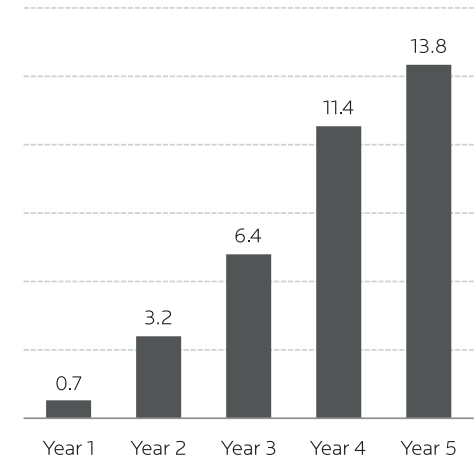
Sales Revenues
(in millions of SEK)



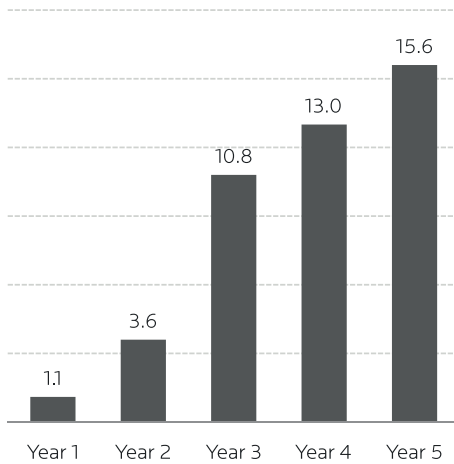
Income From Operations
(in millions of SEK)



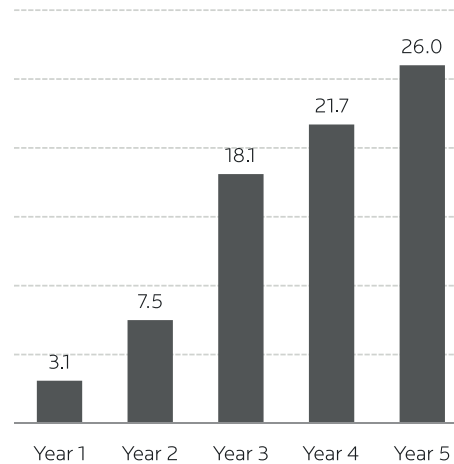
Net Cash Flow
(in millions of SEK)



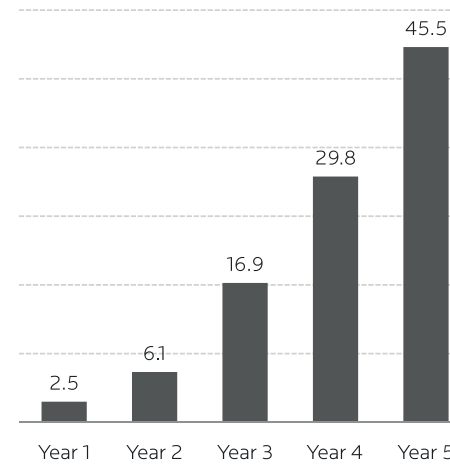
Net Income
(in millions of SEK)



Gross Profit From Sales
(in millions of SEK)



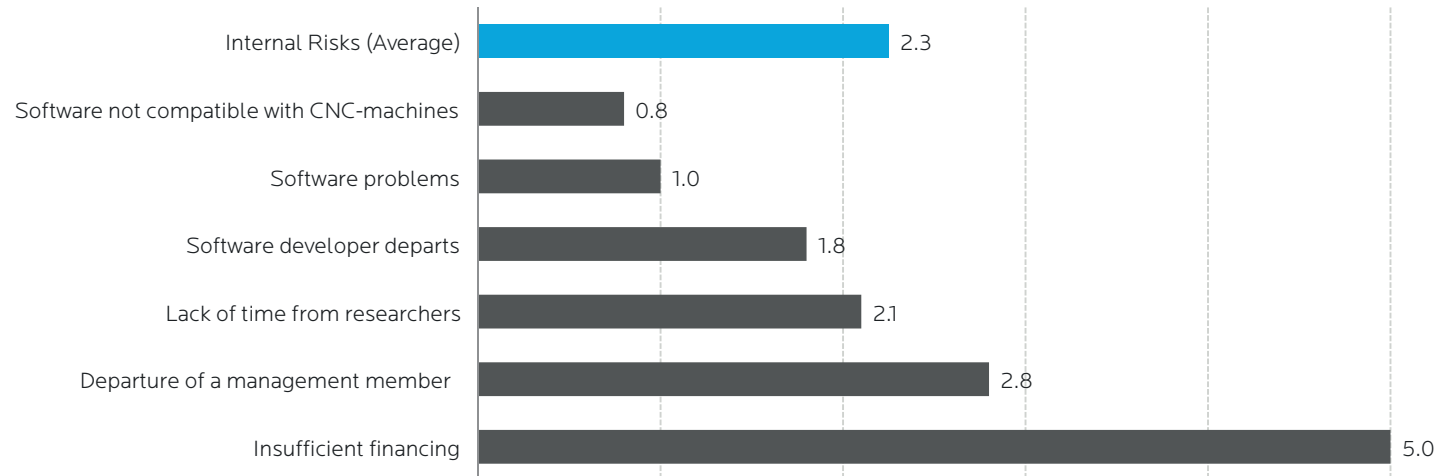
Total Assets
(in millions of SEK)



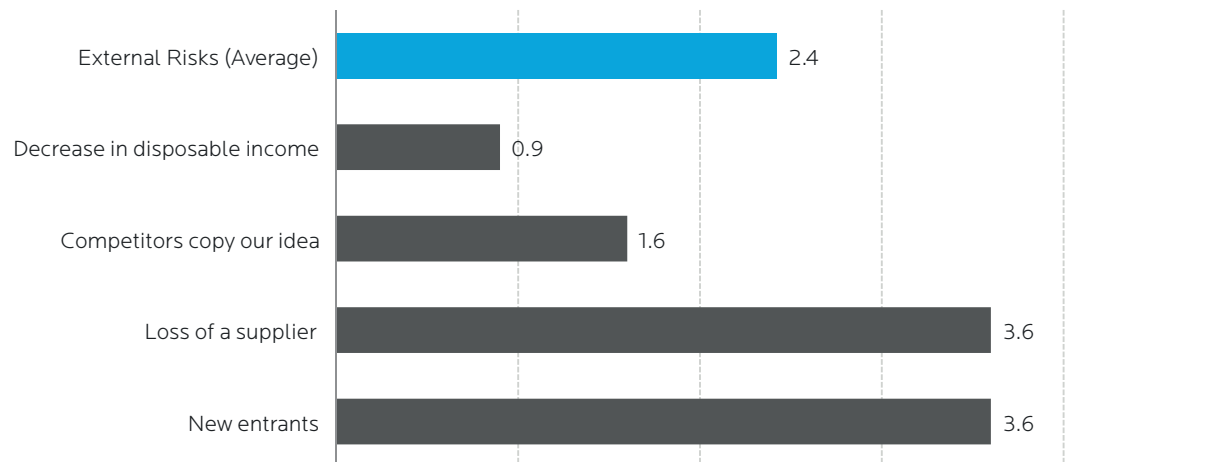
Risk Analysis

Following is a breakdown of the risks facing the company in the coming year (For details, see appendix VI).

Internal Risks



External Risks





Technical Risks

Internal Risks

As with all software, ours will have some bugs that will appear as people start to using it. It could also be the case that the outputs generated by the software aren't fully compatible with all CNC-machines used by our producers. These problems have to be fixed quickly or we face the risk of losing customers.

In the early stages this will be addressed by Axel Nordin, the team's mechanical engineer/programmer, but the long-term plan is to hire a full time programmer to solve these issues. Because Nordin is currently the only person who can fully operate the software, we will make it his responsibility in the ownership contract to deliver a working program, to train other members of the team and to deliver a user manual. These things should be done by the end of May, 2011.

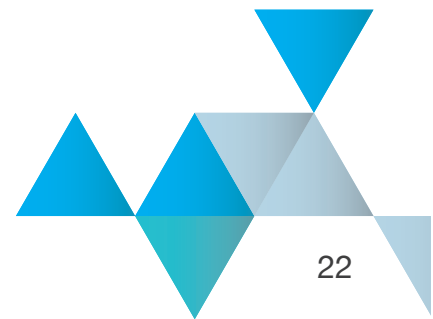
Economical Risks

Our company will need some external finance in the start-up phase in order to pay for prototypes, pay salaries as well as other expenses. If we don't succeed in securing enough finance it is a possibility that the company will go bankrupt. However, the management team is willing to lower (or sacrifice completely) their salaries for some time period. It is also possible to use bootstrapping methods in order to obtain free prototypes and lower other costs for rent, accounting services, legal services etc.

Staff Risks

Given the fact that the no one in the management team is Swedish, we face the risk of one or more of the members returning home and leaving the company. In addition, members in the management team could get external job offers. This would have a considerable impact due to the fact that our skills are somewhat different and complementary, so we would need to hire replacements. However, it is the intention of each individual in the team to take the idea to market and continue to work for the company until exit.

