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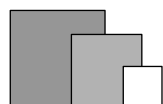
Transforming an idea into a strategic decision in SMEs

The underlying decision-making process

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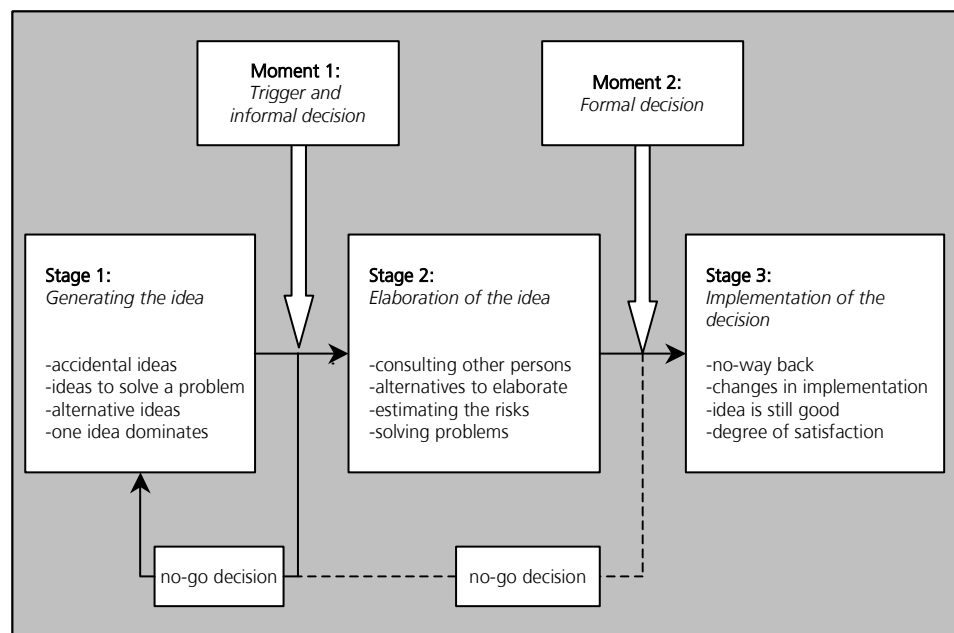
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Summary

Entrepreneurs in small and medium sized firms (SMEs) are dynamic when it comes to decision-making. 65% of the interviewed entrepreneurs in our sample took an important decision in the last three years or will take an important decision in the near future. In this report we investigated the stages and crucial moments in the decision-making process of SMEs. By means of two extensive pilot studies we developed a model, distinguishing three stages and two moments (figure 1).

figure 1 Developed model of the decision-making process by SMEs



Source: EIM, 2004.

In the first stage the entrepreneur has an idea. We distinguish two types of ideas. Ideas that are formed purely by chance are almost always due to external factors. Someone else conceives the idea. The entrepreneur reacts intuitively or emotionally to this idea. Other ideas are the result of a maturing process started to solve a problem and these ideas gradually gain strength. The entrepreneurs are aware of the idea, entrepreneurs probably have ideas milling around in their heads all the time. Only a few of such ideas survive. Some entrepreneurs admit they had more ideas. However, one idea dominates.

The trigger together with the informal decision is the first crucial moment. A trigger is an event that sends the entrepreneur into action. A relatively immature idea needs a strong direct trigger but a weak indirect trigger is sufficient for a relatively mature idea. It is possible that the idea and the trigger arrive at the same time. The trigger results in immediate action and we recognise the moment of the informal decision by the action the entrepreneur takes. The entrepreneur is now ready to elaborate his idea.

The elaboration of the idea takes place in a second stage. The entrepreneur has set his goal but does not know exactly how he is going to achieve it. At this stage the entrepreneur is patient and realises that timing is essential for success. Other parties, family,

accountants, tax advisors or colleague entrepreneurs are consulted. The entrepreneur considers alternative routes to elaborate the idea and estimates the risks. During this entire stage the entrepreneur keeps track of the risks. Problems that come to light are resolved gradually.

Once the entrepreneur has almost finished the elaboration of the idea it is time for the second moment, the formal decision. This formal decision is usually a signed agreement or the first step towards implementing the idea. After the formal decision has been made there is no way back.

In the final stage the entrepreneur implements the decision. Some entrepreneurs experience various problems at this stage as the implementation of the idea turned out to be harder than they expected. The problems may lead to a change in the method of implementation, but the idea itself never changes. Despite the problems, the entrepreneur remains convinced that his idea is good. The majority of the entrepreneurs are satisfied once they have implemented the decision. Sometimes the result turns out to be different from what they expected in the first place.

1 Introduction

Small and medium sized enterprises (SMEs) play a key role in the modern market economy. Strategic decisions made by small and medium sized business entrepreneurs¹ form the heart of entrepreneurship and can therefore be considered as essential for the dynamics in the economy. Surprisingly, little is known about the decision-making process within SMEs. On the other hand there is abundant literature concerning strategic decision-making in large firms. Brouthers et al. (1998) state that past strategic decision-making research focuses mostly on the 'procedural rationality' of decisions in large multinational firms. However, there is the feeling among many researchers (e.g. Papadakis et al., 1998, Brouthers, 1998; Beattie, 1999; Gilmore and Carson, 2000; Cummins et al., 2001) that independent entrepreneurs (owners/directors of SMEs) and managers of large firms differ when it comes to decision-making. For example Busenitz and Barney (1997) assert that entrepreneurs are more susceptible to the use of decision-making biases and heuristics than are managers in large organizations. Studies on the entrepreneurial decision-making process will enrich the knowledge of mechanisms that drive SMEs to participate in the economy life of the state, contributing to growth and prosperity for society. In particular, the decision-making model developed by Mintzberg (1976) inspired us to investigate the decision-making process within SMEs.

In 2002 EIM started a research program which investigates the decision-making process of small and medium sized business entrepreneurs in the Netherlands. In 2002 researchers from EIM interviewed ten entrepreneurs about the crucial factors and moments in their decision-making process, because the decision-making process largely takes place inside the head of the entrepreneur. We looked for strategic decisions resulting in a clear discontinuity in the course of the organisation. The results of this provisional investigation were published in a research report (in Dutch)². This study provided us with many insights in the decision-making process of SMEs. It helped us to perceive the crucial stages and moments in the decision-making process of SMEs.

Although we were able to distinguish three stages and two crucial moments the results of this first pilot study were provisional. Some aspects of the decision-making process of entrepreneurs needed to be clarified in more detail. There were some gaps that need to be filled especially when it came to the emergence of an idea. In addition we wanted to hypothesize whether a new set of case studies would confirm the stages and moments found in the first pilot study and therefore we executed a second pilot study. The results of both studies are described in this research report. The combined results of both studies helped us to describe more precisely the decision-making process of entrepreneurs in SMEs.

¹ Wennekers and Thurik (1999) distinguish three types of entrepreneurs: Schumpeterian entrepreneurs, the intrapreneurs and the managerial business owners. In this report we use the term entrepreneur for a managerial business owner (business owners or self-employed) of a small or medium sized enterprise (SME).

² Gibcus, P. and P.H.M. van Hoesel (2003), The decision-making entrepreneur in a SME: a preliminary investigation ('De beslissende ondernemer in het MKB: een vooronderzoek'), EIM, Zoetermeer.

The objective of this research is to map the decision-making process of entrepreneurs in SMEs. We formulated the following central question:

What are the stages and crucial moments in the decision-making process of entrepreneurs in SMEs?

Structure of the report

In chapter 2 we discuss the research methods used in the first and second pilot studies. Chapter 3 deals with the provisional results of the first pilot study and based on these results we formulated six hypotheses. In chapter 4 we examine these hypotheses and support or reject them using the results of the second pilot study. We retrieved a great deal of information from both pilot studies to give an accurate description of the entrepreneurial decision-making process. Chapter 5 gives a general overview of this decision-making process. Parallel to both pilot studies we performed a literature search. In chapter 6 we present a literature overview and we make a comparison between the literature and our findings. Finally, in chapter 7 we give a preview of further research on this subject. The case studies of the first pilot study are described briefly in Annex I and those of the second pilot study in Annex II.

2 Research method

In the past two years EIM performed two pilot studies on the decision-making process by SMEs. The first pilot study had a very exploratory character. As a literature search was performed parallel to the case studies, we were hardly influenced by decision-making models described in literature. The only article of influence was that of Mintzberg (1976), but we did not allow this article to affect our interviews too much. We just wanted to let the entrepreneurs talk and hear their stories. We, as researchers, wanted to keep an objective point of view. The results of the first pilot study resulted in a different approach in the second pilot study. This second pilot study was more of a confirmatory nature. We wanted to expand and hypothesize our findings from the first pilot study.

The population in both pilot studies consisted of small and medium-sized enterprises (SMEs) in the Netherlands. The number of employees in enterprises is often used as a guideline when it comes to defining SMEs. Mostly SMEs in the Netherlands are defined as companies with no more than 100 employees. In many other countries SMEs are enterprises with a maximum of 250 employees.

In this chapter we shall discuss the research methods used in the first and the second pilot studies.

2.1 The first pilot study

For the first pilot study we selected entrepreneurs from the 'EIM SME-Panel'. This panel was set up and is controlled by EIM. Its major objective is to collect information about knowledge, attitude and opinions of entrepreneurs about various (government) policy-related issues. The panel started in 1999, and, on average, the firms are interviewed 3 times a year on varying topics. In each round about 2,000 companies are interviewed by means of computer-assisted telephone interviewing (CATI). The entrepreneur or the general manager of the company provides the answers. The 'EIM SME-Panel' consists of Dutch companies with fewer than 100 employees, distributed equally across three size classes (0-9 employees, 10-49 employees and 50-99 employees) and nine sectors. The nine sectors distinguished are construction, manufacturing, trade and repairs, accommodation and catering, financial services, other services, rental and real estate, and finally transport and communication.

At our request, during the second measurement in 2002, the panel included four questions about decision-making. The questions were:

- 1 Did you take one or more strategic decisions in the last three years?
- 2 If yes: Could you give a short description of your last strategic decision?
- 3 Did this decision work out positively or negatively?
- 4 Are you satisfied with the result of your decision?

Results of the panel

In total 1,329 entrepreneurs responded to our four questions. About 77% of the participants stated that they took one or more strategic decision (go or no-go) during the last three years. This high percentage can be called remarkable from the point of view of the 'conventional wisdom' that SMEs exhibit almost no economic dynamic activity. Moreover, three quarters of the entrepreneurs were, in the end, satisfied about their decision.

Selection of the case studies

We were looking for strategic decisions that had resulted in a clear discontinuity in the course of the organisation. Out of the 'EIM SME-Panel' we eventually selected ten entrepreneurs who were willing to tell us more about their strategic decision-making during an in-depth interview. For practical reasons the selected SMEs were not distributed across the whole country. The selected SMEs belonged to several sectors and the decisions concerned various matters. We made no attempt to select female entrepreneurs. Characteristics such as firm size and age of the company were not selection criteria. Basically we were interested mainly in entrepreneurs that took a go-decision. Our selection consisted of eight entrepreneurs that took a go-decision and two entrepreneurs that took a no-go-decision. These two entrepreneurs stated during the telephone survey that they had taken a no-go decision. However, during the interview it became apparent that they had taken an alternative go-decision. As a result all case studies involve a go-decision. In two case studies the entrepreneurs were not content with the result of their decision.

The case studies

The appointment was confirmed by letter. One entrepreneur cancelled his appointment a few days before the appointment, but another firm offered us two case studies. Therefore, no new appointment was necessary. The ten participating SMEs received a questionnaire in advance. This questionnaire was inspired partly by the decision-making model described by Mintzberg (1976). Receiving the questionnaire in advance helped the entrepreneurs to prepare for the interview and so make it easier for us to obtain the correct information. We looked on the internet for information about the SME as this helped us to place ourselves, to some extent, in the entrepreneur's situation. The in-depth interviews were held in July and August 2002. Two researchers were present at each interview. One researcher led the discussion and the other took notes. The questionnaire served as a manual during the interview. A case report was made for each interview containing some background information, answers to the questions and a brief summary. The reports were sent to the entrepreneurs for their comments and, if necessary, completion. In almost all cases the entrepreneurs' response was received within a couple of weeks. A brief description of the ten case studies is given in Annex I. The case study reports were used to analyse the decision-making process.

Analysis of the case studies

Two steps were involved in performing the analysis based on the case studies in the first pilot study. The first step consisted of a global qualitative analysis in which the differences and similarities were discussed. The second step concerned an additional 'quantitative' comparison of the cases. As far as possible, the answers of the entrepreneurs were categorised and coded. We considered the categorisation to be preparation for future research on this subject. Because the number of cases was small we realised that all important topics had been found in the first qualitative analysis. The results of this analysis are discussed in chapter 3. Parallel to the case studies we performed a literature search (Ivanova and Gibcus, 2003). Finally we confronted our results with the results we found in literature.

2.2 The second pilot study

The set-up of the second pilot study was somewhat different from that of the first pilot study. Because we did not want to interview the participants of the 'EIM SME-Panel' again about their decision-making process we decided to set up our own panel to select the case studies by using a telephone survey. The sample consisted of 200 completed telephone interviews. All 200 SMEs have a minimum of one and a maximum of 99 employees. The person we spoke to was always a director/owner and the one who takes the important decisions. The survey was distributed equally across the sectors industry, construction, trade, hotel and catering industry, transport and communication, financial services and other services.

In the first pilot study a short questionnaire was used for selecting the case studies. We used a different questionnaire for the telephone survey. During the first pilot study we noticed when doing the in-depth interviews that some questions in the 'EIM SME-Panel' were not quite clear for all the participants. For this reason we improved and expanded the questionnaire to ensure a better selection of the case studies. Beforehand we distinguished three groups: (1) entrepreneurs with a go-decision, (2) entrepreneurs with a no-go-decision and (3) entrepreneurs walking around with one or more ideas or plans that could possibly lead to a strategic decision. Therefore, the questionnaire consisted of three main topics: go-decisions, no-go decisions and ideas that could possibly lead to an important decision. There were some questions about each of the three aspects. When the subject was applicable we asked the entrepreneur to give a short description of the (latest) go-decision, no-go decision or idea. We also asked for some background information about the SME such as the number of employees, legal form, year of start-up, number of directors/owners.

Results of the telephone survey

Entrepreneurs are very dynamic when it comes to decision-making. The results of the telephone survey show us that 65% of the entrepreneurs we interviewed took some kind of decision or has ideas that probably will lead to an important decision in the near future. From table 1 we see that more than half of the entrepreneurs questioned took an important strategic decision in the past five years. Almost 90% of these entrepreneurs were pleased with their decision. We also notice that 9% of the questioned entrepreneurs dealt with a no-go decision. Approximately 45% of these entrepreneurs said they are glad that they had not gone ahead with their decision. 60% of the entrepreneurs have ideas or plans that will possibly lead to an important decision. This is a clear indication that entrepreneurs continue to search for new ideas and opportunities.

table 1 Percentages of go-decisions, no-go decisions or ideas that possible lead to an important decision

	<i>Percentage</i>
Go-decision	54
No-go decision	9
Idea or plan	60
Go-decision or no-go decision or idea or plan	65

Source: EIM, 2004.

Selection of the case studies

Exactly 49 entrepreneurs agreed to have a discussion (face-to-face interview) with one of the researchers about their decision-making process. Out of these 49 SMEs we selected twelve SMES for an in-depth interview. Our selection consisted of 6 entrepreneurs with a go-decision, 2 SMEs with a no-go-decision and 4 entrepreneurs with ideas or plans that possibly will result in a strategic decision. Two female entrepreneurs were included in our case study selection because we were also interested in having a glimpse of their decision-making process. This time the entrepreneurs were located all over the Netherlands.

The case studies

Using the experience gained from the first series of case studies we formulated a protocol. This protocol is explained in four steps:

Step 1: Confirming the appointment and sending the questionnaire

The appointments were again confirmed by letter and a questionnaire was enclosed. The questionnaire used at the in-depth interviews in the first pilot study was based partly on Mintzberg's decision-making model (1976). The results of the first pilot study showed us that Mintzberg's decision-making model does not fit in the decision-making world of SMEs. Because we wanted to verify the stages and moments we found in the first pilot study we used another questionnaire conform these stages and moments. Compared to the first pilot study we paid much more attention to the formulation of the idea that finally led or will lead to an important strategic decision. The questionnaire contained open questions only.

Step 2: A brief Internet search

Most enterprises have their own website at their disposal. We use the information on the website as background information when preparing the in-depth interview, but also in our case report. Where there was no website other channels were used to obtain information. Eight firms did not have a website.

Step 3: The in-depth interview

During the interview we questioned the entrepreneur about relevant facts and motives that finally resulted or will result in the decision.

