

**MASTER** 

Change and growing SMEs how to manage?

Trommelen, R.M.A.

Award date: 2014

Link to publication

This document contains a student thesis (bachelor's or master's), as authored by a student at Eindhoven University of Technology. Student theses are made available in the TU/e repository upon obtaining the required degree. The grade received is not published on the document as presented in the repository. The required complexity or quality of research of student theses may vary by program, and the required minimum study period may vary in duration.

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
  You may not further distribute the material or use it for any profit-making activity or commercial gain

# Change and growing SMEs; How to manage?

by Rogier Trommelen

Student identity number 0759731

in partial fulfilment of the requirements for the degree of

Master of Science in Innovation Management

Supervisors:

Dr. S. Rispens, TU/e, HPM
Dr. Ir. I.M.M.J. Reymen, TU/e, ITEM
M. Herman, KvK, bedrijfsvoorlichting
R. Kerste, KvK, regiostimulering



### Management Summary

Several theories assign that entrepreneurship is important for the economic growth and development within a country (Furman et al. 2002, Dabkowksi, 2011). Yet being an entrepreneur is a risky, uncertain and sometimes even unpredictable living. Each business has its good and bad times. Nevertheless, probably all entrepreneurs will never regret becoming one and love the freedom and control it gives. But what makes one business more successful than another? What makes that 55% of the companies do not exist after 4 years<sup>1</sup> and others end up becoming a multinational? These questions were the starting point of this thesis. One of the first findings while performing the literature study was that the development of a company exist of several stages. The first phase is called the inception phase which usually has few if any, employees. This phase is followed by the survival phase were sale volumes are increasing before finally coming to the growth phase. The growth phase starts when the company has already been in business for around 3 years. These companies already showed to have sufficient viability to survive. As the company starts to grow in profit and revenue it often starts to grow in the amount of people involved to, in terms of partners and the first employees. It were these people within the company that had the focus of attention in this research. They are part of the so called organizational factors that come with being an entrepreneur and developing your own company. The importance of these organizational factors are undervalued, especially in entrepreneurial research. In this research I argue that this undervaluation is misplaced and more attention should be given to these aspects of entrepreneurship.

#### **Problem statement**

The Kamer van Koophandel (Kvk) is the Dutch Chamber of Commerce and has as its primary goal to support Dutch entrepreneurs with the development of their company. They do this with a broad scale of activities, like individual advice, network events or seminars. To support these programs the Kvk is constantly looking for more information on which factors positively stimulate performance. This research is aimed towards increasing this information, so that they can use it for their advice given to these new ventures. In order to get more insight into organizational factors that stimulate performance the following research question will be answered:

#### Which set of organizational factors positively stimulate the performance of new ventures?

#### Research background

Already some research has been done on which organizational factors stimulate performance. From the literature four factors could be found that have a positive relationship with performance (figure 1). These four factors formed the base of this investigation and were combined in a conceptual model. This conceptual model is mainly based on a model of Knippenberg et al. (2004) who argue that the higher levels of diversity in a team affect performance positively, through the mediator variable "elaboration of task relevant knowledge and perspectives" (Figure 2).

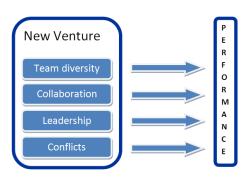


Figure 1 Research design

<sup>&</sup>lt;sup>1</sup> http://www.cbs.nl/nl-NL/menu/themas/bedrijven/publicaties/artikelen/archief/2012/2012-3605-wm.htm

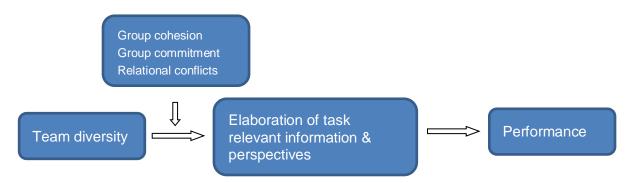


Figure 2 Model Knippenberg et al. (2004)

What also could be drawn from Knippenberg et al. (2004) was that several factors had a moderating effect on the relationship between team diversity and the elaboration of task relevant information and perspectives. Three factors are identified and researched in this thesis namely group cohesion, group commitment and relational conflicts and are called team characteristics. What is hypothesized is that group cohesion and commitment have a positive effect on the relationship and that relational conflicts have a negative on the relationship between team diversity and the elaboration of task relevant information and perspectives.

This model is elaborated by the addition of other organizational factors found in literature that had an effect on the elaboration of task relevant information and perspectives. Namely transformational leadership, task conflicts with venture capitalists and collaborations with external parties (figure 3).

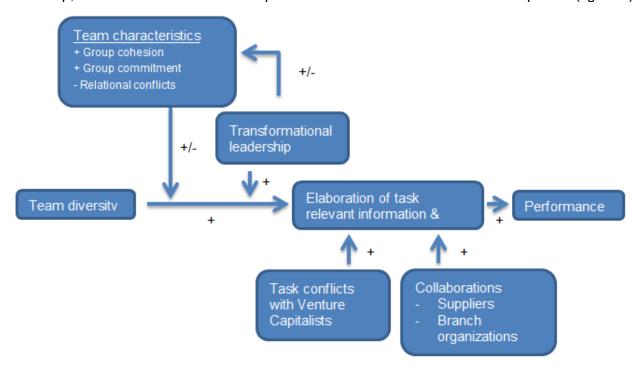


Figure 3 Conceptual model

#### Research methodology

The model derived from the literature was tested with a two stage research design. The first phase has an explorative character and the different variables were discussed with 7 consultants and 5 entrepreneurs active in the sectors Health, Food and Leisure. The goal of the first phase was to come up with a final set of variables and hypotheses. The people interviewed recognized the topics in the conceptual model as relevant except from Task conflicts with venture capitalists which was excluded from further analysis.

In the second stage the hypotheses drawn from the literature and the interviews were tested with a quantitative research survey. This survey was sent to the founder of a new venture as well as 4 employees working within the company. The constructs used to measure the variables were all existing and proven measurements scales from previous studies.

#### **Analyses**

The relationships between the variables were analyzed with hierarchical regression analysis. For each relationship a regression analysis was done and in each model control variables are included. First the relationship between diversity and elaboration of task relevant knowledge was executed. This analysis showed that 'Work experience diversity' had a positive relationship (r=0.742, p<0.1) and 'Diversity in field of study' (r=-1.077, p<0.01) had a negative relationship with the elaboration of task relevant knowledge and perspectives. The literature also suggested that collaboration had a positive relationship with Elaboration of task relevant knowledge and perspectives but this relationship could not be found in our data. In total also four moderating effects on the relationship between diversity and elaboration are analyzed; Group cohesion, group commitment, relational conflicts and transformational leadership. From these analyses group cohesion and group commitment were found to have an moderating effect. Level of education was not found to have a significant main effect on the elaboration of task relevant knowledge and perspectives but in combination with the cohesion of commitment it actually had a positive effect but only in low cohesive and committed teams. The effect of cohesion and commitment on the relationship between 'Field of study diversity' and 'elaboration' was that the negative main effect was stronger in higher committed and cohesiveness team. Transformational leadership and relational conflict was not found to have a moderating effect on the relationship between diversity and elaboration. But transformational leadership was found to have a positive relationship with the moderators cohesion and commitment. Additionally these analyses also showed some by-products. A direct relationship between cohesion, commitment and transformational leadership and the elaboration of task relevant information and perspectives was found. Unfortunately in this study no direct relationship between the elaboration and performance could be identified.

#### **Conclusion and recommendations**

The conclusion that can be drawn based on this research is that indeed organizational factors affect the performance of new ventures. Despite that this research could not identify a direct effect on (financial) performance, I still argue that elaboration of task relevant knowledge and perspectives is beneficial for new ventures. Several other studies agree that elaboration has a positive effect on performance, mostly measured in terms of creativity, innovation and decision quality (Knippenberg et al., 2004; Kearney and Gebert, 2009). It is not really surprising that a direct relationship with financial performance could not be identified. Several mediating and moderating variables, like creativity, decision quality and innovation, will be present and will have an effect on this relation. The chosen relationship is somewhat over simplified. Nevertheless, based on this research I can advise new ventures, and consultants working with them, how to improve the elaboration of task relevant knowledge and perspectives. Diversity in working experience and level of educational diversity positively stimulate the elaboration of task relevant knowledge and perspectives. This can be taken into account when attracting new people for the new venture. In order to get the best out of the existing team, achieving a higher cohesive and committed team should be one of the tasks. Cohesion and commitment can be stimulated by a transformational style of leadership. Transformational leadership, a more visionary style of leadership, can be enhanced by sharing and presenting the long term goals of the company. The awareness of this type of leadership is still not very high by the leaders of new ventures. Therefore this type of leadership is barely used in the sectors under investigation, i.e. Health and Leisure, and therefore needs more attention.

#### Preface

There are several people who I would like to thank for their support. First of all I would like to thank my parents for supporting me, not only during my master thesis, but for my entire educational career. Without their support it would not have been possible for me to be in this position. They supported all my decisions and were always there when needed. Secondly I would like to thank my friends and sisters, on one side for the good moments when they distracted me from studying, but also for the patients they had when I spilled my frustrations towards them..

Furthermore I would like to thank Mark Herman and Richard Kerste for the opportunity they gave me to conduct this master thesis at the Dutch chamber of commerce (Kamer van Koophandel). They supported me were needed and showed belief in me and the research outcomes.

My special thanks go to thesis mentor Sonja Rispens. Her guidance, suggestions and critiques were essential for me to come to this result. Due to her insights I was able to learn a lot about how to conduct theoretical research and to stick to the plan. I would also like to thank Isabelle Reymen for her comments and supportive critiques during this project.

Finally I would like to thank the employees of the Dutch chamber of commerce, the entrepreneurs who helped me with the data and everybody else who was somehow involved in the project.

To the next step! Rogier Trommelen Eindhoven, December 2013

## Content

Mana	agement Summary	I
Prefa	ace	.IV
1.	Introduction	1
2.	Literature review	2
2.2 2.3 2.4 2.5 2.6	New venture Characteristics  Definition Performance  New venture composition  Collaboration  Leadership  Conflicts between VC and new venture team  Hypotheses	3 5 6 8
3.	Research set up	12
3.2	Research question	12
4.	Stage 1	14
4.2 4.3 4.4	Data collection  Case selection  Data analysis  Results stage 1  Conclusion stage 1	14 15 16
5.	Stage 2	19
5.2 5.3 5.4 5.5 5.6	Control variables Sample Dependent variable Performance Independent variables Factor analysis Results stage 2 Conclusion stage 2	19 21 22 25 26 38
6.	Discussion	39
6.2 6.3	Limitations Future research Managerial Implications	41 42
	rences	
	endicesoendix 1 Questionnaires	
Apr Apr Apr	pendix 2 Frequencies pendix 3 Factor Analysispendix 4 Outliers	53 54

#### 1. Introduction

This document presents the results of my master thesis and the way how I came to these results. This master thesis is the final product of the master Innovation Management at the Eindhoven University of Technology and was executed at the Kamer van Koophandel; the Dutch Chamber of Commerce. The Kamer van Koophandel (KvK) is an independent organization whose primary goal is to support the Dutch entrepreneurs with the development of their company. This support starts with the registration in the trade register followed by several activities as seminars, individual advice or network events. The group of entrepreneurs can be separated in starters and more established firms (called new ventures in this document). The advice for start-ups exists out of, e.g. helping them to choose the correct legal entity or supporting them in writing a business plan. For new ventures the KvK organises seminars, provide them with individual advise or organises other events. The Kvk would like to get more insights on the organizational factors that influence the performance of these new ventures. Organizational factors meaning managing the human behavioural factors within the organization. Getting more insights in the human behavioural success factors is the primary goal of this study.

The success factors that will be derived from this study will be the input for the KvK's support program and will specifically be focused on new ventures in the clusters of (market segments) health, leisure, and food. The term "clusters" is used because this term is used internally at the KvK and these clusters are the key sectors in which the KvK is active. These clusters were included in the top sectors selected by the ministry of Economic affairs in the Netherlands<sup>2</sup>, except for the Leisure cluster which was added by the province of Brabant as a top sector<sup>3</sup>. The new ventures which are the focus of this study are active in the region of Brabant (one of the twelve provinces of the Netherlands). All of the new ventures employ 3 or more people and have been active for at least 3 years, and 10 years at the most. Around 250 new ventures with these characteristics are active in the region of Brabant.

The first part of this master thesis gives an overview of the conducted literature study. In the literature study I reviewed research focussed on four different organizational factors which influence the performance of new ventures positively and stimulate growth. Growth is one performance measurement, other often used measurements are efficiency and profit (Murphy et al., 1996). Other organizational topics are, the composition of the new venture team, collaboration with other companies, leadership, and conflicts with venture capitalists. From the literature study a set of hypotheses are formed and included in a conceptual framework.

Secondly, two research questions are elaborated on, which is the start of the research set up. The objective of this study is twofold. The academic objective is to create a better understanding of the organizational factors that positively influence new venture performance. Next to that the study also has a more practical objective, especially for the KvK. The information collected form this investigation can be used directly to the benefit of the daily activities of KVK employees. They can use this information in their advice to help the new ventures to grow. A better performance of new ventures will finally have a positive influence on the economic growth in the Netherlands.

The two-stage research design starts with an explorative stage (chapter 4) followed by an explanatory stage (chapter 5). A two-stage design is preferred when much about the problem and topic is unknown and in order to not forget research variables that later turned out to be important. The first stage exists of qualitative interviews and ends with a final set of variables and possible changes are made in the conceptual framework. In the second stage the new ventures were asked to fill in a survey in order test the hypotheses derived from the literature and the qualitative interviews. The survey was sent to the founder of the company and several employees. Detailed information about the employed methodology was provided. The results and conclusions are presented per stage.

This thesis will end with a discussion based on the conclusions from both stages. Recommendations are given about how this research could be used both in further academically research as in practice. In the last part also some limitations from this research are discussed.

-

 $<sup>^2\</sup> http://www.rijksoverheid.nl/onderwerpen/ondernemersklimaat-en-innovatie/investeren-in-topsectoren$ 

<sup>&</sup>lt;sup>3</sup> KvK, "uitvoeringsplan leisure cluster", 2013

#### 2. Literature review

This chapter exist of three different parts. First a description of the new ventures is given and the characteristics of these companies are explained. Next a description of the findings on new venture composition, collaboration with other companies, leadership and conflicts with the venture capitalist and their effect on performance are given (figure 4). The findings on these four organizational factors are translated into various hypotheses and combined in a conceptual model which is the last part of this chapter.

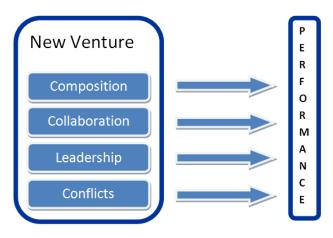


Figure 4 Research design

#### 2.1 New venture Characteristics

Within the development of new ventures several stages can be recognized. Different lifecycle models are found in the literature (Greiner and Schein, 1988; Cooper, 1981; Gaibraith, 1982; Mount et al., 1993). The model of Mount et al. (1993) is chosen because this models shows a

typical lifecycle in combination with five stages and clear titles (figure 5). A short description of each stage is given. Stage 1 is characterized as a small organization with usually few, if any, employees. There is little systematic consideration of marketing and operational decisions are taken based on experiences.

Stage 2, survival, sales volumes are increasing and employees or managers getting permanent tasks or positions.

Stage 3, growth, within the new venture the owner will have a less dominant position. Development is needed in order to remain competitive and to facilitate for example the increased flow of information.

Stage 4, expansion, this is a transition phase that moves the new ventures towards a management organization. Responsibility is delegated and is not in the owners hands anymore.

Stage 5, maturity, in this stage a management is in charge and the organization is organized with functional managers and departments.

The more structural and functional organization (growth stage) is the point of interest for this study. The reason to choose for the growth stage is the high level of governance

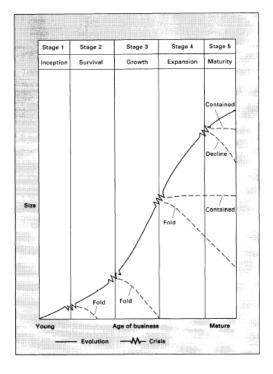


Figure 5 Life-cycle of growing businesses (Mount et al., 1993)

needed for guiding human behaviour during this big organizational change which is of interest for research conducted within the field of HPM. Secondly this research aims to contribute to the understanding of growth within new ventures. The study towards new firm growth suffers from an absence of one conceptual model and several inconsistencies are found in the literature (Garnsey et al., 2006). Searching in the literature I came to the same conclusion and no clear definition of

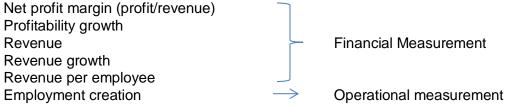
the growth phase could be given. For example the used timeline of Mount et al. (1993) placed the age of business on the vertical as but did not identify the boundaries of the different stages. The reason to not do this is because different circumstances can result in different shapes of lifecycles (Garnsey et al., 2006). Garnsey et al. (2006) studied three different samples from different countries and recognized that the biggest growth occurred between the third a tenth year. For that reason the focus will be on new ventures that are at least three and no more than ten years in business. After clarification of the new ventures under study the next paragraphs give more insides about the findings on the four organizational factors under study. The findings on these four factors and their effect on performance is explained as well as the relations between these factors. Finally the findings were combined in one conceptual model which was the starting point for further investigation.

#### 2.2 Definition Performance

The dependent variable performance of a new venture can be interpreted in many different ways. An accurate and appropriate measurement seems to be critical in entrepreneurial research (Murphy et al., 1996). Without an adequate description of the type of performance under research it becomes difficult for the research to generalize. However the research of new venture success and failures face a number of difficulties (Chakravarthy, 1986). Often it's difficult to collect reliable data and the question arise about the comparability (Kunkel and Hofer, 1991). To guide future studies and to be able to make stronger conclusions about new venture performance, Murphy et al. (1996) analysed more than 50 studies. They examined new venture studies on the use of different measures of performance. They argue that no selection could be made in a fixed set of measures but that performance need to be measured on different constructs (Kaplan, 1983, Venkatraman and Ramanujam, 1986, Steers, 1975).

According to Murphy et al. (1996) the most used dimensions are efficiency, growth and profit. Each dimension can included different measurement methods for example efficiency can be measured as Return on investment but as well as Return on assets. By selecting the right dimension of measurement two important distinctions should be made. Firstly the model of Venkatraman and Ramanujam (1986) classified performance measures as either financial or operational. An financial measurement is for example Return on investment and an example of an operational measurement is market share. The second important distinction that should be made within performance measures is whether the used data is based on secondary or primary sources (Murphy et al., 1996). A primary source is, for example, a questionnaire or an interview and a secondary source is based on archival data.

The guidelines set by Murphy et al. (1996) are used to come up with a final set of dimension. The following performance dimensions were measured all based on a primary source:



The chosen dimensions include both operational and financial measurements and include the most used dimensions growth and profit. Profit and Growth were measured with the two most used measurements in entrepreneurial research (Murphy et al., 1996).

#### 2.3 New venture composition

As explained the new ventures under study have at least three working places, the company exist of 3 FTE or more. The people in the new venture form a team and work together towards the same goal. A new venture team is described as two or more individuals who have financial interest in the company and are actively participating and developing the business (Kamm et al., 1990). The team members that form the new ventures can vary from each other in various ways. Some examples of diversity are different backgrounds in terms of education or profession, industry experience and

skills (Ensley and Hmieleski, 2005). A team is called homogeneous if the team members do not have much variety in for example background or experience. An example, academic new ventures have been criticized for their homogeneity character in terms of technical experience and background (Ensley and Hmieleski, 2005). There are a large number of studies about the effect of diversity on the effectiveness of the team (Foo, 2006). In general, the empirical findings are mixed: some find positive effects (Bantel and Jackson, 1989) and others find negative effects (Ancona and Caldwell, 1992). This leads to the discussion that diversity can have either positive or negative effects on team performance (Van Knippenberg et al., 2004).