The research team will continue their work at Lund University so there might be a risk that they don't have the time necessary to devote to the company. If this were to happen we would lose some know-how related to the software, natural algorithms and design. To compensate this, we would need to hire the programmer sooner then expected as well as a designer.





Technical Risks

Economical Risks

Market Risks

Environmental Risks

External Risks

Competitors in the field of customizable design furniture already have a head start in many respects. If they saw what we are doing, they could scale up to our capabilities because we do not have a patent on the software and will not have one in the future. To minimize this risk it is crucial to achieve first mover advantage in using the natural morphologies in good designs and gain exposure through fairs, magazines etc. We will also continue to develop the concept and the software underlying it, making it harder for competitors to imitate.

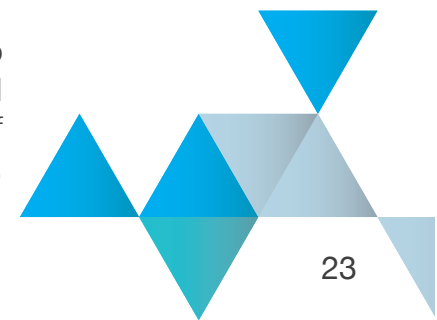
Our target market is a very thin slice of society and our value based pricing strategy relies on them having a certain level of disposable income to be able to pay for our product. A decrease in disposable income would therefore negatively affect our sales but considering the good status of the Swedish economy, this should not pose a problem in the coming years.

Also any failures in production would be very disruptive to our process. For example, the bankruptcy of one of our suppliers would have major implications, given the limited number of suppliers. In that case it would probably take months to find a new supplier and build up a relationship. In order to avoid this we will seek to find reliable producers from the beginning that are willing to enter into long-term contracts.

Given the increasing popularity of co-created/customized furniture, the risk of new entrants to the market is high. With an increased number of competitors it will be more difficult to maintain the necessary levels of sales. As previously mentioned, we will minimize this risk by first mover advantage and exposure as well as developing the software and adding to our base of pre-designs.

As always, with a new product, there is the risk of demand. We don't know in advance if people will actually buy our products. Therefore, it is crucial to have good exposure on the market and make our company's benefits known to consumers.

Due to the nature of our business and how we allow customers to choose any materials they want from our selection, there is the risk that we could lose the edge due to a material no longer being available. For example if a customer would be interested in certain types of engineered wood, but we were not able to supply it due to lack of availability or environmental restrictions, we would not be able to satisfy their desires.



Appendix

I - Prototypes

Bookshelf



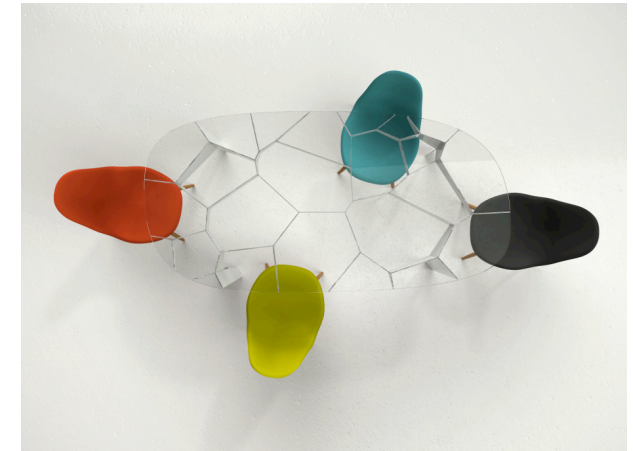
- Production Time: 6 Hours
- Production Costs: 7,000 SEK
- Material: Plywood
- Delivery Time: 1 Week
- Producer: Plattenladen (Berlin)

Coffee Table



- Production Time: 6 Hours
- Production Costs: 2,000 SEK
- Material: Metal & Glass
- Delivery Time: 1 Week
- Producers: Linde Metalltechnik AB (Helsingborg), JSW Pulverlackering (Värnamo) & Värnamo Glasmästeri & sliperi AB.

Dining Table



- Production Time: 8 Hours
- Production Costs: 5,000 SEK
- Material: Metal & Glass
- Delivery Time: 1 Week
- Producers: Linde Metalltechnik AB (Helsingborg), JSW Pulverlackering (Värnamo) & Värnamo Glasmästeri & sliperi AB.



II a - Letter of Intent

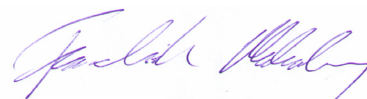
Fredrik Malmberg
Dag Hammarskjölds väg 1d
224 64 Lund
Sweden

Jan. 20, 2011

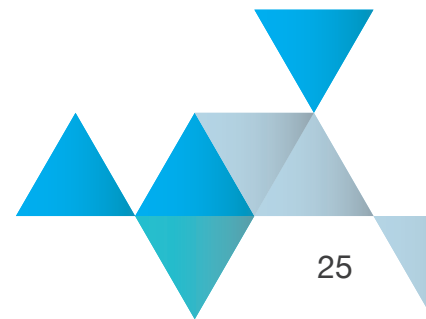
Dear Shapeyard management,

I have the intention to design and build a shelf that will hold my books and other ornaments for my living room. I believe that your software will be able to give me the solution that I need for my home, which I have been unable to find elsewhere. I am willing to pay between 12,000 – 18,000 SEK for the shelf, which I hope to be delivered in good time, hopefully two weeks.

Best Regards,



Fredrik Malmberg





II b - Letter of Intent

Zac Mullett
58 Faulkner Street
Hoole, Cheshire,
CH2 3BE, UK

Jan. 27, 2011

RE: Shapeyard furniture prototype

Dear Sir,

I am writing to you in order to notify you of my interest in financing a prototype of Shapeyard Products furniture item. My personal design space in central Stockholm is presently in need of lighting and shelving that will inspire and impress my guests. The Shapeyard Products prospectus demonstrates an interesting new technique in creating unique, eye-catching furniture that I believe will become popular amongst style-conscious Swedes.

Please contact me at your earliest convenience to discuss this matter.

Yours sincerely,



Zac Mullett
Managing Engineer

III - Environmental Strategy [3]



Source: (Orsato R. , 2009)

- Provides marketing differentiation
- Increases will to pay
- Business model hard to replicate

Eco-branding relies on:

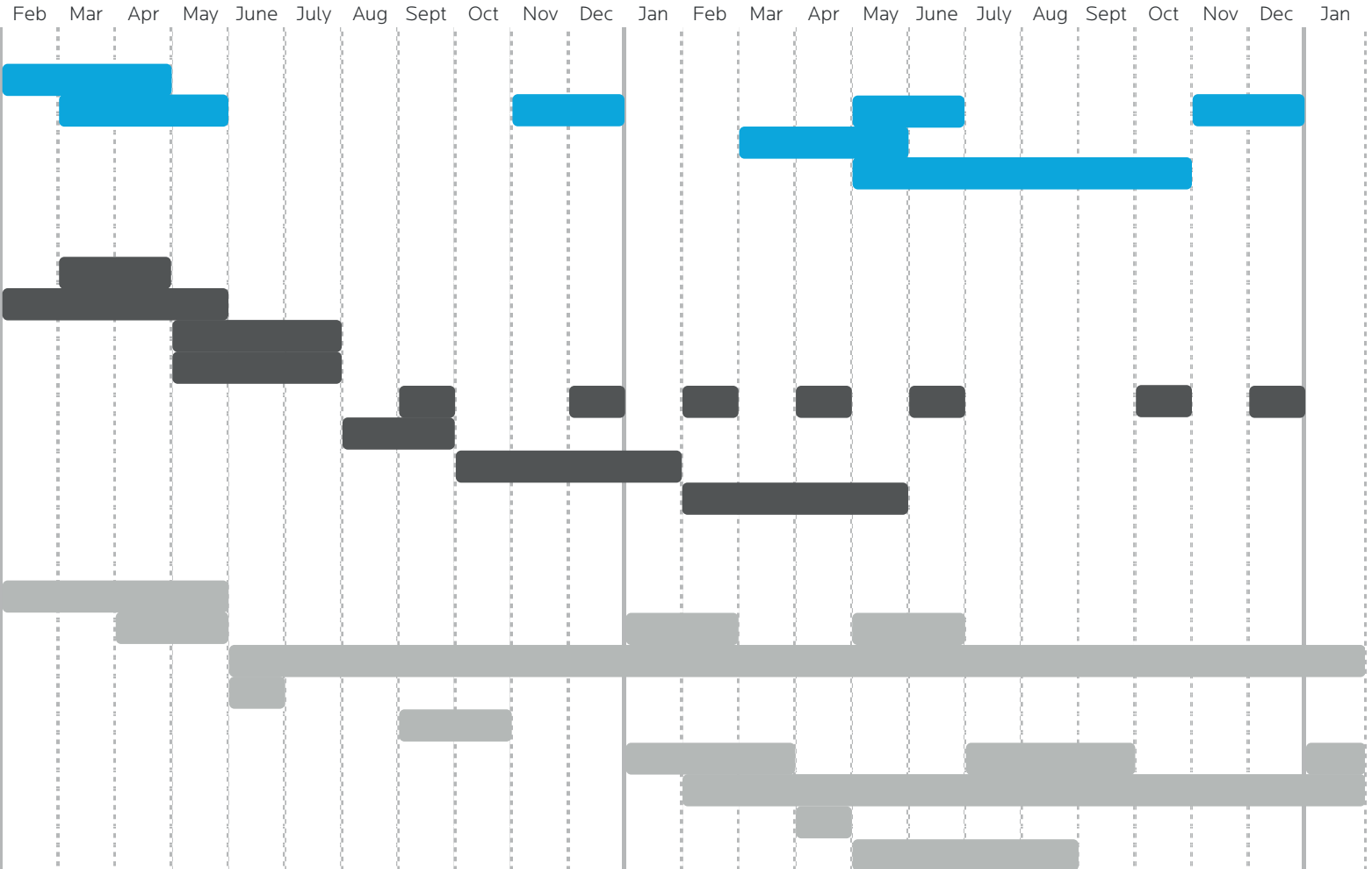
- High quality
- Free access to information
- Third party verification (optional)

