



Universiteit Utrecht

***The impact of legitimacy strategies on the
performance of companies***

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Abstract

New ventures face various difficulties to survive and growth. Due to the lack of proven track record resource gatekeepers are reluctant to engage in exchanges with nascent entrepreneurs. In order to acquire resources and to grow new firms must be perceived as legitimate by important stakeholders. Legitimacy can be viewed as a social judgment of acceptance, appropriateness, and/or desirability.

Although researchers have recognized the importance of legitimacy for new venture success, research on new venture legitimacy is still in its infancy. Due to methodological problems earlier research lacks to empirically prove how legitimacy perceptions matter for firm performance. This research can be seen as a first attempt to empirically measure the influence of different legitimacy strategies on the performance of companies. A quantitative research is carried out in order to explore this relationship. Data is collected through a unique questionnaire. Indicators are developed by focusing on the interaction and communication between a firm and its environment and with the help of Rabobank and earlier theoretical research.

Main findings in this research are that conforming strategies have especially an influence on financial capital and in a lesser extent on human capital. Transforming strategies have a positive influence on all performance indicators, in particular on human capital. The outcomes do not show an influence of resource acquisition on growth.

This research contributes to institutional research and the legitimacy debate by examining the strategic implications of legitimacy strategies, and to the literature on entrepreneurship in general and new venture growth in particular.

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1. Introduction

Entrepreneurial activity is a fundamental driver of the economy and society, albeit, for different reasons. First, creating new businesses promotes economic growth and productivity by introducing proficient models of organizing and more efficient methods of resource allocation (Audretsch and Thurik, 2001; Collins et al., 2004; Acs and Szerb, 2007; Carlsson et al., 2010). Second, new venture creation is statistically linked to both job creation and regional development (Acs and Armington, 2006). Higher rates of entrepreneurial activity are strongly associated with faster growth of local economies (Acs and Armington, 2004). Third, entrepreneurs are crucial concerning the implementation of innovations in our society. For example, with the development of new environmental technologies, which includes solar, wind, and biomass, entrepreneurs have the ability to accelerate the transition to a sustainable society (Negro, 2007; Hekkert and Negro, 2009).

Although researchers have indicated the importance of new ventures, most new firms fail to grow (assuming they have the ambition to do so) due to a liability of newness (Stinchcombe, 1965). Unlike established firms, which have already achieved a level of viability and survival, in the absence of growth the survival of new firms may be significantly reduced (Buederal et al., 1992). Of the estimated 700,000 new ventures started each year in the United States, only 3.5% grow sufficiently to actually evolve into large firms (Gilbert et al., 2006). Problems concerning the survival and growth of nascent firms are largely caused by limited resources and adaptability (Khairi, 2010). The task of attracting resources into a new venture is perhaps the greatest challenge faced by entrepreneurs as the lack of both reputation and a track record creates a heightened perception of risk by potential resource providers (Brush et al., 2001; Gilbert et al., 2006). Aldrich (1999) argues that new firms must be perceived as legitimate by those groups who might be inclined to engage in resource exchanges with them, such as customers, suppliers, investors, potential employees, and the like.

Besides liability of newness, which occurs at the firm level, young populations at an industry level face the same problems. Entrepreneurs in new industries especially struggle to survive and perform due to the difficulty of acquiring crucial resources, such as top managers, quality employees, financial resources, technology, and government support (Zimmerman and Zeitz, 2002). The results are low founding rates and high disbanding rates experienced by young and small organizational populations (Carroll and Hannan, 2000). According to institutional theories of organizations, the underlying reason for low founding and high failure rates in new industries is caused by an initially lack of external legitimacy (Hannan and Freeman, 1989; Singh et al., 1991). As a result, entrepreneurs face difficulties with continually legitimating their organizational structure for the creation and sustaining of their firms (Holt and Macpherson, 2010).

Legitimacy can be viewed as a social judgment of acceptance, appropriateness, and/or desirability (DiMaggio and Powell, 1991; Zimmerman and Zeitz, 2002). It is the motivating factor for external stakeholders to provide resources to entrepreneurs, i.e. their belief of feeling that the venture is indeed competent, efficient, effective, worthy, appropriate, and/or needed. It ultimately exists in the eye of the beholder and is very important for the performance of a company. It plays a crucial role in acquiring resources and to understand the creation, survival, and growth of new ventures (Zimmerman and Zeitz, 2002; Delmar and Shane, 2004; Khaire, 2010). It is an intangible, social resource that improves chances of acquiring all of the various resources needed to survive and grow, such as capital, technology, managers, competent employees, customers, and networks (Meyer and Rowan, 1977; Zucker, 1987; Hannan and Freeman, 1989; Aldrich and Fiol, 1994; Scott, 1994a, 1995a). Over the years, social scientists have offered a number of definitions of legitimacy, with varying degrees of specificity. In this thesis an inclusive, broad-based definition will be used:

“Legitimacy is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions” (Suchman, 1995, p. 574).