A homogeneous team can have a positive effect on performance because a homogeneous group is likely to be characterized by high member commitment (Riordan and Shore, 1997) and high group cohesion (O'reilly et al, 1989). This means that as the group continues to work together the people get to know each other better this may improve the operational effectiveness and trust (Ensley, Pearson and Amason, 2002). If people know each other they are likely to have more efficient communication which leads to less process losses, which in turn improves the performance. In addition, the level of trust will be higher in the group, which stimulates the exchange of information and fewer relational conflicts are likely to occur (Jehn et al., 1999). These mechanisms are summarized in figure 6.

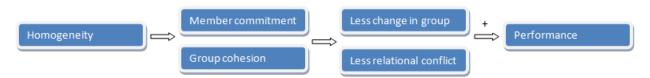


Figure 6 Mechanism of homogeneity

In contrast, others argued that heterogeneous groups should outperform homogeneous groups because they are more likely to possess a broader range of task-relevant knowledge, skills and abilities which gives heterogeneous groups a larger pool of resources (Van Knippenberg et al., 2004). The larger pool of resources results in improved discussions, more innovative solutions and increased creativity. Discussion with input from different team members with all specific knowledge forces a group to more thoroughly process task relevant information. This may prevent the group from opting to easily for a solution which turns out to be insufficient researched or analysed (Van Knippenberg et al., 2004). Task relevant discussions as well as, creativity and innovative solutions stimulates performance positively (Ancona and Caldwell, 1992; Bantel and Jackson, 1989). Figure 7 shows the mechanism of the positive effect of an heterogeneous team has on performance.

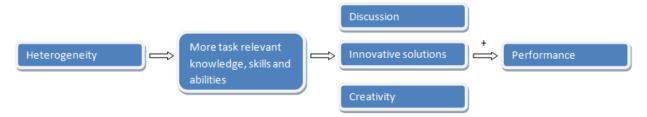
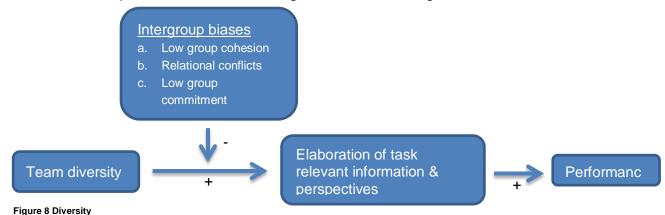


Figure 7 Mechanism of heterogeneity

Also Van Knippenberg et al. (2004) argue that diversity has positive as well as negative effects on team performance. They argue that the process underlying the positive effects of diversity in performance is through elaboration of task relevant information and perspectives. This positive influence is based on the idea that more different perspectives positively stimulate for example discussions and creativity (Ancona and Caldwel, 1992; Bantel and Jackson, 1989) and also that due to more trust information is shared among team members (Ensley, Pearson and Amason, 2002). Additionally diversity can also have a negative influence when intergroup biases moderate the relationship between diversity and the elaboration of task relevant information and perspectives (Van Knippenberg et al., 2004). Intergroup biases means to be more favourable to others that are categorized as similar or in group rather than to others that are recognized as dissimilar, or out group. People tend to trust in-group members more than out-group members and to see in-group members as a more valid source of information (Brewer, 1979; Turner et al., 1987). These

intergroup biases can be identified by low group cohesion, relational conflicts and low group commitment (Van Knippenberg et al., 2004). Intergroup biases are the negative effects an divers team can have on performance. These findings are visualized in figure 8.



Next to the discussion about the effect of diversity on performance another indirect effect can been found which is more extern oriented. Within new ventures financial resources seems to be most critical in order to stimulate growth (Moray and Clarysse, 2005). There most starting organizations do not always have all the needed financial resources and they apply for a capital funds from private investors (Vanaelst et al., 2006). When applying for these funds a well-balanced team with sufficient business experience is often an used selection criteria used by the private investor (MacMillan et al., 1985; MacMillan et al., 1987; Muzyka et al., 1996). Due to these selection criteria Vanaelst et al. (2006) conclude that teams and especially the diversity of the team is an important factor in decisive entrepreneurial events such as raising venture capital.

What can be drawn from the literature is that the effect of diversity has positive as well as negative effects on the performance of a new venture through the variable elaboration of task relevant information & perspectives. In general diversity should be stimulated but at the same time the intergroup biases should be measured and controlled in order to benefit from the diversity. Also the indirect effect of an heterogeneous group can neither be ignored because without funding a company will never be able to grow.

#### 2.4 Collaboration

As the new ventures start to grow new people will be added to the initial entrepreneurial (founding) team in order to fill gaps in resources. Another solution in order gain these competencies, is to collaborate with another company (Hagedoorn, 1993; Hoffmann and Schlosser, 2001). Filling gaps in resources is one reason to collaborate other reasons are innovation (Hoffmann and Schlosser, 2001), the lack of competiveness (Wincent, 2005), globalization and radical technological change (Gomes and Casseres, 1996; Haagedorn, 1993). Debate exists about the risks and benefits of these inter firm collaborations but these relations, such as strategic alliances and joint ventures are recognized as an important strategy for the growth of starting companies (Street and Cameron, 2007). In general collaborations are found to have a positive effect on performance (Robson and Bennett, 2000; Calabrese, Baum and Silverman, 2000; Berry et al., 2006) and are a good solution to fill a gap in the resources or other purposes. But in the new venture literature also some restrictions for this relationship can be found. This means that in order have a positive effect some restrictions should be taken into account.

The first restriction is that only supply chain collaboration is working and that no significant effect could be found in collaboration with customers (Robson and Bennett, 2000). With other words collaboration with suppliers but also advise from third parties (for example lawyers) are a good way to fill resource gaps but collaboration should not be with competitors. In line with these findings Calabrese et al. (2000) found that horizontal alliances (alliances with potential competitors) depress new ventures and vertical alliances (alliances with universities, supplier or a marketing company) stimulate the start-up. An alliance is described as "a close, collaborative relationship between two, or more, firms with the intent of accomplishing mutually compatible goals that would

be difficult for each to accomplish alone" (Spekman and MacAvoy, 2000). The research of Calabrese et al. (2000) is conducted in a high technology environment, the biotechnology industry, which strength the findings of Gils and Zwart (2004) that alliances are more important within environment in which technology is fast changing.

Another finding on the impact collaboration has on the performance of new ventures is the impact of geographically distance. Where bigger companies not have any problems in maintaining international relations the geographically distance, when it becomes bigger, lowers the effect on the performance of new ventures (Huggins & Johnston, 2009).

Alliances and collaborations are in the literature used interchangeable for the same phenomena. For example working together and interchange information with your supplier is called collaboration (Robson and Bennett, 2000) but the same phenomena is by Calabrese et al. (2000) as a vertical alliance. Therefore the term collaborations is used and it covers collaboration with other companies but also advise from external parties is seen as a collaboration.

#### 2.5 Leadership

Ensley et al. (2006) studied new ventures and found out that the performance of new ventures is highly dependent on the behaviour of their leaders. In line with the findings of Greiner (1972) they recognized that within different stages of the development of a new venture another style of leadership is preferred. External factors, which moderate the relations between type of leadership and performance, makes one leadership style preferable over another one in different situations (Ensley et al., 2006). The conclusion of Ensley et al. (2006) is based on a sample of 66 new ventures from Inc. Magazine's annual list of America's fastest growing private firms. Leadership has been studied from many different perspectives (Andersson and Tell, 2009) and after their review of articles published during the last 25 years they conclude that it is fruitful to study leadership from different perspectives and the sum of these perspectives increases the understanding of the phenomena. Style of leadership is one of the perspectives but for that reason also the personal characteristics of the leader and its effect on performance were researched. So next to the mechanism leaders are using in order to guide the followers also the individual actions and motivation of the leaders will be explained.

According to Fiedler (1970, pp. 1) a leader is:

"The individual in charge of a group who is given the task of directing and coordinating the task relevant activities, or who carries the primary responsibility for performing these functions in the group or organization."

Already a substantial amount of research is done on leadership and its effectives but there is still much uncertainty about the requirements for an effective leader (Higgs, 2003). In order to find the requirements for an effective leader the model of transformational and transactional leadership of Bass and Avolio is used. This model is recognized as a dominant approach (Dulewicz and Higgs, 2005) and the strength of this model is that a set of leadership behaviours is summarized in two different concepts.

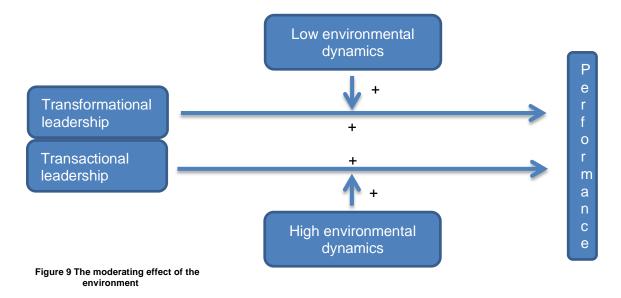
The descriptions that are used in this study are drawn from the article of Rosete and Ciarrochi (2005). These descriptions provide a very practical and clear view of the two approaches which is needed to fully understand the findings in this chapter as well as the conclusion that will follow from these findings.

Transformational leadership is a style were the leaders are able to create and communicate a vision and improves the motivation, morale and performance of the subordinates. Transactional leaderships is viewed as a more status quo style. The focus of the leaders is linking job performance to rewards and ensuring subordinates to have the necessary resources to undertake their roles.

In a meta-analysis Judge and Piccolo (2004) argue transformational leadership is positively related to the performance of new ventures. The working of transformational leadership can be

decomposed into five dimensions; idealized influence attributed, idealized influence behaviour, inspirational leadership, intellectual stimulation and individualized consideration. Idealized influence (attributed and behaviour) is the degree to which the leader behaves in admirable ways that cause the followers to identify with the leader. Inspirational motivation is the degree to which a leader articulates a vision that inspires encourage followers to take action. Intellectual stimulation is the degree to which the leader challenges assumptions and solicits followers' ideas. Individualized consideration is the degree to which the leader attends to each follower's concerns and needs. These five dimension cause the positive influence of transformational leadership on performance (Judge and Piccolo, 2004). Research on the effect of transformational leadership within different stages of the development process shows that this leadership style is stronger related to performance in new ventures than in more established firms (Peterson et al., 2008). This means that under uncertain circumstances transformational leadership is of greater influence on the performance of the company. Nevertheless a significant result was found for both new ventures as for the established firm (Peterson et al., 2008).

In the same meta-analysis of Judge and Piccolo (2004) also found a positive effect of transactional leadership on the performance of the new venture. Again the style of leadership, in this case transactional leadership, can be decomposed in different dimensions. For transactional leadership are that contingent reward, management by exception-active and management by exceptionpassive. Contingent reward is the degree to which the leader clarifies expectations and establishes the rewards for meeting these expectations. Management by exception is the degree to which the leader takes corrective actions based on the results of his followers. The corrective actions are active if it takes place before it create problems and passive leaders wait until the behaviour has created problems. As can be recognized from the literature research both transformational and transactional leadership have positive effects on performance in new ventures and this is exactly what Bass (1999, pp. 21) states: "the best leaders are both transformational and transactional." But as already earlier stated the circumstances makes one style preferred of another. Ensley et al. (2006) also investigated new venture performance which is affected by both transactional and transformational types of leadership and recognized that the environment moderates the relationship between leadership and performance. Unpredictable and rapid change are the characteristics of a dynamic environment. Due to this rapid change individuals experience an increased level of uncertainty and decision makers tend to experience high levels of stress and anxiety (Waldmen et al., 2001). Transformational leadership was the most effective in low environmental dynamics and in situations of high environmental dynamics transactional leadership was found most effective, see figure 9 for a graphical presentation of these processes (Ensley et al., 2006). This suggests that within a rapid changing and uncertain environment a transactional leadership is more efficacious.



Taking into account previous findings one could say that a leader needs to use either transformational and transactional leadership (Bass, 1999) and apply them in different situations according to the level of dynamic environment. Different stages in the development of a company can be recognized and as discussed each phase end with a crisis. A crisis as described is an example of a high dynamic environment. In time of crisis the leader needs to make use of a transactional style in order to enhance new venture performance. During the more stable periods a transformational style is preferred. This means that the leader needs to be able manage the new venture in both periods using both styles of leadership. Thus if a leader is only using either transactional of transformational leadership or is not able to identify the different situations when he/she needs to use the correct style the leader will have a negative effect on performance. But if the leader is able to use the correct style in the correct situation he/she will positively influence performance.

#### 2.6 Conflicts between VC and new venture team

A Venture Capitalist (VC) is not directly part of the new venture but can have a big influence on the performance of this team (Timmons and Bygrave's, 1986). A VC is a person that invests in a company to provide the required capital for the start-up or expansion. As I already described, the start-up of a business is a project with the duration of several years. Often already a few years pass by before any revenue is generated or even before the first product is ready to sell. Funding of the business is required and there are several options to get this funding. One of the options is to attract a VC. In general, VC's are looking for high rates of return and is perhaps therefore not the most ideal partner. Nevertheless it's generally accepted that the provision of VC's is critical to the success of high growth entrepreneurial firms (Higashide and Birley, 2002). This means that new ventures often cannot continue without a VC's funding in order to grow. Also venture capital backed start-ups are seen as an important source of innovations and technological development and therefore serve as a major source of new wealth creation (Bygrave and Timmons, 1991). There a venture capitalist is often so important to the growth of a new venture the relationship and possible conflicts are researched. In the next paragraph I try to get an answer to the question what the effect of a conflict between a new venture and VC is on the performance of these new ventures.

The relationship between the VC and the new venture is often formalized by contracts and equity exchanges (Ring and Van de Ven, 1994; Das and Teng, 1998) and forms the basis of their collaboration. In addition to this formal relationship there is also a demand for mutual exchange of information which relies on interpersonal factors, such as trust and confidence in the other parties cooperation (Yitshaki, 2008). An example, the collaboration will in the beginning not be formalized with any contract or other signed document which means that the relationship is fully based on trust in the other partner. This trust is needed because already some confidential information will be shared even before the contract will be signed. Previous studies recognize that these interorganizational collaborations might sometimes be characterized by conflict, because both parties might have conflicting goals. A VC may expect that new ventures focus on increasing the profits profit rather than to reinvest in future developments (Sahlman, 1990). The underlying reason is that the goal of a venture capitalist is to make as much profit as possible were the focus of the new venture may be on innovation and improve the quality of the product. Higashide and Birley (2000) examined the relationship between VCs and new ventures. After their study of 57 relations they found that conflict can be beneficial as well as harmful for the new venture performance and confirming the findings of others (see also Schweiger et al., 1989; Amason, 1996; Jehn, 1995). In general the literature makes a distinction between two types of conflicts, task and relationship conflicts (Amason et all, 1995; Dreu and Weingart, 2003; Higashide and Birley, 2002). First task conflicts are disagreements among the distribution of resources, judgements and interpretation of facts and procedures. Secondly, relationship conflicts are disagreements about personal taste, political preferences, values and interpersonal style (Dreu and Weingart, 2003). In the relationship between a VC and a new venture task related conflicts may be beneficial for the company. The reason for the positive relationship is that task conflict may contribute to the decision (making) quality because the solution to the problem emerges from

diverse perspectives which is generally superior to the individual perspective (Schweiger and Sandberg, 1989; Jehn, 1995). Groups with relationship problems that feel friction with each other tend to work less effectively (Argyris, 1962). Being less effective is the main reason why a relationship conflict between a venture capitalist and the new venture is not beneficial (figure 10).

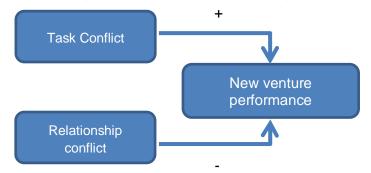


Figure 10 Conflicts

What can be drawn from these findings is that conflicts not necessarily need to be banned. It's important to recognize the type of conflict and to find ways to lower the relationship conflict. Ensley et al. (2002) and Amason and Sapienza (1997) found effectual forces to reduce relationship conflict. When teams have high levels of mutuality or greater openness less relationship conflicts will arise (Amason and Sapienza, 1997). Ensley et al (2002) contributed to these earlier recognized forces that cohesion also has a negative effect on relationship conflict. The members of cohesive teams exhibit higher levels of affinity and trust for another team member (O'Reilly et al., 1989). Managing relationship conflicts is difficult but with these characteristics the amount can be reasoned and strategic decisions can be made (Amason and Sapienza, 1997). As explained it's important to maintain the relationship with a venture capitalist not only for the capital that is required but also for the support that venture capitalists can give. For example the use of the network of the venture capitalist is found to have a positive effect on the new venture performance (Timmons and Bygrave's, 1986). Nevertheless conflicts between the venture capitalist and the new venture are likely to occur as both might have some conflicting goals (Sahlman, 1990). These conflicts are not necessarily harmful but new ventures should be aware that it's not a relationship conflict.

#### 2.7 Hypotheses

In the literature study the findings on four organizational factors and their effect on new venture performance are described. In this chapter these findings are combined and hypotheses are formulated. The starting point are the findings of Knippenberg et al. (2004) where diversity has a positive effect on the elaboration of task relevant information and perspectives and Intergroup biases moderates the effect of this relation. The variable intergroup biases is changed into team characteristics because the word biases suggests a negative results while this is not always true. A diverse team increases discussion and creativity (Ancona and Caldwell, 1992; Bantel and Jackson, 1989) due to more perspectives that are present in the team. These perspectives does not always have to be present in the team but can also be gathered from outside in the form of collaborations. Collaborations with for example your supplier and external advisors are found to positively stimulate the performance in new ventures (Berry et al., 2006; Robson and Bennett, 2000). Due to the fact that collaborations are used to fill gaps in the resources (MacMillan et al., 1985; MacMillan et al., 1987; Muzyka et al., 1996) and to gain information from external advisors I propose that collaborations also elaborate task relevant information and perspectives as long as these collaborations are within the supply chain or with knowledge institutions (for example universities, branch organisation or a marketing companies). From the literature study can be concluded that relational conflicts with the Venture Capitalists depress the venture performance. The mechanism of the relational conflict is already recognized as part of team characteristics and whether it is with a venture capitalist or not this moderates the positive relationship between diversity and the elaboration of task relevant information and perspectives. From the same investigation could also

be concluded that task conflict with a venture capitalist may contribute to the decision making quality through the same construct as collaboration namely that solutions created based on more perspectives is generally superior to the individual perspective (Schweiger and Sandberg, 1989; Jehn, 1995). Therefore I propose that collaborations and task conflicts with venture capitalists have a positive effect on the elaboration of task relevant information & perspectives. The following hypotheses are developed:

- H1: Team diversity (a), collaborations (b) and task conflicts with venture capitalists (c) have a positive relationship with the variable elaboration of task relevant information and perspectives.
- H2: Team characteristics moderate the relationship between diversity and elaboration of task relevant information and perspectives. Group cohesion and group commitment have a positive moderating effect and relational conflicts have a negative moderating effect.

These hypotheses and the hypothesis that will follow in the next paragraph are combined in a conceptual model which can be found in Figure 11.