IV - Gantt Chart

2011

2012

2013



V a - Income Statement

		Year 1				Year 2					Year 1	Year 2	Year 3	Year 4	Year 5
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4						
Sales Revenue	1	1,280,000	1,480,000	1,800,000	1,620,000	3,140,000	3,600,000	4,360,000	3,960,000	6,180,000	15,060,000	36,120,000	43,344,000	52,012,800	
Less: Cost of Goods Sold	2	-640,000	-740,000	-900,000	-810,000	-1,570,000	-1,800,000	-2,180,000	-1,980,000	-3,090,000	-7,530,000	-18,060,000	-21,672,000	-26,006,400	
Gross Profit from Sales		640,000	740,000	900,000	810,000	1,570,000	1,800,000	2,180,000	1,980,000	3,090,000	7,530,000	18,060,000	21,672,000	26,006,400	
Salaries	3	207,000	207,000	207,000	207,000	353,700	353,700	353,700	353,700	828,000	1,414,800	1,808,280	2,241,108	2,717,219	
Rent	4	0	0	40,800	61,200	67,320	67,320	67,320	67,320	102,000	269,280	296,208	325,829	358,412	
Shop Equipment		0	0	90,000	20,000	22,000	22,000	22,000	22,000	110,000	88,000	96,800	106,480	117,128	
Less: Depreciation		0	0	18,000	4,000	8,800	8,800	8,800	8,800	22,000	35,200	47,520	59,312	70,875	
Stationery		3,500	700	700	700	770	770	770	770	5,600	3,080	847	932	1,025	
Office Equipment	5	30,000	0	20,000	0	25,000	25,000	25,000	25,000	50,000	100,000	110,000	121,000	133,100	
Less: Depreciation		15,000	0	10,000	0	15,625	15,625	15,625	15,625	25,000	62,500	86,250	103,625	118,363	
Phone & Internet		1,200	1,200	1,200	1,200	1,320	1,320	1,320	1,320	4,800	5,280	5,808	6,389	7,028	
Legal Services	6	0	0	0	0	15,000	15,000	15,000	15,000	0	60,000	66,000	72,600	79,860	
Accounting Services		0	4,500	0	4,500	4,500	4,500	4,500	4,500	9,000	18,000	19,800	21,780	23,958	
Trade Shows	7	0	40,000	40,000	40,000	44,000	44,000	44,000	44,000	120,000	176,000	193,600	212,960	234,256	
Travel Expenses	8	2,600	2,600	2,600	2,600	2,860	2,860	2,860	2,860	10,400	11,440	12,584	13,842	15,227	
Advertisement		20,000	30,000	20,000	30,000	22,000	33,000	22,000	33,000	100,000	110,000	121,000	133,100	146,410	
Prototypes	9	30,000	30,000	30,000	30,000	33,000	33,000	33,000	33,000	120,000	132,000	145,200	159,720	175,692	
Less: Depreciation		6,000	6,000	6,000	6,000	11,400	11,400	11,400	11,400	24,000	45,600	65,520	84,360	102,626	
Website Development		15,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	21,000	8,000	8,800	9,680	10,648	
Operating Expenses		330,300	324,000	488,300	409,200	629,295	640,295	629,295	640,295	1,551,800	2,539,180	3,084,217	3,672,717	4,311,826	
Income from Operations		309,700	416,000	411,700	400,800	940,705	1,159,705	1,550,705	1,339,705	1,538,200	4,990,820	14,975,783	17,999,283	21,694,574	
Financial Revenues	10	0	279	375	371	361	847	1,044	1,397	1,024	3,649	4,495	13,482	16,211	
Financial Expenses		0	0	0	0	0	0	0	0	0	0	0	0	0	
Income Before tax		309,700	416,279	412,075	401,171	941,066	1,160,552	1,551,749	1,341,102	1,539,224	4,994,469	14,980,278	18,012,766	21,710,786	
Taxes on Income		86,716	116,558	115,381	112,328	263,498	324,955	434,490	375,508	430,983	1,398,451	4,194,478	5,043,574	6,079,020	
Net Income		222,984	299,721	296,694	288,843	677,568	835,597	1,117,260	965,593	1,108,241	3,596,018	10,785,800	12,969,191	15,631,766	

Notes

- The sales revenues are estimated based on our projections of our market share (number of customers), i.e. That each customer buys on average 1 unit yearly for an average price of 20,000 SEK
- Cost of goods sold is estimated at 50% of selling price on average
- In the first year, monthly salaries of 23,000 SEK per employee are paid to the three members of the management team. In year two we plan to add two employees with a monthly salary of 21,000 SEK and the third one in year 3, also with 21,000 SEK in monthly salaries. On top of that we assume a 10% yearly increase on salaries.
- We assume to start renting a space for our shop in Q3 of year 1
- Office equipment is mainly in the form of computers
- In the first year we plan to use the legal services provided by LU Innovation
- We plan to be visible at trade shows, like Stockholms furniture fair. We assume two shows per quarter at an average cost of 20,000 SEK per show.
- These expenses are mainly due to trips within Sweden, for example to search for future producers.
- We assume that we will produce three prototypes per quarter for an average cost of 10,000 SEK per unit
- We assume to put 50% of Net income on a short term bank account earning on average 1% interest

V b - Balance Sheet

Assets		Balance Brought Forward	Year 1	Year 2	Year 3	Year 4	Year 5	
<i>Fixed Assets</i>	Office Equipment	0	50,000	125,000	172,500	207,250	236,725	
	Less: Accumulated Depreciation		-25,000	-62,500	-86,250	-103,625	-118,363	
	Shop Equipment	0	110,000	176,000	237,600	296,560	354,376	
	Less: Accumulated Depreciation		-22,000	-35,200	-47,520	-59,312	-70,875	
	Prototypes	25,000	145,000	248,000	343,600	434,600	523,372	
	Less: Accumulated Depreciation	0	-29,000	-49,600	-68,720	-86,920	-104,674	
	<i>Physical Assets</i>	25,000	229,000	401,700	551,210	688,553	820,561	
Intangible Assets	1	125,000	168,750	227,813	307,547	415,188	560,504	
Total Fixed Assets		150,000	397,750	629,513	858,757	1,103,741	1,381,065	
<i>Current Assets</i>	Cash	25,000	270,371	614,738	3,364,402	13,552,114	25,841,508	
	Short Term Placements	2	0	554,121	1,798,009	5,392,900	6,484,596	7,815,883
	Accounts Recievable	3	0	1,236,000	3,012,000	7,224,000	8,668,800	10,402,560
	<i>Debt Recievable</i>		0	1,236,000	3,012,000	7,224,000	8,668,800	10,402,560
	Inventory	4	0	0	0	0	0	0
	Total Current Assets		25,000	2,060,491	5,424,747	15,981,303	28,705,509	44,059,951
	Total Assets		175,000	2,458,241	6,054,259	16,840,059	29,809,251	45,441,016

Liabilities and Owners' Equity		Balance Brought Forward	Year 1	Year 2	Year 3	Year 4	Year 5	
<i>Owners' Equity</i>	Research Team	5	90000	30000	30000	30000	30000	30000
	Management Team	6	45,000	15,000	15,000	15,000	15,000	15,000
	LU Innovation	7	40,000	305,000	305,000	305,000	305,000	305,000
	External Investor	8	0	1000000	1000000	1000000	1000000	1000000
	<i>Equity Capital</i>		175,000	1,350,000	1,350,000	1,350,000	1,350,000	1,350,000
	Retained Earnings			0	1,108,241	4,704,259	15,490,059	28,459,251
	Net Income			1,108,241	3,596,018	10,785,800	12,969,191	15,631,766
Total Own Equity		175,000	2,458,241	6,054,259	16,840,059	29,809,251	45,441,016	
<i>Current Liabilities</i>	Overdraft		0	0	0	0	0	0
	Bank Loan		0	0	0	0	0	0
	Other Long Term Debt		0	0	0	0	0	0
	<i>Long Term Liabilities</i>		0	0	0	0	0	0
	Accounts Payable		0	0	0	0	0	0
	Tax Debts		0	0	0	0	0	0
	Other Short Term Debt		0	0	0	0	0	0
	<i>Short Term Liabilities</i>		0	0	0	0	0	0
	Total Liabilities		0	0	0	0	0	0
	Total Liabilities and Owners' Equity		175,000	2,458,241	6,054,259	16,840,059	29,809,251	45,441,016