Although some researchers have recognized the importance of legitimacy for new venture success and identified legitimacy as critical issue organizations face (Stinchcombe, 1965; Starr and MacMillan, 1990; Hunt and Aldrich, 1996; Zimmerman and Zeitz, 2002; Delmar and Shane, 2004), research on new venture legitimacy is still in its infancy. I argue that due to conceptual and methodological complexity of this phenomenon earlier research fails to empirically prove how legitimacy perceptions matter for firm performance. For instance, Khaire (2010) focuses only on a few activities to obtain cognitive legitimacy, where she neglects sociopolitical legitimacy. In addition, Tornikoski and Newbert (2007) and Tornikoski (2009) use indicators which are not appropriate to measure the different legitimacy strategies in general. The legitimacy behavior indicators they use are improvising, resource combination and networking activities, these activities have no or only a vague relation with the earlier defined legitimacy strategies by Zimmerman and Zeitz (2002). Moreover by focusing on new venture growth and organizational emergence they neglect the intermediate step resource acquisition, which is crucial for survival and growth (Zimmerman and Zeitz, 2002; Tornikoski, 2009). In other words, research is yet to establish valid indicators for legitimacy strategies and link these strategies to resource acquisition and growth, here summarized as performance. Therefore, the main question that arises in this context is:

To what extent do legitimacy strategies influence the performance of companies?

In this thesis, I seek to improve and expand the work of Khaire (2010), Tornikoski and Newbert (2007), and Tornikoski (2009) by focusing on the different legitimacy strategies defined by Zimmerman and Zeitz (2002), who developed legitimacy strategy

concepts, however, did not empirically test them. Using these indicators as a starting place for this research and knowledge available within the Rabobank where I followed an internship, I endeavor to develop suitable indicators to obtain valuable results.

In this thesis a quantitative research is used to explore the relationship and influence of legitimacy strategies on the performance of a firm. Data is collected through a unique questionnaire whereby well chosen indicators are used. In cooperation with Rabobank, I have come into contact with 60 start-up companies within a new or emerging industry. Most of the firms within the database focus on a clean technology. Since these firms are active in a new industry they mostly do something new whereby it is crucial to gain legitimacy. By putting firms with different backgrounds in the sample it is possible to measure which characteristics of firms are responsible for differences in legitimacy strategies. Indicators for legitimacy strategies are defined with the help of earlier legitimacy research and generally used Global Reporting Initiative (GRI) and International Corporate Governance Network (ICGN) indicators. These indicators are related to corporate social responsibility and used by many large and smaller companies around the world, including Rabobank. To assess which strategy may have no relationship with different performance indicators at all, and to identify which subsets of legitimacy strategies contain redundant information about performance, a linear regression analysis is applied to quantify the strength of the relationship between performance and different legitimacy strategies. Almost all independent (legitimacy strategies) and dependent (performance) variables are measured by an ordinal scale.

Next section contains the theoretical framework which describes shortly the legitimacy process, present legitimacy concepts and developed hypotheses and conceptual model. The third section describes the methodology. The fourth section presents the results. The thesis will end with a discussion and conclusion. The discussion discusses the limitations of this research and the contribution of this research to current legitimacy debate about the role of agency. The conclusion provides a short overview of the research and discusses the implications of the findings for both academics and practitioners.

2. Theoretical framework

This section starts with explaining the legitimacy process. Subsequently the different sources and legitimacy strategies are explained. The relation between legitimacy strategies and performance is discussed with the help of eight hypotheses. This discussion ends with a conceptual model. Last part of this chapter explains how legitimacy strategies can be used, discusses the role of agency and discusses the paradox where entrepreneurs are exposed to.

External processes of legitimation assume: (1) legitimacy can be acquired and enhanced by strategic actions taken by a new venture; (2) legitimacy is a resource

important for acquiring other resources, such as quality employees and financial resources; (3) said resources are crucial for new venture growth (Dowling and Pfeffer, 1975; Suchman, 1995; Zimmerman and Zeitz, 2002). This process is repeated again and again whereby feedback loops continuous change strategic actions, legitimacy and resources acquired what ultimately result in various growth rates.

Within this process legitimacy is a relationship between the practices and utterances of the organization and those that are contained within, approved of, and enforced by the environment in which the organization exists (Zimmerman and Zeitz, 2002). The legitimacy process can be viewed as generalized perceptions or institutional logics that new organizations conform. These are widely held beliefs amongst social movements, consumers, investors, etc. However, there is variability at the individual level. An individual alone can not decide if something is legitimate or not. When an individual thinks something is suitable, appropriate and/or desirable it can be named propriety, not legitimate. On the other hand, when he or she believes everyone else believes it then it is legitimate or valid. A type of social control is necessary to judge if a new organization is legitimate, for instance when an authorized external audience evaluate and endorse a nascent firm.

In addition, there are also differences between the object of legitimation. In this thesis I will use an organization as a whole as object of legitimation. However, there are also specific practices and utterances within a company which could be the object of legitimation like a certain routine, activity, technology, name or symbol. The organizational form as object of legitimation attempts to include all of these objects to get a robust picture of new organization legitimacy.