Step 4: The case study report

A considerable amount of information was gathered and we structured this information in a case report that we returned to the entrepreneur for comments or corrections. The corrections and comments were processed in a final report. A detailed case report keeps the case study much more alive in the mind of the researcher and makes it easier to analyse the case studies.

Two entrepreneurs offered two case studies in one in-depth interview. In the end we had 14 case studies at our disposal. In July and August of 2003 we finished 8 case studies. At the beginning of November 2003 we completed the other 6 case studies. A short summary of these case studies is given in Annex II.

Analysis of the case studies

We analysed the case studies by making several qualitative scores. The entrepreneurs' answers were categorised and we listed the answers for each category in a table. These tables assisted us in interpreting these answers. Before we started the second pilot study we formulated six hypotheses (chapter 4) which we were able to support or reject more easily by using the results in the qualitative tables.

We performed an additional literature search the results of which were added to the literature overview of the first pilot study. Again we confronted our results with the literature findings.

3 First pilot study: A provisional description of the decision-making process

From the ten case studies of the first pilot study we discovered that an entrepreneur goes through certain stages and crucial moments in the decision-making process. The stages and crucial moments, which we shall call provisional for the moment, are as follows:

- stage 1: emergence of an idea
- moment 1: trigger and informal decision
- stage 2: working out the idea
- moment 2: formal decision
- stage 3: implementation of the decision.

In this chapter we shall consider these stages and moments. Paragraph 3.1 describes how an idea emerges. The first critical moment involves a trigger that results in an informal decision being taken (paragraph 3.2). In paragraph 3.3 we explore how entrepreneurs work out their ideas after taking the informal decision. Once everything is in its right place the entrepreneur takes a formal decision (second moment), which has a central place in paragraph 3.4. In the last paragraph of this chapter we look at the last stage: implementation of the decision.

3.1 Stage 1: an idea emerges

Entrepreneurs are always thinking about the future of their firm and are constantly on the look-out for opportunities and threats. They are frequently scanning their environment - their competitors, their customers, their suppliers or their sector in general. The entrepreneurs also examine the internal organisation of the firm, e.g. what is the state of the production process, how do the employees perform under the current conditions and how profitable is the firm. They also gather information from, for example, trade journals, management journals, meetings, courses or the Internet. It is possible that one of these items will lead to the birth of an idea. We think that in the ten case studies one or more of these information sources were responsible for the idea although it was hard to point out the actual source.

The moment at which an idea arises

In eight out of ten cases it was not possible for us to indicate one particular moment at which the idea arose. In none of the cases we could trace one single moment at which the entrepreneurs yelled "Eureka". Rather the entrepreneurs talked about a maturing process. The idea slowly penetrates the consciousness of the entrepreneur, who considers himself as the creator of the idea. These entrepreneurs are almost constantly aware of their idea. Box 1 gives two examples.

Box 1 Examples of ideas that are the result of a maturity process

- The entrepreneur of a pub serving food noticed that the dishes offered on the menu did not differ from any other pubs serving food. The entrepreneur wanted to be more distinctive. His idea was to drastically upgrade the menu to the level of a haute cuisine restaurant, while still enjoying the ambience of a pub.
- The entrepreneur of three supermarkets knew that a supermarket in his vicinity was for sale. This supermarket could fall into the hands of a competitor. It took a while before he realised that it would be a good idea to buy this supermarket himself.

Source: EIM, 2004.

In two cases we were able to indicate the moment at which the idea arose. These ideas arose completely by chance. These two ideas coincide with the moment we call the trigger (see paragraph 3.2). One idea came from the entrepreneur himself (see box 2).

Box 2 Examples of an idea that came from the entrepreneur himself

The entrepreneur of a firm that cleans the fronts of houses saw that the owner of a similar company arranged his succession too late. This made the entrepreneur aware that he had to think about this and take measures at an early stage.

Source: EIM, 2004.

The other idea arose due to external factors (see box 3).

Box 3 Examples of an idea that arose due to external factors

An entrepreneur who runs an international transport company in the Benelux, received a telephone call from the international owner to look for a firm that was suitable for a take-over.

Source: EIM, 2004.

Surprisingly, when it comes to formulating the idea there is no place for any advisors, such as accountants, notaries or lawyers. This phase of dealing with the idea mainly takes place in the mind of the entrepreneur (or entrepreneurs, if there are associates). We received the impression that the associate who produced the idea takes a dominant lead. This is a provisional finding only because we did not question any associates.

Attractiveness of the idea

The idea can be attractive, or in some cases very attractive, from the first moment on (see box 4). During the process the entrepreneur becomes more and more aware of why the initial idea is a really good idea. Perhaps the entrepreneurs had some experiments in mind to sound out the idea. It is possible that some ideas were killed in this way although we did not question the entrepreneurs explicitly on this subject. However, we saw that the entrepreneurs are gradually convinced that the idea needs to be implemented. The idea develops into a strong motive (or a set of motives), which requires action. There was one entrepreneur who did not find the idea attractive at first, but as it went on his opinion changed. At the end he was convinced that the idea was good.

Box 4 Examples of reasons why the idea is attractive

- The investment made by a printing firm in a modern silk-screen printing machine was attractive from the first moment on. The quality of the new machine would be much better than the old one. With this new machine the printing office is able to stay in the top segment of the market.
- A civil engineering agency realised that some diversification was necessary in order to receive enough orders in the near future. This diversification could be realised by accepting the offer of a take-over by an international firm but this would mean the end of the civil engineering agency. For this reason the entrepreneur developed a new plan and the civil engineering agency started up a joint venture with a foreign civil engineering agency. In this way it could still operate independently and survive.
- A shipping agent with a medium-sized transport business received a telephone call from the director of an international transport business who gave the manager instructions to look for a suitable candidate for a take-over and to manage this firm. The shipping agent did not like the idea of becoming a manager of a transport business at first, but now he is very enthusiastic about his new job.

Source: EIM, 2004.

Argumentation of the idea

We questioned the entrepreneurs after they had implemented their decision. Therefore we need to realise that in this stage the entrepreneurs could reason differently about their ideas. The entrepreneurs were able to present good arguments to support the idea. We are not sure whether the entrepreneurs would talk about their idea in the same way as they did when they were in the stage of becoming aware of the idea.

The entrepreneurs thought very carefully about the rational argumentation of the idea. At the same time intuition and emotion play an important role in their argumentation, as the entrepreneurs frankly admit. It is quite possible that at first emotions are dominant and that later on they think through their idea carefully in a more rational way. In seven case studies it was hard to recognise any emotional dominance, because the entrepreneurs were obviously reasoning in retrospect. Three entrepreneurs acknowledged the dominance of emotional arguments such as 'I'm very proud of my company' or 'it's nice doing this too'. These emotional arguments were complemented with rational arguments. Because entrepreneurs think a lot about their arguments we suspect that they weigh up the alternatives in their minds. As a consequence the argumentation of the idea becomes more rational.

Alternative ideas

In most case studies we could not find any alternative ideas. However, two entrepreneurs spoke about their alternative plans (see box 5) which, however, they chose not to go through with.

Box 5 Examples of alternative ideas

- The entrepreneur of a research agency has chosen for the establishment of a joint venture instead of expanding his own research agency.
- A civil engineering agency also decided to set up the establishment of a joint venture. This time the alternative was the buy-out of the firm by a large civil engineering agency.

Source: EIM, 2004.

The first idea was the best for those entrepreneurs without alternatives. This is again an indication that feelings play an important part. Apparently the first idea is so attractive that the entrepreneurs are not aware of alternatives. Because this idea is so dominant it is perhaps hard for entrepreneurs to find alternative ideas. The entrepreneurs considered this stage as closed.

It is remarkable that none of the entrepreneurs wants to abandon his idea at any moment during the process. Apparently they find the alternative unattractive. Sometimes this is understandable because the entrepreneurs are under pressure to solve a problem or to reduce an area of tension. But even in cases where the entrepreneur is not under any pressure, the possibility of abandonment does not arise.

Idea and trigger

Despite the strength and maturity of the idea, the elaboration of the idea rarely comes automatically. In nine out of the ten case studies something extra is needed: a trigger. The period between idea and trigger differs from case to case. Some entrepreneurs need only a couple of weeks whereas others need a year or even more. As mentioned previously in two case studies the idea emerged at the same moment that the trigger occurred. This means that the elaboration of the idea began immediately and the entrepreneur did not require any time to allow his idea to mature.

3.2 Moment 1: trigger and informal decision

The trigger is the direct stimuli for the entrepreneurs to take action and elaborate their idea. In one case study the entrepreneur stated that he could not remember anything that worked as a trigger. In the nine other case studies we did perceive a trigger. In seven case studies the trigger came from the outside world. The trigger can be direct or indirect. If the idea is immature a strong direct trigger is necessary before the entrepreneur takes any action (see box 6 for examples).

Box 6 Example of a direct trigger

- The wife of a sound engineer arrived home with a film that had to be edited. This seriously encouraged the sound engineer to research the possibility of doing some film editing.
- The entrepreneur of an installation company heard that some of his employees wanted to do some other work in addition to their normal work. This triggered the entrepreneur to fulfil his idea of starting-up an additional firm.

Source: EIM, 2004.

A relatively mature idea needs only a rather indirect trigger. In this case there is not an obvious continuation of the mental process until then. It concerns an indirect, temporary and unique event. Most of the times the trigger occurs accidentally. We give a brief description of a few indirect triggers in box 7.

Box 7 **Examples of indirect triggers**

- A research agency and a communication firm had the idea of co-operating through a joint venture. Although the idea had existed for a long time nothing had been done. A candidate that applied for a job at the communication agency had previously worked for a research agency. This candidate was the perfect person to manage a joint venture between the communication agency and the research agency. Her application triggered both agencies to act.
- Two employees of a printing firm became the owners of the business. For them it was the moment that they had been waiting for to realise their idea and to buy a modern silk-screen printing machine.

Source: EIM, 2004.

We found it quite surprising that entrepreneurs experience such a decisive moment like a trigger as relatively unimportant compared to the major thread in their thoughts. When we asked the entrepreneurs about the crucial moments in their thought process they could not indicate such a moment. Also in the case study where no trigger was found there was no crucial moment. The entrepreneurs talked about a period in which the idea slowly gained strength. Of course, in the two case studies where the idea and the trigger coincide there is no such period. The trigger leads to immediate action. The action taken by the entrepreneur after the trigger occurs shows us that the entrepreneur took his informal decision. In box 8 we mention a few examples of informal decisions.

Box 8 **Examples of informal decisions**

- Informal decisions are for example:
- purchasing a fourth supermarket
 - upgrading the menu
 - investing in editing equipment
 - creating a joint venture
 - taking-over of a medium-sized transportation company

Source: EIM, 2004.

It is hard for the entrepreneur to let go of his idea after this particular moment even if obstacles have to be overcome. The moment the trigger occurs the entrepreneur takes some direct action that eventually leads to the final decision. The informal decision is not put in writing. It is an intention in the entrepreneur's mind or a verbal agreement between associates.

3.3 Stage 2: working out the idea

After taking the informal decision the entrepreneurs elaborate their idea. They look at alternatives and consult advisors and banks. The entrepreneurs also bear in mind that there are risks. All this makes the elaboration of the idea a complex matter and, as a consequence, entrepreneurs often have to overcome obstacles. Other persons that operate in the vicinity of the entrepreneur gain more influence in this stage of the decision-making process. We shall take a closer look at each of the above-mentioned topics.

Alternatives

When the entrepreneur is working out his idea alternative solutions are considered. However, the original idea remains unaffected. Box 9 shows some examples of alternatives.

Box 9 **Examples of alternatives**

The alternatives include, for example

- finding a subcontractor or a favourable financial agreement
- the choice between various types of machines or software packages
- dishes that are going to be served
- a location for a new establishment.

Source: EIM, 2004.

When the entrepreneurs consider the alternatives it appears that economic rationality is very important. The entrepreneur considers which alternative is most beneficial in terms of costs and benefits.

Role of advisors and banks

As mentioned above, advisors come into play at this stage of the decision-making process, although not every entrepreneur consults an advisor. By advisors we mean accountants, banks, lawyers, notaries and consultants. These advisors do not have any influence on the idea and are not given any chance of offering alternative ideas.

Box 10 **Example of the role of advisors**

One entrepreneur received unasked advice about the idea. The entrepreneur acknowledged the advice and put it to one side.

Source: EIM, 2004.

Usually advisors compile alternative solutions (within the boundaries of the idea). Some entrepreneurs admit that they depend very much on these advisors to consider the alternatives and for the specific elaboration of their profession. Otherwise we have the distinct impression that entrepreneurs are not very interested in the details provided by the advisors. All they want is for the advisors to help them implement their idea. The position of banks is in our opinion remarkable. Entrepreneurs wish to have as little as possible to do with banks, because they do not want to be dependent on them. On the other hand, the banks are reticent even though there is an important role for them to play. This mutual aversion could perhaps result in the informal decision being unsuccessful.

Consulting advisors and banks assist entrepreneurs by providing information in the form of analyses on which to found their informal decision. For four firms these analyses were restricted to financial or legal aspects only. Two entrepreneurs drew up a business plan. The four other entrepreneurs did not make use of any advisors. In these case studies there were no financial or legal complications.

Risks

The impact of risk-awareness on the final decision appeared to be very low. Seven entrepreneurs had little or no doubt about their strategic decision. The entrepreneurs who found their idea very attractive from the start had the least doubt about their decision. Three other entrepreneurs did have considerable doubts about their decision because of the high risk involved. Nevertheless these risks did not play an important part in their

final decision. Entrepreneurs are able to keep track of all the risks even if they are large. They balance the risks against the benefits that the decision brings before they finally decide. Box 11 gives some examples of risks that entrepreneurs have to take into account during their decision-making process.

Box 11 Examples of risks that entrepreneurs have to bear

- Although the owner of three supermarkets decided to buy a fourth supermarket. It was a high-risk decision. The supermarket included a unhygienic and unprofitable bakery. Nevertheless the entrepreneur rebuilt this bakery. The reorganisation of the bakery was expensive and it is still hard for the supermarket to make a profit.
- The entrepreneur of an installation firm took some risks when starting-up a new subsidiary. A large telecommunication provider who is a customer of the installation firm could decide to take his custom elsewhere, because the SME could become a competitor. As the entrepreneur did not want to lose his largest customer, he decided to set up a subsidiary.

Source: EIM, 2004.

Complexity

During the elaboration of the informal decision four SMEs had to deal with complex situations according to the entrepreneurs. These entrepreneurs all executed financial or legal analyses or formulated a business plan. The more complex the decision the more analyses needed. However, intuition also plays a part in complex decision-making perhaps because it is hard for the entrepreneur to gain complete insight into this decision. Complexity concerns mainly the financial obstacles that an entrepreneur has to overcome. When the entrepreneur is elaborating the financial implications it appears to be much tougher than once thought. On the other hand it appears that when there is no financial obstacle then the elaboration of the idea is quite simple.

Obstacles

Two SMEs did not meet any obstacle during their decision-making process. Three entrepreneurs came up against some small obstacles. Substantial obstacles were encountered by five SMEs. Four entrepreneurs stated that the obstacles had to do with the financial solution (see box 12).

Box 12 Examples of obstacles that have to be overcome

- Financial obstacles are, for example, difficulties in getting credit from the bank or the withdrawal of a possible financier.
- Non-financial obstacles are, for example, delivery problems and the attitude of customers.

Source: EIM, 2004.

Most obstacles were overcome with great enthusiasm, because the entrepreneurs actively searched for a solution to deal with the obstacle. This is directly related to the attractiveness of the idea that motivates the entrepreneurs to hold on. The right timing plays an important role in their solution. None of the entrepreneurs was in a hurry to deal with the obstacles. In some case studies the entrepreneurs waited as long as was needed for the obstacle to disappear.

Influence of other persons in the environment

It seems as if the entrepreneur is the only person who really matters during the elaboration process. When there are one or more associates these also have substantial influence, but there is one leader who drags the other associates along with him. All other parties involved have minor influence.

Employees do not participate in the decision-making process although they sometimes know what is going on. In one case study the influence of the employees was clearly noticeable, because they formed the trigger for the entrepreneur to work out his idea. We do not exclude that in some other case studies the employees had more influence than the entrepreneur admitted. In some other case studies the decision-making process was strictly no-need-to-know for the employees. In these cases they could not influence the decision-making process.

The entrepreneur's wife or girl friend has no influence on the decision-making process according to the entrepreneurs. At the most she does not stand in the way of the entrepreneur and gives him enough space to continue working out the idea. We do not know how the partners of the entrepreneurs view their influence.

The influence of customers is also almost unnoticeable. In one case study the customers appeared to be the trigger. In some other case studies the entrepreneur did not explicitly take into account the probable reaction of the customers to his decision.