Notes

- 1 We assume that our research team has been working on the software for 500 hours and 100 SEK per hour. After year one we assume a 35% yearly increase in intangible assets
- 2 We assume to put 50% of Net income on a short term bank account
- 3 We assume that accounts recievable at 20% of sales revenues. Our business model seeks a two week period of payment after delivery
- 4 Due to the fact that each item is unique, we do not keep any inventory
- 5-7 The equity distribution is as follows: The research team: 60%, The management team: 30%, Lu Innovation: 10%
- 8 We will seek for an external investor for approximately 10% equity share, diluting shares proportionately

V c - Statement of Cash Flows

	Year 1				Year 2				Year 1	Year 2	Year 3	Year 4	Year 5
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4					
<i>Operating Activities</i>													
Income from Operations	309,700	416,000	411,700	400,800	940,705	1,159,705	1,550,705	1,339,705	1,538,200	4,990,820	14,975,783	17,999,283	21,694,574
Depreciation	21,000	6,000	34,000	10,000	35,825	35,825	35,825	35,825	71,000	143,300	199,290	247,297	291,864
Change in Inventories	0	0	0	0	0	0	0	0	0	0	0	0	0
Change in Accounts Payable	0	0	0	0	0	0	0	0	0	0	0	0	0
Change in Accounts Receivable	-256,000	-40,000	-64,000	36,000	-304,000	-92,000	-152,000	80,000	-324,000	-372,000	-4,212,000	-1,444,800	-1,733,760
Change in Physical Assets	-77,000	39,000	-172,000	104,000	-91,650	-35,825	-35,825	-35,825	-106,000	-120,650	-348,000	-384,000	-423,360
Total Operating Activities	-2,300	421,000	209,700	550,800	580,880	1,067,705	1,398,705	1,419,705	1,179,200	4,641,470	10,615,073	16,417,780	19,829,318
<i>Financial Activities</i>													
Financial Revenues	0	279	375	371	361	847	1,044	1,397	1,024	3,649	4,495	13,482	16,211
Financial Expenses	0	0	0	0	0	0	0	0	0	0	0	0	0
Tax on Net Income	-86,716	-116,558	-115,381	-112,328	-263,498	-324,955	-434,490	-375,508	-430,983	-1,398,451	-4,194,478	-5,043,574	-6,079,020
Total Financial Activities	-86,716	-116,279	-115,006	-111,957	-263,137	-324,108	-433,445	-374,112	-429,959	-1,394,802	-4,189,983	-5,030,092	-6,062,809
Net Cash Flow	-89,016	304,721	94,694	438,843	317,743	743,597	965,260	1,045,593	749,241	3,246,668	6,425,090	11,387,688	13,766,510

Financial Ratios

	Year 1	Year 2	Year 3	Year 4	Year 5
Operating Margin	50%	66%	83%	83%	83%
Profit Margin on Sales	36%	48%	60%	60%	60%
Asset Turnover	2.5	1.8	1.6	0.9	0.7
Return on Assets	125%	117%	131%	77%	58%
Return on Capital Employed	36%	165%	155%	100%	70%
Return on Owners' Equity	26%	119%	112%	72%	50%

VI - Risk Analysis

	Internal Risks	Probability (p)	Consequences (c)	p x c	Action
<i>Technical</i>	Software Problems	100%	1	1,0	Axel Nordin and in year 2 a programmer to be hired
	Software not Compatible with CNC-Machines	10%	8	0,8	Axel Nordin and in year 2 a programmer to be hired
	Software Developer Departs	20%	9	1,8	Add clause in agreement for software manual by May 31, 2011
<i>Economical</i>	Insufficient Financing	50%	10	5,0	Management forgoes wages, employs bootstrapping methods
<i>Staff</i>	Departure of a Management Member	40%	7	2,8	Hire a replacement
	Lack of Time From Researchers	30%	7	2,1	Hire programmer and designer

	External Risks	Probability (p)	Consequences (c)	p x c	Action
<i>Technical</i>	Competitors Copy our Idea	20%	8	1,6	Develop product and add new features
<i>Economical</i>	Decrease in Disposable Income	15%	6	0,9	Create products available to lower income people
	Loss of a Supplier	40%	9	3,6	Diversify supply with reliable manufacturers
<i>Market</i>	New Entrants	90%	4	3,6	Develop product and add new features

Note: Probability: 0-100%, Consequenses 1-10



References

1. The domestic furniture market in Sweden, CBI market survey, October 2009. <www.cbi.eu>
2. "Inkomststatistik - Totalräknad." Statistiska Centralbyrån. Statistiska Centralbyrån, 21 jan 2010. Web. 21 Oct 2010. <<http://bit.ly/bVlgvk>>
3. Orsato, R. (2009). Sustainability Strategies: When Does it Pay to be Green? Houndmills, Basingstoke, UK: Palgrave Macmillan.



shape▼yard



LUND UNIVERSITY
School of Economics and Management

MSc Entrepreneurship
Course BUSP01

Theoretical Reflections:

The Influence of Conflicts and Emotions
in the
Start-Up Process

-a self-observatory reflection

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Supervisor: Tomas Karlsson

Department of Business Administration, Lund University

May 30, 2011

Abstract

This theoretical reflections are about the time working with my final project Shapeyard in course BUSP01 in the master program Entrepreneurship at Lund University. I reflect about conflicts and emotions during this start-up process using my documented experiences in form of autoethnographic observation and link them to research about conflicts, emotions, and entrepreneurship. In the end I describe my learning outcome from this process.

Shapeyard is a project of two researchers from Lund University. It is a design program for furniture. LU Innovation, a Lund University organisation for commercialising research, brought the researchers together with the entrepreneurship students. Three of us students were chosen to commercialise Shapeyard and one of them was me.

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1. Introduction

Background

This is a theoretical reflection about my conflicts and emotions during the commercializing process of Shapeyard in the master program in Entrepreneurship at Lund University.

In September 2010 I started working with two researchers from Lund University in a project that was called at that time Bespoke Products (now Shapeyard). The researchers had developed a software which was able to generate and customize furniture designs in the shape of natural morphologies. With this they followed a trend called mass customization. The idea behind was, that people could design their own furniture with the program and that this one-off-pieces would then be individually produced.

What they needed was a plan how to commercialize this project, in other words making money out of it. They contacted the university organisation LU Innovation, responsible for bringing research ideas from the universities into the market and they connected them with us: the students from the entrepreneurship program.

My course coordinator of the entrepreneurship master program gave me Bespoke Products as a project because I have former experience in the furniture business. I became a project leader and could choose a team for commercializing this during the master program. It became two male students from my class. And I have to say we were the best team I could imagine and I am happy about the time we spent together. When I say we/us in this paper, it is referred to us three.

The collaboration with the researchers was very difficult. Unfortunately we never connected with each other and our relationship was stamped by conflicts and negative emotions.

Purpose

The purpose of this paper is to reflect on my own experiences and learning outcomes during the course BUSP01 and connect it to my theoretical knowledge I developed during the master program in Entrepreneurship.

This reflections are a great tool to reclaim my experiences during the year of studying entrepreneurship, for highest possible learning outcome. I learned in our first course BUSM01, that ”..learning is a cyclical emergent process where ideas and solutions to problems are continually formed and reformed through experience and reflection.” (Gabrielsson and Tell, 2009, pp. 8). Reflections are therefore a great tool to learn.

Main Topic

I write about conflicts and emotions in this reflections, because for me they were present to a high extent during my work with Shapeyard and influenced everything I did. Through the difficult collaboration with the researchers I had often a hard time working in this project and my emotions and the conflicts we had mainly influenced my work for Shapeyard. I will analyse now why I had this conflicts and what the results were. To look additionally on the emotions, as a trigger or result of the conflicts, is highly interesting for me because I had never before such intense emotional up- and downturns over a long period. My goal is now to analyse this with a distance look. But therefore that I write from my point of view about my emotions and the conflicts within my project, the text will be often informal and emotional.

Please note, that what I write here is only from my perspective and not from the one of my team members or the researchers. Its my interpretation of the things that happened during the time I was working with Shapeyard. It can be that other people involved might see it it in a totally different way.

Disposition

I structured the text into two parts. First I summarize the literature I am using for the theoretical side of the paper followed by a short description of my methodology. Subsequently the second part follows, first with an informal description of the history of Shapeyard and the main conflicts from my perspective. This is the basis for the analysis chapter, applying the theory from chapter 2 and my own analysis on my perceived conflicts and emotions.

In the conclusion I describe my main learning outcomes from my reflection in this paper and I develop suggestions for further research.