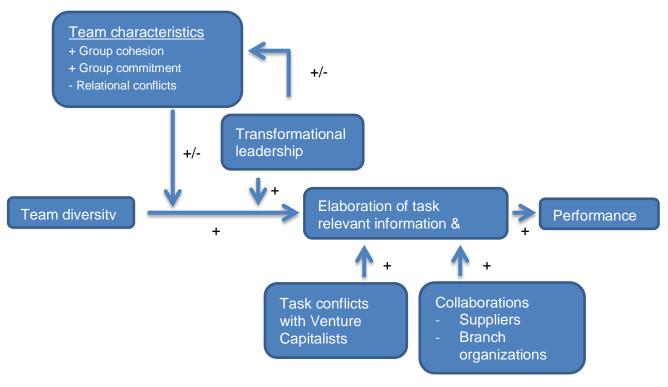


Figure 11 Conceptual model

The main conclusion of the research towards leadership was that both transformational and transactional leadership have a positive effect on the performance of a new venture. Transactional leadership is preferred in high dynamic environment and transformational leadership has a bigger effect in a low dynamic environment (Ensley et al., 2006). Researchers that were interested in the relationship between diversity and leadership found out that transformational leadership affects the balance between the negative and the positive effects that different kinds of heterogeneity have on the performance of an new venture (Kearney and Gebert, 2009). In more detail they found out that transformational leadership moderates the relationship between diversity and the elaboration of task relevant information and perspectives. Age diversity had a negative effect when transformational leadership was low and educational and nationality diversity had a significant positive effect only when transformational leadership was high. Both findings suggest that higher levels of transformational leadership have a positive effect on the relationship between diversity and elaboration of task relevant information and perspectives. For these reasons they argue that transformational leadership has a positive moderating effect on team diversity and the enlarged pool of ideas and perspectives. At the same time, transformational leadership ensures that

diversity will not lead to harmful effects of diversity (Kearney and Gebert, 2009). Thus have a negative effect on relational conflicts and a positive effect on group cohesion and group commitment. The next two hypotheses about transformational leadership are formulated:

- H3: Transformational leadership has a positive moderating effect on the relationship between diversity and the elaboration task relevant knowledge and perspectives.
- H4:Transformational leadership has a positive effect on group cohesion and group commitment and a negative effect on relational conflicts.

In the same research of Knippenberg et al. (2004) was also proposed that the positive effect of diversity on performance was caused by the intervening variable elaboration of task relevant information and perspectives. A direct effect of the variable elaboration on performance is therefore expected. The following hypothesis was researched:

 H5 Elaboration of task relevant information and perspectives has a positive relationship with new venture performance.

#### 3. Research set up

#### 3.1 Research question

In chapter 4 I have discussed the effects of team diversity of the new venture, collaboration, style of leadership and conflicts with venture capitalists on new venture performance. These 4 factors are the start of a further investigation towards new venture success factors. The topics derived from the literature are pooled into the term "organizational factors". Explicitly I would like to state that financial resources, as the availability of capital and market and opportunities are not included in this research. In order to give the Kvk more insights in the success factors of new ventures the following research question will be answered:

### Which set of organizational factors positively stimulate the performance of new ventures?

Already an appreciable amount of research is done on organizational factors that influence performance. The set of organizational factors and hypothesis derived from this study is therefore well grounded. Nevertheless the list of identified organizational factors can perhaps be elaborated on for this study's target group. In order to complete the set of organizational factors the following sub question will be answered:

Sub question 1: Are diversity, leadership, collaboration and conflicts with venture capitalists, factors that affect the performance of new ventures?

The studies that form the base of the hypotheses were executed in different sectors, examples are the health industry or high tech firms. What is missing in the present literature is a verification of these findings in other sectors. For example, West et al. (2003) examined 100 health care teams and argued that clarity about the team leadership is important in order to enhance team innovation. which is a parameter of performance. These findings are contradictory to e.g. Erez et al. (2002) who studied student teams. They argue that a natural selection of the leader will result in the most qualified member to become the leader. The same natural selection method will not work in the health sector because clarity about the team leadership is of high importance. Due to the different circumstances, the effects that are found in previous studies could prove to be different in the industries were the Kvk is active. The sample for this study will therefore exist of new ventures operating from in the province Brabant (the Netherlands) and the findings from previous studies were tested on this sample to see if the same effects can be found. In addition this study explored differences between the target groups; leisure, food, and health because also differences between these subgroups are likely to exist. For the KvK this information is important because with this information they are able to differentiate their advice based on the different needs of their customers. To identify the differences within the sample the next following sub question is identified.

Sub question 2: Can differences be identified in the importance of the organizational factors between the different clusters: Leisure, food and health and if so what are the differences?

#### 3.2 Research objectives

Management research should be both academically rigorous and practically relevant (Van Aken, 2005). According to my information, internal organizational factors have never been studied in the Dutch entrepreneurial market. Mostly there was a focus on a specific market for example health in the research of West et al. (2003). Other researchers that did covered the Dutch market did not researched a complete set of organizational factors but focused on, e.g. strategic alliances (Gils and Zwart, 2004). The combination of the different organizational factors as well as the fact that it's targeted at the Dutch market makes this research academically relevant. The rigorous side of this study is explained based on the added value this research has for the KvK who makes this research possible.

The goal of this research is to identify which internal organizational factors stimulate growth in established firms. One of the primary activities of the KvK is the advice of starting and new ventures. This research can be used as a source for this advice their the available information will be expanded. As described in the internal programs<sup>4</sup> of the key clusters Health, Food and Leisure the goal of the KvK is to shift companies from mid-level companies to top performing companies. The conclusions from this research gives more insights in the factors that makes the companies in the mid-level to grow towards the top performers (figure 12). Once these factors are identified these factors should be measurable, so that the KvK can also use these in their program. The seminars, the

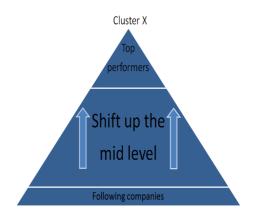


Figure 12 Program KvK

individual support and the tools the KvK provide can be targeted more directly. An example; If the result of the research is that alliances with suppliers for new ventures results in a significantly better performance, the KvK can organize networking events with suppliers or provide a tool which improves the communication between supplier and the new venture.

#### 3.3 Research method

In order to answer the research questions a two stage research design is chosen. A two-stage design is preferred when much about the problem is unknown and if the area is unknown to the researcher (Cooper & Schindler, 2011) and in order to not forget to research variables that later turned out to be important. The main goal of 'Stage 1' is to come up with a complete set of variables that can be tested in the 'Stage 2'. In the first stage the theoretical findings were discussed with some experts working with new ventures and with the founders of the new ventures with the use of qualitative research techniques. The approach and results will be discussed in the chapter 6 followed by 'Stage 2' which is the start of the quantitative research.

<sup>&</sup>lt;sup>4</sup> Kvk, "Programma Speerpuntclusters" 27 oktober 2011. Kvk, "Uitvoeringsplan clusters Leasure, Health and Agro en Food 2013"

#### 4. Stage 1

The goal of 'stage 1' is to partially answer the first sub question and to define the research question in more detail, and more important to come up with a set of variables that were examined in the second phase. The information from stage 1 and the conclusions from the literature were used in order to come up with the final set of hypotheses that were tested in stage 2.

#### 4.1 Data collection

The information in the first phase was gathered using the qualitative 'in-depth interviews' technique. The reason for choosing this design is that the first phase has an explorative character which relies more heavily on qualitative techniques (Blumberg et al, 2011). The interviews had a semi-structured character which means that the interviewer and interviewee could decide which direction the interview went as it proceeded. This does not mean that no questions were prepared. As an interviewer I prepared an interview guide (see appendix 1) which contains a list of specific questions to ensure that the interviewer covered the necessary areas (Blumberg et al, 2011). Also the prepared questions ensured that the different interviews conducted were comparable. A different list of questions was made for the consultants, and the founders of the new ventures. The goal of these interviews was to explore the characteristics of the target group. But also to get some feeling and understanding about the problems the founders of the new ventures are facing while developing their company. Each variable from the conceptual model was discussed with the founder of the new venture and assessed whether this topic applies in his/her situation. Examples questions are given in the next paragraph.

In the interview several types of questions were used:

*Introductory questions*: These type of questions are used to establish a relationship with the interviewee such as:

"I have studied the cluster plan about the specific goals the KvK has with the Health cluster. I have read that your role is to advise and organize events for the established firms. But still, can you tell me some more about your daily activities?"

*Closed questions:* Questions that do not require additional explaining or elaborative structuring, could best be asked in a closed fashion. This makes the indicator related to this type of question easier to compare between new ventures. An example:

"How many people are currently working at the company?"

Open questions: In order to explore the effect of a certain phenomenon on a small population, significant value could be extracted from the explanation or elaboration of an answer to a question. Open questions could sketch a more elaborated picture of a specific situation than could be done with multiple closed questions. An example:

"What are good ways to measure performance and growth in new ventures?"

There the interview had an unstructured character the interviewer is free to make use of follow-up questions and perhaps structuring questions. A follow up questions is used in order to elaborate further on a given question or to clarify if you have understood them correctly. An example is: "That is interesting. Please could you say a little bit more on this?". Structuring questions are used to avoid talking about topics that are not relevant for your study or if the topic is already be covered sufficient.

#### 4.2 Case selection

The data in stage 1 was collected from six consultants and one senior consultant working in the field of Health, Leisure or Food and also from the founders of five new ventures active in these fields. The seven consultants are working at the KvK and responsible for the development of these clusters. Per cluster one consultant is working with the start-up and the so called "self-employers without employees" (ZZPer) and the other consultant is focusing on the development of new

ventures in later stages. As explained, next to the six consultants a senior consultant was also interviewed. He carries the final responsibility and manages the different clusters. He isn't an expert in one of the clusters but was able to give an overview of all the clusters and to identify differences between them. During one meeting two consultants, both active in the same cluster, were invited to discuss their activities and to get more insights in the type of companies they work with. The focus of this research is on the new ventures, and therefore the consultants working with them, but the consultant of the start-ups was also invited in order to get more insights in the total lifecycle of a starting company. Additionally the information supplied by the consultant of start-ups can be useful in order to indicate the differences between the start-up phase and later stages of development. Activities or decisions in the start-up phase can influence further development and could be valuable for this research. The consultant of the more mature ventures was the main source of information in order to define the hypotheses in more detail and to come up with a final set of variables. At the end of the meeting the consultants were asked to come up with two new ventures which could be interviewed to confirm the hypotheses. The reason for choosing the snowball sampling method was because the targeted new ventures were probably more willing to cooperate because of the relationship already established with the consultant. Per cluster two new ventures were interviewed to enlarge the validity of the findings by using multiple sources. In total five new ventures and seven consultants were interviewed from three different clusters.

#### 4.3 Data analysis

During the interviews notes were taken and the same day these notes were worked out and digitalized in word. To start with the consultants I used an introductory question in order to establish the relation with the interviewee. From the given answer I tried to find out whether it related to some conclusions drawn from the literature. The answer of the respondent was the starting point for further discussion. Finally the consultants were asked directly if they think that the found topics from the literature were applicable for new ventures in their field of expertise. The interviews with the new venture founders were slightly different. The founders did not have any prior knowledge about the purpose of my research were the consultants of the KvK were introduced when I started my research by their supervisor. Taking that into account I shortly introduced the topic of my research. The follow up question was for them to elaborate on the information I had on their company, examples are: type of activity, size and date of founding. I asked them about crucial moments, problems or special actions they had taken in their first years as an entrepreneur. Again I searched for points of reference and introduced each topic that I found in the literature. In total twelve people were interviewed. Seven consultants and five founders of new ventures. I optimized the available time by inviting both consultants in one meeting (focus group) and was therefore able to react directly to any possible inequalities between both type of consultants (start-ups vs. more established firms).

The digitalized interviews were coded, the statements and claims made by interviewee were assigned to one of the topics from my literature study. This resulted in eight coded interviews were statements and claims were linked to either collaboration, leadership, diversity, conflicts with venture capitalist or performance measurements. Three interviews were with the consultants and five with the founders of the new ventures. Secondly the results were analysed and combined cross-sectional, which means that a combination of the statements form the different interviews per topic was made. From this combination of statements the results are drawn and discussed in the next chapter. After the results a final set of variables was made and included in the conceptual model. Some variables were not found to be relevant and therefore deleted.

## 4.4 Results stage 1

In this paragraph the results from the semi-structured interviews will be discussed. The names of the consultants are not displayed and a synonym is used. A consultant in the health industry is logically called 'Health consultant' and an entrepreneur active in the food industry 'Entrepreneur Food'. The goal of these interviews was to partially answer sub question 1; "Are diversity, leadership, collaboration and conflicts with venture capitalists factors that affect the performance of new ventures".

The comments are discussed per topic starting with alliances and followed by leadership, diversity, conflicts with venture capitalists and new venture performance.

#### Collaboration

The main conclusion drawn from these interviews is that indeed it's common to have collaborations with other companies, in each cluster. The consultants agree that this is one of the keys to success and necessary to survive in these times. One of the consultants in leisure illustrated the sector as follows: "In the Leisure cluster there is a lot of collaboration but mainly with companies that are active in the same industry". Practically this means that several activities are combined to offer a full package for example to combine an activity with a lunch or dinner.

Next to the discussion about the effect of collaboration on the performance of new ventures the Health consultant also questioned the type of collaboration under investigation. He asked if relations that are mainly used to gather information, were also included. He argued that these relations are even as important, as collaborations that were more product or supply chain related. Possible sources to gather information are, trade organizations, chamber of commerce and universities.

The same reaction was observed with entrepreneurs. They were all involved in some kind of collaboration. Entrepreneur Food 1, who has a grocery store, explained that he works together with his suppliers, which is focused on product or logistic development. He gave the example of introducing a new product as fresh and healthy shots made from wheatgrass. Due to this collaboration the Entrepreneur Food 1 was able to offer an exclusive healthy shot and the producer was ensured of this distribution channel and able to invest in buying the required production resources. Entrepreneur Leisure 1 explained another type of collaboration namely with the province and the forestry commission which he used in other to fulfil his own goals and plans. This entrepreneur organizes canoe trips in the creek owned by the government, due to his collaboration and relationship with the local municipality he was sure of timely maintenance so he could properly carry out his business.

#### Leadership

Consultants from two of the three clusters (Food and Leisure) agreed that the most common style of leadership was transactional leadership. This transactional character is illustrated by a comment of Consultant Food 1 about the food cluster where a high amount of Polish people work; "It works easily with employees from Poland, you just tell them what has to be done before the night falls". What the consultant meant with this statement is that due to the temporary character of the work no strong relationship is build and it is mainly about the work that has to be done rather than personal goals that need to be fulfilled. The founders of the new ventures got a pre-test existing of questions from the MLQ-5X short (Avolio & Bass, 2004) about their style of leadership in order to recognize problems with answering these questions as early as possible. The outcome of this pretest was that they didn't have problems with the type of questions and that these questions could be used for further analysis. The only possible concern that arises is that the measurement was sometimes positively biased. The results showed that the respondents thought that higher numbers were better. A possible reason for this positive biases is that it was self-rating. The list of questions can be found in the appendix 1. An example is the following question which was used to measure the transactional style of leadership; "I make clear what one can expect to receive when performance goals are achieved".

#### **Diversity**

When discussing the term 'group diversity' with either the advisors as the entrepreneurs the reactions are focused on the skills required in a growing company. For example the Health Consultant 1 mentioned that in the health sector an entrepreneurial team often exist of people with a strong R&D focus combined with somebody with more commercial experience. But what they lack is operational experiences; how to organize a production process or how to manage the relationship with suppliers. Organizing a production process is perhaps not the most important in the first three years after founding. But as the new venture start to grow this will results in some problems. What the advisors of the leisure sector explained is that the entrepreneurs have problems with finding good employees. Due to the, to a large extent, seasonal work there is a lack of interest in these sectors and the groups have a lack of cohesiveness. This opinion was confirmed by a camping owner who mainly needed more employees during the summer months and couldn't find people that took enough initiative and responsibility. In response to the question how do you manage diversity in your team Entrepreneur Health 2 said: "In the beginning I was searching for more Heidi's (her name) but found out this was not possible nowadays I selected people based on their capacity and interests". This showed us that diversity is not actively managed and that actually in the beginning an homogeneous team (low diversity) was preferred.

#### Conflict with venture capitalist

Discussing the different options for financing the start-up and development of the companies learned me that new ventures in the sectors Leisure, Health and Food are not dependent on venture capitalists. The more traditional way of getting a loan from the bank or investing their own capital are the main sources of financing. Neither the consultants nor the entrepreneurs recognized having conflicts with venture capitalists. When asking an entrepreneur in the food industry about conflicts with venture capitalist he responded that "we don't have conflicts with venture capitalists, we only have conflicts with suppliers who force us to buy products". His reaction and switch to another topic showed that this topic was not applicable.

#### 4.5 Conclusion stage 1

From the qualitative interviews I confirmed that the variable collaboration should be researched in terms of collaboration with other companies but also with organizations that provide information (branches organizations etc.). This is an important distinction and therefore the variable 'Collaborations' was split and measured separately so differences could be identified. In order to not bias the results the variable leadership was measured using various measurements per company. The measurements were not only self-rated but the employees provided information about the style of leadership too. The decision was made due to the discovery of the positively biased ratings during the pre-test of measuring the style of leadership.

The discussion about diversity learned us that most entrepreneurs are not aware about the positive effect a divers team can have. When adding new people to the organizations the selection is mainly based on practical requirements. None of the entrepreneurs was involved with a venture capitalist, and the consultants did not recognized problems with them either, thus the decision was made to not include this variable in the research. The final conceptual model that was tested with the survey is presented in figure 13. The team characteristics are not researched in stage 1 but directly integrated from the literature study.

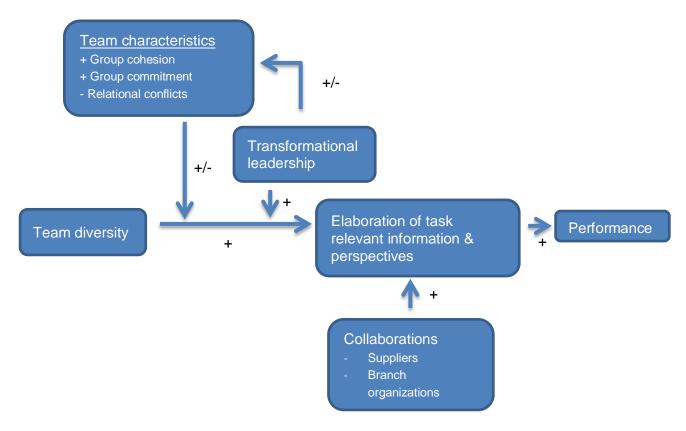


Figure 13 Final conceptual model

The final set of hypotheses:

- H1: Team diversity (a) and collaborations (b) have a positive relationship with the elaboration of task relevant information and perspectives.
- H2: Team characteristics moderate the relationship between diversity and elaboration of task relevant information and perspectives. Group cohesion and group commitment have a positive moderating effect and relational conflicts have a negative moderating effect.
- H3: Transformational leadership has a positive moderating effect on the relationship between diversity and the elaboration task relevant knowledge and perspectives.
- H4:Transformational leadership has a positive effect on group cohesion and group commitment and a negative effect on relational conflicts.
- H5 Elaboration of task relevant information and perspectives has a positive relationship with new venture performance.

#### 5. Stage 2

After the qualitative interviews in the first phase the final hypotheses were tested with a quantitative research survey. With this survey the conceptual model is verified and the differences between the clusters Health, Leisure and Food are indicated. With the combination of the results from stage 1 and 2 the first research question can be answered, after this phase also research question two can be answered.