2.1 Sources of legitimacy

Although legitimacy is not directly observable, scholars have attempted to measure legitimacy using a variety of indirect or proxy measures related to the source of legitimacy (DiMaggio and Powell, 1983; Aldrich and Fiol, 1994; Scott, 1995a,b; Suchman, 1995; Hunt and Aldrich, 1996; Zimmerman and Zeitz, 2002). One can discern three sources of the external environment from which legitimacy can be derived: sociopolitical regulatory, sociopolitical normative, and cognitive. These types of legitimacy are also known as regulative, normative, and cognitive (Scott, 1995a; Hunt and Aldrich, 1996; Zimmerman and Zeitz, 2002). *Regulative legitimacy* can be derived by visibly conforming to regulations, rules, standards, and expectations created by governments, credentialing associations, professional bodies, and powerful organizations. Examples are earning additional certificates and registering with additional governing bodies. *Normative legitimacy* can be acquired by visible endorsing and implementing values and norms widely held within their various domains of activity. An example of building normative legitimacy is increasing profits, treating employees fairly, receiving endorsements, and building networks. *Cognitive legitimacy* can be acquired by visible espousing and practicing widely held beliefs and assumptions accepted within their various domains of activity (Scott, 1994b; Scott, 1995a,b;

Zimmerman and Zeitz, 2002). A new venture can build its level of cognitive legitimacy by creating new practices and adopting a fashionable business model.

In addition to the three types of legitimacy, it is possible to add the legitimacy derived from the industry in which a new venture operates (Zimmerman and Zeitz, 2002). Over the past decades, researchers pointed that entrepreneurs of start-up companies in new industries face an even bigger challenge to gain legitimacy than entrepreneurs of start ups in well-established industries. Industries have different degrees of legitimacy that can be conferred upon the firms operating within them (Aldrich and Fiol, 1994; Scott, 1995b; Suchman, 1995; Zucker, 1998). The obtained legitimacy within an industry is based on a variety of actions and consequences stemming from the collective action of industry members (Zimmerman and Zeitz, 2002). Legitimacy from the industry in which a new venture operates can be derived by adopting the educational standards of the industry or promoting the potential of a new industry's technology.

Instead of using one source of legitimacy, a company can address multiple types of legitimacy by building its level of legitimacy. This can be done concurrently or sequentially as fits the situation. For instance, the examples given for each source of legitimacy can also be addressed concurrently or sequentially.

Legitimacy can be enhanced by strategic actions taken by the new venture (Zimmerman and Zeitz, 2002). Given the importance of legitimacy for the new venture, it is necessary to understand how new ventures can acquire legitimacy. Zimmerman and Zeitz (2002) have defined fundamental concepts about how to acquire legitimacy. However, existing empirical research on legitimacy strategies focus only on a single legitimacy activity, not on legitimacy concepts as a whole. Researchers paid no attention to find empirical evidence of earlier developed fundamental concepts. It is important to examine if those concepts are also empirical true, therefore more indicators are necessary to test a specific concept or strategy instead of a single activity.

2.2 Legitimacy strategies

A newer approach to legitimacy suggests that organizations can exercise strategic choice to alter the type and amount of legitimacy they possess (Scott, 1995a; Suchman, 1995). New ventures can take proactive steps to acquire legitimacy by at least two kinds of action. These kinds of action are (1) attempts to change itself, and (2) attempts to change its environment and other organizations operating within its environment (Suchaman, 1995; Zimmerman and Zeitz, 2002). In order to acquire legitimacy, Zimmerman and Zeitz (2002) argue that there are four basic strategies. The first three strategies - conformance, selection, and manipulation – were proposed by Suchman (1995). They added a fourth strategy: creation. These four basic strategies differ in terms of how much change is made by the organization in elements external to it. Conformance involves the least external change, whereas creation involves the most.

Moreover, entrepreneurs who carry out the conformance strategy have little room for strategic choice. It is relatively facile to execute this strategy because a firm meets general accepted norms, values and beliefs within a society. In contrast, for the creation strategy strategic choice is very important. This strategy involves developing something that did not already exist in the environment. New ventures, especially those in new industries, often uncover new domains of operations that lack existing scripts, rules, norms, values, and models (Aldrich and Fiol, 1994; Zimmerman and Zeitz, 2002). In between the strategic level of conformance and creation are selection and manipulation. Where selection is more strategic than conformance and manipulation is more strategic than selection.

Here two main strategies, conforming and transforming, are composed based on the four strategies of Zimmerman and Zeitz (2002). An attentive reader will notice that the distinction conforming and transforming expose a paradox where almost every entrepreneur has to deal with. The following section will explain this paradox by discussing the differences between the strategies.

Conforming

Conforming is the same strategy as the conformance strategy of Zimmerman and Zeitz (2002). This strategy involves 'following the rules'. A new venture that conforms does not question, change or violate the social structure. A nascent firm can conform to new values or logics, also institutional logics, or older logics, mostly a widely held legitimate belief. They may as well conform to a mix of new and older logics. In case of conforming to a widely held legitimate belief it involves seeking legitimacy by achieving conformity with the demands and expectations of the existing social structure in which the organization is currently positioned (Meyer and Rowan, 1977; DiMaggio and Powell, 1983; Suchman, 1995; Zimmerman and Zeitz, 2002). According to Zimmerman and Zeitz (2002) is conformance especially appropriate for a new venture operating in a social structure where the scripts, rules, norms, values, and models are well established (Utterback, 1994).