Influence from the public authorities

There appeared to be no direct influence by policy makers or public authorities on the decision-making process, for example through subsidies, tax benefits or educational programs. Entrepreneurs dislike the administrative burdens that accompany the application for subsidies or tax benefits. A couple of times it was evident that entrepreneurs would welcome some stimulating policy on certain aspects, aspects such as reduction of entry barriers, removing unfair competition or a good infrastructure.

3.4 Moment 2: Formal decision

At a certain moment the entrepreneurs set up a formal agreement concerning their decision or take the first step to execute the decision. We regarded the moment at which the entrepreneur takes one of these two steps as the moment when the entrepreneur takes the formal decision. After this moment there is no way back for the entrepreneur.

Recording of the final decision

Eight entrepreneurs have their decision in writing. In these cases agreements of a legal and/or financial nature are involved. For two entrepreneurs (see box 13) who do not have their decision in writing the first step of implementation can be considered to be the moment of the final decision. Before that moment the entrepreneur has no obligations.

Box 13 Examples of how to recognise the formal decision

Two entrepreneurs did not set up a formal agreement to record their decision. The first steps to implement their decision were:

- the purchase of equipment and software by a sound engineer
- drawing up the new menu by the owner of a pub serving food.

Source: EIM, 2004.

Crucial motives

In all case studies there was a single motive that was very dominant and was finally decisive in the decision to go ahead. Examples are presented in box 14.

Box 14 Examples of crucial motives

- The owner of three supermarkets decided to buy a fourth supermarket before any competitor could buy this supermarket in his environment.
- To stay at the top a silk-screen printing company had to buy a new silk-screen printer.
- The strategic vision of an international owner of a transport business was the crucial motive to take-over a Dutch transport business.
- A communication agency pushed the entrepreneur of a research company to expand his research capacity in order to co-operate and this resulted in a new joint venture.

Source: EIM, 2004.

For seven SMEs the motive came from inside the firm, for the other three SMEs the decisive motive came from outside the SME. The decisive moment has, in all cases, an obvious economic principle. In most case studies we could also recognise some non-economic elements, like being proud of the SME or the need for a new challenge. The strategic decisions of the entrepreneurs have different natures that stress their diversity. We categorised the strategic decisions in two categories. The strategic decisions concerning a change in the organisation of the SME and investments in products and processes. In short, in seven out of ten case studies we talked to entrepreneurs who made changes in their organisation and three cases that involved the strategic decision of investment in products or processes.

3.5 Stage 3: implementation of the decision

After the entrepreneur took the formal decision he was able to implement his decision. The implementation of the decision was not plain sailing for four entrepreneurs. At the time of the implementation of the decision difficulties arose and those were more serious than previously thought. These problems resulted in financial difficulties. Eventually these problems were solved although for most firms the consequences were unpleasant. In all other case studies the implementation of the decision went quite smoothly, although three entrepreneurs did admit that the implementation was not as fast as they thought in advance. In box 15 some examples are presented that show us how entrepreneurs implemented their decision.

Box 15 Examples of obstacles that have to be conquered

- Because of the expensive reorganisation it was a few years before the supermarket was profitable. Large losses made the financing of a take-over much more difficult.
- An establishment went bankrupt because the market collapsed and as a consequence the parent company has some large debts.
- The entrepreneurs of a printing company bought a new silk-screen printing machine. The capacity improved and the products are of much higher quality.
- The entrepreneur of a pub serving food suddenly changed his menu. Customers were surprised at first, but now really like the haute-cuisine food and the ambience of the restaurant.

Source: EIM, 2004.

Degree of satisfaction

All the entrepreneurs are satisfied about their decision. They admit that they at least tried to make the best out of it. If they had not taken their decision they certainly would have had some regrets later on, because an opportunity would have been lost. This was also the case for entrepreneurs whose decision had less favourable results.

Because enough time has passed since the formal decision was taken it was possible for the entrepreneurs we interviewed to judge the results of their decision. Five entrepreneurs were found to be very pleased with their decision. Three entrepreneurs are content with the decision, but have some marginal notes. These marginal notes were solved by:

Box 16 Examples of solving marginal notes

- trying to be more cautious with a fifth take-over
- having conversations with the manager of the joint venture
- the sound engineer stopping editing.

Source: EIM, 2004.

Two entrepreneurs openly state that the decision did not have the result they expected although they are still convinced that their idea is good and will not give up so easily. These entrepreneurs are trying to correct their mistakes. They have no doubts about the idea, but consider the way in which the decision was implemented to be responsible for mistakes.

Current state of the SME

Three SMES are very pleased with the current state of the firm and are generating a much higher turnover and profit than before. Three SMEs were able to attain their end goals, but they are hoping for a slight improvement in turnover and profit. The decision led to a business interruption for the other three firms (see box 17).

Box 17 Examples of SMEs where the decision has led to an interruption

- A civil engineering agency states that the co-operation is unsatisfactory. They have put a great deal of effort into the co-operation but the results are marginal. The civil engineering agency is looking for a new partner.
- The sound engineer has temporarily stopped editing tapes, because it takes too much time.
- An installation company is bankrupt. Current orders are being handled by the parent company.

Source: EIM, 2004.

4 Second pilot study: Hypotheses

In the previous chapter we described a first impression of the decision-making process within SMEs. However, some aspects remained unanswered or needed to be investigated more thoroughly. We did this by setting up six hypotheses. To carry out a preliminary test of these hypotheses we interviewed another series of entrepreneurs in a second pilot study. The results are discussed in this chapter. In each of the following paragraphs one single hypothesis is central.

4.1 Hypothesis 1: alternative ideas are not considered

After the first pilot study we assumed that the entrepreneurs did not consider any alternative ideas. We were also aware that we had not paid special attention to this issue and therefore we wanted to hypothesize this. We formulated hypothesis 1.

Hypothesis 1: In their decision-making process entrepreneurs do not consider alternative ideas.

We asked entrepreneurs whether alternative ideas played a part in decision-making and found alternative ideas in more case studies than we expected. The examples in box 18 show why hypothesis 1 probably has to be rejected.

Box 18 Examples of alternative ideas

- The owners of a camping site decided to build a brand new bungalow park on a piece of land that they owned but that was hardly ever used. They also had the idea of expanding the camping site. The local authorities disagreed and so this idea was rejected.
- A confectioner considered three ideas, namely making his own chocolate, selling confectionery instead of having a lunchroom and baking his own bread. The last idea was dismissed very quickly, because the entire bakery had to be rebuilt. Making his own chocolate would require a lot of effort to learn this trade. The idea of selling more confectionery remained.

Source: EIM, 2004.

When we look at the two examples in box 17 we see that the confectioner picked the most attractive idea and at the camping site they chose the idea, which the local authority also preferred. In one case study the idea was not attractive at first (see box 19). In all other case studies the ideas were attractive from the beginning.

Box 19 Example of an idea that was unattractive from the start

Two associates had a hard time working together with their third associate. Because they started their firm as good friends it was hard for these two associates to buy-out the third one. They were very patient, but finally the situation became unbearable so they had to inform the third associate about the problem.

Source: EIM, 2004.

We noticed that entrepreneurs do not stare blindly at just one idea. In fact, they are aware of other competitive ideas and also consider these ideas. In the case studies where we do not know whether the entrepreneur had alternative ideas it is possible that there were alternative ideas, but they could not remember what they were. In fact, probably all entrepreneurs had alternative ideas but these were written off at an early stage or totally crowded out. We have seen in the first pilot study that it was hard to distinguish the idea generating process of the entrepreneurs and how they evaluate alternative ideas. In the second pilot study we paid some extra attention to the idea underlying the decision-making process.

We also found some additional results related to hypothesis one that will be discussed in the remainder of this section. One entrepreneur admitted that he frequently does some brainstorming and makes visualisations through which ideas come to life. There are several channels through which an entrepreneur can obtain the necessary information that eventually leads to the idea. In box 20 we see that the entrepreneurs have different information channels that could possibly lead to an idea.

Box 20 Examples of the information-seeking process

- An insurance entrepreneur has a great deal of knowledge and experience of his profession. He is also consciously aware of what is happening in the economy. He regularly talks to other insurers.
- The owners of a snack bar read trade journals, but admit they receive most information from demonstrations.
- An information centre that wanted to set up a data warehouse obtained more information from similar firms that already had a data warehouse.

Source: EIM, 2004.

In seven out of the fourteen case studies the entrepreneurs said that the idea came by chance (box 20). In these cases the idea itself came from someone else (external factor). The entrepreneurs reacted very quickly to this idea and almost immediately after the idea emerged they recognised the opportunity. Intuition, but also emotion, plays an important part in dealing with such ideas and these emotions are dominant in the beginning. The feeling has to be good otherwise the idea is rejected immediately.

Box 21 Examples of ideas that emerged by chance

- Examples of ideas that emerged by chance are:
- a telephone call from a well-known international firm to become a team partner or
 - the demonstration of a new computerised cash-desk system at a fair that interested a snack bar.

Source: EIM, 2004.

Other entrepreneurs argued that idea arose because they had to solve a problem. These entrepreneurs are more conscious about the idea (box 22). Once the entrepreneur has conceived the idea, the idea gradually matures in the mind of the entrepreneurs until an opportunity comes along.

Box 22 Examples of ideas to solve a problem

Examples of ideas to solve a problem are:

- the search for a suitable take-over candidate because of the nearing retirement of the entrepreneur or
- another way of organising data to meet the increasing demand.

Source: EIM, 2004.

No-go decisions take place in the first stage of the decision-making process. Especially entrepreneurs with a no-go decision have alternative ideas. Entrepreneurs with a no-go decision find the idea attractive at first, but gradually it becomes less attractive. Mostly this is due to problems that the entrepreneur encounters. The entrepreneur does not wish to put a lot of effort into solving these problems so the idea becomes unattractive and eventually reaches a point where the idea is rejected. Box 23 shows us two examples of no-go-decisions.

Box 23 Examples of a no-go decision

- It was, for instance, very attractive at first for an insurance company to work with a fourth associate. This fourth associate had a large network, which the insurance company could use to expand its clientele. During this potential associate's trial period at the insurance office one of the associates began to feel uncomfortable and this feeling increased. A few weeks later the other associates complained about the same problem and they decided to call it all off.
- The entrepreneurs of a snack bar decided to their his idea to buy a computer controlled cash desk system. Teaching the female entrepreneur how to work with such a system would prove too time consuming.

Source: EIM, 2004.

Entrepreneurs with a no-go decision were able to formulate an alternative idea almost immediately. This alternative idea is responsible for a go-decision (see box 24). The alternative ideas that entrepreneurs produce after a no-go decision are additional evidence to reject hypothesis 1.

Box 24 Examples of a no-go decision followed by an alternative idea

- Instead of buying a computer controlled cash desk system the entrepreneurs of a snack bar decided to buy a new oven.
- An insurance office cancelled the buy-in of a fourth associate, but have plans to co-operate with a real estate agent.

Source: EIM, 2004.

After the alternative ideas have been dropped the idea that remains gains strength. The entrepreneurs are gradually convinced that the idea needs to be executed just as we experienced in the first pilot study. Eventually the idea develops into a strong motive (or a set of motives), which requires action.

4.2 Hypothesis 2: a trigger is responsible for the informal decision

Usually the elaboration of the idea does not come automatically. In the first pilot study we discovered that something extra was needed. That something we call a trigger. In the first pilot study we distinguished two types of triggers: direct and indirect. When an

idea is relatively weak there has to be a strong trigger that spurs the entrepreneur into action but a relatively strong idea needs only a weak indirect trigger. We wanted to investigate the role of the trigger and the result is hypothesis 2.

Hypothesis 2: An informal decision is taken after some kind of event (the trigger). If the idea of the entrepreneur is comparatively mature an indirect or weak trigger will lead to the informal decision. If the idea is comparatively immature the informal decision is taken after a strong trigger that has a strong relation with the idea.

In each case study we could distinguish such a trigger. The entrepreneurs do not pay much attention to these triggers. It was hard for two entrepreneurs to recall any such trigger. Only when the idea and the trigger occur simultaneously is the entrepreneur aware of the trigger. Just as in the first pilot study we noticed in the second pilot study that the period between the idea and the trigger differed in each case study. The nature of the trigger varies (see box 25).

Box 25 Examples of triggers

Examples of triggers are:

- a leak in the water supply system
- getting a tenancy agreement and
- not being able to formulate the vision of the company for the coming year.

Source: EIM, 2004.

In two case studies the idea and the trigger occurred simultaneously. Once the entrepreneur is aware of this trigger it is hard for him to let go of his idea. Sometimes some obstacles have to be removed but the entrepreneurs are convinced that they can overcome these obstacles. All the time the idea remains very powerful. The entrepreneurs do not let go of their idea after the trigger and start elaborating their idea from that moment on. They take actions that will eventually lead to other actions. We consider the moment of the trigger as the moment at which the informal decision is taken. Hypothesis 2 surely holds for the case studies in which the idea and the trigger occur simultaneously. If the entrepreneur did not have any thoughts in the direction of the idea then the trigger has to be very powerful before he reacts to it. The external idea is the trigger in these cases. We found that the trigger in these cases was so strong that it finally led to an important strategic decision by the entrepreneur. We also noticed that these triggers came from the outside world (box 26).

Box 26 Examples of direct triggers

- A developer of bungalow parks visited the owners of a camping site and interested them in building a bungalow park on a piece of land that they never use.
- The entrepreneurs at a snack bar saw a computer-controlled cash desk system at a demonstration and this triggered them to find more information about such a system.
- A confectioner received a telephone call from a commercial agent with the offer to sell his company's confectionery.

Source: EIM, 2004.

Other ideas are more mature and these are the result of a process in which the idea gradually matures inside the mind of the entrepreneur. Mostly these ideas develop to deal with to some kind of problem. Only a weak trigger is necessary to move these entrepreneurs into action. We illustrate this in box 27.

Box 27 Examples of indirect triggers

- A dental technician knows that he will have to retire from business within a couple of years. The idea had been milling around in his head for quite a while and was pretty mature. It was his wife who said that he had to arrange his succession well in advance.
- Various little irritations had occurred in the past couple of years in a multimedia firm. Two entrepreneurs found it was interfering with their work. A third associate was finding it difficult to explain how he saw the future of the firm and, even after a holiday, he was still unable to do so. The two other associates considered this to be the last straw and doubted his commitment to the firm.

Source: EIM, 2004.

Using the examples in box 27 we showed that hypothesis 2 also holds for more mature ideas. Hypothesis 2 is supported by our cases.

4.3 Hypothesis 3: lack of influence of other persons

After the informal decision has been taken the entrepreneur takes action. He works out his idea and considers alternatives, risks and overcomes the obstacles. Once everything has been worked out the entrepreneur takes his final decision. In the first pilot study we discovered that the entrepreneur is the only person who really matters in the decision-making process. We investigated this more thoroughly in the second pilot study and formulated hypothesis 3.

Hypothesis 3: In SMEs with a owner-manager (or owner-managers) the decision-making process is rarely influenced by other persons that are directly or indirectly involved.

One entrepreneur was very direct in giving his answer to the question whether the decision-making process was influenced by other persons (box 28).

Box 28 Example of a reaction on the influence of other persons

When we asked one entrepreneur about the impact of other persons on the decision-making process he answered: "I hardly ever consult 'outsiders' if it concerns drastic decisions". He admitted that everything was discussed within his office. If he consults colleague entrepreneurs then he quotes his own but indirectly inquires how they would react to a specific situation. Afterwards he picks out what he thinks is relevant.

Source: EIM, 2004.

In firms with several co-owners it is always the case that all the owners are informed about the decision that is going to be taken. They are all involved in the process. Just as in the first pilot study we found that one entrepreneur takes the lead. In some cases the entrepreneurs were husband and wife. When the entrepreneurs were not husband and wife it was usually still the case that the entrepreneur's partner knows what is going on. These partners often have their own opinion about the situation, but they do not

stand in the way when the entrepreneur takes his decision. In one case study the wife of the entrepreneur played a crucial role in the decision-making process (box 29).

Box 29 Example of the role of the wife of an entrepreneur

As a real estate agent the wife of an entrepreneur told her husband about an historic farm. Together they went to look at the farm and decided that they wanted to live there as well. The entrepreneur's wife also stimulated the entrepreneur to move his firm to the farm.

Source: EIM, 2004.

We spoke to entrepreneurs that come from a family of entrepreneurs. They talk to their family about their business and decisions because they feel understood by their family members. We noticed that eventually the entrepreneurs go their own way and take their own decision.

The role of employees is usually almost negligible. In some case studies the entrepreneur informs the employees about the decision, but according to the entrepreneur the employees have no influence on the decision-making process. In one case study the entrepreneur talked a lot with the IT-manager. This was because the entrepreneur knew little about data warehouses. But in the end it was the entrepreneur who decided that it was time to implement a data warehouse.