First the founder of the new venture was contacted by phone. The founder is the one who administratively is recognized as the manager at the chamber of commerce. During this phone call the purpose of the research and the possible benefits for the respondent were explained and they are asked if they were interested in joining the research. If they decide to cooperate a questionnaire was send to them by email. Next to their cooperation also the cooperation of 4 employees was required (if applicable). In order to be able to send the questionnaire also their contact details were asked to the founder. A short explanation in the email supplied them with the necessary information and explained that their company decided to join the research and that their cooperation was required.

The variables were measured once, a snapshot or a so called cross-sectional study. The complete preliminary research design of the second phase is visualized in figure 10. As explained this research investigated the effect that internal organizational factors have on the performance of new ventures through the variable elaboration of task relevant knowledge and perspectives.

#### 5.1 Control variables

Next to the independent variables included in the conceptual model also other variables can have an effect on the performance. Most variables can safely be ignored (Cooper & Schindler, 2011) but still a check is needed if the results are influenced by them. Therefore a set of control variables (size of the venture, age of the venture, industry) are added to the research. These control variables were included because they were found to be most relevant in a meta-analysis towards new venture performance (Murphy et al., 1996). The addition of the control variables improves the generalizability of the research (Murphy et al., 1996). This research is targeted at new ventures which consist of various individuals. So the variables are measured at several individuals of the new venture and aggregated to a combined measurement. From some new ventures we got a reaction of three people and from another we got five reactions. So the aggregation is also based on either three or five people. The differences between the amount of people in the aggregations can have an effect on the regression analysis and bias the results. Therefore additionally to these three variables also the variable measurement size is added which controls for this possible violation effect.

#### 5.2 Sample

The population under examination exists of small and medium (new) ventures in Brabant (the Netherlands). Small ventures have less than 50 employees and an annual turnover less than 10 million euro. Medium ventures employ fewer than 250 persons and the annual turnover does not exceeds 50 million<sup>5</sup>. The examined ventures operate in the clusters Food, Health or Leisure. In the Netherlands the amount of self-employers without employees (in Dutch ZZP'er) has been increasing over the last ten years<sup>6</sup>. These companies are new ventures but are not within the scope of interest of this study because they don't have or at least fewer organizational factors that influence performance. For example leadership and diversity within the team does not apply in this case. Therefore additionally to the age also the amount of people within the organization is important. The new ventures under study exist of at least 3 people and have a maximum 250 people working in the company.

<sup>&</sup>lt;sup>5</sup> European Commision, The new SME definition, User guide and model declaration.

<sup>&</sup>lt;sup>6</sup> http://www.cbs.nl/nl-NL/menu/themas/arbeid-sociale-zekerheid/publicaties/artikelen/archief/2012/2012-3611-wm.htm

The companies where this study is targeted at have the following characteristics:

- Situated at Brabant (the Netherlands)
- Active in the clusters: Health, Leisure and Food
- Between 3 and 10 years in business
- Between 3 and 250 employees

A seven year sample, from 2003-2009, is selected from the companies registered in the Dutch trade register. By selecting this period I ensured that the company already is in business for more than 3 years and is defined as a growing company. A filter was set to ensure that the companies selected were not a subsidiary company. What happens is that a parent company start a (new) subsidiary when their activities are extending away from their main industry or activities. Administratively this is a new company but not a new venture because they could be already doing business for over 35 years. In order to ensure that the new ventures were started in the last ten years a filter was set that the new ventures only should exist of starters, this definition is controlled by the employee that administratively processed the inscription. The final sample exist of 255 new ventures active in the three clusters Food, Health and Leisure.

The companies were contacted by phone to ask if they were willing to participate in the research. The first questions were used to verify the basic characteristics of the companies (years in business and amount of employees), these questions also improved the recognition and therefore the willingness to participate. Other actions in order to increase the response rate were:

- 1. Gift, everybody who was willing to participate was invited to a seminar especially organized and targeted at new ventures. Richard Stomp with his subject "Straatjutten" will be organizing this workshop. The seminar was held on the 28 of November.
- 2. Results will be shared and a summary for each company will be made. With this summary they will be able to compare their score on for example Team diversity to the average of companies in their business. This can be used in order to improve their own activities.
- 3. Follow up emails to both founder and employees after one week if they didn't respond on the survey yet.
- 4. Follow up calls if they didn't responded after two weeks.
- 5. Follow up emails after spoken to the founder to put the survey under their attention again.

#### Response rate

A total of exactly 100 individuals participated in the survey. To be able to connect the different individuals to the company where they are working for, a reference number was used. Two participants did not fill in this number correctly, resulting in the uselessness of their measurements. In total 98 measurements could be used in this research. From these 98 measurements 57 (58%) were male, and 40 (41%) were female (one missing value). All participants held at least an secondary degree in total 12 (12%), 36 (37%) hold an intermediate vocational education, 45 (46%) hold an higher vocational education (HBO) and 5 (5%) hold a master's degree. Frequencies about the participants age, field of education and working experience and the two already discussed can be found in Appendix 2. The participants are working at 26 different companies which makes the response 10.2%. In total 67 (26.2%) agreed to join the research but later in the process dropped out due to several reasons. Some reported the survey as being to theoretical others were not willing to share information about their performance. Despite the numerous reminders sent to increase participant response some simply did not respond.

#### Measurement

In the survey several types of measurements were used and the appropriate choice of scale depended on what information was needed. A nominal 5-point Likert scale was for example used to measure the independent variables but also a nominal scale was used to identify the type of business were the company is active. In the next paragraphs the used scales are described and separated in company information, independent variables and dependent variables.

#### Company information

In order to gather more information several general questions about the characteristics of the company were asked. In table 1 you can find the specific questions and scales used. The measurement of the branches is based on the subdivisions used by the Kvk. The reason to use this list of subdivisions is due to the completeness and used within the Kvk which improves the internal comparability.

Company details						
Question	Scale	Measurement				
How many employees does your company have	Ratio					
What is your function within the company (more as one option possible)	Open					
When is the company founded	Ratio	Year				

table 1 Company details

#### 5.3 Dependent variable Performance.

No fixed set of measures for assessing new venture performance could be made (Kaplan, 1983, Venkatraman and Ramanujam, 1986, Steers, 1975). As explained in the literature study the measurement of performance was based on multiple factors because reliability is much higher than when a single factor is used (Murphy et al., 1996).

The following items were measured:

- Net profit margin (profit/revenue)
- Profitability growth
- Revenue
- Revenue growth
- Revenue per employee
- Employment creation

The net profit margin and profitability growth were measured in percentages with an open question and this information was asked for the last two years. Profitability is the total profit shared by the total revenue, this explanation is also provided in the survey. Revenue (growth) is measured on an ordinal scale where the respondent can choose between 8 different options. Again this information was asked for the last two years in order to measure growth. Table 2 includes the open question of profitability and the ordinal scale to measure the turnover. Employment creation is the increase of employees over the years which is measured using an open question where absolute numbers are asked for the years 2011 and 2012. Revenue per employee could be calculated with the information already requested.

	2011	2012
Turnover 500.000 – 1.000.000 eu 1.000.000 – 2.000.000 eu 2.000.000 – 4.000.000 eu		
	0-50.000 euro	0-50.000 euro
	50.000 - 200.000 euro	50.000 - 200.000 euro
	200.000 – 500.000 euro	200.000 – 500.000 euro
Turnovor	500.000 – 1.000.000 euro	500.000 – 1.000.000 euro
Turnover	1.000.000 – 2.000.000 euro	1.000.000 – 2.000.000 euro
	2.000.000 - 4.000.000 euro	2.000.000 - 4.000.000 euro
	4.000.000 – 10.000.000 euro	4.000.000 – 10.000.000 euro
	10.000.000 or more	10.000.000 or more

Table 2 Dependent variable

#### 5.4 Independent variables

For each independent variable, established constructs were used to measure these variables in our sample. The respondent was asked to rate his company or himself mostly on a 5-point Likert scale. For each variable different ranges are used depending on the original constructs.

#### **Diversity**

In previous work a distinction is made between two types of diversity, demographic and functional diversity. These two types of diversity are recognized as the most important in the research of diversity (Knippenberg et al., 2004). Demographic diversity refers to the degree to which, in this case a new venture, is heterogeneous with respect to demographic attributes. In this research the demographic attributes Age and Gender are included. Functional background is a less visible underlying attribute that is more job-related. Functional diversity is measured with the level of education, field of study and the previous working experience (Knippenberg et al., 2004). Diversity indexes are sometimes cumulated to indicate the total amount of diversity in a team but the decision is made not to do this. In the research of Harrison and Klein (2007) several reasons are given why this is unwise. One of the reasons was that the team, or new venture, itself does not have diversity (Jackson et al., 2003) but that the individuals within the new venture yields the diversity.

The level of diversity is calculated using the Blau's index of heterogeneity for categorical (nominal) scales and is frequently used for these items (Foo, 2011). The Blau index is calculated by (1-∑pi²), where p is the proportion of group members in a category and i is the number of different categories represented in the team. The scores of this formula gives a score beteen 0 (low diversity and 1 (high diversity). Table 3 presents the different scales used to identify diversity within the new venture and the used scale.

Question	Scale	Measurement
Function	Open	
Gender	Nominal	Male
		Female
Age	Interval	Inverval steps of 5 years
Education	Ordinal	Secondary education Intermediate vocational education (MBO) Higher vocational education (HBO) University level
Field of study	Nominal	11 Categories
Branche previous work	Nominal	18 Categories

table 3 Diversity measurement

#### Elaboration of task relevant information and perspectives

The elaboration of task relevant information and perspectives was measured using the set of statements from the research of Kearney and Gebert (2009). These four statements are: (1) The members of this team complement each other by openly sharing their knowledge; (2) The members of this team carefully consider all perspectives in an effort to generate optimal solutions; (3) The members of this team carefully consider the unique information provided by each individual team member; (4) As a team, we generate ideas and solutions that are much better than those we could develop as individuals. The questions are measured on a 5 point scale ranging from 1 (strongly disagree) to 5 (strongly agree). The Cronbach alpha of this and other variables will be discussed at the end of this chapter.

#### Transformational leadership

Transformational leadership is measured with the Dutch translation of the Multifactor Leadership questionnaire (MLQ-5X short; Avolio & Bass, 2004; Den Hartog et al., 1997). This model has been used predominantly to measure the style of leadership and is recognized as a valid instrument (Antonakis, 2001). In the questionnaire the five scales of transformational leadership (idealized influence attributed, idealized influence behaviour, Inspirational motivation, intellectual stimulation an individualized consideration) are captured with four different questions per scale. The outcome of this measurement indicated the level of transformational leadership used. The traditional response format makes use of a scale ranging from 0 (not at all) to 4 (frequently if not always) but this scale is changed to 1 to 5 in order to be consistent in the entire survey. Three sample questions are showed in table 4.

Re-examine critical assumptions to question whether they are appropriate 1 2 3 4 5					
Question	Not at all (	Once in awhile	Sometimes	Fairly often	
Re-examine critical assumptions to question whether they are appropriate	1	2		3 4	. 5
Talks about my most important values and beliefs	1	2	3	3 4	5
Seeks different perspectives when solving problems	1	2	3	3 4	. 5

**Table 4 Transformational leadership** 

#### Collaboration

In this survey the amount of collaboration, the type of collaboration and the reason of the alliances are questioned. The first question was if the new venture collaborated with other companies, with a yes/no answer. If the answer was yes respondent was asked with whom he collaborates on a nominal scale. The options suppliers, competition and customers are given but also the option "others namely......" is given. The same two question were asked for gaining external advise and other nominal options, for example knowledge institutions, were given. The amount of collaboration was measured on a ratio scale. With the skip logic function the first questions is; "Did you cooperate with one or more companies this year?" (yes/no) If the answer was "yes" the respondent could reply on a ratio scale how often he collaborated during the last two years. If the answer was "no" the next question was skipped. The last question about the collaboration was about the reason why the new ventures collaborated. Again the respondent could choose between several options for example; insufficient resources.

#### Team characteristics

Team characteristics are measured with three variables, relational conflicts, group cohesion and group commitment. These are only three constructs of a long list (Williams and O'Reilly, 1998) others are high turnover intentions, low satisfaction and identification to the group. If a group is likely to score low on group cohesion and low on group commitment or high at relational conflict it will bias the relationship between diversity and the elaboration of task relevant information and perspectives.

Relational conflict was measured using the scale of Pearson et al. (2002). With three items the respondent is asked to indicate the existence of relational conflict within his team. The questions are "How much friction is there in your team on the personal level?", How often are there tensions between team members of this team" and "How often are members of your team angry at each other?". The questions are rated on a 5 point Likert scale from 'never' to 'always'.

Organizational commitment is measured using the scale of Schyns and van Veldhoven (2010). This construct exists of 8 items for measuring the organizational commitment. This measurement is not included in the survey of the original founder because the assumption is made that the founder is committed to his own company and also the type of questions could not be asked to the founder. For example the question: "It would take very little negative change to make me leave?" cannot be asked to the founder. The respondent is asked to respond on the items on a 5 point Likert scale from "totally disagree" to "totally agree.

In the research of Riordan and Shore (1997) cohesiveness is measured using 7 items and is assessing the degree to which group members are attracted to each other, the general moral of the group and the degree to which group members coordinated efforts. Again a 5 point Likert scale

from "totally disagree" to "totally agree is used. Three examples are: (1) "Most of the employees in my work group get along well with each other", (2) "Most of the employees in my work group trust each other", (3) "Most of the employees in my work group do their fair share of the work".

#### Construct reliability

Al the Cronbach's alpha's (table 5) show good to excellent results. Only the cronbach's alpha for organizational commitment was 0.702 which is relatively low but still recognized as good (Kline, 1999). This low score is dedicated to the smaller sample size as the other items. The cronbach's alpha is calculated on only 74 cases were the calculation of the other variables included 100 cases due to the founders of the new ventures who did not provided information on commitment.

Variable	Cronbach's alpha	Number of items	N
Transformational leadership	0,944	20	100
Elaboration of task relevant	0,863	1	100
information and perspectives	0,803	4	100
Relational conflict	0,880	3	100
Organizational commitment	0,702	8	74
Organizational cohesion	0,860	7	100

table 5 Descriptives Cronbach's Alpha

#### 5.5 Factor analysis

As explained in the research set up, the questions used are proven constructs employed by other researchers (Kearney and Gebert, 2009; Avolio & Bass, 2004; Pearson et al., 2002; Schyns and van Veldhoven, 2010). Nevertheless a common factor analysis is performed in order to show the validity of these constructs. The goal of this factor analysis is to explore the data and not to reduce the data. The constructs of the independent variables: Transformational leadership, Relational conflict, Group cohesion and Organizational commitment, are added in the analysis. Perhaps a confirmatory factor analysis (CFA) would be preferable in this situation but the computer program to do this research was not available to me. Therefore the decision is made to use a standard exploratory factor analysis (EFA) with an oblique rotation. The results are drawn from the structure matrix because in the structure the results are less affected by the relationships between the factors. The structure matrix (appendix 3) shows us that the questions from the Transformational leadership construct in particular correlate high with other questions from Organizational commitment, Group cohesiveness and Relational conflicts. This confirmed that indeed the style of leadership influences these factors as already proposed in the conceptual model. In order to continue with the factor analysis the questions of the Transformational leadership construct were deleted and the analysis repeated. The scree plot shows us that the amount of factors to be distracted is three which is confirmed by the theory (prior criteria) and therefore this is set as a restricting in the analysis. The model has a significant Barlett's Test and the KMO's is above 0.7 which shows us good results. In this case we will look at the pattern matrix because this is the most used option and easier to read (Field, 2009). The questions of the variable Relational conflict correlate high on one factor were three questions from the variable Group cohesiveness also correlate high (Table 6). The correlation of the Relational conflict are negative were the questions of Group cohesion are positive. The correlation of de questions from two different constructs show us that the factors are not totally independent but this is not a reason for concern because both are 'Team characteristics'. After deletion of the questions from the conflict construct the Pattern Matrix shows us perfect correlations on just two factors (Table 7). Which shows us that these factors are independent.

Pat	ttern Mat	rix					
		Factor					
	1 2						
Commitment Q1		0,550					
Commitment Q2		0,375					
Commitment Q3		0,636					
Commitment Q4	0,031	0,554					
Commitment Q5		0,413					
Commitment Q6		0,328					
Commitment Q7		0,370					
Commitment Q8		0,416					
Cohesion Q1	0,645						
Cohesion Q2	0,559						
Cohesion Q3	0,501		0,443				
Cohesion Q4			0,738				
Cohesion Q5			0,460				
Cohesion Q6			0,537				
Cohesion Q7			0,680				
Conflict Q1	-0,866						
Conflict Q2	-0,780						
Conflict Q3	-0,757						

Patter	n Matrix	
	Fac	tor
	1	2
Commitment Q1		0,496
Commitment Q2		0,372
Commitment Q3		0,587
Commitment Q4	0,407	0,463
Commitment Q5		0,496
Commitment Q6		0,379
Commitment Q7		0,325
Commitment Q8		0,478
Cohesion Q1	0,791	
Cohesion Q2	0,739	
Cohesion Q3	0,851	
Cohesion Q4	0,609	
Cohesion Q5	0,526	
Cohesion Q6	0,559	
Cohesion Q7	0,704	

table 7 Pattern Matrix 3 factors

table 6 Pattern matrix 2 factors

#### 5.6 Results stage 2

The relations between the variables are explained using hierarchical linear regressions. Possible differences between the groups are explained using the Anova method. Probably the use of a Structural Equition Modeling method would be preferred when mediating variables are present but this is not possible due to relatively small sample size of 100 measurements separated over 26 different new ventures. The analysis were executed with the use of the software program SPSS.

A Pearson correlation measurement was done to explore the data collected with the survey. This is the, among researchers, most widely used test for exploring the relationships between variables (Field, 2009) and was performed with SPSS. Possible relations can be found in the correlation matrix of this test. This provided me with a first picture on possible relationships. As can be seen in table 8 several relations are found to have a positive or negative relationship. The three functional diversity measurements hold significant relations with each other. Level of education diversity is positively related to field of study diversity (r=0.415 p < 0.1). Working experience diversity with both Level of education diversity (r=0.618 p < 0.01) and Field of study diversity (r=0.571 p < 0.05). These correlations confirm that they measure one factor which is called functional diversity. Further the Elaboration of task relevant information and perspectives is positively related to three other variables. First this variable is positively related to organizational commitment (r=0.724, p < 0.01) to organizational cohesion (r=0.670, p < 0.01) and to transformational leadership (r=0.537, p < 0.05). Transformational leadership is also positively related to work experience diversity (r=0.601, p < 0.01), to organizational commitment (r=0.470, p < 0.05) and to organizational cohesion (r=0.542, p < 0.01). A negative significant relationship could be identified between the conflict and cohesion variables (r=-0.659, p < 0.01). In the remainder of this chapter the results of each hypothesis which was tested with a linear regression model is shown. The results are showed and finally discussed in the conclusion. In all models the control variables size, age, industry and measurement size were included.

	matrix

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Age Diversity	1													
2 Gender diversity	-0,121	1												
3 Level of education diversity	0,19	0,168	1											
4 Field of study diversity	0,232	-0,183	0,415*	1										
5 Work experience diversity	0,007	-0,064	0,618***	0,571**	1									
6 Commitment	0,152	-0,304	0,219	-0,24	0,178	1								
7 Conflict	0,06	-0,326	-0,196	0,102	-0,028	-0,089	1							
8 Cohesion	0,006	0,235	0,247	-0,029	0,23	0,257	-0,659***	1						
9 Transformational leadership	-0,041	-0,264	0,146	0,201	0,601***	0,470**	-0,187	0,542**	1					
10 Elaboration	0,221	0,015	0,348	-0,126	0,217	0,724***	-0,287	0,670***	0,537**	1				
11 Leisure	-0,436*	0,133	0,118	0,081	0,269	-0,152	0,183	0,029	0,036	-0,068	1			
12 Health	0,462*	-0,151	-0,173	-0,079	-0,323	0,123	-0,054	0,047	-0,004	0,088	-0,896***	1		
13 Age	0,195	-0,06	0,142	-0,053	0,158	0,212	-0,092	-0,139	-0,184	-0,087	0,247	-0,339	1	
14 Size	-0,28	-0,119	0,35	-0,364	0,565**	0,094	-0,101	-0,072	0,164	-0,101	-0,021	0,032	0,073	1
15 Measurementsize	0,707***	-0,041	0,281	-0,037	0,081	0,121	-0,206	0,349	0,066	0,327	-0,504**	0,563**	-0,088	0,181
N=19	*p<0,1	** p<0,05	***p<0,01	·			·		·		·	·	·	

table 8 Pearson correlations

#### Checking outliers

Outliers are cases that represent an observation very different from other observations (Field, 2009). In our sample we checked for possible outliers with the use of several boxplots. For the dependent as well as the independent variables (appendix 4). The boxplots show three cases (observation 100201, 302201 and 303101) which have values that were not included in the boxplot. This can mean that these are outliers but in this case they are not. A better look at the values of these observations shows us that the values are indeed lower as the other cases but are not unrealistic or extreme. It is therefore decided to not exclude or transform these cases.