Compared to the other strategies defined by Zimmerman and Zeitz (2002) it is relatively easy to execute this strategy because there is little room for strategic choice. It is an especially appropriate strategy for a new firm operating in a social structure where the scripts, rules, norms, values, and models are well established (Utterback, 1994; Zimmerman and Zeitz, 2002). It is often used by new ventures because when a firm meets general accepted norms and values within society it already performs to the conformance strategy, for instance through addressing to regulations. From the earlier explained proactive steps to acquire legitimacy – (1) attempts to change itself and (2) attempts to change its environment and other organizations operating within its environment- conforming can be achieved by the first kind of action. Examples are creating a new structure, managerial team, and/or business model.

A central argument in this research is that legitimacy strategies are important for resource acquisition and growth. Two crucial resources necessary to obtain growth

objectives are human capital and financial capital. Conforming strategies can influence human capital since they decrease the uncertainty around a new venture. Quality employees and top managers rather work for a company which achieves conformity with the demands and expectations of the existing social structure in which the organization is currently positioned. The following hypothesis can be defined from the above information:

Hypothesis 1: Conforming strategies positively influences human capital

The same applies for financial capital. Investors and other financial sources are inclined to invest earlier in firms which conform to social rules, regulations, norms, values, ideas, models and practices. Hence, the following hypothesis can be developed:

Hypothesis 2: Conforming strategies positively influences financial capital

In addition to resource acquisition, legitimacy strategies also have an influence on new venture growth. Khairi (2010) examined this relationship by looking at activities which mimic the structures and ceremonial activities of established firms in their industry and activities which affiliate with high-status entities. By doing this she shows that legitimacy and status have favorable impacts on new firms' growth in revenues and number of employees. A lack of this study is that she only looks at two specific strategies to obtain cognitive legitimacy. Conforming and transforming strategies consists of different activities which can acquire alongside cognitive legitimacy also regulative and normative legitimacy. In this research especially the influence of regulative and normative legitimacy on performance is investigated. In addition, in this research also growth in EBITDA and sales are used as firm growth indicators. Following hypothesis can be defined using the above information:

Hypothesis 3: Conforming strategies positively influences growth

Transforming

For the transforming strategy, in contrast, strategic choice is quite important. According to Child (1972), strategic choice is the manipulation of the environment and the selection of performance standards within which one will operate. Transforming involves the selection, manipulation and creation strategy explained by Zimmerman and Zeitz (2002). Selection involves locating in a favorable environment. Since environmental sectors are very complex due to the differences in domains of activity, type of industry, and scope, ranging from international to local, it can be a very effective strategy to select an environment that is consistent and most advantageous to the new venture. An important condition is that the scripts, rules, norms, values, and models of a relevant environment are known and a firm has the opportunity and the resources to select an environment (Zimmerman and Zeitz, 2002). A successful example is Apple, which initially selected the home and school market because they valued playfulness

and widespread accessibility. A new venture can also select a favorable geographic location. Locating in an area where there are organizations that address similar scripts, rules, norms, values, and models may provide a new venture with legitimacy. For instance, it is beneficial for a software venture which develops a new and unfamiliar technology to locate in Silicon Valley, to be near ventures using related technologies or engage in related activities. Another example is to locate in a geographic location where there are favorable taxes and subsidies (Zimmerman and Zeitz, 2002).

Manipulation involves making changes in the environment to achieve consistency between the organization and its environment. It involves innovation and/or a substantial departure from prior practice. The innovator 'must often intervene preemptively in the cultural environment in order to develop bases of support specifically tailored to the distinctive needs of the organization' (Suchman, 1995, p.591). A single new venture generally lacks the money or power to significantly manipulate its environment (DiMaggio and Powell, 1983; Brint and Karabel, 1991; Powell, 1991; Zimmerman and Zeitz, 2002). However, a new venture can manipulate its environment by teaming with successful, well-established organizations. For example, new ventures can work together with established organizations to lobby for legislative change in rules and regulations impeding their growth. Another strategy is to associate with other new ventures (Zimmerman and Zeitz, 2002).

Creation involves developing something that did not already exist in the environment. New ventures, especially those in new industries, often uncover new domains of operations that lack existing scripts, rules, norms, values, and models (Aldrich and Fiol, 1994). Creation concerned the creation of the social context, rules, norms, values, etc. Creation is especially evident in the introductory stage of new industries. A creative new venture can act as a pioneer and establish the basis of legitimacy for those that come after it (Anderson and Zeithaml, 1984; Miller and Dess, 1996; Zimmerman and Zeitz, 2002).

Entrepreneurs who carry out the transforming strategy actively select, manipulate or create certain circumstances in order to acquire legitimacy. If it is not possible to select a specific environment, an entrepreneur could manipulate or create it by themselves. In general, these entrepreneurs actively perform specific strategies to persuade important stakeholders and society that they are desirable, proper and appropriate. They wanted to do more than just complying with rules and regulations and focus on opportunities to differentiate in a competitive market or to be a pioneer in a new market. Regarding the two proactive steps to acquire legitimacy, the transforming strategy can be realized by the second kind of action, attempts to change its environment and other organizations operating within it environment. Examples are the strategic use of issue advertising and lobbying for change in regulations.