Advisors like accountants, tax consultants or notaries help the entrepreneur to elaborate the idea (see box 30).

Box 30 Examples of the role of advisors

- An accountant helped a multimedia firm to buy-out a third associate.
- A salesman gave advice about a new oven at a snack bar.
- An information centre consulted a software design agency about the introduction of a data warehouse.

Source: EIM, 2004.

As in the first pilot study there was again no influence from the public authorities. We conclude this section by saying that we have noticed that other associates have the most powerful influence on the decision. Other persons can play a role, but the entrepreneur is always responsible for the final decision.

4.4 Hypothesis 4: informal versus formal decision

In chapter 3 we described the formal decision as the moment at which there is no way back. However, we found that there is almost no way back even at the moment the trigger occurs and the informal decision is made. We wanted to investigate, based upon a new set of case studies, whether the informal and formal decision differed and formulated hypothesis 4.

Hypothesis 4: The moment of the informal decision is the decisive moment in the strategic decision-making process. The formal decision is therefore not considerably different from the informal decision.

The new series of case studies offered us better insight in the way the entrepreneur takes the formal decision. After the informal decision every entrepreneur has his own way of elaborating the idea and dealing with possible obstacles. At some point there is

a decisive moment that convinces him to take the formal decision. These decisive moments vary across the case studies, examples being discontent about the current job, lack of confidence, recognising the opportunity for further growth and the success of confectionery in other bakeries.

All the time one idea is dominant and the entrepreneur is convinced that this idea will be a success. For this reason it is very hard for the entrepreneur to let go of the idea. The entrepreneur works out the informal decision in such a way that the idea will be executed in the end, even though it can be very tough sometimes. In the long run the informal and formal decisions do not differ from each other. The cases seem to support hypothesis 4.

4.5 Hypothesis 5: majority of decisions lead to success

After the formal decision the entrepreneur thinks the time is right to actually execute his decision. Because all strategic decisions have a different nature each entrepreneur implements the decision in his own manner (see box 31).

Box 31 Examples of the way an entrepreneur implements the decision

- A firm that deals in special glass has become the team partner of an international firm and this resulted in changing the name of the firm.
- Two entrepreneurs started a joint venture in insurance and rebuilt the office of one of the entrepreneurs.
- A confectioner closed his lunchroom and bought a new refrigerator and showcase to sell more confectionery.

Source: EIM, 2004.

The first pilot study showed us that not every entrepreneur was pleased about the results of the decision. However, we expect that the majority of entrepreneurs will consider the decision to be a success (hypothesis 5).

Hypothesis 5: The quality of strategic decisions at SMEs with a managerial business owner (or owners) is such that a majority of the decisions will lead to success. In the cases where there is no success it is hard to blame this on the quality of the decision.

It was not possible in all cases to say whether the entrepreneurs were satisfied or not, because they have not yet reached the point at which the decision is executed. This holds for five case studies. We asked these entrepreneurs whether they are satisfied up to this point. Three entrepreneurs are content so far. One entrepreneur is still too insecure to be satisfied and one entrepreneur states that he will be satisfied once everything is in order.

However, the majority of decisions were executed and the entrepreneurs have an opinion about their decision (see box 32).

Box 32 Examples of the way an entrepreneur implements the decision

- Now the third associate has left the multimedia firm the communication between the other two associates has improved by 100%. Although it was hard for them they are very pleased with their decision.
- Another entrepreneur is content with the decision about the joint venture although the integration of the two insurance offices did not progress as quickly as he expected.

Source: EIM, 2004.

Seven entrepreneurs are satisfied with the decision. Two entrepreneurs are content with their decision although the result was not what they expected.

Based on the two pilot studies we see that the majority of decisions turned out to be a success for the SME. The SMEs that are satisfied only to a certain extent admit that this is entirely due to the implementation of the decision. They are convinced that the idea is good. We conclude this section by supporting hypothesis 5.

4.6 Hypothesis 6: stages and moments apply to all decisions

We formulated a provisional description of the stages and moments based upon the results of the first pilot study. We wondered if we would also find these stages and moments when we interviewed other entrepreneurs. In the previous sections of this chapter we hypothesized some elements of the decision-making process. As a conclusion we want to formulate one consistent model concerning decision-making. Therefore we also found it necessary to hypothesize the following:

Hypothesis 6: The stages and moments in the decision-making process (idea – informal decision – elaboration – formal decision – execution) apply to every SME with a managerial business owner (or some owners) in all sectors in all size classes en for all kinds of strategic decision-making.

Although the case studies dealt with varying decisions, the stages and moments were applicable to all of them. We interviewed many entrepreneurs across seven sectors industry, construction, trade, hotel and catering, transport and communication, business services and other services and three size classes: 2-9 employees, 10-49 employees and 50-99 employees. Based on the 24 case studies in the two pilot studies we were able to distinguish the three stages and two moments each time. For the time being we support this hypothesis. In a future study this insight will be tested in a large quantitative sample (see chapter 7).

5 The decision-making process

The two pilot studies offered us ample information to model the decision-making process in SMEs. In chapter 3 we saw that the decision-making process may be conceived to consist of three stages and two crucial moments. First, there is the stage where the idea arises. This stage is followed by the moment that there is a trigger and the informal decision is taken. The next stage consists of working out the idea. After the entrepreneur has elaborated the idea thoroughly the second moment occurs: taking the formal decision. The last stage consists of the implementation of the decision in the organisation. We considered this a provisional description of the decision-making process at SMEs. We wanted to hypothesize some aspects of this provisional model and so a second pilot study was carried out, that provided us with additional insight in the decision-making process through which we are able to expand our provisional model: the decision-making process. In this chapter we put all our findings together into one single description of the decision-making process at SMEs.

Generating the idea

The entrepreneur continually scans his environment, absorbs information and also looks at what is happening inside the firm. Generally speaking ideas emerge by chance or because a problem has to be solved. The ideas that emerge by chance are almost always ideas that are influenced by external factors. In other words someone else is actually responsible for the idea and discusses it with the entrepreneur. At first intuition and feelings play a key role in supporting or rejecting this idea. The feeling has to be good otherwise the entrepreneur will reject the idea immediately. Later on the entrepreneur thinks about the idea more seriously. At this stage the idea gains more strength. Entrepreneurs that create an idea to solve a problem are more aware of the idea. The idea also gains strength as time passes. The strength is a combination of the business perspective and the good feeling that the idea evokes. An idea that is full of risks will not survive.

Probably entrepreneurs continually have various ideas about their firms milling around in their minds, but most ideas fade to the back of the mind or are rejected in an early stage. It is quite credible that entrepreneurs have even more alternative ideas than we think. Some entrepreneurs considered alternative ideas. We found that one idea will dominate and the entrepreneur will do everything in his power to realise this idea. In cases where the entrepreneur has no alternative ideas the one idea is so appealing that it is hard for the entrepreneur even to remember the alternatives. The idea is so attractive that he cannot get it out of his mind. Presumably the entrepreneur searches for reasons that will give the idea even more strength. Persons other than associates have no essential influence on this maturing process of the idea.

The moment of the trigger and the informal decision

At a certain point the idea has matured and has become very attractive to the entrepreneur. Even a trivial event could cause him to take action. Sometimes it is hard for the entrepreneur even to recall such an occasion. Without being noticed this occasion worked as an indirect trigger. If the idea is relatively immature and is still in the process of gaining strength a more powerful direct trigger is necessary before the entrepreneur will anticipate. This holds in particular for decisions where the idea and the trigger occur simultaneously. In such cases the entrepreneur will not even be considering the idea. The idea is so strong that it also works as a trigger for the entrepreneur to react

and take action. We consider the moment of the trigger as the moment at which the entrepreneur makes his informal decision. Once this informal decision has been taken the entrepreneur is ready to elaborate his idea.

Elaboration of the idea

Once the entrepreneur has taken his informal decision he knows exactly what he aims to achieve with his idea but he does not know how to execute his idea. At this stage of the decision-making process the entrepreneur is definitely aware of what he is doing. The entrepreneur is usually very patient and realises that a good timing is essential for success. For example a cost-benefit analysis helps the entrepreneur to determine whether the decision will lead to more sales and profit.

It is in this stage of the decision-making process that the entrepreneur consults other persons such as lawyers, accountants and colleague entrepreneurs. The entrepreneur discusses everything with the associates, if there are any. Sometimes family members or other acquaintances are also consulted. If necessary the entrepreneur also consults banks about financial agreements.

When elaborating the idea the entrepreneur considers alternative implementation possibilities and estimates the risk. Alternatives are judged on business motives and emotions play a minor part. Economic rationality rules at this stage of the decision-making process. Entrepreneurs control their risks. An entrepreneur is willing to take some risks because he is convinced that the idea will be a success, but he always keeps track of these risks.

Sometimes problems arise when elaborating the idea and the entrepreneur solves these problems with good grace. The reason for this is that the entrepreneur is still very convinced that the idea will work out well. The entrepreneur will do everything in his power to make it a success. There are no doubts about the success of the idea, because otherwise the idea would have been rejected at an early stage and a no-go decision would have been made.

Formal decision

The elaboration of the idea approaches its end and it is time for the entrepreneur to round off. The entrepreneur feels that he is approaching a stage at which it is impossible to go back (point-of-no-return). At a certain moment the entrepreneur takes his formal decision, most often recorded as an agreement. When the entrepreneur considers a contract to be unnecessary the moment of the formulation is marked by the first step in the execution of the decision.

Implementation of the decision

After taking the formal decision the entrepreneurs implement their decisions. Although for some entrepreneurs this is a stage where there are no problems, other entrepreneurs may meet with resistance. The entrepreneurs state that such resistance is due to the implementation, but that the idea is still good. Most of the time such resistance results in a change in the implementation of the decision but rarely stops the implementation of the decision. Cessation occurs only when the idea loses its attraction, but these cases were not included in our sample.

Most entrepreneurs say they are satisfied with their decision. Although sometimes the effect of the decision turned out to be different from what was expected, the entrepreneurs are still satisfied, because they would have regretted it if they had not even tried. For the majority of firms the decision results in success.

6 Confrontation with literature

Most theories concerning the decision-making process (Mador, 2000; Mintzberg, 1976 and Papadakis et al., 1998) gravitate around a model of decision-making, which comprises three components: the environment, the specific characteristics of the decision to be taken and the entrepreneur himself. These three independent variables are in constant interaction while following the path of the decision process. The environment, process and event of entrepreneurial activities require a holistic analysis rather than a simplistic analysis of the individual elements of entrepreneurship (Bygrave, 1989). Papadakis et al. (1998) state that for understanding decision-making process in depth, an integrative model, which includes decision specific, environmental and organisational factors, is needed. Likewise, De Meyer (1991) states that the elements that are expected to influence strategic processes are the manager's individual characteristics, internal organisational context, and environmental factors. In this chapter we look back to the literature on strategic decision-making and describe each of the three elements that influence the decision-making process. We confront our results found in the previous chapters with the existing literature on strategic decision-making.

6.1 The entrepreneur

One of the major elements in the framework of the decision-making process is the entrepreneur. The process and antecedents of decision-making mainly take place in the entrepreneur's mind. Hence, it is important to study the psychological facets of the entrepreneurial personality in order to comprehend the strategic decision-making in SMEs (section 6.1.1). Besides the reflections on the entrepreneurial nature, entrepreneurship might be explained by examination of how entrepreneurs think, hence by their cognition (section 6.1.2). These cognitive mechanisms help us to analyse the entrepreneur's creative thinking process along the time frame of pre-idea through to the creation of the opportunity (section 6.1.3).

6.1.1 *Psychological traits of the entrepreneur*

According to Brouthers et al. (1998) the personal characteristics of the decision-maker influence the decisions taken, thus in small firms rationality is expected to be decreased due to the strong personal influence of the entrepreneur. Empirical studies found it hard to prove that entrepreneurs possess psychological or any other type of statistically significant differences than non-entrepreneurs (McClelland, 1967; Brockhaus, 1980; Schere 1982 and Low and MacMillan, 1988). Nevertheless, there are some widely spread beliefs about the entrepreneurial psychology which merit being mentioned here in order to get more insight in how entrepreneurs deal with strategic decisions. The most common psychological traits are discussed in this section.

The need for achievement

A significant psychological explanation of entrepreneurial acts is the need for achievement. For instance Shaver and Scott (1991) consider the achievement motivation. From this prospective the main characteristic of the business initiators is the high need for achievement which they define following McClelland (1967) as a preference for challenge, acceptance of personal responsibility for outcomes and innovativeness. Papadakis et al. (1998) also underline that the two core aspects of entrepreneurship are the need

for achievement and the attitude toward risk. Hornaday and Aboud (1971) found that compared to 'normal people' entrepreneurs have a higher need for achievement.

Desire to be independent and individualism

Hornaday and Aboud (1971) reported that in comparison with men in general, entrepreneurs had a higher degree of independence desire. McGrath et al. (1992) found that entrepreneurs agreed, far more than did career professionals, that 'Success is owning your own company'. Further to the desire for independence, Sexton and Bowman (1985) state that entrepreneurs need autonomy and dominance and are not strongly absorbed by needs for support from others or conformity to the norms of others. According to McGrath et al. (1992) entrepreneurs are rugged individualists. Their research confirmed the idea that entrepreneurs favour independent action and separation from groups and clans. This finding is consistent with Hofstede's results (1980), in which high individualism is associated with emphasis on individual initiative and achievement.

Locus of control

The concept of locus of control refers to a generalized belief that a person can or cannot control his or her own destiny (Rotter, 1966). People can be classified along a continuum from very internal to very external. Those who ascribe control of events to themselves are said to have an internal locus of control and are referred to as 'internals'. People who attribute control to outside forces are said to have an external locus of control and are termed as 'externals' (Spector, 1992, Nwachukwu, 1995 and Carver, 1977). Gilad (1982) notes that almost three decades of research consistently shows that internals are alert, discover opportunities, and scrutinize their environment to find information needed to formulate the optimal approach to developing those opportunities. According to Rauch and Frese (2000) business owners have a slightly higher internal locus of control than other populations.

Ability to focus and pursue a goal

The empirical research of Levander and Raccuia (2001) observed that people possessing ADHD (Attention Deficit Hyperactivity Disorder i.e. hyperactivity) were highly over-represented among the entrepreneurs. The results show that entrepreneurs differ cognitively from the general population by a striking difference in the capacity to focus attention on a single task. Attention in this study is defined as the individual reception to environmental stimuli and the ability to process information. Thus, the survey concludes that it is the environmental stimuli and the ADHD that lead some individuals to react and to become entrepreneurs, motivating them for higher performance.

Optimism

Palich and Bagby (1995) suggest that entrepreneurs operate by a unique set of cognitive processes, thereby supporting their optimism. Furthermore, literature on entrepreneurial behaviour suggests that entrepreneurs are likely to be optimistic and that they frequently make judgements based on subjective factors (Cooper et al., 1988; McCarthy et al., 1993 and Timmons, 1990). Excessive optimism involves acknowledging some risks and may lead to serious damage to the business and even to its complete failure.

Other findings on entrepreneurial personality

Besides the abovementioned psychological traits of the entrepreneur Lyon et al. (2000) consider that entrepreneurial behaviour can be described as aggressive, innovative, proactive, risk taking, and autonomy seeking. Stokes (1998) suggests that owner-managers tend to concentrate on the day-to-day at the expense of the longer term. Levander and

Raccuia (2001) warn that typical entrepreneur's features such as impulsiveness, a low degree of flexibility and the inability to learn from mistakes as characteristics of entrepreneurs may affect the process of strategic decision-making negatively. In addition to the above, Bazerman (1999) recognizes common behavioural traits and identifies ten 'important money mistakes' when making decisions about money (or anything else). That is, entrepreneurs tend to be:

- *Over-confident* when making decisions, trusting in established routines when they ought to be more wary of the efficacy of those routines;
- *Unprepared* when making decisions, assuming decisions fully reflect their knowledge and competence;
- *Ignorant* of others' decision-making and motives, assuming that others share the same dispositions and attitudes;
- *Exclusive*, assuming that their decisions are theirs alone, often failing to anticipate the interaction effects between themselves and others;
- *Competitive*, wanting to win while believing that their decisions will mean that others' welfare will somehow suffer as a consequence;
- *Focused on the short-term*, thereby discounting the long-term in favour of immediate 'impulses';
- *Focused upon immediate reference points* of value, ignoring the wider implications of any decision for their total well-being;
- *Recursive* in the sense that one decision is the prelude for another decision and so on (decisions escalate);
- *Ignorant of the alternatives*, while emphasizing what is immediately relevant and known from previous decisions;
- *And easily influenced* by 'big' events rather than the causal structure of economic and financial processes that produce those events.