2. Literature Review

For this theoretical reflections I am using research about conflicts in teams and their influence on the outcome of the teamwork as well as literature about emotions and their influence in business processes.

I also integrate standard literature about processes in start-ups and entrepreneurship for the better understanding from a theoretical point of view.

In the following three sections I summarize the literature I am using in that way in which it is relevant for this reflections.

Conflicts

”Central to the effort to meld talent and ability is the use of conflict. Paradoxically, conflict can be a catalyst for creativity and understanding as well as for animosity and resentment. The open exchange of ideas, the objective assessment of alternatives, and the rigorous contrasting of perspectives produces conflicts out of which creative ideas and solutions emerge. At the same time, such interactions may also produce anger and alienation, which can lead to disaffection and departure by the offended team members.” (Ensley et.al., 2000, pp. 366)

Ensley et. al. (2000) describes, that there are two dimensions of conflicts, the cognitive and affective dimension. Whereas the cognitive dimension is seen as a positive conflict helping the team to emerge creative ideas and solutions, affective conflicts show the negative side. They can lead to anger and alienation within the team, which makes offended team members drop out of the team or being dissatisfied and working less effective.

The cognitive dimension describes a conflict that centers in the completion of a task whereas an affective conflict centers on an emotional conflict between parties. The problem is that

cognitive and affective conflicts normally occur together, caused by good intentions and a lack of understanding. (Ensley 2000, pp. 366)

Normally a conflict in a team start in a cognitive dimension and mutates to an affective dimension. This is triggered mostly by value dissimilarities and the absence of open and mutual interaction. When the values of team members differ to a high extent it is more likely that they are less understanding with each other and don't value a disagreement but see it as a personal offence. Also they are more suspicious on one another and don't trust each others work. (Ensley et.al., 2000, pp. 370)

Cohesive teams on the other side are dealing much better with cognitive conflicts and do not tend to make affective conflicts out of them. They feel familiar with each other and can talk more openly about differences. (Ensley et.al., 2000, pp. 370)

"Conflict is an awareness on the part of the parties involved of discrepancies, incompatible wishes, or irreconcilable desires." (Jehn and Mannix, 2001, pp.239).

Jehn and Mannix (2001) describe in their article *The Dynamic Nature of Conflict: A Longitudinal Study of Intragroup Conflict and Group Performance* three types of conflict in that can arise in working teams.

A relationship conflict (synonym for affective conflict) comes up when there is an awareness of interpersonal incompatibilities and feelings like tension and friction. There is always also a personal issue involved so that people among the group dislike each other and that there are feelings like annoyance, frustration, and irritation. (Jehn and Mannix, 2001, pp.238).

Task conflicts (synonym for cognitive conflict) are defined as differences in viewpoints and opinions about the group work. They can also include personal excitement and animated discussions but there are normally no negative interpersonal emotions included. (Jehn and Mannix, 2001, pp.238).

Process conflicts are defined as the awareness of controversies about how to fulfill a task and how task accomplishment will proceed. Additionally its a conflict about how much responsibilities everyone should have. If team members disagree about the duties different responsibilities imply its a process conflict. (Jehn and Mannix, 2001, pp.239).

Research has shown that there is a negative association between relationship conflict and the productivity as well as satisfaction in teams. The problem is that in a team with relationship conflicts, the members focus on reducing threats and to build cohesion rather than putting their effort in tasks. Relationship conflicts decrease the goodwill in a team which also decreases the completion of tasks because time is often used to work on interpersonal aspects. Team members get negative, suspicious, resentful and are irritated. If there are long-term relationship conflicts the function of a group is really constricted. (Jehn, 1997, pp.531)

”Emotions are an important element of conflict. They define individuals' subjective interpretation of reality and reactions to current situations. Conflict is often associated with stress and threat, which increase emotional responses and negative arousal (Thomas, 1992). Pinkley (1990), in a study of disputants' interpretations of conflict, found an intellectual vs. emotional dimension of conflict resolution frames. Disputants with emotional frames had feelings such as jealousy, hatred, anger, and frustration. When group members are in this emotional state, they tend to work less effectively (Argyris, 1962; Ross, 1989), because emotions overrun and oversimplify rational and instrumental reasoning (Thomas, 1992).” (Jehn, 1997, pp.532)

Emotions

”Human beings are emotional creatures. In our lives we experience a wide range of emotions from anger to enthusiasm, from worry to calm. Understanding and controlling these emotions is important for good decision making, thinking clearly, and performing at an optimal level (Goleman, 1995).” (Peslak, 2005, pp. 251).

Peslak (2005) writes in his study *Emotions and team projects and processes* about the evolution of emotions through the life of a project. In general he found that the emotional intensity increases significantly over the lifetime of a project. In the beginning of the teamwork there are usually more positive emotions than negative emotions. But negative emotions grow over time as well positive emotions. For being successful in the group work negative emotions needs to get addressed.

”Rationality is bounded by emotions and, in any case, emotions cannot be separated from rationality in either personal or business decision-making.” (Das, 2008, pp. 1)

Das (2008) describes in his article *Planning and Decision Making: Beware of Emotions and Illusions* how emotions influence decision-making either in personal or business issues. He introduces five categories of emotions which are defined as disturbing in the decision making-process:

1. passion (including desire, greed, lust)
2. aggression (including anger, hatred, resentment)
3. ignorance (including bewilderment, confusion, apathy)
4. pride (especially wounded pride and low self-esteem)
5. jealousy (including envy, paranoia)

These five emotions are not supportive when making a decision and also lead often to bad and affective decisions. These decisions lack normally a broad view on the problem.

Das (2008) suggests, to make good decisions, to be in a really clear state of mind. If you are feeling one of the five emotions you should try to postpone a decision to a time when this emotion is not strong anymore or the problem behind is solved.

Another piece of research literature I would like to introduce here is the dissertation by Ethel Brundin (2002) *Emotions in Motion- The Strategic Leader in a Radical Change Process*.

Brundin (2002) defines different emotions in her dissertation. I will use this definitions for the emotions that played a role in the conflicts and processes of Shapeyard. Whenever I write about an emotion in the following chapters I use the definitions that follow.

”Dependence: Dependence is a constant and regular need that someone has for something in order to be able to survive or operate properly; Dependence ist he need that someone has for another person, especially for emotional security.” (Brundin, 2002, pp. 352)

”Helplessness: You have no protection, and cannot defend yourself or anyone else. If you are helpless, you are unable to behave normally or react normally to a situation because you have no power or strength.” (Brundin, 2002, pp. 352)

”Sense of unfair treatment: If you think that something is unfair, you think that it is unreasonable and unjustifiable according to your ideas about what is right and just.” (Brundin, 2002, pp. 352)

”Distrust: If you distrust someone, you are very suspicious of them because you can not trust them; Distrust is the feeling of suspicion that you have for someone who you do not trust. ” (Brundin, 2002, pp.353)

”Uncertainty: Uncertainty is the state of doubt about the future or about what is the right thing to do. ” (Brundin, 2002, pp. 354)

”Disappointment: Disappointment is the state of feeling disappointed; When things or people disappoint you, they do not satisfy you because they are not as good or as reliable as you had hoped, or do not what you want them to do; If something disappoints someone's hopes or expectations, it prevents something happening which they had planned or wanted to happen.” (Brundin, 2002, pp. 354)

”Optimism: Optimism is the feeling of being hopeful about the future and the belief that a particular situation or course of action will be successful.” (Brundin, 2002, pp. 355)

”Motivation: If you are motivated to do something, you are caused to feel determined to achieve something and willing to work hard in order to succeed.” (Brundin, 2002, pp. 357)

”Sense of giving up: If you give up something, you stop doing it or believing in it; If you give up, you admit that you cannot solve a problem, puzzle, or joke.” (Brundin, 2002, pp. 358)

Processes

Saravathy wrote in 2001 the article *Causation and Effectuation: Toward a theoretical Shift from Economic Inevitability to Entrepreneurial Contingency*. Causation rests on the logic of prediction and effectuation on the logic of control, which means that causation processes will

have a predictable outcome. Effectuative processes on the other hand take into account what resources are available and using this or combining it in different ways can create different effects that can be selected from.

Causation-Process:

- Effect dependent
- Excellent at exploiting knowledge
- Excellent when dealing with natural phenomena

Effectuation-Process:

- Actor dependent
- Excellent at exploiting competencies
- Far more frequent and very much more useful in understanding and dealing with spheres of human action, especially when dealing with uncertainties of future phenomena and problems of existence.

The paper "*Entrepreneurs' attitudes towards failure: An experiential learning approach*" (2009) from Jonas Gabrielsson and Diamanto Politis purposes to examine why some entrepreneurs have developed a more positive attitude towards failure than others. They try to explain this through employing theories of experiential learning. Experiential learning can be described as the process of learning through individual direct experiences in different situations throughout life and work.