In addition to conforming strategies, also transforming strategies enable entrepreneurs to acquire resources and reach growth objectives. By actively select, manipulate or create favorable conditions a new venture can increase their chances to find, attract and keep suitable employees. This process is important since a new venture

may require more specific expertise and highly skilled workers than a mature firm (Cardon, 2003). Human resource needs change as the firm progresses from start-up to an established mature firm (Thakur, 1999). When the firm enters its expansion stage it may be able to use lower skilled workers to meet production demands (Gilbert et al., 2006). Thus, the following hypothesis can be defined:

Hypothesis 4: Transforming strategies positively influences human capital

Concerning financial capital, transforming strategies can also have a favorable impact on attracting finance from internal and external sources. The entrepreneur's ability to obtain capital from sources such as banks or venture capitalists takes on great importance for the growing firm (Gilbert et al., 2006). By taking purposive action, i.e. carrying out transforming strategies, a firm can increase visible consistency with the environment. Investors, lenders, government and other money providers will earlier accept such a company what increases the chance they will invest or lend money to the company. Hence, the following hypothesis can be developed:

Hypothesis 5: Transforming strategies positively influences financial capital

Another effect explored in this research is the influence of transforming strategies on growth. Companies can use transforming strategies to differentiate themselves from others. By selecting, manipulating and creating circumstances which are beneficial for the company the chance on success increases, i.e. the chance a company will meet their growth objectives. Following hypothesis can be developed from the above information:

Hypothesis 6: Transforming strategies positively influences growth

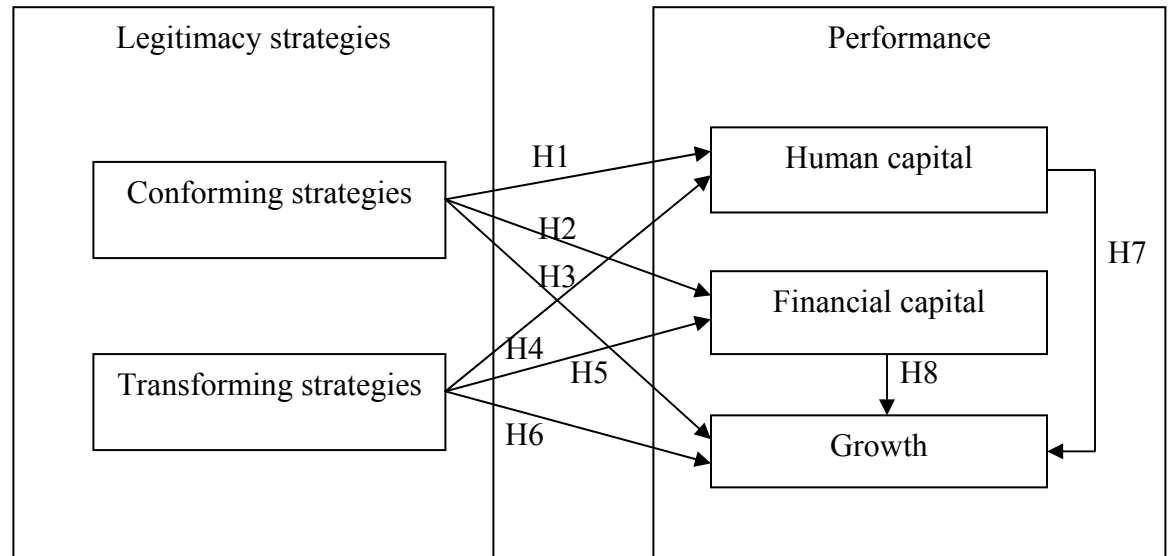
The earlier explained relationships between legitimacy strategies and different performance indicators all have a direct influence. For instance, conforming strategies have a direct positive influence on human capital. However, in addition to those direct influences I propose another two indirect influences. In their article Zimmerman and Zeitz (2002) argue that resources such as top managers, quality employees and financial resources are crucial for new venture growth. Resources enable firms to effectively pursue growth objectives through their quality, strength, and competencies they generate for the firm (Chandler and Hanks, 1994a,b; Brush and Chaganti, 1998; Gilbert et al., 2006). Hence, I propose that human and financial capital also have an influence on growth. Thus, the following hypotheses can be defined:

Hypothesis 7: Human capital positively influences growth

Hypothesis 8: Financial capital positively influences growth

The conceptual model in figure 1 represents the relations between conforming and transforming strategies and the different performance indicators. The arrows set forth the hypotheses discussed above.

Figure 1: Conceptual model



Conforming versus transforming

Entrepreneurs may use conforming and transforming strategies separately or in combination. It is possible for an organization to select different legitimacy strategies for different management functions (Hargreaves, 2003). For example, an organization can be conforming on managerial structures and processes, while manipulate and seeking to legitimate those technical aspects which offer competitive advantage. According to Zimmerman and Zeitz (2002) is it crucial that a new venture is very clear about what aspect it seeks to create. In order to minimize controversy between the new venture and the social structure in which it operates it may be best for a nascent entrepreneur to limit its institutional entrepreneurship, or transforming strategies, to that one area in which it intuitively feels that creation can be successful and which is central to its competitive advantage. In other areas, for example accounting, it may be best for nascent entrepreneurs to conform to expectations of the social structure, when conforming does not erode its competitive advantage over existing organizations.