Psychological traits of the entrepreneur in practice

In our case studies every entrepreneur showed the need to achieve for example: the entrepreneur of a supermarket wanted to buy a fifth supermarket because of the success of the other four, in addition to running a profitable camping site entrepreneurs are going to build a bungalow park, and others plan for integration of their offices in a joint-venture. Although entrepreneurs sometimes consult other persons in their decision-making process and they have many networks, they still want to take the decision themselves. If there are several associates then one entrepreneur takes the lead. We talked to entrepreneurs who were somehow less fortunate in the result of their decision. The entrepreneurs blame themselves for the failure (internal locus of control). They also claim the praise for successes. We noticed that the entrepreneurs we interviewed pursue a goal, but we do not whether this is because of ADHD. The entrepreneurs are very optimistic about the success of the decision. Even when there are some problems along the way they remain positive, because they are convinced that their idea will work out in the end. The psychological traits presented in literature correspond with our findings.

6.1.2 *Cognitive mechanisms*

Initially, research efforts were concentrated on identifying the personal traits, and those differences that led some people to recognise opportunities and to pursue them (Shaver and Scott, 1991). Most of these studies did not show viable support for the thesis that self-employed businesspeople are different from others. Thus, research shifted to another possible source of explanation – cognitive predispositions, i.e. a hypothesis that entrepreneurs simply think in a different way (Baron, 1998). For example, Palich and Bagby (1995) found that while not differing in their general risk-taking propensity from

non-entrepreneurs, the entrepreneurs tend to categorise business situations as having more opportunities for potential profit. It is not that entrepreneurs do not recognise risk, they just do not estimate it to be as high as other people do, and neither are they afraid of it. Busenitz and Barney (1997) state that entrepreneurs differ from managers in that they take decisions by relying much more extensively on biases and heuristics, and furthermore speculate that without their use many entrepreneurial decisions would never have been made. Even if the use of cognitive biases may be beneficial in some circumstances, it may lead to major errors in others continue Busenitz and Barney (1997). The most dangerous aspect of decision-making is the tendency for even the smartest people to fall into the 'cognitive illusion' trap, which causes them to distort reality or delude themselves with sloppy or misguided thinking claims Bazerman (1999). Similarly, Baron (1998) argues that due to the specific situation entrepreneurs find themselves in (e.g. information overload, high degree of uncertainty, intense emotions, commitment, responsibility etc.) their susceptibility to cognitive biases and errors is increased. Some contributions from literature concerning common entrepreneurial cognitive biases are reviewed below.

Emotional biases

Most theories about strategic decision-making are silent about the role of emotions. However, Savage (1954) proposed anticipated regret as a determinant to influence decisions, and later Bell (1982) systematically incorporated emotions into a theory of choice. Another interesting theory presenting further emotional biases in the entrepreneurial way of thinking is the affect infusion model, first developed by Forgas (1995). This model suggests that affective states created by one source or experience can influence (infuse) judgement about other unrelated events. Furthermore, Forgas speculates that the likelihood of affect infusion is higher when individuals engage in effortful thought (as entrepreneurs often are forced to do). Thus, Baron (1998) hypothesises that entrepreneurial decisions are highly susceptible to affect infusion.

Self-efficacy

Self-efficacy (Brockhaus, 1980; Bandura, 1986 or Chen et al., 1998) is the entrepreneur's belief that he can cope with anything. Self-efficacy beliefs help to determine how much effort entrepreneurs will spend on an activity, how long they will persevere when confronting obstacles, and how resilient they will be in the face of adverse situations (McCarthy et al., 1993). Moreover, McCarthy et al. differentiate it from self-esteem in that the latter is viewed as an inherent characteristic of individuals that is relatively stable across situations, whereas self-efficacy is situation specific. While being an important prerequisite for entrepreneurial acts, self-efficacy represents a serious cognitive bias because it leads to the false perception of a very low possibility of failure (Brockhaus, 1980). Such consequences of misjudgement are often observed in entrepreneurs (Koen et al., 2000) and are interlinked with further cognitive biases that represent a potential source of errors in the process of decision-making. It is plausible that entrepreneurship would be impossible without self-efficacy.

Planning fallacy

Planning fallacy is termed the tendency of most people to underestimate the time required to complete a certain project, or to overestimate how much they can accomplish in a given period of time (Baron, 1998). Due to the fact that entrepreneurs, by the very nature of their activity, constantly step into new experiences, they do not have adequate reference (given the lack of previous experience) of how much personal effort or resources the activity will consume. Hence, they are likely, being optimistic and

euphoric about the new activity, to think they are able to do more than they actually can (McCarthy et al., 1993). Indeed, belief in success is one of the key ingredients in a successful business venture but at the same time unrealistic optimism leads to bad planning, which in most cases ends with losses and failure.

Overconfidence

The planning fallacy bias is closely related to the entrepreneur's belief that he or she is more likely to succeed than others in the same kind of business, i.e. to overconfidence. Overconfidence describes the tendency to overestimate the likely occurrence of a set of events (Zacharakis and Shepherd, 2001). Levander and Raccuia (2001) found that entrepreneurs have higher levels of self-confidence compared to general population. Thus, because of over-self-esteem, they are more susceptible to making decisions with uncalculated risks. It is not unusual for individuals to over- or underestimate their abilities and suffer the consequences of such errors of judgement.

Attributional styles

Baron (1998) claims that most individuals tend to attribute positive outcomes to internal causes (their own talent or effort) but negative outcomes to external causes (the self-serving bias: blaming others for negative feedbacks of decisions). Especially the self-serving bias i.e. the belief that negative outcomes are out of one's responsibility and attributed to external forces may be extremely devastating in strategic decision-making. Sooner or later it will probably lead to business failure. Baron (1998) predicts that successful entrepreneurs are less susceptible to the self-serving bias than are unsuccessful ones.

Escalation of commitment

The phenomenon of over-commitment to a failing course of action, the consequence of psychological biases connected to the original choice, was introduced in literature by Staw (1977). Because of this 'escalation' bias, when meeting strategic decisions (like persisting with the marketing of a failing product or expanding instead of contracting the business assets) entrepreneurs, despite negative feedback, may continue devoting a significant amount of resources to activities that rationality would advise should be given up. Psychologically this misjudgement is explained by the fact that a negative outcome of a decision provokes a self-justification process whereby decision-makers attempt either to defend themselves against a perceived error in judgement or to make the previous choice appear rational by increasing their commitment to the failing course of action (Staw, 1981). Because of their deep commitment to their companies entrepreneurs may be under considerable pressure to justify their initial decisions. It does not matter whether they are afraid of looking ridiculous in front of others or are unwilling to admit to themselves the initial mismanagement of resources, in both cases they continue to persist, claims Baron (1998).

Improvisation

Research within the strategic management domain suggests that improvisation is a commonly enacted activity during conditions of uncertainty (Mintzberg, 1994). Improvisation is defined as the extemporaneous composition and execution of novel action (Moorman and Miner, 1999). Hmieleski and Corbett (2003) conclusions suggest that a proclivity for improvisation is an integral part of the entrepreneurial mindset. For example, Baker et al. (2003) demonstrates that improvisation is often an elemental in the start-up of new firms.

Cognitive processes in practice

We noticed that entrepreneurs rarely accept the idea without having a 'gut feeling' about it. The decision-making process is influenced by emotions, but it is hard for us to hypothesize whether emotions lead toward biases in the decision-making process. In each case study we find that self efficacy is present. The entrepreneurs do not have any doubts about their own capacity. This holds for more experienced entrepreneurs and entrepreneurs that are just starting-up a business. We recognise planning fallacy in a number of case studies. Entrepreneurs admitted during the in-depth interview that the decision-making process lasted longer than they expected. However, they remained patient and waited a little longer. On the other hand there were also entrepreneurs for whom the decision-making process proceeded much faster than expected. Overconfidence is not the right term to describe the confidence that the entrepreneurs have, because their confidence did not lead to an overestimation of their abilities. In fact they are realistic. They are relativists and accept their personal weaknesses. The mechanism of attributional styles is perceptible. The entrepreneurs in the case studies claim the successes, but also give credits to other persons that helped them to attain this success. But we did not find that the entrepreneur avoids his responsibility if the decision turns out to be a failure. In a way the escalation bias is recognisable. One entrepreneur tried to save a subsidiary by giving it extra financial inputs, but the subsidiary eventually went bankrupt. In other case studies we did not recognise an escalation bias. We certainly found improvisation in our case studies. If something does not work out the way the entrepreneur wants it to, he improves to achieve his goal in the end.

6.1.3 *Creative ideas*

The cognitive processes that have been described in section 6.1.2 are not the vested interests of entrepreneurs alone. However entrepreneurs' internal thought processes, having the mental modelling ability to categorise, pattern match, make schemata, concepts and apply them to problem solving and decision taking are of fundamental importance to the success of their business enterprise. According to Beattie (1999) it is also at the heart of the entrepreneurs' creative ability and also the processes that they employ to make their dreams come true.

Creativity

Kao (1989) says that creativity implies a vision of what is possible and the entrepreneur translates that creative vision into action. Creativity is about the quality of originality that leads to new ways of seeing and having novel ideas. It is basically a thinking process associated with imagination, insight, invention, innovation, ingenuity, inspiration and illumination. Insight experiences in which creative ideas emerge unexpectedly from the subconscious in such a way that the creator is unable to explain how they got there (Henry, 1991). Creative ideas develop to a state where new ideas and challenges are welcome.

Mooney (1963) considered four approaches to creativity (1) the creative person, (2) the creative environment, (3) the creative product and (4) the creative process. Perkins (1981) state that the more of the following psychological traits a person has the more creative he tends to be: strong commitment to the personal aesthetic, the ability to excel in recognising problems, mental mobility, to think in terms of opposites and contraries while seeking a new synthesis of ideas, a willingness to constantly take risks and stimulation by physical and/or mental thrills. Gyskiewicz (1987) considered the 'right' sort of environment for generating ideas to be freedom, encouragement, resources and time, recognition and challenge. The creative process is a mental modelling that takes place, mostly unconsciously, in preparing the mind to scan, recognise and categorise information leading to the discovery of an entrepreneurial idea.

Adoption or rejection of ideas in practice

In a qualitative longitudinal research Beattie (1999) performed 50 in-depth interviews with Scottish entrepreneurs. One of the investigated aspects of his study was the adoption or rejection of ideas. We briefly mention the main results of his study. There appeared to be a never-ending search for new ideas and opportunities in order to stay ahead of the game. Each idea had its own path to follow. In many of the personal histories the entrepreneurs picked up opportunities rather than ideas. They certainly did not relish discussing their ideas with anyone else until they themselves were convinced that it was worthy of further consideration and were, if necessary, able to defend their point of view. Most entrepreneurs realised that the right timing was the key to most of their decisions and actions and as a consequence, until the timing was right, ideas were placed on what they called a back burner. There was universal agreement that most of their inspirational ideas occurred outside their office environment. Once the entrepreneur has made his or her preliminary 'gut feel' decision about the idea, it is difficult to get a totally unbiased reaction from him or her about the idea in future deliberations. Entrepreneurs are too busy being positive and looking ahead to look back at negatives. One of the main reasons given for putting the idea on 'hold' is a lack of information to make a considered decision. The results Beattie presents are quite similar to our results concerning the way entrepreneurs are handle ideas.

6.2 The entrepreneurial environment

The study of entrepreneurship is deficient if it focuses exclusively on the characteristics and behaviours of individual entrepreneurs and treats the social, economic, and political infrastructure for entrepreneurship as externalities. A social system perspective that considers external environmental conditions is appropriate to explain the process of entrepreneurship (Van de Ven, 1992). Studies have explored the relationship between environmental conditions and new venture creation (Keeble and Walker, 1994; Reynolds and Williams, 1995), business survival (Romanelli, 1989; Stearns et al., 1995), business closure (Keeble and Walker, 1994; Westhead and Birley, 1994), the competitive strategies pursued by organisations (Romanelli, 1989; Zahra, 1996) and business performance (Covin and Slevin, 1990; Vaessen and Keeble, 1995; Westhead and Wright, 1999). Entrepreneurs take decisions in an environment in which various actors and forces are present (such as: competitors, government regulations, customers with their specific demands, suppliers, tax authorities, investors etc.). Each of these plays a more or less a significant role in the performance of the firm by presenting opportunities and imposing threats on its activities (Kotler, 1988). Successful decision-making requires an accurate understanding of the environment in which that decision will be played out. Without that understanding, it is impossible to assess the probable consequences and choose thoughtfully among them (Messick and Bazerman, 1996). The decision environment is defined as the collection of information, alternatives, values, and preferences available at the time of the decision (Harris, 1998). To predict how decision-making is influenced by environmental developments, it is critical to understand how the individual cognitively processes and interprets these developments. When regarding the environment, a central issue to analyse in the entrepreneurial behaviour is the ability to recognise opportunities (6.2.1), process information (6.2.2) and deal with risk propensity (6.2.3).

6.2.1 Opportunity recognition

In a rapidly changing world organisations need to continually identify new opportunities beyond existing competencies (Krueger, 2000). Opportunity recognition and information search are often considered to be the first critical steps in the entrepreneurial process (Christensen et al., 1994; Shane and Venkataraman, 2000). Opportunities are cre-

ated, or built, using ideas and entrepreneurial creativity (Dellabarca, 2002). McGrath (1999) argued that entrepreneurs have access to numerous shadow opportunities (i.e. opportunities that have not been recognised). Shane and Venkataraman (2000) state that 'why', 'when' and 'how' certain individuals exploit opportunities appears to be a function of the joint characteristics of the opportunity and the nature of the individual. Furthermore they highlight three main areas of difference between individuals that may help us understand why certain individuals recognize opportunities while others do not: knowledge (and information) differences, cognitive differences and behavioural differences. In the Schumpeterian perspective opportunities may be created inside the firm or by individuals outside the firm who operate independently (DeTienne et al., 2003). In addition Kirzner (1973) asserted that the entrepreneur identifies opportunities by being alert to and noticing opportunities that the market presents. The process of search and opportunity recognition can be influenced by the cognitive behaviour of the entrepreneur. Chandler et al. (2002) suggest three categories when it comes to opportunity recognition processes: proactive search (Drucker, 1998), reactive search (Ardichvili et al., 2003) and fortuitous discovery (Kirzner, 1979). Results indicate that initiatives discovered through proactive search are implemented more rapidly than those discovered through reactive searches or fortuitously. As time passes the advantages in implementation speed are reduced and in some cases nullified. This implies that the opportunity recognition process has an impact on the timing speed of implementation, and may have longer-term impacts on profits. Low and MacMillan (1988) suggested that networks are an important aspect of the context and process of entrepreneurship. Networking allows entrepreneurs to enlarge their knowledge of opportunities, to gain access to critical resources and to deal with business obstacles (Floyd and Woolridge, 1999). Businesses owned by teams of partners generally have wider social and business networks (Cooper et al., 1994) and more diversified skill and competence bases to draw upon (Covin and Slevin, 1990).

Opportunity recognition in practice

Just as McGrath (1999) we are of the opinion that entrepreneurs have access to numerous opportunities. The entrepreneurs do not recognise many of these opportunities. It was hard for us to detect whether knowledge differences, cognitive differences and behavioural differences had affected the recognition of the opportunity. The opportunities that come along are essential for the entrepreneur but we found that some entrepreneurs are looking harder for opportunities than others. We agree with Chandler (2002) that opportunities recognised by a proactive search were more rapidly implemented than the opportunities that were recognised by a reactive search or fortuitously discovery.

6.2.2 *Information processing*

Information search behaviour can be bounded by the decision-maker's knowledge of how to process information as well as the ability to gather an appropriate amount of information (Woo and Lochovsky, 1992). Entrepreneurs with limited experience may use simplified decision models to guide their search, while the opposite may be the case with experienced entrepreneurs (Gaglio, 1997). Cooper et al. (1995) found that novice entrepreneurs sought more information than entrepreneurs with more entrepreneurial experience, but they searched less in unfamiliar surroundings. Further, entrepreneurs having high levels of confidence sought less information. Over time habitual entrepreneurs are likely to acquire information and contacts that provide them with a flow of information relating to opportunities.

The ability of entrepreneurs to learn from previous business ownership experiences can influence the quantity and quality of information subsequently collected (Gaglio, 1997).

In addition, it allows informed and experienced entrepreneurs to identify and take advantage of disequilibrium profit opportunities (Kaish and Gilad, 1991). This entrepreneurial learning process goes beyond acquiring new information by connecting and making inferences from various pieces of information that have not previously been connected. Some people habitually activate their mental schema for processing information and can notice it in the midst of an otherwise overwhelming amount of stimuli (Gaglio, 1997). This may explain why the pursuit of one set of ideas and opportunities invariably leads entrepreneurs to additional innovative opportunities that had not previously been recognised (Ronstadt, 1988).