Significant influences on the entrepreneur's attitude towards failure come from their start-up experiences as well as from their experiences in closing down a business. Remarkable is the fact that the most entrepreneur's review their failures in a positive way which also influences their attitude towards failure in a positive way. But why? The workcharacteristics of an entrepreneur have a lot of potencial to create failure. Their activities often involve a high stress level, a multiplicity of obstacles and a high uncertainty regarding the outcome. (Politis and Gabrielsson, 2009)

"The pain and fear associated with failure can for example prevent unfortunate entrepreneurs from being true to their potential and hinder adequate and necessary action. In these situations there is a risk of falling into self-denial where extraneous elements or conditions are blamed as causes of failure (Friedman, 2004). The result may even be that entrepreneurs are

overwhelmed with oppressive feelings of incompetence and reduced self-esteem, which can make them stop trying to realize new business ideas.” (Politis and Gabrielsson, 2009, pp. 367)

As a definition for agency risk I am using the following by Landström. ”Agency risk, in its turn, is a risk that is caused by separate and possibly divergent interests of agents and principals. Agency risks may result in opportunism, shirking, conflicting objectives or incompetence.” (Landström, 2007, pp. 258)

Fitzsimmons and Douglas (2010) wrote an article about the antecedents of entrepreneurial intentions. These can be characterized by the perceived desirability and the perceived feasibility of the entrepreneurial opportunity. If both antecedents are perceived as high, the authors call this a natural entrepreneur. If only one of the antecedents is high, it can be enough for the entrepreneur to take the opportunity.

3. Method

During my master program in entrepreneurship, I documented the progress of my final project Shapeyard, in form of weekly learning journals, that I wrote from December 2010 until the end of April 2011. This data are the basis of my empirical research for this theoretical reflections.

The learning journals document my progress when commercialising Shapeyard over the timespan of seven months. They always included the tasks from the last week and whose fulfillment as well as the tasks I was planning for the week ahead. Additionally I wrote about my learning outcome from every week of work and included theory supporting or disagreeing with my experiences. I also wrote about my emotional state, what the researchers or my mentor had said to me and how I perceived the future of Shapeyard. In chapter 4 and 5 I use these journals in a way as they are relevant for my main topic.

In this theoretical reflections I write about my experiences with conflicts and emotions during the commercialising process of Shapeyard. I use research about conflicts and emotions to

compare former findings with my own experiences to find out if there is concurrence or disagreement. I am doing this for my learning outcome and to find suggestions for further research.

4. Shapeyards History and Conflicts

For a better understanding and as a basis for the analysis, I will describe the story of Shapeyard briefly. I will also describe our main conflicts.

This chapter is the basis for the analysis chapter and the application of theory on my experiences.

The serious work to commercialise Shapeyard began in November 2010. My team members and me were highly motivated and working hard to develop a strategy to bring Shapeyard into the market.

Our first meetings with the researchers I perceived as positive. I thought I got a really good project with a lot of potential. Of course I trusted the researchers about their project because they have the competencies in the area of mass customization, design and software development.

They told us, that producing the furniture they designed and customized with their developed program is not a problem at all. It sounded like producers would stay in line to produce the one-off pieces coming out of the design program. The only thing, we as entrepreneurs had to do from the point of view of the researchers, were finding the customers, the market and a distribution channel.

Over time when we got deeper and deeper into the project we noticed that we were far away from commercialisation. The developed program lacked a lot of features and was quite imperfect to start a business from it. The producers were really restricted and only few of them were slightly interested to work together with us. When we found out, it was like a shock. We thought we just have to find a market for products that can be produced immediately. We tried hard then to work on the production and the supply chain, but it was too late to start this because we were running out of time in our master.

Additionally our project was very complex. A lot of different steps within the supply chain and a lot of externals working within it, made it hard for us to overview what needs to be done. The researchers normally had totally different opinions about how to work on the project than we had which made it even more difficult.

The researchers had their full time jobs, teaching and researching for Lund University. They had no time to work for Shapeyard but were not willing to give away responsibility on us entrepreneurs. This created a dilemma of trust, because we felt they don't want us and they don't trust us doing a good job. Furthermore the idea belongs to them and we were dependent on their decisions.

Over time the climate between us became tensed. It was hard to get meetings with them, they didn't hold the deadlines we decided on and never said a nice word about the work we were doing. I was really disappointed about this and my motivation suffered a lot. I felt offended personally and began to perceive my project as a burden.

The problem I created from my side was, that I didn't talk openly to the researchers, but stayed too long in the phase of being polite not talking about what I really think. Now I think that I behaved really naive, because instead I was telling my group mates about my feelings and my concerns which was ok, but not always the right address.

Also I missed to analyse the idea of Shapeyard properly in the beginning to find out where the bottlenecks are. I just trusted the researchers. And from their research point of view they were right. But I was there to check the business point of view, which I didn't do properly.

Conflict 1

Our first real conflict and negative emotions on my side occurred over the Christmas holidays 2010. We decided with the researchers that I produce a prototype over Christmas in the carpentry of my family. Therefore they wanted to make a design and send it to me before the 24th of December. In my perception they said it's not a problem at all to make a good design until then, so I was very positive about this agreement. In the end I got a lot of emails that the designs are late, and because of Christmas I didn't say anything about that I was angry. When

I got a design it was one day before I left Germany back to Sweden and I had no chance to produce it anymore.

For me it was a problem because I noticed that we have different priorities. I had a really high desirability of bringing Shapeyard into the market and it was my first priority at that time. Also I thought that the feasibility of doing this is positive. So I was full of hope and motivation. When the designs came late and the process of designing and producing was not as easy as expected my perception of the feasibility began to drop. I got unsure about the possibilities for Shapeyard.

Conflict 2

In the beginning of our work we thought that the only thing we have to find is the market. Somehow this search centered in the question of which product category we should choose, which means which kind of furniture we produce for a certain market. The entrepreneurship team as well as our mentors had the opinion we should start simple with tables and shelves, because they are easier to produce than other furniture and we could gain experience concentrating on two kind of furniture. The researchers had the complete different opinion. They wanted that start with a portfolio of different things as designers do usually.

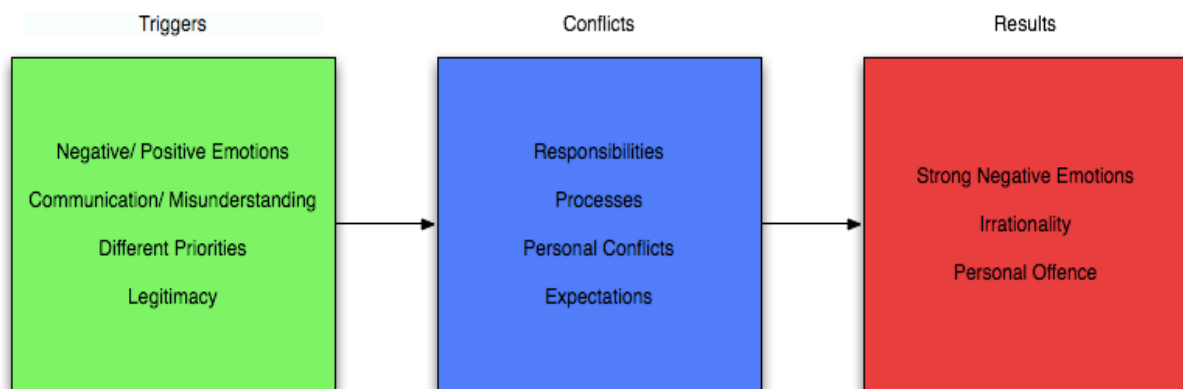
This question took us 3 month to get an answer. In the end we said to the researchers they should decide about it. They did. And the decision was to do everything, as designers usually do. So the decision was no decision, we could create a strategy from, for bringing Shapeyard into the market

Conflict 3

A lot of times I wrote in my learning journals about responsibilities and dependencies. The researchers didn't want to give us responsibilities about decisions for Shapeyard, also they had no time to do the work for Shapeyard themselves. Therefore we were dependent on them, getting their permission for everything we did. Additionally we were dependent on some contributions from their side, for example for the software development or the designs.

5. Analysis

I divide the analysis into the three different conflicts I described in chapter 4. For each conflict I describe the trigger, categorize the conflict with the help of theory and describe the results from the conflict. The following picture should give in overview in keywords about my perceived triggers of the conflicts, the conflicts itself and the results of the conflicts in keywords.



Additionally I add three parts about the difference between entrepreneurs and researchers according how to start a business and , about the influence of emotions and the learning from failure.

Conflict 1

With the first conflict the triggers were different priorities and a misunderstanding in communication. For me the priority was to get something started as soon as possible and produce a prototype to make progress in checking the production friendliness and the stability as well as the design. The researchers didn't get why I want to do this, because from their perspective the production side was fine and I had the impression that they found it unnecessary to produce a prototype and be in a hurry. From my perspective we had to be in a hurry because we had to develop a business within the master program to get a chance to stay here in Sweden earning money and make a living. I thought that I communicated this to the

researchers but they didn't get it either because of miscommunication from my side or they didn't care about the timeline of us entrepreneurship students.

The conflict that arises from this I would categorize as a process conflict like defined by Jehn and Mannix (2001), because we had different opinions how to complete the task of bringing Shapeyard into the market and how the process of doing this should be.