Interesting questions that arise here with respect to agency is: Do entrepreneurs have the ability to transform a social environment or do they always have to conform to it? And can they do this alone or collectively? Since entrepreneurs in general can choose which strategies they prefer they at least act if they do have agency,

what assumes that their actions are observable. Moreover, the agency of an entrepreneur is also dependent on the industry in which an entrepreneur is active.

Assuming entrepreneurs have the ability to transform a social environment, it is interesting to know when do they use conforming and when do they use transforming? And are these mutually exclusive strategies? Or can they be used in combination with each other? I suppose entrepreneurs may use conforming and transforming strategies depending on what they are trying to legitimate. This may cover different legitimacy sources. For instance, a new venture may first conform in order to acquire regulatory legitimacy and then try to manipulate in order to acquire normative legitimacy, or it may conform and manipulate concurrently. However, it is more beneficial for an entrepreneur to know what they can achieve when they are using different conforming and transforming strategies. In specific, to know which problems they can solve or what kind of performance they stimulate by using various strategies. Since resources are limited, especially for new companies, it is important to select those actions that have the greatest payoff.

As indicated above, the conforming and transforming strategy expose a paradox almost every new venture is confronted with. A new venture needs legitimacy to perform well in order to survive and grow. A widely used strategy is conforming to its social structure. However, a new venture could also sell itself as offering something different, so in some sense it may challenge existing expectations, or at least create new ones (Zimmerman and Zeitz, 2002). Moreover, a new venture frequently will acquire legitimacy by introducing a new product, service, and/or practice that shocks, violates, offends, and/or contradicts the existing social structure. Nevertheless, according to the traditional legitimation approach, this should limit or prevent the new venture from accessing resources (Zimmerman and Zeitz, 2002). In order to deal with this paradox it is necessary to know how a new venture changes the social context through the introduction of its new product, service, and/or practice. Institutional entrepreneurship refers to the practice of creating norms, values, beliefs, expectations, models, patterns of behavior, networks, or frames of reference consistent with an organization's identity and current practice, and then getting others to accept these norms, values, etc. (Aldrich and Fiol, 1994; Rao, 1994; Borum and Westenholtz, 1995; Suchman, 1995; Zimmerman and Zeitz, 2002). Etzioni refers to institutional entrepreneurs as 'the shock troops of innovation' (1987, p.179). A new venture creates scripts, rules, norms, etc. that may shock society but that lead to changes in it (Zimmerman and Zeitz, 2002).

3. Methodology

The methodology section starts with explaining the research sample. Second the dependent variable is addressed by clarifying human capital, financial capital and growth. In the third part the independent variables are discussed, consisting of conforming and transforming strategies. Subsequently different control variables are addressed. This section ends with a method of analysis.

3.1 Research sample

To execute this quantitative research and to obtain sufficient data, an internship was followed at the department corporate social responsibility of the Rabobank. This department facilitated the access to start-up companies, especially for firms with a clean technology, i.e. clean tech firms. Clean tech firms can be defined as companies with a dedicated sustainable focus. They can be found in many different sectors, as long as the technology is focused on the more efficient use of natural resources. Clean tech products are defined as products with increasing productive use of natural resources, while eliminating or reducing waste, and adding economic value (Robeco, 2011). These firms are very useful because almost all of them do something new whereby it is crucial to gain legitimacy. Moreover, the internship was beneficial to develop proper indicators for especially the conforming strategy. A disadvantage of acquiring data with the help of Rabobank is a higher chance on a biased sample. A solution to this problem is to take different precautions to minimize this bias where possible. An example is to minimize the share of companies in the sample which are approached with the help of Rabobank. Thus, to have a variety of firms in the sample, the sample contains companies approached with help of Rabobank and companies approached independent of Rabobank. Although the sample it is not completely randomly drawn, it is still possible to execute this research because the present bias is minimized.

Since the scope in this thesis is on start-ups, also incubators were approached to acquire data. Incubators encourage entrepreneurship and minimize obstacles to new business formation and growth, particularly for high technology firms, by housing in one facility a number of fledging enterprises which share an array of services. These shared services may include: meeting areas, secretarial services, accounting, research library, on-site professional and management counseling, and computer word processing facilities (OWBO, 2011). Firms within these incubators offer a diversity of products and services, in contrast to the clean tech firm approached with help of Rabobank. Not every incubator was willing to cooperate. Since there was an opportunity to visit Utrecht Inc., an incubator in Utrecht, the response rate for Utrecht Inc. was much higher compared to other approached incubators. Also here the sample could be biased since firms can experience an advantage or disadvantage when they are settled in Utrecht. However, this effect causes such a small bias that this can be neglected.