#### Regression

H1: Team diversity (a) and collaborations (b) have a positive relationship with the elaboration of task relevant information and perspectives.

To start, the relationship between Team diversity and the Elaboration of task relevant information and perspectives was investigated (figure 14).

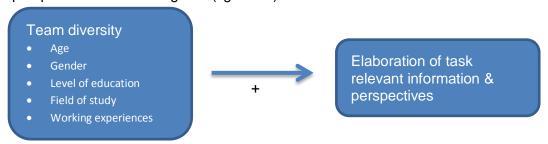


Figure 14 Relationship between team diversity and Elaboration

As explained in the method section the most used measurements in diversity research are demographic diversity and functional diversity.

Demographic diversity is measured by differences in:

- 1. Age diversity
- 2. Gender diversity

Functional diversity is measured by differences in:

- 3. Level of education diversity
- 4. Field of study diversity
- 5. Working experience diversity

The amount of diversity is calculated using the Blau's index. The Blau's index is calculated by 1- $\Sigma p^2$ i where 'p' is the proportion of group members in a category and 'i' is the number of different categories represented in the team. An example: a group of 4 people have 2 members in the age of 21-25, 1 member in the age of 26-30 and 1 member in the age of 51-55. The calculation will be 1- $(0.5^2+0.25^2+0.25^2)=0.625$ . The groups score a 0.625 on gender diversity where a group of 4 people from the same age would have a score of 0 (1-1<sup>2</sup>=0).

The first step of the linear regression process was to add the control variables, see table 9. The control variables didn't show any significant results. After this calculation a linear regression is modelled with the five types of team diversity as predicting variables for the dependent variable "Elaboration of task relevant knowledge and perspectives". An enter method of putting the variables in the equation is used because previous knowledge exist about this phenomenon which makes this the appropriate function (Field, 2009). The regression model as a whole (F-value) does not show a significant result. Nevertheless the R squared change is significant. The variable Diversity in field of study has a significant negative relationship (r=-1.077, p<0.01) and Work experience diversity has a positive relationship (r=0.742, p<0.1) with the Elaboration of task relevant information and perspectives. The three other diversity measurements do not yield any significant results. Nevertheless I found some evidence of a relationship between diversity and elaboration of task relevant information and perspectives. A positive effect could only be found for the work experience diversity and therefore the hypothesis could only partially be confirmed.

Hierarchic	Hierarchical regression analysis results		on	
	Variables	Beta	R <sup>2</sup>	ΔR²
Model 1:			0,159	0,159
Control	Leisure	0,033		
variables	Health	-0,171		
	Age	-0,100		
	Size	-0,171		
	Measurementsize	0,462		
	F-value	0,493		
Model 2:			0,726	0,567*
Linear	Leisure	0,147		
effect	Health	-0,242		
	Age	-0,274		
	Size	-0,411		
	Measurementsize	1,081**		
	Age diversity	-0,157		
	Gender diversity	-0,270		
	Level of education diversity	0,232		
	Field of study diversity	-1,077***	:	
	Work experience diversity	0,742*		
	F value	2,120		
	N=19			
	*p<0,1			
	** p<0,05			

table 9 Regression diversity on elaboration

\*\*\*p<0.01

### **Collaborations**

The effect of having external collaborations or going to events in order to gain external advise or information are proposed to have a positive effect on the variable Elaboration of task relevant information and perspectives (figure 15). The founder of the new venture responded with a yes or no on the following questions.

About external advice:

Do you use external advice or do you go to events to gather information? Examples are: individual advice, seminars of (network) events.

And about collaborations:

Do you collaborate with other companies? For example product development or collaboration in any other way.



Figure 15 Relationship collaborations and elaboration

I compared the regression models of the groups of the ventures that do go to events and have collaborations with the group of new ventures that don't. The variable is dichotomous which means that the analysis had to be done with a dummy variable. A dummy variable for the people who responded yes was included in the analysis to see what's the effect on the elaboration. What can be concluded from the regression model in table 10 is that going to events doesn't have a significant effect on the variable Elaboration of task relevant information and perspectives. The same analysis is done for having collaborations (table 11) with other companies. Again the relationship between having collaborations and the elaboration of task relevant information and perspectives could not be confirmed. The variable is not significant.

To conclude, the first hypothesis that diversity and collaborations have a positive effect on the elaboration of task relevant knowledge and perspectives could not be confirmed.

Hierarchio	lierarchical regression analysis Elaboration				Hierarchical regression analysis Elaboration				
	Variables	Beta	R²	ΔR²		Variables	Beta	R <sup>2</sup>	$\Delta R^2$
Model 1:			0,144	0,144	Model 1:			0,144	0,144
Control	Leisure	0,176			Control	Leisure	0,176		
variables	Health	0,447			variables	Health	0,447		
	Age	0,207				Age	0,207		
	Size	-0,099				Size	-0,099		
	Measurementsize	-0,033				Measurementsize	-0,033		
	F-value	0,637				F-value	0,637		
Model 2:			0,155	0,011	Model 2:			0,171	0,028
Linear	Leisure	0,236			Linear	Leisure	0,074		
effect	Health	0,446			effect	Health	0,312		
	Age	0,196				Age	0,218		
	Size	-0,137				Size	-0,107		
	Measurementsize	0,003				Measurementsize	0,015		
	Advice	0,124				Collaboration	-0,181		
	F-value	0,55				F-value	0,62		
•	N=25					N=25			
	*p<0,1					*p<0,1			
	** p<0,05					** p<0,05			
	***p<0,01					***p<0,01			

table 10 Regression analysis Advice

table 11 Regression analysis Collaborations

### Moderating effect

H2: Team characteristics moderate the relationship between diversity and elaboration of task relevant information and perspectives. Group cohesion and group commitment have a positive moderating effect and relational conflicts have a negative moderating effect.

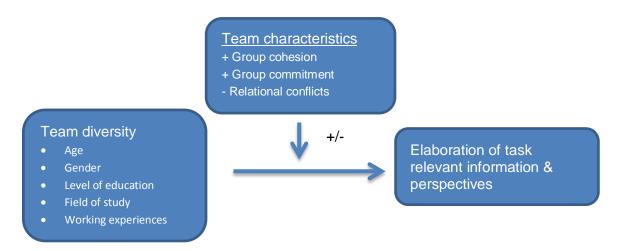


Figure 16 Team characteristics

Not all diversity measurements were found to have a significant relationship with elaboration of task relevant information and perspectives. Only 'Field of study diversity' and 'Working experience diversity' had significant relations with elaboration. Nevertheless the moderating effect of the 'Team characteristics' are investigated because it is proposed that group cohesion and group commitment have a positive effect and relational conflicts a negative effect on the relationship between team diversity and elaboration. A graphical representation can be found in figure 16. Again the moderating effect is measured for each type of diversity individually.

The first step in a moderating regression analysis exists of centering the independent variable (diversity) and the moderating variables (commitment, cohesion and conflict) and include them in the analysis. The regression analysis for moderating effects exists of three steps. In the first step (model 1) the control variables are added in the regression. As already is found the control

variables don't have a significant effect on the elaboration of task relevant knowledge and perspectives. The second step (model 2) includes the control variables and the two independent variables. From this analysis the direct effect of the independent variables on the dependent variable can be found. And finally in step 3 (model 3) the interaction variable is added to the regression model in order research the effect of the moderation. Two things are important when analysing the moderating effect. First I checked if the moderator has an significant effect (significant model and significant interaction variable). Secondly does model 3 (with the interaction variable) has an increased amount of variance explained (R Square changed). In total 15 regression models are analysed (5 types of diversity X 3 types of moderators).

Table 12 shows the results of the regression analysis between the independent variable 'Age diversity' and the 'Commitment' moderator. Model three is significant with also a significant predictor for 'Commitment' which means that commitment has a direct effect on the dependent variable of Elaboration of task relevant knowledge and perspectives. The interaction variable of 'Diversity Age' and 'Commitment' are not significant and therefore the moderating effect of commitment could not be proven. Similar non-significant results were also find for the moderators 'cohesion' and 'relational conflict' with the Diversity measurement Age (see appendix 5). The same counts for the other demographic diversity measurement Gender. No significant moderating effect could be found between none of the moderators. To conclude none of the moderators were found to have a significant effect on one of the two demographic diversity measurements. Only commitment was found to have a positive direct effect on the dependent variable elaboration. The results of the regression analysis can be found in appendix 5.

	Variables	Beta	R <sup>2</sup>	$\Delta R^2$
Model 1:			0,159	
Control	Leisure	0,033		
variables	Health	-0,171		
	Age	-0,100		
	Size	-0,171		
	Measurementsize	0,462		
	F-value	0,493		
Model 2:			0,753	0,593**
Linear	Leisure	0,144		
effect	Health	-0,241		
	Age	-0,328		
	Size	-0,219		
	Measurementsize	0,428		
	Commitment	0,810***		
	Diversity Age	0,028		
	F-value	4,781**		
Model 3:			0,784	0,032
Interaction	Leisure	0,13		
effect	Health	-0,265		
	Age	-0,425*		
	Size	-0,165		
	Measurementsize	0,32		
	Commitment	0,735**		
	Diversity Age	0,141		
	Age * Commitment	-0,221		
	F-value	4,542**		
	N=19			
	*p<0,1			
	"p<0,05			

table 12 Moderating analysis diversity Age and Commitment

The same analysis were done for the other diversity measurements, the functional measurements. These regression analyses yield some significant results. Because it's not possible to show all of the results from the different analyses, only the model significance and the moderating effects are displayed (see table 13). What I found was that only the models of the 'commitment' and 'cohesion' moderators were significant. None of the models of the moderator 'Relational conflict' were significant.

From the significant models the following interaction variables were found to be significant:

Level of education diversity x Cohesion Field of study diversity x Commitment Field of study diversity x Cohesion Working experience diversity x Cohesion

The interaction variable between 'Level of education diversity' and 'Commitment' is not significant (p <0.114) but is close to be significant. Therefore also these interaction effects were included in the simple slope analysis which is explained in the next paragraph.

Variables	Beta	F-value	R <sup>2</sup>	ΔR²
		5,868***	0,824	0,053
Level of education * Commitment	-0,375			
		1,141	0,477	0,190*
Level of education * Conflict	0,611*			
		2,518*	0,403	0,151*
Level of education * Cohesion	-0,538*			
		11,718***	0,904	0,122***
Field of study * Commitment	-0,449***			
		1,135	0,476	0,114
Field of study * Conflict	0,554			
		2,343*	0,652	0,134*
Field of study * Cohesion	-0,515*			
		4,478**	0,782	0,01
Working experience * Commitment	-0,163			
		2,087	0,625	0,326**
Working experience * Conflict	0,681**			
		3,109**	0,713	0,223**
Working experience * Cohesion	-0,613**			

N=19

table 13 Summary of the moderating effects of three Functional diversity measurements on Elaboration

### Simple slope analysis

The significant interaction models were further analysed and the interactions effects were plotted. With a so called simple slope analysis the differences between high and low values of the moderator and low values were identified. The means, standard deviations and regression coefficients are used in order to draw the regression line for the low moderating values and high moderating values. The differences between these two lines are -1 standard deviation from the mean and +1 standard deviation from the mean. The same analysis also calculates the significance of each line in order to be able to draw conclusions on the effect of each moderator. So this is only done for the significant models from significant models for the previous chapter.

Level of education diversity x Commitment Level of education diversity x Cohesion Field of study diversity x Commitment Field of study diversity x Cohesion Working experience diversity x Cohesion

A graphical representation of each moderating effect is showed in figure 17. The regression analysis for the moderating effect of cohesion on the relationship between working experience diversity and elaboration showed a significant model (r=-0.613, p< 0.05). After the simple slope analysis the individual lines for low (p = 0.160) and high cohesion (p=0.177) didn't yield any significant results. This means that I can't say anything about the actual moderating effect of cohesion on the relationship between Working experience diversity and elaboration and therefore this analysis is excluded.

<sup>\*</sup>p<0,1

<sup>\*\*</sup> p<0,05

<sup>\*\*\*</sup>p<0.01

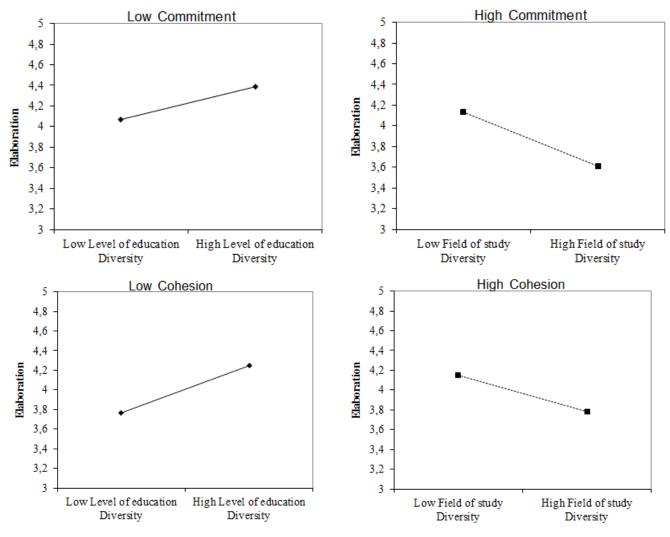


Figure 17 Significant moderating effects of Commitment and Cohesion

As we predicted 'Team characteristics' have an effect on the relationship between the different diversity measurements and the dependent variable elaboration of task relevant information and perspectives. The four graphs displayed are the significant results drawn from the simple slope analysis. The relationship between level of education diversity and elaboration was positive for low cohesiveness and committed groups. For this variable there was no significant main relationship of Level of educational diversity on elaboration so nothing can be said about high cohesive and committed teams.

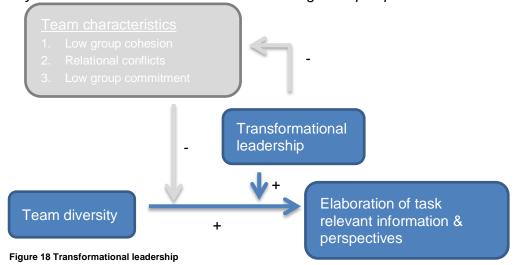
The relationship between field of study and elaboration has a negative main effect and this negative effect is even more in higher cohesive and committed teams.

To conclude level of education diversity has a positive relationship with elaboration in low cohesive and committed teams. Field of study has a negative relationship with elaboration and this negative relationship is stronger in higher cohesive and committed teams.

Due to the moderating effect of cohesion and commitment the effect of diversity on the elaboration (hypothesis 1) can be proven. Other than predicted cohesion and commitment did not necessarily have a positive effect as the graphs of the higher cohesive and committed new ventures show. From these analysis also a by-product could be found namely a direct effect of 'group commitment' and 'group cohesion' on the 'Elaboration of task relevant knowledge and perspectives'.

### Leadership

H3: Transformational leadership has a positive moderating effect on the relationship between diversity and the elaboration task relevant knowledge and perspectives.



In this hypotheses the effect of transformational leadership on the relationship between diversity and the variable elaboration of task relevant information and perspectives is researched. In figure 18 you can find a graphical representation of this relation. The 'Team characteristics' are not included in this analysis and therefore not highlighted in the figure. Transformational leadership was measured by a 20 item questionnaire asking both the founders as the employees of the new ventures. As in the previous moderating analysis the effect checked for each of the five diversity types:

Demographic diversity was measured by differences in:

- 1. Age diversity
- 2. Gender diversity

Functional diversity was measured by differences in:

- 3. Level of education diversity
- 4. Field of study diversity
- 5. Work experience diversity

Again the coefficients were centered and the control variables are added in the regression analysis (table 14). The linear regression analysis showed that the regression models of Age diversity (p=0.389), Gender diversity (p=0.433), Level of Education diversity (p=0.259) and Work experience diversity(p = 0.169) were not significant. The only significant model was Field of study diversity (p < 0.05) but in this model the interaction variable between the diversity measurement and the transformational leadership were not significant. What I could see from all these models was that Transformational Leadership has a direct effect on the elaboration of task relevant knowledge and perspectives. The direct significant effect of transformational leadership is shown in table 14. The linear regression analysis showed that the moderator terms were not significant and that the interaction factors were not significant. This means that the hypothesis that transformational leadership a moderating effect has on the relationship between diversity and the elaboration of task relevant knowledge and perspectives was not confirmed.

	Variables	Beta	R <sup>2</sup>	$\Delta R^2$
Model 1:			0,159	
Control	Leisure	0,033		
variables	Health	-0,171		
	Age	-0,100		
	Size	-0,171		
	Measurementsize	0,462		
	F-value	0,493		
Model 2:			0,518	0,359**
Linear	Leisure	0,046		
effect	Health	0,063		
	Age	0,023		
	Size	-0,350		
	Measurementsize	0,254		
	Transformational leadership	0,534**		
	Level of education diversity	0,324		
	F-value	1,690		
Model 3:			0,551	0,023
Interacti	Leisure	0,044		
on effect	Health	0,067		
	Age	-0,062		
	Size	-0,368		
	Measurementsize	0,321		
	Transformational leadership	0,303		
	Level of education diversity	0,284		
	Level of education * Commitment	-0,309		
	F-value	1,532		
	N=19			
	°p<0,1			
	"p<0,05			
	™p<0.01			

table 14 Moderating analysis Transformational Leadership on Elaboration

H4:Transformational leadership has a positive effect on group cohesion and group commitment and a negative effect on relational conflicts.

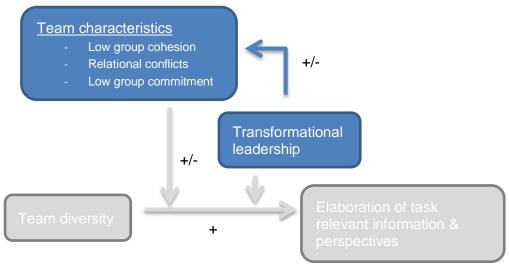


Figure 19 The relationship between transformational leadership and team characteristics

Hypothesis four stated that transformational leadership positively influences group cohesion and group commitment, and has a negative effect on relational conflicts (figure 19). In a linear regression analysis transformational leadership is added as an independent variable to predict either group cohesion, group commitment and relational conflicts. In the first step the control variables were added in the first model and didn't yield any significant results (table 15). Therefore I decided to delete the non-significant control variables because I found out that these biased the results (table 16).