Complexity of the information process

An ideal decision environment would include all possible information, all of it accurate, and every possible alternative. However, both information and alternatives are constrained because the time and effort to gain information or identify alternatives are limited (Harris, 1998). Nowadays, entrepreneurs are faced with a rapidly changing and fast-paced competitive environment, which places demands on organisations to actively interpret opportunities and threats when making strategic decisions (Dess et al., 1997). At the same time today's rapidly changing markets offer little assurance that a decision will not soon prove to inappropriate or obsolete claims Dickson (1992). Probably the most important impact of modern environmental complexity on enterprises is the intensification of information and communication processes. Information became the most sophisticated modern weapon to defeat competition. Some authors even call it a fourth production factor (Loasby, 1976). However, the immense new opportunities are only one side of the coin. The process could also represent a real threat for some enterprises. Nowadays, information flows are so intense and so diverse that for most companies it is hard to distinguish between relevant and irrelevant data. As much as the Internet helps businesses it could also be a dangerous source of disinformation. The phenomenon of immediatisation (pressure for multitasking performance) makes the problem even more complicated (Eisenhardt, 2000). Most entrepreneurs meet difficulties in selecting the correct information and taking a decision in the short term.

As time passes, the decision environment continues to grow and expand. New data and new alternatives appear. Ideally, more information should enable the decision-makers to assess more precisely the probabilities or possible outcomes. However, Zacharakis and Meyer (1998) state that additional data even when relevant make the decision more complex. Even if more information is available, people usually do not analyse all of it, although they think they do (Zacharakis and Shepherd, 2001). Furthermore, the phenomenon of information overload is also to be taken in consideration. People often have problems to select and process the needed data from the constantly intense environmental flows (Loasby, 1998). Mental fatigue occurs, which results in slower or poor quality work. Often the outcome is fast, careless decisions or even decision paralysis - no decisions are made at all (Harris, 1998). Thus, according to Mador (2000) the process of information gathering and analysis in SMEs is often chaotic and opportunistic.

Information processing in practice

Unconsciously entrepreneurs are always looking for information by surfing on the Internet, reading a trade journal or talking to other entrepreneurs in the business. We noticed that in decision-making the entrepreneurs searched for the most necessary information to pursue their idea. Too much information will probably lead to delays or confusion. The entrepreneurs formulated and created an image inside their head about the way they wanted to execute the strategic decision. Other persons do not have any influence on the entrepreneurial idea. The entrepreneurs in our case studies do not use all

available information. We received the impression that in all case studies it concerned a well-organised decision. Consequently, there was less need for information.

Exploiting the opportunity and information

The idea has been nourished and given a chance to develop. Once the opportunity has been identified and information relevant to the venture has been obtained, the next step for the entrepreneur (or the team of entrepreneurs) is to acquire new resources or effectively manage existing resources, in order to exploit the opportunity. Sometimes having an idea and seeing the opportunity in order to exploit the idea occurs almost simultaneously. However, in the majority of cases there is a 'time lag' between the two.

6.2.3 *Entrepreneurial risk propensity*

Since decisions must be made within this constrained environment and as it almost impossible to have all the information needed, the major challenge of decision-making is uncertainty, and a major goal of decision analysis is to reduce uncertainty (Harris, 1998). In this context Knight (1921) claims that every effective exercise of judgement is coupled with a corresponding degree of uncertainty bearing, of taking the responsibility for the selected course of action. He differentiates risks as measurable whereas uncertainty is immeasurable; hence there is no insurance for a business decision. Risks can be rated as percentages, ratios, rankings, grades or in any form that allows them to be compared (Harris, 1998).

The risk-taking propensity is an individual's willingness to take or avoid risks in decision-making (Jackson et al., 1972). Very few studies have shown statistically significant differences between entrepreneurs and non-entrepreneurs in their risk-taking propensity (Brockhaus 1980; Low and MacMillan 1988). However, Palich and Bagby (1995) defend the idea that entrepreneurs do not differ from other people in respect to their risk propensity. Rather they react differently to environmental stimuli, especially when the data are equivocal. Entrepreneurs through the cognition process of categorisation are more capable of processing and storing ambiguous data, thus perceiving equivocal business scenarios more positively than others. Hence, it is not their risk propensity but their different cognitive processes that make entrepreneurs more optimistic about certain business venture claim the researchers. Mullins and Forlani (2000) also studied the risks incarnated. According to them risk propensity appears to directly impact venture choice behaviour, rather than indirectly affecting behaviour through the perceptual process. Busenitz and Barney (1997) claim that using biases and heuristics as simplifying mechanisms for dealing with problems concerning the turbulent and uncertain environment may be crucial. There are several theses about how the decision-makers cope with uncertainty (hostile environment). In the first place environmental heterogeneity affects the strategic decision process characteristics such as rationality, and leads to greater use of cognitive simplification processes (Schwenk and Shrader, 1993). Hence, this hypothesis claims that in order to deal with the external pressure and complexity, entrepreneurs seek to minimise their cognitive effort by creating 'short-cuts' in their thinking (such as relying on intuition or routine). Another element of the same hypothesis is suggested by Loasby (1998) who claims that it being quite expensive to collect information about all possible outcomes, decision-makers reduce their costs by postponing decisions and then simplifying the postponed decisions. Consequently, this results in various forms of errors. Secondly, hostile environments lead to a more rational decision process according to Dess and Beard (1984). Eisenhardt and Bourgeois (1988) also argue that it is positive to plan (comprehensiveness) in turbulent industries. A third idea is provided by Fredrickson and laquinto (1989), namely that it is positive to plan in stable, but it is harmful to plan in turbulent industries. Through several empirical studies the researchers prove that comprehensiveness (i.e. rationality) exhibited a positive relationship with

organisational performance in a stable environment and a negative relationship with performance in an unstable environment (as suggested by Frese et al., 2000). Dean and Scharfman (1996) also reported results showing that it is positive to plan in stable industries. Papadakis et al. (1998) found no convincing support for any of the theses in his survey.

Risk propensity in practice

The entrepreneurs in our case studies were more risk-averse than risk-loving. If the entrepreneur had to accept a small risk then this risk was not a threat for the continuity of the SME. When the entrepreneur had to accept greater risks then it was easy for him to single out these risks clearly. But above all the entrepreneur knew how to deal with these risks.

6.3 The strategic decision process

A strategic decision is a decision, which is 'important' in terms of the actions taken, the resources committed or the precedents set (Mintzberg et al., 1976). Eisenhardt and Zbaracki (1992) describe strategic decisions by saying: "those infrequent decisions made by the top leader of an organisation that critically affect organisational health and survival'. In section 6.3.1 we pay attention to content and process strategies. This helps us to better understand the strategic decision models we shall present in section 6.3.2. In the last section (6.3.3) we look whether the decision-making models described would apply to the entrepreneurial decision-making process.

6.3.1 Strategy

Before making his decision an entrepreneur works out his strategy. Chandler (1962) and Ansoff (1965) suggested making a distinction between the process of strategic management and the content of strategy. Frese and Rauch (2001) add another dimension: orientation. They state that all three strategy dimensions can, in principle, be crossed with another.

Content strategy

Content strategy is engaged in the nature of the strategic decision. The focus of content strategies is on generic strategies (Frese et al., 2000) that are concerned with the type of business decisions vis-à-vis the customers, suppliers, employees, products, production factors, marketing, capital, competitors. Miles and Snow (1978) divide companies into four groups: prospectors, defenders, analysers and reactors. The prospector causes changes in the market. Contrary to the prospectors are the defenders who are playing a waiting game and desire stable markets. The reactor is a firm without any consistent strategy. Porter (1980) describes three competitive generic strategies. A cost-leadership strategy means that a company produces at the lowest possible cost in the field. Firms using a differentiation strategy look for dimensions that are appreciated by customers. When firms are concentrating on one segment of the market and try to present a distinctive strategy then Porter calls this a focus strategy. According to Frese and Rauch (2000) psychological issues are also important when it comes to content strategy, for example, how to convince banks to give credit or for developing a niche product.

Process strategy

The strategic process emphasises the formulation and the implementation of strategy (Hanlon and Scott, 1993; Olson and Bokor, 1995). Frese et al. (2000) distinct planning strategy, opportunistic strategy and reactive strategy. A planning strategy implies that a top-down planning is used that is highly proactive. Opportunistic strategy implies very little planning but a higher degree of proactivity: one looks out for opportunities and takes them without any detailed planning beforehand. Finally, the reactive strategy implies that one is neither proactive nor planning: one simply reacts to the demands of the situation.

Orientation

Orientation implies an attitude towards one's strategy: why a strategy is played out. Lumpkin and Dess (1996) conceptualised entrepreneurial orientation as consisting of five dimensions: innovation, proactiveness, risk-taking, autonomy, and competitive aggressiveness.

According to Mintzberg (1976) strategy is a series of decisions, and content theories do not take into account the complexity of the strategic decision-making process. We agree with Henry Mintzberg on this point. Entrepreneurs have to go through a process before they finally make their decision. Taking a decision is a process that consists of many phases and criteria (Hall and Hofer, 1993). The decision-making process is determined by the expectations of the decision-taker, calculating risk on one hand and the rewards on the other (Clark and Marshall, 2002). Harris (1998) states that the decision-making process is a non-linear recursive process, because most decisions are taken by moving backwards and forwards between many criteria and alternatives. When we look at the decision-making models in the next paragraph we shall focus on the process of decision-making.

6.3.2 *Theoretical models on decision-making*

In this section five theoretical models of decision-making process are presented. Rational choice is incorporated in the 'elimination-by-aspects' (EBA) model, and the satisficing model depicts the bounded rationality. Furthermore, the models of Mintzberg et al. from 1976 and 2001 represent a detailed framework on the stages in making a strategic decision. Last but not least we shall present Beattie's creation process model (1999).

Tversky's 'elimination-by-aspects' model

Tversky (1972) suggests a simplistic recursive EBA routine:

Step 1: Selection of a desired aspect (attribute).

Step 2: Elimination of all alternatives that do not have that attribute.

Step 3: Selection of another desired aspect and return to step 2.

In doing so, the decision-maker goes closer and closer to the desired goal until its final achievement.

Simon's satisficing model

Simon (1976), suggests an even simpler strategy: satisficing. In some ways, this turns EBA on its head. The 'satisfactory' decision-making rule or heuristic is a two-step rule:

Step 1: Set the minimal acceptable level of each relevant attribute.

Step 2: Choose the first instance you come across that meets those minimal standards and then act accordingly.

Clearly, EBA is a negative (eliminative) strategy while 'satisficing' is a positive (acceptance) strategy. Empirical work is required to reveal whether and under what circumstances these heuristics are actually used.

Mintzberg's model of unstructured decision processes

Indisputably, the most integrative and popular attempt to create a descriptive framework of the decision-making process in literature belongs to Mintzberg et al. (1976). In their well-known study of twenty-five strategic decision processes across a range of organisations the scientists suggest that there is a basic structure underlying these 'unstructured' procedures. The theorists define the characteristics of strategic decision process as novel, complex and open ended with decisions not so much made under uncertainty, but within a continuous state of ambiguity, where almost nothing is given or easily determined. The proposed model tries to show that whilst strategic decisions are immensely complex and dynamic, it is possible to give them conceptual structuring. Mintzberg et al. (1976) argue that the structure can be described as being seven elements comprising three 'central phases' (identification, development and selection), three sets of 'supporting routines' (decision control, decision communication and political) and six sets of 'dynamic factors' (interrupt, scheduling delays, timing delays and speedups, feedback delays, comprehension cycles and failure recycles). The general model describes the interrelationships among them and the decision processes studied are shown to fall into seven types of 'path configurations'. Three decision stimuli are in a continuum, namely 'opportunities' (voluntary decisions to improve a secure position) at one end, 'crises' (decision responses to intense pressures) at the other and 'problems' in the middle; each capable of integrating or moving along the continuum. The seven elements / stages of the decision-making process according to Mintzberg et al. (1976) are:

1 Recognition

This first stage marks the beginning of the decision-making process. Here, the need to make a decision becomes visible as a difference between certain actual situations and some expected standards or goals. Thus, the entrepreneur realises that a key moment has come and action has to be taken. Recognition depends on the way information is gathered and processed in the entrepreneurial mind and by the environmental characteristics (encouraging or restrictive).

2 Diagnosis

In this stage, the entrepreneur seeks to comprehend the evoking stimuli and to determine the cause-effect relationships for the decision-situation. Existing information channels are reviewed and new ones found in order to clarify the issues and get as much input information into the decision-making process as possible. Determination of the scope and limitations of the decision is done.

3 Search

This stage is devoted to finding ready-made solutions i.e. to identifying the available alternatives. This is a hierarchical, stepwise process of alternative seeking. Cyert and March (1963) hypothesise that the search begins in immediately accessible areas, with familiar sources. Initial failure in search leads to use of more active search procedures and in more remote areas (Mintzberg et al., 1976).

4 Design

Here the decision-makers either modify available alternatives or create alternatives that do not yet exist. According to the approach used in this stage the final decisions are classified as: ready-made (adopted from an existing alternative in the environment); modified (when a ready-made solution is developed to fit the particular situation) or custom-made (when a solution is invented especially in order to meet the decision criteria).

5 *Screen*

Thus, the entrepreneurs disposes of a set of alternatives from the previous two stages. In the screen stage the decision-maker has to set criteria which the ideal decision should meet and to eliminate the unfeasible solutions.

6 *Evaluation / choice*

In this stage the evaluation of the value of each alternative takes place first, then a course of action (a decision) is selected. The decision-maker considers the negative (cost, consequences, problems created, time needed, etc.) and the positive characteristics of each alternative (money won, time saved, added creativity, or happiness to customers, etc.). A great number of factors have to be observed, most of them 'soft' or non-quantitative. This is how elements of bounded rationality intervene the decision-making process. Being the most powerful and often the only decision-maker, the entrepreneur often transfers his cognitive biases into the decision-making process in this stage. The evaluation-choice routine is distorted by information overload or by unintended as well as intended biases.

7 *Authorisation*

Decisions are authorised when the individual making the choice does not have the authority to commit the organisation to the selected course of action. The theorists introduce this routine in their model because it aims to create an integrative framework of the decision-making process. In the specific case of entrepreneurial decision-making, though, this stage does not represent significant research interest since entrepreneurs are autonomous.

Summarising, Mintzberg et al's model (1976) suggests three main phases of the decision-making process. The recognition and the diagnosis routines form the central phase of *identification*. The search and the design routines structure the *development* central phase. Finally, the *selection* phase comprises the screen, the evaluation/choice and the authorisation routines.

Mintzberg and Westley's 3-axis model

It is disputable whether entrepreneurs follow to the letter the pattern that Mintzberg et al. (1976) propose. From the modern perspective Mintzberg revises his point of view to a certain extent (Mintzberg and Westley, 2001). Without denying the rational approach the researchers defend the thesis that the conventional rationality is no longer the only advisable way to determine the course of action. Good decisions are the output of careful analytical thinking combined with two other possible 'ingredients' of decision-making, namely intuition and pro-active behaviour. Consequently, they claim that there are three approaches to meet a strategic decision:

8 *Thinking first (rational)*

This is the already reviewed path to arrive to a decision:

define → diagnose → design → decide.

9 *Seeing first (intuitive)*

Seeing first' is a rather subconscious manner of decision-making, which requires a significant amount of prior experience. Here Mintzberg and Westley (2001) follow the Gestalt psychology developed by Wallas in the 1920s, which identifies four steps in creative discovery:

preparation → incubation → illumination → verification.

10 *Doing first (action-oriented)*

If rationality is helpless and strategic vision is not available Mintzberg and Westley (2001) advise simply to 'jump into the pool', hence to undertake an action. The feedback of the action will direct the further steps. Thus, 'doing first' is a way to evaluate possible alternatives, to see which one suits the organisation best and to continue following it. This approach is advisable when the situation is novel and confusing, and things need to be worked out claim Mintzberg and Westley (2001). That is often the case when entering new industry. Here the pattern is suggested by Weick (1979):

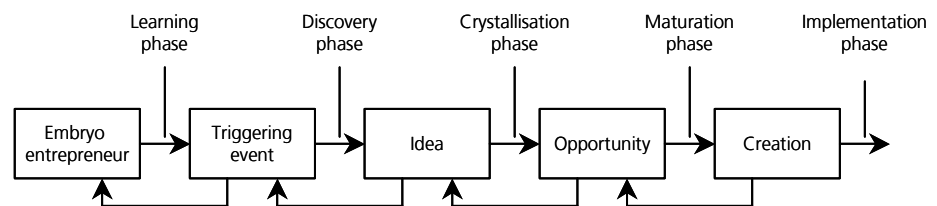
enactment → selection → retention.