Furthermore, I used a database on innovative start-up firms that were nominated or won prizes and awards to build the sample. There are many initiatives developed through big companies and/or other organizations to stimulate innovation. Examples are the Herman Wijffels innovation awards of the Rabobank, the Accenture innovation awards and the MKB top 100 for new innovative firms. A disadvantage of approaching these companies is that they could be biased because they are selected by a jury on specific characteristics. In order to neglect this bias, companies were tried to approach before the selection procedure has occurred. Since these companies were

approached using a Rabobank email address the response rate of participants of the Herman Wijffels innovation awards was much higher than for other prizes and awards.

An online questionnaire was developed in order to answer the research question. Questionnaires were most appropriate method because of the quantitative character of this research. In order to increase the respond rate companies firstly were approached by phone. If they agree to fill in the questionnaire a link of the questionnaire was send by email. The questionnaire consists of different sections which measure different conforming, transforming and control variables. To increase the validity of the measures used in this thesis different sources were applied to define appropriate indicators. First, earlier articles about legitimacy and new venture growth, for instance Suchman (1995), Delmar and Shane (2004), Gilbert et al. (2006), Zimmerman and Zeitz (2002), Tornikoski (2009) and Tornikoski and Newbert (2007), were used to identify the characteristics and behaviors that may confer legitimacy to organizations. Second, the norms and values of probably most important stakeholder, a (potential) investor, were utilized. Besides, additional knowledge within the Rabobank was applied. Based on these findings different legitimacy concepts were translated into more meaningful description of action.

In total 47 respondents filled in the online questionnaire. These companies are in general young companies and active in different industries, of established industries to new industries. Most firms are 1 to 4 years old. Descriptive statistics of the sample and the questionnaire can be found in the appendix.

3.2 Dependent variable

The purpose of this thesis is to measure the influence of executing legitimacy strategies on the performance of a company, in terms of resource acquisition and growth. Gilbert et al. (2006) argue that the two resources examined most often and found to be most clearly related to new venture growth are the financial (Bamford et al., 2000; Cooper et al., 1994; Lee et al., 2001) and human capital (Birley, 1987; Cooper et al., 1994) resources firms employ. Therefore resource acquisition in this research is measured by human capital and financial capital.

According Chandler and Hanks (1994) contribute resource-based capabilities of firm employees positively to venture growth by helping the entrepreneurs execute their objectives. 'Human capital is the knowledge, skills, competencies and attributes embodied in individuals that facilitate the creation of personal, social and economic well-being' (Klingbeil, 2008, p.3). Brüdel et al. (1992) observe that a lead entrepreneur's education, general work experience, and industry-specific experience were significantly correlated with the survival chances of newly founded firms. Based on earlier research, the human capital indicators in this research reflects the educational and professional experience of all the employees within the company. The first indicator enclose the average level of education and the highest level of education, the second human capital indicator contains also the variables average and highest level of education and, in

addition, the variable average years of experience in the current industry. All variables used have an ordinal five point scale.

Financial capital refers to money used by entrepreneurs and businesses to buy what they need to make their products or provide their services and to bring them to the market. A higher level of financial capitalization is important because it buys entrepreneurs time to successfully execute strategic objectives, enables entrepreneurs to either undertake more ambitious strategies or change their course of action, and simply empowers the entrepreneurs to meet the financing demands that are required to sustain the growth being realized (Cooper et al., 1994; Gilbert et al., 2006). The first financial capital indicator used is the money available to entrepreneur(s) at the start of the business, i.e. the amount of initial start capital. The second indicator is revenues in 2010 and measures the financial situation in a later stage, whereby the emphasizes shifts to financial success instead of capital. Revenue is income that a corporation receives from its normal business activities, usually from the sale of goods and services to customers. It refers to money currently available to the business. By measuring financial capital at various points in time it is possible to gain more insights which strategies an entrepreneur should use at specific phases in their development. Both financial capital variables have an ordinal five point scale.

Due to a high amount of young companies within the sample, growth is measured by the change of different financial tables from 2010 to 2011(expected value) and the growth of employees from 2009 to 2010. The questionnaire contains the following financial tables: Revenues, EBITDA (Earnings before interest, taxes, depreciation and amortization), and sales. All financial tables have an ordinal five point scale, the number of employees have a ratio scale. In order to develop growth indicators new variables will be defined. One method to measure growth is to rate it to -1 when there is a decline, 0 when there is no growth and 1 for growth. Another method is to divide the values for revenues, EBITDA, sales and employees by the previous year to measure the amount growth.

Besides measuring the influence of different conforming, transforming and control variables on growth, also the influence of human capital and financial capital is measured. As earlier mentioned researchers argue that legitimacy is necessary for resource acquisition and, thus, is an important means to foster growth (Zimmerman and Zeitz, 2002). In order to research if this true, if the acquisition of resources really has an influence on growth, growth regressions also comprise human and financial capital variables. The human capital variable used for this purpose is the variable which contains level of education and years of experience. This variable is more comprehensive than the other human capital variable since it contains more aspects of human capital. The financial capital variable chosen is initial start capital due to a higher response rate since there are some companies which do not have a revenue yet.