	Variables	Beta	R <sup>2</sup>	ΔR²
Model 1:			0.159	
Control	Leisure	0,033	0,233	
variables	Health	-0.171		
	Age	-0,100		
	Size	-0,171		
	Measurementsize	0,462		
	F-value	0,493		
Model 2:			0,518	0,359**
Linear	Leisure	0,046		
effect	Health	0,063		
	Age	0,023		
	Size	-0,350		
	Measurementsize	0,254		
	Transformational leadership	0,534**		
	Level of education diversity	0,324		
	F-value	1,690		
Model 3:			0,551	0,023
Interacti	Leisure	0,044		
on effect	Health	0,067		
	Age	-0,062		
	Size	-0,368		
	Measurementsize	0,321		
	Transformational leadership	0,303		
	Level of education diversity	0,284		
	Level of education * Commitment	-0,309		
	F-value	1,532		

	Variables	Beta	R²
Model 1:			
Control			0,159
variables	Leisure	0,320	
	Health	-0,019	
	Age	-0,167	
	Size	-0,149	
	Measurementsize	0,543	
	F-value	0,493	
Model 2a:			0,221
Linear effect	Commitment	0,470	
	F-value	4,818**	
Model 2a:		,	0,294
Linear effect	Cohesion	0,542	
	F-value	7,083**	
	N=19		
	*p<0,1 **p<0,05		
	***p<0,01		

table 15 Transformational leadership as predictor of Cohesion and Commitment

table 16 Transformational leadership as predictor of

°p<0,1 °°p<0,05 °°p<0,01

Table 15 does not show any significant models while the (non-significant) control variables are excluded transformational leadership indeed has a positive relationship with the elaboration of task relevant information and perspectives. To be clear the results showed in table 16 (model 2a and 2b) does not include the control variables.

Transformational leadership indeed had a positive relationship with group cohesion (0.542 p < 0.05) and a positive relationship with group commitment (0.191 p < 0.05). The effect of transformational leadership on relational conflicts was indeed as proposed negative but not significant. Hereby hypothesis four can only partially be confirmed. Only the effect of transformational leadership was found to have a significant positive relationship with group cohesion and commitments (coefficients can be found in table 16).

H5 Elaboration of task relevant information and perspectives has a positive relationship with new venture performance.

Elaboration of task relevant information & perspectives

#### Figure 20 The relationship between elaboration and performance

The last analysis that is executed is about the effect of elaboration of task relevant information and perspectives on the performance of new ventures (figure 20). To explore the data, collected with the survey, again a Pearson correlation test is done with the different performance measurements included. In the correlation matrix of this test possible correlations between all the variables included in the test can be found. This provides us with a first picture on possible relationships see table 17. Which actually doesn't look very promising.

For each independent performance measurement a regression analysis including the control variables is ran. None of the results was significant and if the total model was significant, in for example the case of profit, the only significant predictor was the control variable size. Where you can conclude from that the size of the company, amount of employees, is a good predictor for revenue. Due to these insignificant correlation and regression results hypothesis five cannot be confirmed.

	Correlation matrix	
	Variable	Elaboration
1	Revenue 2011	-0,062
2	Revenue 2012	-0,104
3	Revenue per employee 2011	-0,062
4	Revenue per employee 2012	0,635
5	Net Profit Margin 2011	-0,301
6	Net Profit Margin 2012	0,181
7	Profit 2011	0,615
8	Profit 2012	0,471
9	Customer growth	0,032
10	Employee creation	0,905
11	Profitability growth	0,512
N=16	°p<0,1°°p<0,05°°°p<0,01	

table 17 Pearson correlations

## Cluster Analysis

With a one way Anova the differences in the dependent variable elaboration of task relevant knowledge and perspectives in the three clusters (Health, Food and Leisure) are inspected. As can be seen in table 18 the Anova is not significant which means that no statistical difference between the variances of the groups could be found. In this case no significant difference between the different clusters could not be identified. In each regression analysis I also controlled for type of cluster which yield the same conclusion. There are no differences between the groups.

Elaboration of task relevant knowledge and perspectives

	Sum of	Mean		
	Squares	Square	F	Sig.
Between	,314	,157	1,240	,308
Groups				
Within	2,914	,127		
Groups				
Total	3,228			

Table 18 Anova clusters

## 5.7 Conclusion stage 2

From the quantitative research survey several relationships were found significant (figure 21). To start two types of 'team diversity' were found to have a significant relationship with 'elaboration of task relevant information and perspectives'. As proposed, 'working experience diversity', had a positive relationship with 'elaboration of task relevant information and perspectives' but field of education had a negative relationship with 'elaboration of task relevant information and perspectives'. Therefore I can only partially confirm hypothesis 1a. Hypothesis 1b could not be confirmed, no relation between any type of 'Collaboration' and 'Elaboration' could be found. From the analysis of the moderating effect of the 'Team characteristics' can be concluded that group cohesion and commitment indeed moderate the relationship between 'Team diversity and 'elaboration'. 'Level of education diversity' has a positive effect on 'elaboration' in low cohesive and committed teams and 'Field of education' had a stronger negative effect in high committed and cohesive teams. Thus hypothesis 2 can be partially confirmed but only for two types of diversity. The moderating effect of transformational leadership could not be found so hypothesis three is rejected. What I did find was that transformational leadership has a positive relationship with either cohesion and commitment which again partially confirms the hypothesis. For Hypothesis 5, a positive relationship between 'elaboration of task relevant knowledge and perspectives' and performance could not be found and is rejected.

The analysis also showed some by-products which are very interesting as well. Namely 'Transformational leadership', 'Group cohesion' and 'Group commitment' are found to have a positive direct relationship with 'Elaboration of task relevant information and perspectives' as well. This finding is really interesting because it explains more about the actual relations between the variables in this model.

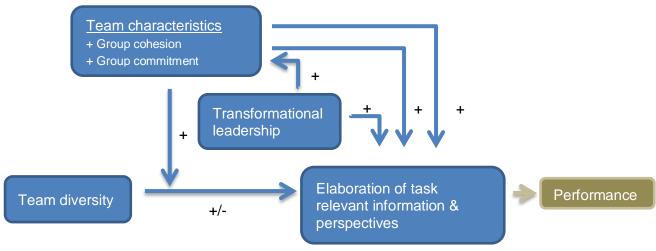


Figure 21 Results research towards organizational factors

### Hypotheses:

- H1: Team diversity (a) and collaborations (b) have a positive relationship with the elaboration of task relevant information and perspectives.
- H2: Team characteristics moderate the relationship between diversity and elaboration of task relevant information and perspectives. Group cohesion and group commitment have a positive moderating effect and relational conflicts have a negative moderating effect.
- H3: Transformational leadership has a positive moderating effect on the relationship between diversity and the elaboration task relevant knowledge and perspectives.
- H4:Transformational leadership has a positive effect on group cohesion and group commitment and a negative effect on relational conflicts.
- H5 Elaboration of task relevant information and perspectives has a positive relationship with new venture performance.

## 6. Discussion

The decision to perform a study on organizational success factors of growing new ventures was mainly fueled by the opinion that organizational factors are strongly undervalued both in practices as in the research on these new ventures. The undervaluation in research is perfectly illustrated by a citation of Shane and Venkataraman (2000) in their research named "The promise of entrepreneurship as a field of research":

"Many scholars ask, either implicitly or explicitly, why anyone should study entrepreneurship. Data are difficult to obtain, theory is underdeveloped, and many findings to date are the same as those obtained in other areas of business" (p 219).

The undervaluation in theory became clear in the first phase of my literature study were it proved to be hard to find studies focused on the early development of a new venture. Therefore findings from other areas needed to be included in order to complete the hypotheses.

As has been said the focus of this research was on the organizational factors that enhance success in growing new ventures. Meaning that it focused on team diversity, leadership, collaboration, conflicts with new venture capitalists, group cohesion, group commitment and interpersonal conflicts.

Results show that several types of functional diversity (Field of study and Working experience) had a significant relationship with the 'elaboration of task relevant information and perspectives'. Elaboration of relevant information and perspectives refers to the exchange, discussion and integration of ideas, knowledge and insights to assigned tasks within a new venture and requires the cooperation of several, if not all, employees (Kearney and Gebert, 2009). The demographic diversity (age and gender) and the level of education are not found to have a significant relationship with elaboration. As proposed 'Working experience diversity' had a significant positive relationship with 'Elaboration' (r=0.742, p<0.1). 'Field of study diversity' yields a negative relationship with 'Elaboration' (r=-1.077, p<0.01). What I believed before this study was that more and different types of knowledge and views improved the pool of information and therefore also the elaboration of task relevant knowledge and perspectives. But the finding of this negative effect was contrary to the original proposition. This negative effect is in line with the findings of Knippenberg et al. (2004). They argue that diversity, has positive effects but can also have negative effects due to social categorization. The reason that 'Field of study diversity' had a negative relationship with 'Elaboration' can possibly be devoted to the negative effect of social categorization. Social categorization means to be more favorable to in-group members as to outgroup members (Knippenberg et al., 2004). These results imply that the negative effects of social categorization are more related with 'Field of study diversity' as to the 'Working experience diversity'. This means having a new venture with a high amount of people from the same study is not beneficial. Previous working experience is related to the advantages of having a more diverse venture, by having a larger pool of information. Investigation of possible moderating effects on the relationship between diversity and elaboration show this relationship is moderated by commitment and cohesion. The relationship between level of education diversity and elaboration is positively moderated by commitment and cohesion such that in lower cohesive and committed new ventures this relationship was positive. So the level of education actually had a positive effect on elaboration where earlier this relationship was not significant. This means that indeed, as proposed, two of the three functional diversity measurements had a positive effect on the elaboration of task relevant knowledge and perspectives. An effect of demographic diversity, with or without moderators could not be found. Therefore I argue that functional diversity in combination with cohesion and commitment is a better predictor of the elaboration of task relevant knowledge and perspectives than demographic diversity. 'Field of study diversity' yields a negative relationship and therefore in order to stimulate the positive effects of diversity the founder of a new venture should not focus on stimulating this type of diversity because it's not beneficial for the elaboration of information.

Also the moderating effect of transformational leadership on the relationship between diversity and elaboration was tested but not found in in the data. What I did find is that transformational leadership, which is a more visionary type of leadership, had a positive significant effect on group cohesion and commitment. This means that a transformational leader has a positive effect on group cohesion, which has a moderating effect on the relationship between some

types of diversity and 'elaboration of task relevant information and perspectives' but also a direct effect on the elaboration of task relevant knowledge and perspectives.

What surprised me was that collaboration with other companies or going to events did not have a significant effect on the elaboration of information. In case of the events, for example a seminar "Social Media Masterclass" was expected to have a positive relationship with elaboration, since the primary goal of these events is the distribution of knowledge. The same counts for collaborations with other companies. Expected was that more different views, more experiences, also from outside the company, would improve the available knowledge. A possible explanation of this phenomenon could be that the information discussed during these events is not the information that is needed in order to grow. Another explanation is that the problem does not lie in the type of information but more in the practical implication. Perhaps the new ventures cannot apply the information directly in their company and more practical tools are necessary in order to benefit from the seminar. Nevertheless it is still surprising that no relationship could be found.

Furthermore I could not identify differences between the results from the different clusters. This means that in the early development of a company it does not seem to make a difference in which cluster you are active and the discovered conclusions count for each sector.

Last but not least there was no relationship found between the 'elaboration of task relevant information and perspectives' and venture performance. Perhaps this could not be found due to the unilateral performance measurements. This limitation will be elaborate upon in the next paragraph. But despite that this research could not identify a direct relationship between 'elaboration' and (financial) performance, I still argue that this relationship exist. Several other studies agree that 'elaboration of task relevant information and perspectives' is positively related with performance, mostly measured in terms of creativity, innovation and decision quality (Knippenberg et al., 2004; Kearney and Gebert, 2009). None of the researchers ever measured the direct relationship between 'elaboration' and financial performance. The reason that I could not find this direct relationship is because this relationship is perhaps not as simple as proposed. Several mediating and moderating variables, as creativity, innovation and decision quality, could be present and have an effect on this relation.

### **6.1 Limitations**

Next to the care that is taken in preparing this research several limitations of this study must be recognized. First the design of this study has a cross-sectional character and the information is only measured once, a so called snapshot. Due to this cross-sectional character no long term effect can be investigated, which is especially interesting for a study like this. This study focuses on the development and growth of young companies and it would therefore be very interesting to measure the effects over time and necessary to improve the validity. This lack of longitudinal information is partially compensated by including historical data. For example, information on revenue and profits was collected for the years 2011 as well as 2012. With this information an increase could be measured, but nevertheless this information on growth is limited and could be extended. This brings me to the second limitation, the performance measurements are to a large extent unilateral. The performance measurements are almost all based on financial data. As Chakravarthy (1986) discusses in his article the measurement of financial performance is necessary, but not sufficient as the only indicator. He argues that next to financial measurements, operational performance measurements should also be included in order to define a broader conceptualization or organizational performance. Only employment creation is one of those organizational performance measurements. Performance measurements as innovativeness. satisfaction or product success could be included, which could have led to different interpretations about the relationship between elaboration and performance.

Furthermore, the data that was collected, was self-reported and no external sources were consulted. It is recommended to use data from a secondary sources like a data base, e.g. collecting the financial information on the dependent variable from a database rather than ask this information to the founder. The reason to obtain for this secondary archival data is that this data is less subjective. However Venkatraman and Damanujam (1986) argue that both data have some degree of subjectivity, the data from a secondary source (database) is likely to be more objective.

Unfortunately these types of information were not available, or in a very limited amount. In the Netherlands it's not obligated to register this information at the chamber of commerce and only the tax authorities had this type of information. The tax authorities were not willing to share this information and therefore this wasn't possible.

Next, this research was conducted in a particular setting, with information mainly coming from two different industries in one country. Information is only gathered from the Health and Leisure Industry. As a consequence, the generalizability of the results in other countries and industries may be questionable (Hair et al, 2010). The last limitation is the limited sample size which only included the information from 26 different new ventures. This low sample size was a result of the low response rate and the complexity of measuring an entire team in its totality. Cooperation of four or five people was needed in order to complete one measurement. The limited sample size thus lowers the power of this research (Hair et al, 2010).

### 6.2 Future research

The limitations mentioned in the previous paragraph naturally provide opportunities for further research. One of the limitations is the sample size of this research, future work could replicate this study and examine a larger sample size, more new ventures but also measurements from a broader scale of industries could be desirable. When more data is collected, the Structural Equation Modeling method should be used preferably. Due to the chosen method of research this wasn't possible, but when causal relations and mediating variables are present this method shows stronger results and improves the interpretability. The preferred method for this study is a longitudinal study and therefore the most important improvement for further research. Unfortunately a longitudinal research isn't possible within the limitations of this thesis project.

In this research I found out that different types of functional diversity (level of education, field of study and working experience) had either a positive or negative relationship with elaboration of task relevant information and perspectives. Therefore I argued that perhaps one type of functional measurement is more related to social categorization as others. I found out that the field of study diversity was negatively related with elaboration of task relevant information and perspectives and therefore argue that this variable is more related to social categorization and it's negative effects. These findings are conflicting with the propositions in the research of Knippenberg et al. (2004) because they argue that each dimension of diversity may elicit both the information and decision making processes as well as the social categorization processes. Therefore it would be interesting to investigate the relationship between the 'Field of study diversity' variable and social categorization in order to either confirm or reject this preposition.

As already mentioned in the discussion as well as the limitation section, the relationship between the variables 'elaboration of task relevant information and perspectives' and financial performance requires some further investigation. Several mediating and/or moderators will be present and should be included in order to understand this relationship.

Finally I could not find a relationship between collaborations, going to events, and the elaboration of task relevant information and perspectives in the data. Several possible explanations are already discussed in the conclusion but this it is still not satisfying. Collaborations are seen as an important strategy (Street and Cameron, 2007) for growth and almost each SME makes use of them. Therefore this relationship should be studied in more detail. What is the underlying reason why no relationship could be found? It could be because of our limited sample size but also another external factor could be present. An external factor for example could be the reason why the new venture decided to collaborate. Was it for optimization and enhance economies of scale or because of insufficient resources? Perhaps the reason for collaboration or the type of collaboration makes the difference. These phenomena are already discussed in my literature study and several researchers found that the type of the collaboration can make a difference (Calabrese et al., 2000, Robson and Bennett, 2000). The analysis of this information could be an extension of this research.

## 6.3 Managerial Implications

Apart from the more theoretical conclusion and suggestions for future research I would like to use the opportunity to give some more practical recommendations to managers of new ventures and to consultants working with this target group, especially the Chamber of commerce. There are some differences between these two groups and therefore these will be discussed separately.

### Consultants

One of the tasks of a consultant working with new ventures is to provide them with information, knowledge, tools and practical tips in order to improve their performance. As this research shows, several organizational factors have an influence on the elaboration of task relevant information and perspectives. Unfortunately I could not prove the relationship between 'elaboration of task relevant knowledge and perspectives' and financial performance. But as explained in the discussion due possible moderating en mediating variables this is not very surprisingly. Assuming that this relationship exists recommendations about how to improve the 'elaboration of task relevant information and perspectives' are given. First of all working experience diversity" has a positive effect on 'elaboration', as well as 'transformational leadership', 'cohesion' and 'commitment'. Consultants working with new ventures should therefore focus their advice more on this side of entrepreneurship which as explained is often undervalued. So not only a good product, perfect marketing and excellent service are important but also the behavior of the individuals within the company are needed in order to be able to grow.

#### Chamber of commerce

The topics included in the year plans of the Chamber of commerce are focused on innovation and internationalization (implementation plan sector Leisure, Health and Food 2013). The goals included in these plans were shifting the mid-level of entrepreneurs to top performers with a focus on these two topics (figure 22). What I, after this research, argue is that that besides the innovation and internationalization, improved attention should be given to the people within the organization (organizational factors). This topic should be an extension of the subjects that are handled within the seminars and the individual advise meetings. It should be added to the guide that was developed in 2013 for an individual advise meeting (implementation plan Healthsector).

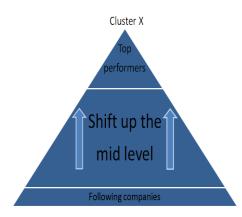


Figure 22 Program Chamber of commerce

Besides I think it's a good advice to make a more detailed description of the Top performers as well as the mid-level performers. Over the different clusters different descriptions are used and no specific parameters are developed. The results of this research could be a really good starting point for this list of parameters. As stated in the implementation plan this is the biggest group of entrepreneurs and there is no high level of innovation. The list of parameters can be used to identify the potential of each individual entrepreneur and this list makes it easier to focus on the right group.

I recommend to insert the following parameters: Level of educational diversity Working diversity Cohesion Commitment Transformational leadership

### New ventures.

This research showed that higher cohesive and committed teams have a positive effect on the elaboration of task relevant information and perspectives in new ventures. What this means in

practice is that higher committed and cohesive new ventures will have access to a larger pool of information and that the new venture is also equipped to make use of this information. To be able to use the information i.e. the structure and culture of the new venture need to be designed so that the available knowledge can come out. If somebody with very good ideas does not have the opportunity, due to the structure of the new venture, to discuss his ideas the existing knowledge will not be used. The same counts if due to a closed/non open minded culture someone is too scared to share his ideas. New ventures should make use of the talent available in their company. The atmosphere required for this process can be stimulated by improving trust and loyalty, social activities and include them when important decisions need to be made.