Mintzberg and Westley argue that an integrative and successful decision-making process should rely on all the three axes.

Process of creation

The process of creation in its most simplistic terms, is the transformation of an idea into an opportunity and the opportunity into a creation. Although a number of stages are usually involved in the process of creation, there are times when some of the stages are short-circuited. Beattie (1999) distinguishes some phases in the creative process. This is modelled in figure 2. We will briefly describe each of the phases.

figure 2 Process of creation



Source: Beattie, 1999.

Learning phase: The entrepreneur's creative process requires skill, knowledge, experience and resources. In the beginning most of these originate from within the entrepreneur, and are fashioned from the experiences resulting from entrepreneur's life path and from the social, economical and environmental backcloth, which has surrounded the entrepreneur up to the time of making the decision to become entrepreneurial.

Discovery phase: Critically important is the necessity of cultivating a prepared state of mind, which then acts as the catalyst for the stimuli which impinges into the individual's thought processes and provides the beginning of the discovery phase of the creative process. Without having this antenna for alertness, recognition and receptiveness, ideas can fall on infertile ground and subsequently wither. A prepared mind ensures that the seeds of ideas have at least the chance of germination.

Crystallisation phase: Although the process is a continuous one, the crystallisation phase can provide the entrepreneur with the necessary thinking space. Decision taking and problem solving can be put into incubation or on a back burner waiting for further information of the answer to the problem or situation.

Maturation phase: When the "Ah Ha!" stage has been reached, mainly as a result of understanding and insight, the process can either be terminated, or given the all clear to go forward to the opportunity stage. This becomes the maturation phase of the process, where flesh can be put on the bones of the idea in order to identify the how, the when, and the where, the creation will materialise and eventually gain acceptance by the market place in the *implementation phase* of the process.

These creative stages and phases are not independent watertight compartments - they are completely dependent on each other. This indicates a multi-faceted and holistic aspect of the embryonic entrepreneur's path to the discovery, recognition and harnessing of the entrepreneurial idea and its evolution into an opportunity.

6.3.3 *Theoretical decision models in practice*

We end this section by looking at the practical use of the theoretical models discussed in section 6.3.2. Tversky's elimination-by-aspects model and Simon's satisficing do not apply to the decision-making process of Dutch entrepreneurs, because we think that these models do not cover all aspects of decision-making. As explained in the introduction we were first inspired by Mintzberg's model and we constructed our interview based on his model. However, we found that Mintzberg's model was not applicable to the entrepreneurs we interviewed about their decision-making process. In fact, our description of the decision-making process is quite different. The most important difference is that Mintzberg describes a complex process, which distinguishes several actors, which is probably very applicable to large firms, but the decision-making process of the entrepreneurs we interviewed was quite straightforward. By chance we talked to a manager of a large multinational family business and we gained the impression that the decision-making process was far from complex. The Beattie's model (1999) contains elements that we also found. The models show many similarities at a high level.

6.4 Rationality

Rational decision-making is choosing from alternatives in such a way that it coincides with the preferences and the conviction of the individual or group of individuals that make the decision. In this section we shall find out whether the entrepreneurs we interviewed are rational in their decision-making. In economic literature three tendencies can be distinguished: classical rationality, bounded rationality and neoclassical rationality.

Classical rationality

Until the 70s the ruling paradigm was the one of *homo economicus*, the 'rational economic man'. The classic theory of the rational choice suggests that people are driven in their economic actions by pure rationality, hence are able in any given situation to rank with almost mathematical precision their preferences and to pursue the optimal outcome. Rational decision-making is choosing from alternatives in a way that complies 'properly' with the preferences and beliefs of an individual decision-maker.

Bounded rationality

At the beginning of the 50s the fundamentals of the rational theory began to crack. As the environment was uncertain and the market conditions far from perfect competition, the model of bounded rationality¹ emerged as an alternative to the classical rationality concept. Decision-makers generally are not looking for the best or optimal, but for a satisfying solution of a decision task (Simon, 1986). Thus, they may try to simplify a complex decision by anticipating only a small part of all possible outcomes.

Neoclassical rationality

The theory of 'bounded rationality' was studied and empirically tested by the followers of the neoclassical rational approach, who tried to overcome the gaps in the classical theory, in order to create a new rational model. Since the mid 70s, increasing interest has been taken in the analysis of quasi-rational decision-making under uncertainty and under risk. Several formal theories have been proposed such as the Tversky and Kahneman's (1986) prospect theory and the regret theory (Savage, 1954 and Bell, 1982).

Rationality in practice

The three above-mentioned theories on rationality are not explicitly applicable to the decision-making process of entrepreneurs. The decision-making behaviour we have seen in our case studies fits in the bounded rationality and neoclassical rationality better than those of classical rationality. We recognise that the interviewed entrepreneurs have to make their decisions under constraints.

Although some entrepreneurs do consider alternative ideas, there is one idea that dominates them all. When the entrepreneur is elaborating the idea, there are far more options. Several possibilities are considered within the scope of the elaboration. Because both pilot studies were performed in retrospective this might lead to a bias towards more rationality. Perhaps the entrepreneur is less rational than economic theory suggests. Busenitz and Barney (1997) state that entrepreneurs do not have all time in the world to reconsider all possibilities. Large firms are, in terms of sales and number of employees, far more rational than small firms (Brouthers et al., 1998).

¹ Bounded rationality is rationality as exhibited by decision-makers of limited abilities (MIT encyclopedia of Cognitive science, 2002).

7 Future research

The case studies in the first and second pilot studies helped us to distinguish the stages and crucial moments in the decision-making process of entrepreneurs. Even though we have 22 case studies at our disposal it is hard to picture the impact of the important strategic decisions on the dynamics of the economy and the differences between sectors. For that purpose we need quantitative data material. It might be useful to carry out a telephone survey among entrepreneurs to gather such quantitative information.

This quantitative data would provide us with insight as to the percentage of SMEs that take important decisions and how many decisions they take during a certain period. We also wish to look for differences between sectors. Do entrepreneurs in a certain sector take more decisions than those in another sector? And perhaps the decision-making process differs across sectors. We want to distinguish eight sectors in our quantitative research: industry, construction, trade, hotel and catering industry, transport and communication, financial services, business services and personal services. In addition we would also like to investigate the quantitative impact of entrepreneurial decisions on the Dutch economy by looking at the level of investment that was necessary to implement the decision.

Although we have compiled an extensive chapter reviewing some literature on decision-making, more attention for decision-making models in literature is necessary. We would like to provide an overview of the theoretical models and indicate whether they are empirically hypothesized and whether they are applicable to SMEs. An integral overview of the literature on decision-making is much needed.

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Annex I Case studies

A1.1 Establishment of a joint venture by a small research agency and a communication agency

A small research agency and a communication agency co-operate regularly. The communication agency wants to pass on more and more research to the small research agency. It is hard for the research agency to handle the increasing demand. The communication agency suggested to the entrepreneur of the research agency that he should expand. But the emphatic wish of the entrepreneur is not to expand because the entrepreneur had already had some bad experience in managing personnel. The entrepreneurs of the research agency and the communication agency decided to establish a new joint venture in the communication agency's building.

The idea of establishing this joint venture existed for some time. The trigger that led to activating the idea was the arrival of a female applicant. This applicant wanted a job at the communication agency, but she seemed very suitable for a management function in the new joint venture. The confidential relationship between the two agencies and a large initial assignment made it possible to start the joint venture. At the moment the new agency is even larger than the research agency although it still strongly dependent on both founders. In the long run the director of the joint venture will take over increasing responsibility.

A1.2 Buying a fourth supermarket

The owner of four supermarkets wanted to prevent a supermarket in the same area from falling into the hands of a competitor. Therefore the entrepreneur decided to buy the supermarket that was for sale. It was not an easy decision. The supermarket included an unhygienic and unprofitable bakery. Nevertheless the entrepreneur found the courage to buy the supermarket because customers stressed that the entrepreneur could make something good out of it. This was the trigger that motivated the entrepreneur to take over the supermarket.

The reorganisation of the bakery cost a lot of money. Only after a few years was a break-even situation achieved. At the moment the supermarket is making some profit but this is still not the case for a badly situated supermarket he bought a few years earlier. The entrepreneur is now considering another take-over, he is constantly on the look out for new opportunities, but his wife tells him that he should think things over at his age. He is not sure if he agrees.

A1.3 Establishment of a joint venture by a civil engineering agency and a large foreign agency

Traditionally the civil engineering agency is engaged in the construction of large and prestigious buildings. For a long time the youngest director/stake holder of this civil engineering agency has had the feeling that the agency should do something about diversification to acquire enough assignments in the future.

At a certain moment the agency had the opportunity to diversify by accepting the offer from a large civil engineering agency of being taken over. At first the two other directors, who were much older than the entrepreneur we spoke to, liked this idea. They would receive a large sum of money and retire without any financial worries. Normally

directors who leave the agency receive no goodwill payment at all. The youngest was not willing to accept this offer and brought forward various arguments to support his refusal. The SME has belonged in the top of the market segment for quite some years now and has always worked independently. The entrepreneur also felt responsible for his employees. A tradition of pride has dominated the SME for many years. The two older directors, who were not far from retirement, agreed to the youngest director's proposition to retain their independence.

What happened here worked as a trigger to formulate an alternative plan. Together with a large foreign civil engineering agency they started-up a joint venture which would be capable of entering the railroad infrastructure market. At the moment the entrepreneur is not very satisfied with this joint venture. The in-put of the large foreign agency is minimal and the number of assignments remains low. In the meanwhile the entrepreneur is looking for other opportunities.

A1.4 Drastic upgrading of a menu at a pub serving food

The owner of a pub serving food noticed that the dishes on his menu did not differ from other pubs serving food and he wanted to be more distinctive. The entrepreneur is member of the committee of a local union of entrepreneurs in the catering industry through which he has a good overview of the market. His associate immediately agreed to the new plan.

The menu was changed to offer food comparable to that of a haute cuisine restaurant. The entrepreneur had some knowledge of haute cuisine gained in a former restaurant that he owned. The prices were raised, but kept below those of a haute cuisine restaurant. The pub chef was able to cope with the haute cuisine menu. The entrepreneur wanted to attract new customers such as two income families but he was not sure whether he would succeed.

The upgrading of the menu was almost immediately a success despite of the fact that there was no advertising. According to the owner of the pub word of mouth advertising works best. In the meanwhile the formula has been successful for quite some time and this success is still continuing. The turnover and profit have improved and this in contrast to the competitors for whom this formula did not work.

A1.5 The opening of an branch establishment in Belgium by a Dutch subsidiary company of an international transport business

The manager of a Dutch subsidiary company of an international transport business received a phone call from the business owner in Germany. The owner instructed the manager to look for a new location for an extra branch of the transport business in Belgium and to run this extra establishment. The idea arose from a situation in which there had been various problems dealing with allowances and visas when drivers changed in certain countries. Formerly these exchanges took place in car parks. The manager of the Dutch subsidiary company had been toying with the idea for a while. The instructions given by the international business owner worked as a trigger for him to go into action. We do not know what the direct cause was for the owner to make this phone call. It so happened that a good location was found very quickly in the area that the manager had in mind. The decision to buy the land and make some large investments was communicated by telephone by the international owner. The manager is well known and trusted by the international business owner. The opening of an extra establishment

turned out to be a satisfactory decision. This decision was not high-risk, because it mainly concerned mainly an investment in real estate, which will retain its value. The manager of the subsidiary transport business also spoke about another important strategic decision that took place a couple of years ago: the take-over of a medium-sized Dutch transport business. We consider this decision as a separate case study in further analysis. A short description of this decision is given in the next section.

A1.6 The take-over of a medium-sized transport business

The take-over of a Dutch medium-sized transport business by the previously mentioned international transport business also took place after a telephone call from the international business owner. This international business owner contacted the manager of a shipping agency in the Netherlands. The international business owner instructed the manager to look for a Dutch transport business that would be suitable for a take-over and eventually to manage this firm. The idea for this take-over had existed for a while because as yet the international transport business had no branch in the Netherlands. At first the manager of the Dutch shipping agency had some doubts about the idea but now he is very enthusiastic about it.

After a search operation directed by the manager of the shipping agency a suitable candidate was soon found. At that time he was very familiar with the transport market in his vicinity as in his position he had regular contacts with shipping agents. A destitute transport business attracted his attention.

The international business owner had complete confidence in the manager's choice. The manager insisted on a visit by the international business manager to at least take a look at what he was going to buy, but the international business manager rejected this idea and bought the company unseen. After the take-over the company was completely modernised, new equipment was purchased and the office was renovated and extended. Once this had been completed the international business owner came to visit, for the first time, the company he had bought. He was very pleased with what he saw and both he and the manager are satisfied with the way the Dutch transport branch is progressing.

A1.7 Large investment in new equipment and software by a sound engineer

A freelancer, whose profession is that of a sound engineer, decided to do some editing in addition to his work of making sound recordings. He has some affinity with editing films and documentaries, for example, because he trained at the film academy. The sound engineer had had the idea of doing some editing at the back of his mind for some time.

When his wife came home with a film that needed to be edited (trigger) the idea gained strength. The sound engineer decided to buy some editing equipment : a computer and software. The sound engineer knew there was new software available in the United States, but it took a while for this software to become available in Europe. As soon as the software was introduced onto the European market the sound engineer bought it. Taking into account his annual earnings this represented a large investment for him.

The return on investment has already been achieved. Temporarily the sound engineer has decided to do no more editing, because it is too time consuming and not much is tax deductible. The large investment was not something that caused him to have sleepless nights because he knew that he could earn back his investment by editing in the

evenings. The van which he recently bought to transport all his equipment is an investment that worries him a lot more.

A1.8 Management buy-out at a SME that cleans and renovates the fronts of houses

The entrepreneur of a medium-sized firm that cleans and renovates the fronts of houses realised that arranging for a successor had to start in time. The entrepreneur had seen that another firm had had problems in finding the right successor in time and that the business owner was still involved to some extent in running the firm in spite of his age. That firm they had had to find a potential buyer at very short notice and the knowledge of this fact acted as a trigger for the entrepreneur to concentrate on arranging his own succession at an early stage.

The entrepreneur looked inside his SME and found two employees that he considered to be suitable for a possible management buy-out. One of the candidates was his younger brother. A couple of years ago (after some discussions and the assistance of the accountant) they signed an agreement in which the three of them agreed upon a gradual management buy-out. The culminating point would be the transfer of stock and the resignation of the managing director who would, however, remain available for a couple of days a week. In addition to his work for the SME, that cleans and renovates the fronts of houses, he wants to put some of his own patents on the market.

It is remarkable that in this case study, just as in the case study of the civil engineering agency, the entrepreneur took the decision in the interest of the identity of the firm.

A1.9 Large investment in a modern silk-screen printing machine at a printing office

Before the current entrepreneurs of the printing office took over the firm they were planning to make a considerable investment in a modern silk-screen printing machine. The enterprise focuses on a high-grade segment in the market in which there are only a few competitors. The new machine is capable of making high quality silk-screen prints for artists. Using the old machine this required many man-hours and a long passage time but a short passage time is required for the silk-screen prints for chain store businesses that want their posters printed within one or two weeks. The entrepreneurs wanted to keep their share in this prestigious market. After taking over the firm the two entrepreneurs made all the necessary preparations for such a substantial investment. The actual moment of the take-over was the trigger to go through with the idea of buying a new silk-screen printing machine.

Although the bank was not very keen on the idea of helping the entrepreneurs to finance the machine it did agree, thanks mainly to the efforts of the accountant. The supplier also helped by making use of existing peripheral equipment after overhauling it. The new machine can generate extra sales and even if no extra sales are generated it is still possible to maintain the current level of profit because some of the depreciation costs have been written off. This was the most important argument to convince the bank to finance the investment. The depreciation of the new silk-screen printing machine will have been completed within five years and the machine can be used for several years to come. At that point the financial results are expected to be positive.

A1.10 Start-up of a subsidiary business by a telephone and data cable installation firm

At the time of the boom on the telecommunication market an installation firm for telephone and data cables decided to start-up a subsidiary that would work only for SMEs. Up to now, however, they have worked only directly or as a subcontractor for large enterprises. The entrepreneur wanted to capture the market for the installation of telephone and data cables for SMES. To avoid conflicts with largest telecommunication provider in the Netherlands, which is a very important customer, they had to start up a subsidiary.

The employees indicated that they would also like to do some other work. The entrepreneur did not want to lose his people and this was the trigger for him to elaborate his idea. The entrepreneur found two associates who were enthusiastic about the developments. Not only did they own a large amount of shares of the subsidiary, but they were also prepared to work for this subsidiary.