According to Ensley (2000) this conflict can be categorized as a cognitive conflict because we had a huge contrast in perspectives on how to work on the commercialisation of Shapeyard. But what he is also saying is, that cognitive and affective conflicts normally occur together, which is also true in this case. I felt personally offended because I was willing to use time of my holidays and the resources of my family to produce a free prototype for us and all I got in the end was the feedback that I pressured the researchers to much. I thought that this was really unfair.

In conclusion this conflict that came up had a cognitive and an affective side as well as it was a process conflict. Jehn (1997) says that affective and process conflicts have a negative influence on the group work. Moderate task conflicts can have a positive influence on the group work because they open new views on the task and can lead to a better solution.

In my perception now, the conflict had the result for me that I became suspicious about the reliability of the researchers and their commitment to our project. I felt a gap between our wishes what Shapeyard should become in the future. And I also felt kind of helpless because I didn't know how to close the gap between us.

My mentor called this agency risk. He said, that having so divergent opinions about how to do things and get them done is a high risk for an organisation and in our case for our collaboration with the researchers. There is high potential for conflicts when there is agency risk. (Karsten, 2011, Entrepreneurship Learning Journal No. 4)

As I explained in the description of the conflict I had the perception of a high feasibility and desirability to realize Shapeyard as a business. Fitzsimmons and Douglas (2010) say that the entrepreneurial intentions depend on this perception. My perception of feasibility of this project dropped through the conflict. But therefore that my desirability was still high I stayed in the project and didn't drop out like affective conflicts can cause. (Ensley et.al., 2000)

The result of the conflict was that I had negative emotions about the collaboration with the researchers and that I felt personally offended. My motivation suffered a lot from this.

It was not possible for me to separate my emotions from the further work. For the further development of the project this was not healthy because I had a negative attitude. As Das (2008) states that negative feelings have a bad influence on decision making in business processes I experienced the same. I didn't put the same effort into the project as before, because I thought it makes anyway no sense because the researchers will not like what we are doing and will not put as much effort in as necessary. Also my decisions were influenced and irrational. For example I had this defiant thought in my head that I will never try again to produce a prototype for them for free and let my family help us. What I missed in this thought was not only that Shapeyard was also my project, but that we are a group and should work together. Now I know that being angry is the worst thing in business when it stays over a long time. It does not bring anyone further, neither me nor my environment.

So the result of this conflict was negative for the group work in general and for the relationship between me and the researchers. I think that this conflict and the results influenced and triggered following conflicts.

Conflict 2

The second conflict was triggered by different priorities and opinions as well as by legitimacy reasons. The researchers priorities from my point of view were to set up a small design store, something really special. They focused when thinking about product categories on existing design stores and their business model. How I understood it in the beginning they wanted our help to bring Shapeyard into the market, but on the other hand they never listened to our suggestions and strategies or to other people for example from our board. Because we came to no decision together we said to the researchers they should just decide for a product category and we try to develop a business strategy around this. First they missed the deadline for this decision and the decision that came then was no decision for us. They decided to offer at least four types of furniture from every material available as well as lighting and decoration items. (Karsten, 2011, Entrepreneurship Learning Journal, No. 3)

From the entrepreneurial point of view that was way to complicated according to our resources available and the complexity of the project itself. At that point in January we already noticed, that production is not as easy and then using every material available? Our analytical result from this was, that they could only produce then a few one-off pieces selling them for a really high price but never go into mass customization and make a lot of sales.

To include us in the Shapeyard we developed a strategy that said we add product categories over time, start with two and limited material choices, as well as with a high profitability. The researchers didn't like that and I was considering at that time that they think we have no legitimacy and no knowledge at all to know how to bring this into the market. As my mentor said in our sum-up-meeting of the master program and the work for Shapeyard, the researchers never respected our opinion or our knowledge. We didn't reach it to legitimize ourselves in this project. They never started to respect us. (Berntson, 2011, personal communication)

I would categorize this conflict after Jehn as a task conflict, also including process conflict. We had very different opinions about the strategic direction for Shapeyard. But this task conflict didn't lead us to emerge creative ideas or solutions for this questions as Ensley (2000) describes as a result of task conflicts. Instead the researchers didn't listen to our opinion and telling us we should better get more close to the design world if we want to understand how business is made there. It was also a process conflict because it also implied that we had different opinions in how to fulfill the task of accomplishing bringing Shapeyard into the market. Also with this conflict an affective dimension was included. It was the feeling of unfair treatment. Why did I studied and worked for six years and then get the feedback that I have no clue about how to do business.

The result was then that my negative feelings got bigger. I felt not respected and kind of helpless, because I didn't know how to handle the situation if I have no influence on making decisions about the strategic direction of Shapeyard. I got angry about the whole situation and as Das (2008) states this is one of the five feelings that lead to bad and affective decisions. I started just to talk bad about the project, not thinking about what the appropriate way is to deal with the situation. I should have talked to the researchers openly about our discrepancies and should have tried to make clear that from my business point of view, I think that our strategy is the best way to go and if we go their strategy they don't need us and we don't have to work that hard then. What was also playing a role was the fact, that I needed a final project

for the master program. If I would have dropped out of this project in January there would have been no time to start something new. Also I didn't want to leave my entrepreneurial colleagues alone. So there were also strong feelings about being dependent on the one hand because the researchers could decide on the strategy and on the other hand because I needed to fulfill the criteria to get my master degree.

A positive result of the conflict with the researchers was that our entrepreneurship team got closer. We shared the same values and had often the same opinions about strategic decisions. Also we could talk openly with each other about problems. As Ensley (2000) states, cohesive teams are dealing much better with cognitive conflicts and normally not develop strong affective conflicts out of them. At the same time this became a problem, because we felt so close but the gap to the researchers became bigger. When I think now about it, this became over time two parties being against each other. For the progress of Shapeyard this was very unhealthy, because we had to deal with all our conflicts and personal affections as well as finding a way that everyone agrees to. As Jehn (1997, pp.532) describes, teams which are in a negative emotional state work less effectively "...because emotions overrun and oversimplify rational and instrumental reasoning."

Conflict 3

The third conflict centers in the question about responsibilities. Jehn (1997, 2001) describes conflicts about responsibilities as process conflicts. We couldn't come to a decision who is responsible for what and also which duties different responsibilities imply.

The trigger for this were the fact that the researchers wanted to stay in control. They were not willing to leave responsibilities to us or in my perception it was like this. Now I am not really wondering about it, because they never followed any suggestion from our side. They didn't trust us and our work. For me it was an interplay. I also didn't trust them and their work. As Ensley (2000) says if the values and opinions of a working group differ to a high extent they are not willing to understand each other or value disagreement between each other. For me it was exactly like this. We were just too far away from each other. It took so much effort just to deal with each other so there was almost no power left to make progress and to get something done.

The result of this conflict was that us entrepreneurs just worked on Shapeyard without integrating the researchers anymore. We developed the business plan our way with the hope in the end convincing the researchers with a well developed document, gaining some legitimacy. We tried to stay optimistic and tried to motivate each other with this. I thought when we have good arguments and put a lot of effort in the business plan that everything might go well then. It was the other way around. One of the researchers rewrote the business plan in his way. This made me angry because of two things. First because they were always complaining that they have no time because of their work and therefore didn't do the things we were asking them explicitly for. And second because it was our task and our competence to write this plan and we got really good feedback from other people about it.

So also this conflict ended up in an affective dimension, me feeling frustrated, angry and disappointed. My only thought for a long time was that I worked for nothing.

Because of this conflict we had a talk with a board member of Shapeyard from LU Innovation because we didn't know how to proceed with the work. He had than a serious talk with the researchers and suddenly they were willing to give us some responsibilities. I was more surprised about this than motivated because it was in march and my attitude was already so negative that I didn't really want to work anymore also I had more possibilities now. I could only think that it will not work out anyway and that I don't want to start a company with the researchers because we already had so many difficulties. (Karsten, 2011, Entrepreneurship Learning Journal No. 14)

Now I think I should have addressed all the described conflicts much earlier and that I should have been much more open about the difficulties I've seen. I think that the talk to the board member 2 month earlier would have made a difference.

The Influence of emotions

In my perception my emotions had a high impact on my work for Shapeyard. I agree there with the research of Jehn (1997) that emotions are an important element of conflicts. Therefore that every conflict we had also had an affective side and that conflicts in general are stressing and a threat, I had a high emotional response on them and negative arousal. I was

often exhausted because its hard to deal with negative feelings over a long period. Jehn (1997) also says that people in that emotional state working less effectively and that emotions overrun and oversimplify rational reasoning. I made the same experience. For me it was often hard to concentrate on the work or I didn't know what I can do. Sometimes I felt useless for Shapeyard or that my work is not necessary at all.