Transformational leadership can also help in other to stimulate this process. As been recognized in the qualitative study the use of transformational, a more visionary style of leadership, is still not broadly used in the Health and Leisure sectors. The awareness of this style of leadership is available but not used broadly. The reason some entrepreneurs gave was that due to the short term relationship they have with their employees (temporary and seasonal work) this was not possible. But this research showed the opposite. Transformational leadership can be stimulated by sharing and presenting the long term goals the founder has with the company. So show the employees where you want to be on the long term and do not only discuss the activities that have to be finished by tomorrow. Besides the founder can reward an employee who shows signs of collectivism. This reward does not always have to be in financial terms.

### References

Sijamix Wahid, A. (n.d.). Director heterogeneity and its impact on board effectiveness, Harvard Business School.

Amason, A. C. (1996). Distinguishing the Effects of Functional and Dysfunctional Conflict on Strategic Decision Making: Resolving a Paradox for Top Management Teams. *Academy of Management Journal*, 39(1), 123–148.

Amason, A. C., & Sapienza, H. J. (1997). The effects of top management team size and interaction norms on cognitive and affective conflict. *Journal of Management*, 23(4), 495–516.

Ancona, D. G., & Caldwell, D. F. (1992). Demography and Design: Predictors of New Product Team Performance. *Organization Science*, *3*(3), 321–341.

Andersson, S., & Tell, J. (2009). The relationship between the manager and growth in small firms. *Journal of Small Business and Enterprise Development*, 16(4), 586–598.

Antonakis, J. (2001). The validity of the transformational, transactional, and laissez-faire leadership model as measured by the multifactor leadership questionnaire (MLQ 5X). ProQuest Information & Learning, US.

Argyris, C., 1962. Interpersonal competence and organizational effectiveness, *Homewood*, IL.

Atwater, L. E., & Yammarino, F. J. (1992). Does Self-Other Agreement on Leadership Perceptions Moderate the Validity of Leadership and Performance Predictions? *Personnel Psychology*, *45*(1), 141.

Avolio, B.J. & Bass, B.M. (2004). Multifactor leadership questionnaire: Third edition manual & sampler set. Menlo Park, CA: Mind Garden, Inc.

Bantel, K. A., & Jackson, S. E. (1989). Top management and innovations in banking: Does the composition of the top team make a difference? *Strategic Management Journal*, 10(S1), 107–124.

Bass, B. M. (1999). Two decades of research and development in transformational leadership. *European Journal of Work and Organizational Psychology*, 8,9–32.

Bass, B. M., & Yammarino, F. J. (1991). Congruence of Self and Others' Leadership Ratings of Naval Officers for Understanding Successful Performance. *Applied Psychology*, *40*(4), 437–454.

Berry, A. J., Sweeting, R., & Goto, J. (2006). The effect of business advisers on the performance of SMEs. Journal of Small Business and Enterprise Development, 13(1), 33–47.

Blumberg, B., Cooper, D.R., Schindler P.S. 2011. Business Research Methods. 3e Red. McGraw Hill Higher Education.

Brewer, M. B. (1979). In-group bias in the minimal intergroup situation: A cognitive–motivational analysis. *Psychological Bulletin, 86,* 307–324.

Bygrave, W., & Timmons, J. 1991. Venture and risk capital: Practice and performance, promises and policy. *Boston: Harvard Business School Press*.

Calabrese, T., Baum, J. A. C., & Silverman, B. S. (2000). Canadian Biotechnology Start-Ups, 1991–1997: The Role of Incumbents' Patents and Strategic Alliances in Controlling Competition. *Social Science Research*, *29*(4), 503–534.

Carless, S. A., Mann, L., & Wearing, A. J. (1998). Leadership, Managerial Performance and 360-Degree Feedback. *Applied Psychology*, *47*(4), 481–496.

Chakravarthy, B. S. (1986). Measuring strategic performance. *Strategic Management Journal*, 7(5), 437–458.

Chowdhury, S. (2005). Demographic diversity for building an effective entrepreneurial team: is it important? *Journal of Business Venturing*, 20(6), 727–746.

Cooper, A. C. (1981). Strategic management: New ventures and small business. *Long Range Planning*, *14*(5), 39–45.

Cooper, D. R. & Schindler, P. S., 2011. *Business Research Methods*. 3e red. New York: McGraw-Hill Companies, Inc..

Dabkowksi, A.P. (2011), Entrepreneurship and economic growth: An investigation into the relationship between entrepreneurship and total factor productivity growth in the EU, *CASE network studies and analyses*, 1, 4-41

Das, T.K. and Teng, B.S. (1998), Between trust and control: developing confidence in partner cooperation in alliances, *Academy of Management Review*, 23, 491-512.

Den Hartog, D. N., VAN Muijen, J. J., & Koopman, P. L. (1997). Transactional versus transformational leadership: An analysis of the MLQ. *Journal of Occupational and Organizational Psychology*, 70(1), 19–34.

Dulewicz, V. & Higgs, M.J. (2005). Assessing Leadership dimensions, styles and organizational context, *Journal of Manegerial Psychology*, 20, 105-23

Ensley, M. D., & Hmieleski, K. M. (2005). A comparative study of new venture top management team composition, dynamics and performance between university-based and independent startups. *Research Policy*, 34(7), 1091–1105.

Ensley, M. D., Pearce, C. L., & Hmieleski, K. M. (2006). The moderating effect of environmental dynamism on the relationship between entrepreneur leadership behavior and new venture performance. *Journal of Business Venturing*, *21*(2), 243–263.

Ensley, M. D., Pearson, A. W., & Amason, A. C. (2002). Understanding the dynamics of new venture top management teams: cohesion, conflict, and new venture performance. *Journal of Business Venturing*, 17(4), 365–386.

Ensley, M. D., Pearson, A. W., & Amason, A. C. (2002). Understanding the dynamics of new venture top management teams: cohesion, conflict, and new venture performance. *Journal of Business Venturing*, 17(4), 365–386.

Erez, A., Lepine, J. A., & Elms, H. (2002). Effects of Rotated Leadership and Peer Evaluation on the Functioning and Effectiveness of Self-Managed Teams: A Quasi-Experiment. *Personnel Psychology*, *55*, 929–948.

Field, A. (2009). Discovering statistics using SPSS. 3d ed. London, Sage

Fiedler, F.E. (1970), "Leadership experience and leader performance - another hypothesis shot to hell", Organizational Behavior and Human Performance, Vol. 5, pp. 1-14.

Foo, M.-D., Sin, H.-P., & Yiong, L.-P. (2006). Effects of team inputs and intrateam processes on perceptions of team viability and member satisfaction in nascent ventures. *Strategic Management Journal*, *27*(4), 389–399.

Foo, M.-D. (2011). Teams developing business ideas: how member characteristics and conflict affect member-rated team effectiveness. *Small business economics*, *36*, 33-46

Fox, S., & Dinur, Y. (1988). Validity of Self-Assessment: A Field Evaluation. *Personnel Psychology*, 41(3), 581–592.

Furman, J. L., Porter, M. E., & Stern, S. (2002). The determinants of national innovative capacity. *Research Policy*, *31*(6)

Furnham, A., & Stringfield, P. (1994). Congruence of self and subordinate ratings of managerial practices as a correlate of supervisor evaluation. *Journal of Occupational and Organizational Psychology*, *67*(1), 57.

Gaibraith, J. (1982). The Stages of Growth. Journal of Business Strategy, 3(1), 70-79.

Garnsey, E., Stam, E., & Heffernan, P. (2006). New Firm Growth: Exploring Processes and Paths. *Industry & Innovation*, *13*(1), 1–20.

Gils, A. V., & Zwart, P. (2004). Knowledge Acquisition and Learning in Dutch and Belgian SMEs:: The Role of Strategic Alliances. *European Management Journal*, 22(6), 685–692.

Gils, A. V., & Zwart, P. (2004). Knowledge Acquisition and Learning in Dutch and Belgian SMEs:: The Role of Strategic Alliances. *European Management Journal*, 22(6), 685–692.

Gomes-Casseres(1996), *The Alliance Revolution: The New Shape of Business Rivalry*, Harvard University Press, Cambridge, MA

Greiner, L. E. (1972). Evolution and Revolution as Organizations Grow, Harvard Business Review, Vol. 50, Issue 4, p. 37-46

Greiner, L.E., & Schein V.E. (1988). Power and Organization Development, Boston: Pearson Education

Haagedorn, J. (1993), Understanding the rationale of strategic technology partnering: Interorganisational modes of co-operation and sectoral differences, *Strategic Management Journal* **14**, 371–385

Harrison, D.A., & Klein, K.J. (2007), What's the difference? Diversity constructs as separation, variety, or disparity in organizations., *Academy of Management Review*, 32, 1199-1228

Higashide, H., & Birley, S. (2002). The consequences of conflict between the venture capitalist and the entrepreneurial team in the United Kingdom from the perspective of the venture capitalist. *Journal of Business Venturing*, *17*(1), 59–81.

Higgs, M. (2003). How can we make sense of leadership in the 21<sup>st</sup> century?. *Leadership* & *Organization development Journal*, 24, 273-84

Hoffmann, W. H., & Schlosser, R. (2001). Success Factors of Strategic Alliances in Small and Medium-sized Enterprises—An Empirical Survey. *Long Range Planning*, *34*(3), 357–381.

Homan, A. C., van Knippenberg, D., Van Kleef, G. A., & De Dreu, C. K. W. (2007a). Bridging faultlines by valuing diversity: Diversity beliefs, information elaboration, and performance in diverse work groups. *Journal of Applied Psychology*, *92*(5), 1189–1199.

Homan, A. C., van Knippenberg, D., Van Kleef, G. A., & De Dreu, C. K. W. (2007b). Interacting Dimensions of Diversity: Cross-Categorization and the Functioning of Diverse Work Groups. *Group Dynamics: Theory, Research, and Practice*, 11(2), 79–94.

Huggins, R., & Johnston, A. (2009). Knowledge Networks in an Uncompetitive Region: SME Innovation and Growth. *Growth and Change*, *40*(2), 227–259.

- Jackson, S.E., Joshi, A., & Erhardt, N.L. (2003). Recent research on team and organizational diversity: SWOT analysis and implications, *Journal of management*, *29*, 801-830
- Jehn, K. A. (1995). A Multimethod Examination of the Benefits and Detriments of Intragroup Conflict. *Administrative Science Quarterly*, 40(2), 256–282.
- Jehn, K. A., Northcraft, G. B., & Neale, M. A. (1999). Why differences make a difference: A field study of diversity, conflict, and performance in workgroups. *Administrative Science Quarterly*, 44(4), 741–763.
- Judge, T. A., & Piccolo, R. F. (2004). Transformational and Transactional Leadership: A Meta-Analytic Test of Their Relative Validity. *Journal of Applied Psychology*, *89*(5), 755–768.
- Kamm, J. B., Shuman, J. C., Seeger, J. A., & Nurick, A. J. (1990). Entrepreneurial Teams in New Venture Creation: A Research Agenda. *Entrepreneurship Theory and Practice*, *14*(4), 7.
- Kaplan, R. S. (1983). Measuring Manufacturing Performance: A New Challenge for Managerial Accounting Research. *The Accounting Review*, *58*(4), 686–705.
- Kearney, E., & Gebert, D. (2009). Managing diversity and enhancing team outcomes: The promise of transformational leadership. Journal of Applied Psychology, 94(1), 77–89.
- Kline, P. (1999). The handbook of psychological testing (2nd ed.). London: Routledge
- Kunkel, Scott, and Hofer, Charles (1991). Why study the determinants of new venture performance: A literature review and rationale. *Academy of Management Proceedings*, 51, 418
- MacMillan, I.C., Siegel, R., & Narasimha, P.N.S. (1985). Criteria used by venture capitalists to evaluate new venture proposals. Journal of Business Venturing,1, 119–128.269
- MacMillan, I.C., Zemann, L., & Subbanarasimha, P.N. (1987). Criteria distinguishing successful from unsuccessful ventures in the venture screening process. Journal of Business Venturing, 2, 123–137.
- Moray, N., & Clarysse, B. (2005). Institutional change and resource endowments to science-based entrepreneurial firms. *Research Policy*, *34*(7), 1010–1027.
- Mount, J.J., Zinger, J.T., & Forsyth (1993). Organizing for Development in the Small Business, *Long Range Planning, 26,* 111-120.
- Murphy, G.B., Trailer, J.W., Hill, R.C. (1996). Measuring performance in entrepreneurial research. *Journal of business research*, 15-23.
- Muzyka, D., Birley, S., & Leleux, B. (1996). Trade-offs in the investment decisions of European venture capitalists. Journal of Business Venturing,11(4), 273–288.
- O'Reilly, C. A., Caldwell, D. F., & Barnett, W. P. (1989). Work group demography, social integration, and turnover. *Administrative Science Quarterly*, *34*, 21–37.
- Pearson, A.W., Ensley, M.D., & Amason, A.C. (2002). An assessment and refinement of Jehn's intragroup conflict scale. International journal of conflict management, 13, 2, pp. 110-126.
- Peterson, S.J., Walumbwa, F.O., Byron, K., & Myrowitz, J. (2008). CEO Positive Psychological traits, transformational leadership, and firm performance in high-technology Start-up and Established firms. *Journal of Management*, *35*, 348-368
- Rhee, K. S., & White, R. J. (2007). The Emotional Intelligence of Entrepreneurs: [1]. *Journal of Small Business and Entrepreneurship*, 20(4), 409–425,439–440.

- Ring, P.S. and Van de Ven, A. (1994), Developmental processes of cooperative interorganizational relationships, *Academy of Management Review*, 19, 90-118.
- Riordan, C., & Shore, L. (1997). Demographic diversity and employee attitudes: Examination of relational demography within work units. *Journal of Applied Psychology*, *82*, 342–358.
- Robson, P., & Bennett, R. (2000). SME Growth: The Relationship with Business Advice and External Collaboration. *Small Business Economics*, *15*(3), 193–208.
- Robson, P., & Bennett, R. (2000). SME Growth: The Relationship with Business Advice and External Collaboration. *Small Business Economics*, *15*(3), 193–208.
- Rosete, D., & Ciarrochi, J., (2005), Emotional intelligence and its relationship to workplace performance outcomes of leadership effectiveness, *Leadership & Organization Development Journal*, 26, 388 399
- Sahlman, W. A. (1990). The structure and governance of venture-capital organizations. *Journal of Financial Economics*, *27*(2), 473–521.
- Sahlman, W. A. (1990). The structure and governance of venture-capital organizations. *Journal of Financial Economics*, *27*(2), 473–521.
- Schweiger, D. M., & Sandberg, W. R. (1989). The Utilization Of Individual Capabilities In Group Approac. *Strategic Management Journal*, *10*, 31.
- Schweiger, D. M., Sandberg, W. R., & Rechner, P. L. (1989). Experiential Effects of Dialectical Inquiry, Devil's Advocacy, and Consensus Approaches to Strategic Decision Making. *The Academy of Management Journal*, 32(4), 745–772.
- Schyns, B., & Van Veldhoven, M. J. P. M. (2010). Group leadership climate and individual organizational commitment: A multilevel analysis. *Journal of Personnel Psychology*, *9*(2), 57–68.
- Shane, S., & Venkataraman S., (2000). The promise of entrepreneurship as a field of research. *Academy of management review,* 25,217- 226
- Song, M., Podoynitsyna, K., Van Der Bij, H., & Halman, J. I. M. (2008). Success Factors in New Ventures: A Meta-analysis\*. *Journal of Product Innovation Management*, *25*(1), 7–27.
- Spekman, R. E., L. A. Isabella, and T. C. MacAvoy (2000). *Alliance Competence: Maximizing the Value of Your Partnerships*. New York: John Wiley & Sons.
- Steers, R. M. (1975). Problems in the Measurement of Organizational Effectiveness. *Administrative Science Quarterly*, *20*(4), 546–558.
- Street, C. T., & Cameron, A.-F. (2007). External Relationships and the Small Business: A Review of Small Business Alliance and Network Research\*. *Journal of Small Business Management*, 45(2), 239–266.
- Timmons, J. A., & Bygrave, W. D. (1986). Venture capital's role in financing innovation for economic growth. *Journal of Business Venturing*, 1(2), 161–176.
- Timmons, J. A., & Bygrave, W. D. (1986). Venture capital's role in financing innovation for economic growth. *Journal of Business Venturing*, 1(2), 161–176.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford, United Kingdom: Blackwell.

Van Aken, J. E. (2005). Management Research as a Design Science: Articulating the Research Products of Mode 2 Knowledge Production in Management. *British Journal of Management*, *16*(1), 19–36.

Van Knippenberg, D., De Dreu, C. K. W., & Homan, A. C. (2004). Work Group Diversity and Group Performance: An Integrative Model and Research Agenda. *Journal of Applied Psychology*, 89(6), 1008–1022.

Vanaelst, I., Clarysse, B., Wright, M., Lockett, A., Moray, N., & S'Jegers, R. (2006). Entrepreneurial Team Development in Academic Spinouts: An Examination of Team Heterogeneity. *Entrepreneurship Theory and Practice*, *30*(2), 249–271.

Venkatraman, N., & Ramanujam, V. (1986). Measurement of Business Performance in Strategy Research: A Comparison of Approaches. *The Academy of Management Review, 11*(4), 801–814.

Waldman, D.A., Ramirez, G.G., House, R.J., Puranam, P., 2001. Does leadership matter? CEO leadership attributes and profitability under conditions of perceived environmental uncertainty. Academy of Management Journal 44 (1), 134–143.

West, M. A., Borrill, C. S., Dawson, J. F., Brodbeck, F., Shapiro, D. A., & Haward, B. (2003). Leadership clarity and team innovation in health care. *The Leadership Quarterly*, *14*(4–5), 393–410.

Williams, K. Y., & O'Reilly, C. A. (1998). Demography and diversity in organizations: A review of 40 years of research. *Research in Organizational Behavior*, *20*, 77–140.

Willimack, D., Nichols, E. en Sudman, S. (2002), Understanding Unit and Item Nonresponse in Business Surveys. In: Groves, R.M. et al. (eds.), *Survey Nonresponse*, Wiley, New York, pp. 213-227.

Wincent, J. (2005). Does size matter? A study of firm behavior and outcomes in strategic SME networks. *Journal of Small Business and Enterprise Development*, 12(3), 437–453.

Yitshaki, R. (2008). Venture capitalist-entrepreneur conflicts: An exploratory study of determinants and possible resolutions. *International Journal of Conflict Management*, 19(3), 262–292.

## **Appendices**

## **Appendix 1 Questionnaires**

### Questionnaire Consultants

Short introduction about my research and the reason why they are contacted.

Organizational factors Behaviour of the people

### Questions:

- 1. I have studied the cluster plan about the specific goals the KvK want to reach in the Health cluster. But still, can you tell me some more about your daily activities?
- 2. I have read that one consultant is targeting start-ups and one more at established firms is their a clear distinction?
- 3. My research topics are Team composition, collaboration, leadership and conflicts with venture capitalists? Do you recognize these topics or are their other important topics that I don't have included?
- 4. What are specific characteristics of the cluster ..... and to what extent does it for example differentiate from ...... (Health, Food & Agro or Leisure).
- 5. What are good ways to measure performance and growth? Apart from financial measurements?
- 6. How can I best ask for "sensitive information" for example revenue? Anyway the survey will be anonymous.
- 7. I extracted the following numbers from the trade register about the amount the size of the different companies are these numbers representative?
- 8. I would like to contact two employees in order to ask them the same questions and to get some feeling about the different markets. Do you contact details of two companies that may be interested?

### Questionnaire Entrepreneur

Date & Time: Location: Interviewee: Interviewer:

Short introduction about my research and the reason why they are contacted.