There was not one bank that was willing to finance the subsidiary and for this reason they searched for an investor. However, the telecommunication market collapsed dramatically in 2001 and the investor would have lost more money to keep the firm in business so he dropped out. The parent company had to bear all the costs. This threatened the continuity of the installation firm and in 2002 the entrepreneur applied for bankruptcy for the subsidiary. The consequence is that the parent company has to depend more on the bank and his own interest is reduced almost to zero.

A little while ago the firm won a large, long-term project and the market is starting to improve somewhat so that the entrepreneur is hopeful about the position of the installation firm. In the meantime the installation firm has been working on projects that were won by the subsidiary. From now on the parent company is attempting to expand the activities on the market for SMEs. This has been made possible because the relationship with the large telecommunication provider is now more relaxed.

Annex II Case studies

A2.1 The start-up of a machine-shop

The entrepreneur had worked for many years as an employee of a company manufacturing of agricultural machinery. The market for agricultural machinery was starting to collapse so the need for components for these machines was diminishing. As a consequence the firm had to close the machine-shop and the entrepreneur's job was at stake. At his age, and bearing in mind the unfavourable economic situation, it would be hard to find another job. The entrepreneur had a lot of knowledge of and experience in machining components for agriculture machinery and he did not want to waste his skills. He was really eager to do something with his knowledge and therefore hit upon the idea of starting-up his own machine-shop.

Before the entrepreneur could actually start-up his own machine-shop he needed to find a business associate who could operate the machinery. The entrepreneur approached another employee working for the same company whose job was also on the line. They agreed to go into business together. After making a cost-benefit analysis and discussing his plans with the management team of the manufacturing company the entrepreneur then definitely decided to start-up his own business. The entrepreneurs could rent their own working space from the manufacturing firm. There was no way back when the management team of the manufacturing company gave the entrepreneur a rental agreement, which he had to sign.

There were some problems when deciding about the legal form and obtaining the financing required but, eventually all the problems were solved and the start-up of the machine-shop was a fact. At the beginning the entrepreneurs found it hard to run their own business. Now that the firm is making progress entrepreneurship has become more enjoyable. The entrepreneur is still content with his decision, but he admits that he would not take the same step again.

A2.2 The buy-out of an associate in a multimedia firm

Together with his business associate the entrepreneur decided to continue their multimedia firm with two associates instead of three. However, numerous factors resulted in an intolerable situation. The two associates noticed that the third associate wanted to be the manager of the firm instead of one of a team. The third associate went on a holiday during a very busy and stressful period even though the other two associates needed his help, but he waved away their arguments asking him to stay and help them. The multimedia firm was still a hobby for the third associate not a serious profession whereas for the other two entrepreneurs it was their profession. The entrepreneur and the third associate lived together in one house and this meant that discussions about work continued at home. Eventually there were too many irritations and the bomb burst.

That happened at the beginning of a new year. Each of the three associates had to write down his vision of the future of the firm but the third associate was unable to do so, even after being given several chances. The other two entrepreneurs interpreted this as a lack of commitment and discussed their feelings with the third associate. It was hard for the two entrepreneurs, but they finally presented an ultimatum: "Either you leave or we do". Because the three entrepreneurs were friends it was very hard to issue this ultimatum.

The third associate took the honourable way out and left the multimedia firm. The two entrepreneurs that remained had to buy him out. The multimedia firm's accountant took care of this financial procedure and found a solution that was satisfactory for everyone. The break-up was hard for the entrepreneur we interviewed because he shared a house with the third associate and there was a lot of tension at home too. The situation became untenable and the entrepreneur had to leave his house within a week but finding a new house was hard in such a short time. The entrepreneur talked a lot to his family during this period of time, because they understood the problems of having their own firm. Ultimately the entrepreneurs of the multimedia firm are pleased that they took this decision because things are running much more smoothly at work and communication has improved 100%.

A2.3 The removal of an insurance agency

The entrepreneur wants to move to another office: a historic farm that was going to be demolished. This farm is situated a few hundred metres away from his present office. A friend working for the local authorities told the entrepreneur and his wife that this historic building was for sale. Horses are the entrepreneur's hobby and for years he has wanted to keep his own horses, buying the farm would make this possible.

He visited the farm together with his wife who is a real estate agent and thought the place would be ideal for their purpose. But local planning authorities had designated the area for business purposes. As the entrepreneur and his wife were very confident that these plans would change in the near future they rang the local authority and made a bid for this farm. There were other bidders but most of them dropped out when they heard about the development plan. Now, however, the plan has changed and the land has been released for residential buildings.

The entrepreneur still is not the owner of the farm, because the appeal court turned down the development plan. There are some problems with the expansion of the area and a pig farm on the other side of the road. The entrepreneur hopes that everything will be settled next year. He has already contacted an architect specialised in the renovation of historic buildings as he intends to restore the farm.

A2.4 A snack bar owner decides not to buy a computer-controlled cash desk system

At a catering exhibition the entrepreneurs (husband and wife) of a snack bar saw a demonstration of a computer-controlled cash desk system. The entrepreneurs were very enthusiastic about this system. Which could make it so much easier and faster to add up the bill, especially on Sundays when it is very crowded in the snack bar. They invited some companies to tender and two salesmen demonstrated the computer-controlled cash desk system in their own snack bar.

The female entrepreneur has only just learned to work with personal computers. She experiences difficulties in working with a personal computer and she is afraid that it would not be easy for her to work with the computer-controlled cash desk system and it would be even harder to explain it to her employees. For this reason they decided not to buy the electronic cash desk system. Perhaps in a few years time they may buy a computer-controlled cash desk system for the snack bar, but this will happen only when the female entrepreneur is more familiar with the world of computers.

Instead of the computer-controlled cash desk system the entrepreneurs bought a new oven for baking French fries. This was done on impulse. Nevertheless, the entrepreneur is very pleased with the new oven. The quality of the French fries is much better and the

fries not so greasy. There is also more space to pack the French fries. To date the female entrepreneur does not regret the decision not to buying the computer-controlled cash desk system, because the new oven has more advantages than the computer-controlled cash desk system would have had.

A2.5 The replacement of a water supply system on a camping site

About nine years ago the owners of the camping site had to replace their electricity network because the fuses kept blowing. The female entrepreneur's husband discovered that the water meter kept running even though no water was being used. A short time later he realised that there had to be a leak in the water supply system and further investigation showed that there was a leak in the main pipe. There was only one option: to replace the existing water supply system.

Some specialists visited the camping site and inspected the water supply system. Eventually, two companies were invited to tender. The replacement of the water supply system involved a substantial investment. At a meeting of the three associates (female entrepreneur, her husband and her mother) it was decided to choose the firm with the best (and most economic) tender. It was a race against time to get the installation of the new water supply system finished. Bad weather was the cause of some delay but the installation was finished just a couple of days before the opening of the new camping season. The entrepreneurs are still content with the new water supply system.

A2.6 Building a new bungalow park

The owners of the camping site in paragraph A2.5 also want to build a new bungalow park. A long time ago the female entrepreneur's father bought a piece of land but this land has never been used. Approximately eight years ago the idea of building a new bungalow park was born. The economic situation was favourable and bungalow parks were shooting up like mushrooms. A developer visited the owners of the camping site and interested them in building a bungalow park. After this visit the entrepreneurs realised that they ought to use the piece of land to build a new bungalow park. Previously they were thinking about expanding the camping site but the local authorities were against any further expansion but they did like the idea of a new bungalow park, although the entrepreneurs had to meet certain demands.

The entrepreneurs spoke to a total of three or four developers and after listening to their plans they visited some bungalow parks. Finally they chose the most appropriate developer. This developer, however, wanted to sell all the bungalows, but the entrepreneurs did not agree and the plan did not go through. The another new developer was called in but he went bankrupt and the construction of the bungalow park had to be postponed again. After such disappointing experience with developers the entrepreneurs decided to hire a building contractor themselves. The construction of the bungalow park will start soon. Previous difficulties with this project have made the female entrepreneur rather nervous about whether construction will really start this time.

A2.7 Start-up of a new glass distribution firm

The entrepreneur and his brother run a firm in specialised glazing. They have built up a good reputation in their own region and sector. And this is why a well-known international company specialising in glass approached the entrepreneur to inquire whether

question if he wanted to be one of the team partners. The entrepreneur saw this as a real compliment and he was enthusiastic and swiftly agreed. Becoming a partner meant that the old company name could no longer be used. The entrepreneurs changed the name of their firm

Besides changing the name the entrepreneur also recognised the opportunity offered for selling glass. There are several reasons for selling special glass. Despite the bad economic situation the entrepreneur still wants the firm to grow. The entrepreneur likes to talk and in his present work he cannot express himself enough, selling special will give him opportunities to talk to other people. The entrepreneur does not always want to work as a subcontractor, he would rather pull the strings himself. The entrepreneur's brother was sceptical at first, but after a while he became enthusiastic as well.

The entrepreneur realised that some organisational changes had to be made. He wanted a strict distinction between selling glass and the special glazing firms. The reason for separating the activities and having two firms is to spread the risks. The old office was no longer suitable for the new venture so they looked for another office and eventually they leased the building previously occupied by their international partner. The entrepreneur admits that it is very exciting to start a new business in selling special glass, because the market conditions are still bad.

A2.8 Succession of an entrepreneur at a dental lab

The entrepreneur is nearing retirement age and wants to stop working in the dental lab. He realises that he will have to stop one day and it is better to think everything through carefully rather than have to find a successor at short notice. That is why he is looking for a capable successor a few years before his retirement. Once he has found a successor he wants to slow down and work less. His succession is part of the strategy that the entrepreneur has clearly defined for the next couple of years.

The dental technician first looked among the lab staff to see if there was a possible successor. The person he had in mind had once been declared bankrupt and did not want to experience such a thing ever again. Another person wants to take over the dental lab, but the entrepreneur thinks this person is not capable of running the lab. The only option is to find an external successor. Two candidates have announced that they are interested. Before he makes his decision the entrepreneur wants to talk to them personally and assess what their ideas are. If the ideas are similar to his own and the feeling is right then he will choose the best successor. The day after our interview the entrepreneur had a first meeting with one of the candidates.

A2.9 Introduction of a data warehouse at an information centre

A national supplier of information to health insurers has decided to introduce a data warehouse. The health insurers needed more and more information about the pharmaceutical behaviour of their clients. Because there was no central data source there were lot of delays and mistakes. It was necessary to organise the data to be able to meet the customers' demand for information. Other firms had found a data warehouse to be successful and this would be the solution to this firm's problem.

The entrepreneur acknowledged that a data warehouse should be built with the help of an external software design agency. A software design agency with which he was familiar was approached and was asked to think about the size of the investment. The amount of the investment mentioned by the well-known software design agency was too high according to the entrepreneur. The entrepreneur found it difficult, but asked another software design agency for a second opinion. This agency provided a lower es-

timate of the costs. In the end the first agency was chosen, because money was not the only motive and this agency knows much more about the internal organisation of the supplier of information to health insurers.

The introduction of a data warehouse is a growth process. At a certain moment the process is making progress and it would be a great shame to stop. The data warehouse is beginning to look more and more like the system that the entrepreneur had in mind. In the near future more data warehouses are going to be built and where possible the databases will be linked. But it is quite possible that a different software design agency will be asked to build these data warehouses. The entrepreneur is not satisfied about the performance of the present agency.

A2.10 Sell more confectionery instead of running a lunchroom

The entrepreneur, a confectioner, decided to close his rather unsuccessful lunchroom and instead he wanted to sell a broader range of confectionery. A salesman from a well-known firm that makes confectionery asked the entrepreneur to sell their goods. Right from the start the confectioner found this idea very attractive. The confectioner saw this as an opportunity to get rid of his unsuccessful lunchroom and instead sell more confectionery which enjoys a certain reputation, is of high quality and above all tastes good. Before deciding to sell the confectionery, the entrepreneur considered another idea: selling hand-made chocolates. This idea was less attractive, because the confectioner had to learn a completely new skill and it would cost him too much effort. He argued that confectionery could be sold anywhere.

The salesman mentioned sales figures that sounded too good to be true. The entrepreneur wanted to judge for himself if the sales figures were feasible. He visited some other confectioneries that sold confectionery of the same brand. All these confectioneries are successful and this convinced the entrepreneur to sell confectionery. To realise his decision the pastry cook had to buy a new display case and a new refrigerator.

A2.11 No fourth associate at an insurance office

Three associates own the insurance office. We spoke to one of the associates and he told us that an acquaintance of his called him at the office. This person (a male) had a large portfolio of insurance files, which he wanted the insurance company to manage. The acquaintance mentioned some percentages that, according to the entrepreneur, were not feasible. However, a new large portfolio sounded good to him so the entrepreneur invited the acquaintance to meet him to discuss the percentages. After some discussion the entrepreneur suggested starting-up a new partnership in which they could manage the new portfolio. Half of the stock was to be controlled by the insurance office and the other half by the potential fourth associate. As the potential associate disagreed another solution was found. The potential fourth associate would work for insurance office as an employee for a few months to see how things would work out.

At first glance the idea seemed very attractive, because the potential fourth associate would bring along more customers. A few days after the potential associate started work the entrepreneur felt rather uneasy and after two weeks he was having second thoughts about the whole situation. He talked about his feelings with the other two associates. They were still quite happy about the potential associate because he would bring along more customers. The fact that his fellow associates had no worries left the entrepreneur feeling very insecure. He was very relieved to hear, after about two months, that his colleagues also had their doubts. The three associates talked to the

potential associate and decided that it was the best for all of them if he went his own way. The insurance office took a no-go decision when giving up the plan of having a fourth associate.

In retrospect the potential fourth associate did not have any knowledge of insurance. The associates are very pleased with their no-go decision although there were some financial problems when the ex-potential associate left. If they find a good candidate who wants to join them he or she will be welcome. However, the entrepreneurs will be more careful in future.

A2.12 Co-operation between an insurance office and a real estate agent

The insurance office mediates mortgages. If the insurance company's customers want to buy a house the office often refers them to an estate agency. One of the employees at the estate agency would like to start his own agency. If he is to achieve his dream he needs to co-operate with the insurance office and he therefore contacted the entrepreneur about possible co-operation. The entrepreneur, in turn, is aware that he could also make some money out of selling houses.

The idea is still in a premature stadium. Up to now there have only been a few conversations between the real estate agent and the associates of the insurance office. No specific action has been taken. It will some time before there are any concrete proposals to elaborate the idea.

A2.13 Co-operation between two insurance offices

About thirteen years ago the entrepreneur started his own insurance office. The office was situated immediately behind the entrepreneur's private house. Although the entrepreneur has one assistant as an employee there were many times at which no one was accessible (by phone) at the office. It was more than difficult to reach the office especially during the holidays, illness and days off. The entrepreneur searched for a solution to his problem for a long time.

He talked to a colleague in the insurance field about his problem. This person was having the same problem. Because both entrepreneurs have the same kind of customers and a similar relationship with their customers the entrepreneur thought they would make a perfect match. The entrepreneur suggested co-operating in the sense of sharing an office. After some hesitation the other entrepreneur agreed primarily because he needed a financial administrator and because both firms would remain independent. The entrepreneur's was not suitable for three persons so the office of his new "partner" was rebuilt and the entrepreneur and his employee also moved in. As they did not know whether the co-operation would succeed they introduced a trial period of six months. There were a few miscommunications but in general the co-operation was a success. Accessibility for the customers improved greatly. After the trial period they agreed to keep on co-operating. The entrepreneur is very happy with his decision and appreciates the independence of his firm although he thought there might have been a further integration of the two offices especially where computerisation is involved.

A2.14 Start-up of a consultancy agency

The idea to start-up a consultancy agency arose in the spring of 2002. The female entrepreneur visited her brother after shopping and they had coffee in the garden of

her brother's house and were fantasising about various things. Neither entrepreneur was comfortable any longer in the present job. The female entrepreneur worked as an accountant and had to work with a new manager with whose appointment she did not agree. Her brother was under considerable stress at work and was overworked. He was employed by an insurance company and had about 3,000 clients. He had been able to offer his clients less and less in the past few years and no longer felt at home in the office. Because both brother and sister were unsatisfied they both dreamed of having their own business and independence many of their relations were entrepreneurs and had their own responsibilities. After philosophising for a while their ideas developed into a real plan.

The entrepreneurs talked to an ex-colleague of one of their brothers who also started his own agency as an insurance intermediary. After this encouraging meeting they took a definite decision. Both of them would resign from their current job and devote all their time to starting-up their own agency. They took into account the fact that they could take over one of the brother's employer's insurance portfolios and contact all their brother's old customers. This all turned out quite differently. Right now they are fighting against a competition restraint that has made the start-up difficult and they will have to wait for a year before they can approach these customers again. The entrepreneurs are satisfied with their independence and do not have any regrets.

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