For me my emotions made it hard to work in a productive way. I couldn't get a distance to my feelings about the conflicts we were in. I knew that everything is relative and that nobody wanted this conflicts on purpose. I shouldn't have taken them so serious and so personal. But that is especially for me difficult because I am a very emotional person and I am very sensitive with conflicts. I don't have a thick skin and I am always getting unsure when I feel disharmony's in my environment. Because of this and my experiences during the year with Shapeyard I began to doubt that I have the right characteristics to be an entrepreneur. Hisrich et. al. (2008) writes that a lot of difficult and lonely times occur in entrepreneurial processes and that the entrepreneur has to be really strong and should have a strong moral-support network to deal with it. From my perspective this is right. If I have my family and my friends around me, people I trust, then I can handle conflicts and negative emotions much better. The problem here was, that I was away from home and only new people were around me. I found also friends but that is different from the social environment I have at home. So I think that the conflicts with Shapeyard were maybe normal because the entrepreneurial environment is characterized by high stress, a multiplicity of obstacles, and a high uncertainty regarding outcomes of the work. (Politis and Gabrielsson, 2009) But the problem for me to handle this was that my support was missing. Of course I had also the other students in class or my group members, but they normally all had enough problems with their own project. My conclusion therefore is that I would have handled the conflicts and negative emotions better if I would have had a strong-moral support network around me. (Karsten, 2011, Entrepreneurship Learning Journal No. 14)

Processes

An interesting experience I've made according to the differences me as an entrepreneur student and the researchers is related to effectuation and causation. The researchers wanted a

certain outcome from the work of Shapeyard: a high status as famous designers and a business that famous designers usually have, which is a little very fancy design store or selling their designs to companies with a high reputation. To reach this certain goal they needed certain ingredients so that they get this certain outcome.

From my view as an entrepreneur and business student I was sure that starting up a company with Shapeyard that is profitable and successful in the market we needed to have a look around us about the resources available. For me it was only possible if we would go a practical and simple way. For example start very small with the product portfolio and the use of material. We needed to establish good relationships with the producers and develop the program and many more tasks that take time. To start up a company is such an uncertain process that it goes many ways that can not be predicted before. For me the more logic way is then to control my resources on my way and be aware of uncertainties and difficulties in the process.

But the researchers wanted us to predict everything and they wanted a certain outcome. And the result of this was that as a conclusion they didn't need us as entrepreneurs. Because we tried to find a clever way to start a profitable business and they tried to find a way to start their own store and being recognized in the design world. It was not my intention to make somebody else famous neither it was my intention to do exactly what somebody else wants, because then I can just be an employee with fixed tasks and a steady salary.

In conclusion the researchers liked more the causation way of doing things and us entrepreneurs liked more the effectuate dimension of doing things. In my perception this was a gap between us and also an indirect trigger for conflicts and misunderstandings.

Learning from failure

I was never afraid towards the act of failing and when I look back I perceive my failures as the best way of learning for life. Nevertheless it changed a bit when I came to Sweden and started working for Shapeyard. I was not so brave anymore just trying everything no matter if I could fail or not. For Shapeyard I was much more careful with my actions. Through the

conflicts we had and my low productiveness I got feelings of incompetence and a reduced self-esteem, which made me even more unproductive.

Now with a bit more distance and the end of the master in my mind I can see my failures in Shapeyard in a more positive way, which is the condition for handling failure effectively. It increases my willingness to learn from it and change my mindset. This goes along with the research of Politis and Gabrielsson (2009). They state that a positive attitude towards failure is the prerequisite to cope with failure in an effective way.

6. Conclusion

I learned many important things through writing this reflections and my experiences during the year of studying entrepreneurship:

- it is very important to analyse a business idea properly before starting to work for it in just a random direction. With Shapeyard we would have known in the beginning where we stand and could have started from a more effective position.
- to talk openly and to the right person about my concerns and the conflicts I perceive. For example the talk to the board member about our difficulties with responsibilities and his intervention talking to the researchers and them finally giving us some responsibilities.
- that I have to learn to get an emotional distance to my work and not taking everything personal. I think that a good solution for this would be that when I recognize conflicts that I analyse them and write down what I am feeling about it. To write it down is also a good solution to put everything into perspective and to reflect why it happened and how it can be solved.
- I learned a lot about collaborations with researchers and the different language they speak in contrast to me as a businesswoman. Researchers are often perfectionists in what they are doing. The same it was with us. They were not satisfied with just good enough, they wanted it to be perfect which was almost impossible and time consuming. If I will ever work with researchers again I know now what to expect and

that I have to check their work by myself, because it is likely that we have different opinions about the status of their work.

- I know now that a moral-support network is really important for me when dealing with entrepreneurial processes. If I ever start an entrepreneurial project again I will make sure before that I have the support I need to stay strong.
- It is necessary to reflect on experiences in detail and to think through them also together with other persons, to put things into perspective and to get a learning outcome of it. I think it is also valuable, because then it is not so likely that I get obsessed with it.

Conflicts and emotions are closely connected to each other. I can agree mostly with the literature about conflicts and emotions that I chose for this theoretical reflections and for me it was good to read about this also to put my own experiences into perspective. I noticed that I am not the only one having strong feelings and experiencing conflicts. But what I also learned is, that the perception of the conflicts and the resulting emotions are very subjective. If they are more negative or positive is depending on the person, the values, the education and the former experiences. Shapeyard was a great project to learn about myself and how I handle conflicts and my emotions. And finally I have to admit that I am not very good in it. But there is still the strong emotion of hope that one day I will handling them in a good way, not perfect, but good enough!

For further research I would suggest to address emotions coming from uncertainties in entrepreneurial processes. Therefore that emotions play such a big role for decision making and work efficiency it is not addressed yet in the field of entrepreneurship. It would help me as an entrepreneur to read about that others of my kind make the same experience and it would be very exiting to get to know different solutions for it.

References

Articles

- Das, J.P., 2008. Planning and Decision Making : Beware of emotions and Illusion. *Journal of Entrepreneurship*, 17:1, pp.1-14
- Desivilya, H.S., 2010. Innovation and Conflict Management in Work Teams: The Effects of Team Identification and Task and Relationship Conflict. *International Association for Conflict Management and Wiley Periodicals*, Vol. 3, No. 1, pp. 28-48
- Ensley, M.D., Pearson, A.W., Amason, A.C., 2000. Understanding the dynamics of new venture top management teams. Cohesion, conflict, and new venture performance. *Journal of Business Venturing*, 17, pp. 365-386
- Friedman, S. (2004), "Learning to make more effective decisions: changing beliefs as a prelude to action", *The Learning Organization*, Vol. 11 No. 2, pp. 110-28.
- Gabrielsson, J., Tell, J., 2009. Managerial learning and development in small firms: implications based on observations of managerial. *CIRCLE*, Paper no. 2009/3
- Jehn, K.A., Mannix, E. A., 2001. The Dynamic Nature of Conflict: A Longitudinal Study of Intragroup Conflict and Group Performance. *The Academy of Management Journal*, Vol. 44, No. 2, pp. 238-251
- Jehn, K.A., 1997. A Qualitative Analysis of Conflict Types and Dimensions in Organizational Groups. *Administrative Science Quarterly*, Vol. 42, No. 3, pp. 530-557
- Pinkley, Robin L. 1990 "Dimensions of conflict frame: Disputant interpretations of conflict." *Journal of Applied Psychology*, 75: 117- 126.
- Politis, D. & Gabrielsson, J. (2009) Entrepreneurs' attitudes towards failure: An experiential learning approach. *International Journal of Entrepreneurial Behaviour and Research*, 15(4): 364-383.
- Sarasvathy, S.D., 2001. Causation and Effectuation: Toward a Theoretical Shift from Economic Inevitability to Entrepreneurial Contingency. *Academy of Management Review*, Vol. 26, No. 2, pp. 243-263
- Zimmermann, M. A., Zeitz, G. J., 2002. Beyond Survival: Achieving new Venture Growth by Building Legitimacy. *Academy of Management Review*, Vol. 27, No. 3, pp. 414-431

Books

- Argyris, C., 1962. Interpersonal Competence and Organizational Effectiveness. Homewood, IL: Dorsey.
- Brundin, E., 2002. *Emotions in Motion-The Strategic Leader in a Radical Change Process*. Jonköping: Jonköping International Business School, Dissertation Series No. 012
- Goleman, D. (1995). *Emotional Intelligence*. Bantam Books, New York, NY.
- Hisrich, R.D., Peters, M.P., Shepherd, D.A., 2008. *Entrepreneurship*. Seventh Edition. New York: Mc Graw Hill
- Landström, H., 2009. *Handbook of Research on Venture Capital*, Edward Elgar Publishing.

Chapters of edited books

Ross, Raymond S. 1989 "Conflict." In R. Ross and J. Ross (eds.), *Small Groups in Organizational Settings*: 139- 178. Englewood Cliffs, NJ: Prentice-Hall.

Thomas, Kenneth W. 1992 "Conflict and negotiation processes in organizations." In M. Dunnette and L. Hough (eds.), *Handbook of Industrial and Organizational Psychology*: 651-718. Palo Alto, CA: Consulting Psychologists Press.

Unpublished Manuscripts

Karsten, L.-M. (2010), Entrepreneurship Learning Journal, Unpublished manuscript

Karsten, L.-M. (2011), Entrepreneurship Learning Journal, Unpublished manuscript

Personal Communication

Bernston, P., 2011. Sum-up Meeting Shapeyard. [talk] (personal communication 26 May 2011)