Organizational factors behaviour of the people

### **Company details**

First short introduction about the knowledge I have from the company and then ask them to elaborate this story:

Next topics need to be handled:

- Starting date
- With how many you started
- Working places (now and when they started)
- Status of the product/service (are they still prototyping or how many different products do they have already)

### Compositie

What is the background of the people working at the company.

- Experience in business
- Entrepreneurial experience
- Study

Could you tell us some more about the way you attract new people/employees

- To what extend are you aware of differentiation within the team?
- Is there a specific profile where you are looking for?

### **Collaborations**

How important are partners and collaborations for doing business in your sector? Could you describe the activities you have pursued in expanding your business network? Do you have the biggest part of knowledge in house or do you depend on external parties?

### **Venture capitalist**

Introduction about the topic and give them the option to skip the questions when preferred. Is you company financed by any liability of borrowed capital?

Any funds, bank loan, venture capitalists?

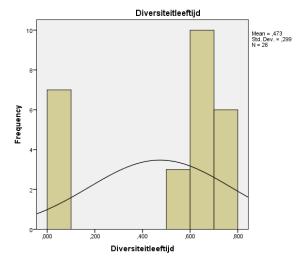
If yes did the relationship at any time had some disturbances?

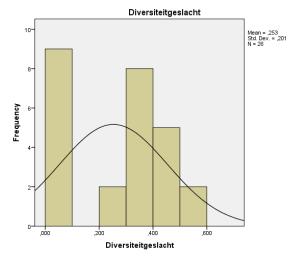
To conclude I have some question about your style of leadership. Can you please fill in this questionnaire (in Dutch)?

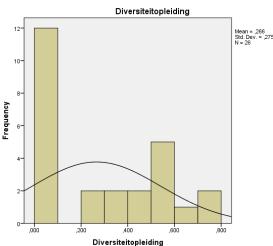
# Leiderschap

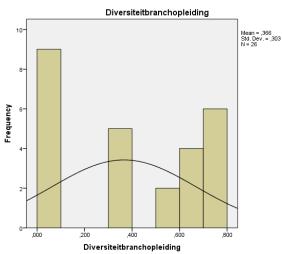
Vraag		Helemaal mee oneens	Oneens	Niet eens/ Niet oneens	Mee eens	Helemaal mee eens
1.	Zet meetbare doelen voor uw medewerkers.	0	0	0	0	0
2.	Spreek medewerkers aan op het feit dat ze te weinig output hebben.	0	0	0	0	0
3.	Laat de medewerkers weten als ze goed gepresteerd hebben.	0	0	0	0	0
4.	Ik noteer fouten van medewerkers.	0	0	0	0	0
5.	Ik laat medewerkers weten wat ze krijgen als ze een bepaalde performance hebben.	0	0	0	0	0
6.	Laat zien waar de groep over een jaar moet staan.	0	0	0	0	0
7.	-	0	0	0	0	0
8.	Ben actief bezig met het ontwikkelen van een team visie.	0	0	0	0	0
9.	Vraagt naar feedback over het eigen functioneren.	0	0	0	0	0
10.	Ben in staat om mijn droom over te brengen op het team.	0	0	0	0	0

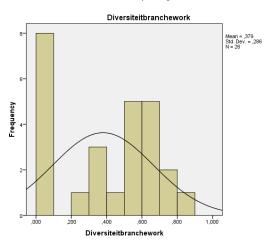
# **Appendix 2 Frequencies**











# **Appendix 3 Factor Analysis**

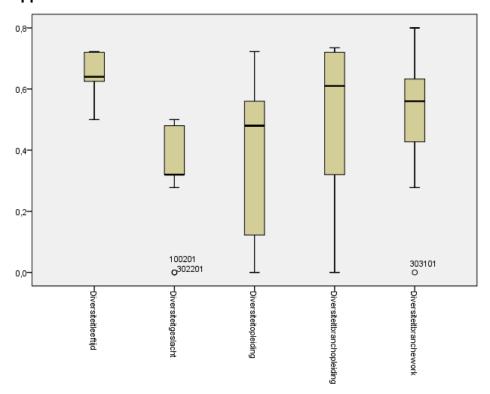
Factor Matrix<sup>a</sup>

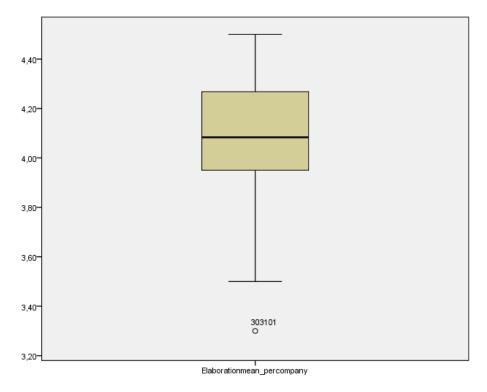
	Factor				
	1	2	3	4	
Commitment1	,629				
Commitment2			,475		
Commitment3	,381		,409		
Commitment4	,539		,312		
Commitment5			,409		
Commitment6			,471	,590	
Commitment7Reversed	,383				
Commitment8			,402		
Cohesion1	,515	-,613			
Cohesion2	,533	-,553			
Cohesion3	,528	-,632			
Cohesion4		-,445			
Cohesion5	,407	-,318			
Cohesion6	,317	-,462			
Cohesion7	,497	-,440			
Conflict1	-,452	,610			
Conflict2	-,405	,757			
Conflict3	-,386	,530			
Leader1	,507	,374			
Leader2	,721				
Leader3	,525				
Leader4	,472	,319			
Leader5	,624				
Leader6	,641	,415			
Leader7	,616			,320	
Leader8	,659				
Leader9	,648				
Leader10	,656			-,363	
Leader11	,713				
Leader12	,668				
Leader13	,667				
Leader14	,736				
Leader15	,771			-,320	
Leader16	,751				
Leader17	,724				
Leader18	,754				
Leader19	,655	,364			
Leader20	,760				

Extraction Method: Principal Axis Factoring.

a. 4 factors extracted. 11 iterations required.

# **Appendix 4 Outliers**





# **Appendix 5 Moderators**

Hierarchical		

	Variables	Beta	R <sup>2</sup>	$\Delta R^2$
Model 1:			0,159	
Control	Leisure	0,033		
variables	Health	-0,171		
	Age	-0,100		
	Size	-0,171		
	Measurementsize	0,462		
	F-value	0,493		
Model 2:			0,221	0,061
Linear	Leisure	0,234		
effect	Health	-0,014		
	Age	-0,193		
	Size	-0,087		
	Measurementsize	0,236		
	Conflict	-0,304		
	Age diversity	0,217		
	F-value	0,445		
Model 3:			0,498	0,277**
Interacti	Leisure	0,502		
on effect	Health	0,474		
	Age	0,005		
	Size	0,109		
	Measurementsize	0,023		
	Conflict	-0,493		
	Age diversity	0,330		
	Age * Conflict	0,631**		
	F-value	1,240		

N=19 \*p<0,1 \*\*p<0,05 \*\*\*p<0,01 Hierarchical regression analysis results Elaboration

	Variables	Beta	R <sup>2</sup>	$\Delta R^2$
Model 1:			0,159	
Control	Leisure	0,033		
variables	Health	-0,171		
	Age	-0,100		
	Size	-0,171		
	Measurementsize	0,462		
	F-value	0,493		
Model 2:			0,520	0,361**
Linear	Leisure	-0,198		
effect	Health	-0,239		
	Age	-0,111		
	Size	0,008		
	Measurementsize	-0,184		
	Cohesion	0,734**		
	Age diversity	0,394		
	F-value	1,703		
Model 3:			0,576	0,056
Interacti	Leisure	-0,202		
on effect	Health	-0,247		
	Age	-0,105		
	Size	0,085		
	Measurementsize	-0,356		
	Cohesion	0,732**		
	Age diversity	0,508		
	Age * Cohesion	-0,270		
	F-value	1,698		

N=19 \*p<0,1 \*\*p<0,05 \*\*\*p<0,01 Hierarchical regression analysis result Elaboration

	Variables	Beta	R <sup>2</sup>	$\Delta R^2$
Model 1:			0,159	
Control	Leisure	0,033		
variables	Health	-0,171		
	Age	-0,100		
	Size	-0,171		
	Measurementsize	0,462		
	F-value	0,493		
Model 2:			0,789	0,630***
Linear	Leisure	0,161		
effect	Health	-0,179		
	Age	-0,307*		
	Size	-0,203		
	Measurementsize	0,421**		
	Commitment	0,866***		
	Gender diversity	0,205		
	F-value	5,878***		
Model 3:			0,837	0,048
Interaction	Leisure	0,175		
effect	Health	-0,166		
	Age	-0,380**		
	Size	-0,224		
	Measurementsize	0,376**		
	Commitment	0,645***		
	Gender diversity	0,081		
	Gender * Commitment	0,334		
	F-value	6,411***		
	N=19			
	*p<0,1			
	"p<0,05			
	*** 40.01			

...<sub>p<0,01</sub>

	Variables	Beta	R <sup>2</sup>	$\Delta R^2$
Model 1:			0,159	
Control	Leisure	0,033		
variables	Health	-0,171		
	Age	-0,100		
	Size	-0,171		
	Measurementsize	0,462		
	F-value	0,493		
Model 2:			0,492	0,332*
Linear	Leisure	-0,189		
effect	Health	-0,204		
	Age	-0,008		
	Size	-0,090		
	Measurementsize	0,121		
	Cohesion	0,672**		
	Gender diversity	-0,154		
	F-value	1,519		
Model 3:			0,497	0,005
Interacti	Leisure	-0,196		
on effect	Health	-0,257		
	Age	-0,050		
	Size	-0,100		
	Measurementsize	0,148		
	Cohesion	0,657**		
	Gender diversity	-0,105		
	Gender * Cohesion	0,103		
	F-value	1,235		
	N=19			

N=19

°p<0,1 °°p<0,05

...<sub>p<0,01</sub>

Hierarchical regression analysis result: Elaboration

	Variables	Beta	R <sup>2</sup>	$\Delta R^2$
Model 1:			0,159	
Control	Leisure	0,033		
variables	Health	-0,171		
	Age	-0,100		
	Size	-0,171		
	Measurementsize	0,462		
	F-value	0,493		
Model 2:			0,218	0,059
Linear	Leisure	0,212		
effect	Health	-0,018		
	Age	-0,133		
	Size	-0,143		
	Measurementsize	0,395		
	Conflict	-0,281		
	Gender diversity	-0,116		
	F-value	0,438		
Model 3:			0,223	0,005
Interacti	Leisure	0,222		
on effect	Health	-0,052		
	Age	-0,157		
	Size	-0,151		
	Measurementsize	0,428		
	Conflict	-0,288		
	Gender diversity	-0,070		
	Gender * Conflict	-0,097		
	F-value	0,358		

N=19 •<sub>p<0,1</sub>

"p<0,05

Hierarchical	rograction a	nalveie rocu	Its Elaboration
Hierarchical	regression a	naivsis resu	iits Elaboration

	Variables	Beta	R <sup>2</sup>	ΔR²
Model 1:			0,159	
Control	Leisure	0,033		
variables	Health	-0,171		
	Age	-0,100		
	Size	-0,171		
	Measurementsize	0,462		
	F-value	0,493		
Model 2:			0,772	0,612***
Linear	Leisure	0,173		
effect	Health	-0,123		
	Age	-0,309*		
	Size	-0,270		
	Measurementsize	0,362*		
	Commitment	0,775***		
	Level of education diversity	0,173		
	F-value	5,310***		
Model 3:			0,824	0,053
Interaction	Leisure	0,136		
effect	Health	-0,086		
	Age	-0,375**		
	Size	-0,235		
	Measurementsize	0,200		
	Commitment	0,540**		
	Level of education diversity	0,170		
	Education * Commitment	-0,375		
	F-value	5,868***		
	N=19			

N=19 'p<0,1 ''p<0,05 '''p<0,01

Hierarchical regression analysis results Elaboration

	Variables	Beta	R <sup>2</sup>	$\Delta R^2$
Model 1:			0,159	
Control	Leisure	0,033		
variables	Health	-0,171		
	Age	-0,100		
	Size	-0,171		
	Measurementsize	0,462		
	F-value	0,493		
Model 2:			0,209	0,357**
Linear	Leisure	-0,103		
effect	Health	0,009		
	Age	-0,002		
	Size	-0,157		
	Measurementsize	0,017		
	Cohesion	0,589**		
	Level of education diversity	0,267		
	F-value	1,681		
Model 3:			0,403	0,151*
Interacti	Leisure	0,141		
on effect	Health	0,247		
	Age	-0,078		
	Size	-0,109		
	Measurementsize	0,032		
	Cohesion	0,242		
	Level of education diversity	0,204		
	Education * Cohesion	-0,538*		
	F-value	2,518*		

N=19 \* p<0,1 \*\* p<0,05 \*\*\* p<0,01

Hierarchical		a marketing	annual to C	Inhanation.
Hierarchical	regression	anaivsis	result	laboration

	Variables	Beta	R <sup>2</sup>	$\Delta R^2$
Model 1:			0,159	
Control	Leisure	0,033		
variables	Health	-0,171		
	Age	-0,100		
	Size	-0,171		
	Measurementsize	0,462		
	F-value	0,493		
Model 2:			0,287	0,127
Linear	Leisure	0,224		
effect	Health	0,173		
	Age	-0,112		
	Size	-0,239		
	Measurementsize	0,239		
	Conflict	-0,187		
	Level of education diversity	0,348		
	F-value	0,632		
Model 3:			0,477	0,190*
Interacti	Leisure	-0,137		
on effect	Health	0,167		
	Age	-0,005		
	Size	-0,093		
	Measurementsize	-0,054		
	Conflict	0,017		
	Level of education diversity	0,256		
	Education * Conflict	0,612*		
	F-value	1,141		

N=19 \*p<0,1 \*\*p<0,05 \*\*\*p<0,01

Hierarchical	regression	analysis	result	Elaboration

	Variables	Beta	R <sup>2</sup>	$\Delta R^2$
Model 1:			0,159	
Control	Leisure	0,033		
variables	Health	-0,171		
	Age	-0,100		
	Size	-0,171		
	Measurementsize	0,462		
	F-value	0,493		
Model 2:			0,782	0,623***
Linear	Leisure	0,131		
effect	Health	-0,383		
	Age	-0,353*		
	Size	-0,150		
	Measurementsize	0,642**		
	Commitment	0,740***		
	Fiel of study diversity	-0,263		
	F-value	5,638***		
Model 3:			0,904	0,122***
Interaction	Leisure	-0,094		
effect	Health	-0,505*		
	Age	-0,357**		
	Size	-0,070		
	Measurementsize	0,791***		
	Commitment	0,809***		
	Fiel of study diversity	-0,228		
	Branche Education * Con	nm -0,449***	:	
	F-value	11,718**	*	
	N=19			
	*p<0,1			
	"p<0,05			

" p<0,05 "p<0,01

Hierarchical regression analysis results Elaboration

	Variables	Beta	R <sup>2</sup>	ΔR²
Model 1:			0,159	
Control	Leisure	0,033		
variables	Health	-0,171		
	Age	-0,100		
	Size	-0,171		
	Measurementsize	0,462		
	F-value	0,493		
Model 2:			0,518	0,358**
Linear	Leisure	-0,137		
effect	Health	-0,363		
	Age	-0,084		
	Size	-0,003		
	Measurementsize	0,442		
	Cohesion	0,515*		
	Fiel of study diversity	-0,345		
	F-value	1,687		
Model 3:			0,652	0,134*
Interacti	Leisure	-0,109		
on effect	Health	-0,547		
	Age	-0,216		
	Size	-0,032		
	Measurementsize	0,621		
	Cohesion	0,705**		
	Fiel of study diversity	-0,246		
	Branche Education * Cohes	io:-0,515*		
	F-value	2,343*		
	N=19			

Hierarchical regression analysis result: Elaboration

	Variables	Beta	R <sup>2</sup>	ΔR²
Model 1:			0,159	
Control	Leisure	0,033		
variables	Health	-0,171		
	Age	-0,100		
	Size	-0,171		
	Measurementsize	0,462		
	F-value	0,493		
Model 2:			0,362	0,202
Linear	Leisure	0,098		
effect	Health	-0,438		
	Age	-0,225		
	Size	0,000		
	Measurementsize	0,862*		
	Conflict	-0,112		
	Fiel of study diversity	-0,585		
	F-value	0,891		
Model 3:			0,476	0,114
Interacti	Leisure	-0,004		
on effect	Health	-0,611		
	Age	-0,442		
	Size	-0,002		
	Measurementsize	0,994**		
	Conflict	-0,446		
	Fiel of study diversity	-0,488		
	Branche Education * Confli	ct 0,554		
	F-value	1,135		

N=19 "p<0,1 "p<0,05 "p<0,01

"p<0,1 "p<0,05 "p<0,01

Hierarchical regression analysis results		Elaboration		
	Variables	Beta	R <sup>2</sup>	ΔR²
Model 1:			0,159	
Control	Leisure	0,033		
variables	Health	-0,171		
	Age	-0,100		
	Size	-0,171		
	Measurementsize	0,462		
	F-value	0,493		
Model 2:			0,772	0,613***
Linear	Leisure	0,166		
effect	Health	-0,108		
	Age	-0,302*		
	Size	-0,330*		
	Measurementsize	0,394*		
	Commitment	0,774***		
	Working experience diversity	0,201		
	F-value	5,325***		
Model 3:			0,782	0,01
Interaction	Leisure	0,118		
effect	Health	-0,159		
	Age	-0,312*		
	Size	-0,272		
	Measurementsize	0,403*		
	Commitment	0,691***		
	Working experience diversity	0,095		
	Branche Work * Commitment	-0,163		
	F-value	4,478**		
	N=19			
	°p<0,1			
	" p<0,05			
	•••p<0,01			

Hierarchical	regression	analysis	results E	laborati	on

	Variables	Beta	R <sup>2</sup>	$\Delta R^2$
Model 1:			0,159	
Control	Leisure	0,033		
variables	Health	-0,171		
	Age	-0,100		
	Size	-0,171		
	Measurementsize	0,462		
	F-value	0,493		
Model 2:			0,491	0,331*
Linear	Leisure	-0,124		
effect	Health	-0,030		
	Age	0,004		
	Size	-0,198		
	Measurementsize	0,098		
	Cohesion	0,579**		
	Working experience diversit	y 0,210		
	F-value	1,513		
Model 3:			0,713	0,223**
Interacti	Leisure	0,043		
on effect	Health	-0,171		
	Age	-0,104		
	Size	-0,214		
	Measurementsize	0,469		
	Cohesion	0,324		
	Working experience diversit	y -0,068		
	Branche Work * Cohesion	-0,613**		
	F-value	3,109**		

N=19

p<0,1 p<0,05 mp<0,01

|--|

	Variables	Beta	R <sup>2</sup>	$\Delta R^2$
Model 1:			0,159	
Control	Leisure	0,033		
variables	Health	-0,171		
	Age	-0,100		
	Size	-0,171		
	Measurementsize	0,462		
	F-value	0,493		
Model 2:			0,299	0,140
Linear	Leisure	0,232		
effect	Health	0,236		
	Age	-0,099		
	Size	-0,366		
	Measurementsize	0,289		
	Conflict	-0,217		
	Working experience divers	ity 0,424		
	F-value	0,671		
Model 3:			0,625	0,326**
Interacti	Leisure	-0,043		
on effect	Health	-0,325		
	Age	-0,270		
	Size	-0,294		
	Measurementsize	0,523*		
	Conflict	-0,329		
	Working experience divers	ity 0,064		
	Branche Work * Conflict	0,681**		
	F-value	2,087		

N=19 °p<0,1 "p<0,05