3.3 Independent variable

3.3.1 Conforming legitimacy strategies

Traditionally researchers treated legitimacy as a dichotomous concept, an organization is either legitimate or it is not (Aldrich, 1995; Scott, 1995a). In this thesis legitimacy is viewed as a continuous variable ranging in value from low to high (Deeds et al., 1997; Zimmerman and Zeitz, 2002). Based on available information and earlier theoretical research I operationalize conforming strategies along three dimensions. In the first area I focus on the knowledge available within the Rabobank which is accessible through my internship at Rabobank. The second section discusses internal activities within the firm to create a credible and desirable image to stakeholders. The third dimension contains two conforming conceptions which represent important conforming strategies.

Since legitimacy is a perception held by an organization's external audience, it is an abstract, unobservable concept that has proven difficult to measure. Because methodological difficulties the focus in this thesis is on sociopolitical legitimacy instead of cognitive legitimacy. Cognitive legitimacy can be derived from addressing 'widely held beliefs and taken-for-granted assumptions that provide a framework for everyday routines, as well as the more specialized, explicit and codified knowledge and belief systems promulgated by various professional and scientific bodies' (Scott, 1994b, p.81). Because the challenge to hunt down these beliefs, assumptions and knowledge, the scope of this research is on the better measurable sociopolitical legitimacy. Sociopolitical indicators can be developed by examining if a company conforms to regulations, rules, standards and expectations created by governments, credentialing associations, professional bodies, and even powerful organizations (sociopolitical regulatory legitimacy) and/or if a company visibly endorse and implement values and norms widely held within their various domains of activity (sociopolitical normative legitimacy).

In order to measure if firms obtain sociopolitical legitimacy by carrying out conforming strategies it is necessary to measure what the current regulations, rules, values, norms and so forth are. However, despite the focus on sociopolitical instead of cognitive legitimacy, this is still a quite difficult task. In order to find out it is important to focus on the interaction and communication between a firm and its environment. To gain more understanding about this process it can be beneficial for an entrepreneur to answer the following questions: (1) Who are important stakeholders? (2) What are the expectations of these stakeholders and which activities, perspectives do they appreciate? (3) When I meet this expectation, activity and/or perspective, how will I transfer this message, in other words, which source will I use to reach important stakeholders? And (4) Is the message received as how it initially was intended?

These understandings are very important to improve the acquisition of legitimacy and to provide more insights in this process. In this thesis they are used as a

reference point to make proper indicators for legitimacy strategies. To investigate these aspects more intensely and to increase choice possibilities, the questionnaire also contains a few open question in addition to the multiple questions. An example is a question about three main start-up and three current problems to investigate which problems could be a consequence of a default in the above process, i.e. which problems are responsible for a lack of legitimacy.

Due to my internship at Rabobank I am very involved and informed about current needs and requirements of the demands of an investor (the Rabobank) before they provide money. A recently new subject at Rabobank but also for other investors and stakeholders is the assumption that responsible entrepreneurship, also sustainable entrepreneurship, is an action that is desirable, proper, or appropriate. Since in last decades the importance of a globally sustainable economy has been recognized in a growing body of literature but also in society, sustainable entrepreneurship is a desired outcome with increasing importance. As a result the norms, values, rules, regulations, standards and expectations created by Rabobank and other stakeholders cover more and more the concept responsible entrepreneurship.

Responsible entrepreneurship, here defined as integrating Environmental, Social and Governance (ESG) factors into business strategies and operations, has different positive effects (Robeco, 2010). First it leads to better management of risks associated with ESG factors. ESG is closely related to Corporate Social Responsibility (CSR). Examples of these risks include liability risks because of pollution or reputation risks as a result of human rights violations. A second advantage of responsible entrepreneurship is cost savings resulting from higher resource efficiency, using less energy, water and materials. A third positive effect is higher revenues by developing new green or socially responsible products and services. Finally, by enhancing a company's reputation, responsible entrepreneurship can raise a company's profile amongst consumer, (potential) employees and investors, creating a higher company valuation.

Indicators for conforming legitimacy strategies are defined by using Global Reporting Initiative GRI and International Corporate Governance Network ICGN indicators. These indicators are widely used and are related to corporate social responsibility. As explained above, this concept is increasingly important in our society and is general accepted as desirable, proper and appropriate. The GRI and the ICGN are organizations which facilitate a general framework for indicators for responsible entrepreneurship, i.e. a norm that induces legitimacy strategies. GRI is a network-based organization that pioneered the world's most widely used sustainability reporting framework (GRI, 2011). The ICGN is a global membership organisation of over 500 leaders in corporate governance based in 50 countries with a mission to raise standards of corporate governance worldwide (ICGN, 2011). Question 6.5 in the questionnaire, 'Do you report and communicate to (important) stakeholders any of the issues below?', appoint different indicators for ESG issues. Each issue comprise different aspects which are showed in the table below the question. Entrepreneurs can answer this question

with a five point scale from never to very often. The issue '*business partners*' is used in the final model¹ since it contains the aspects ethical conduct and compliance, compliance with standards and communication what reveals a close link with both sociopolitical legitimacy and conforming strategies.

The second operationalization dimension is internal activities within a firm to create a credible and desirable image to stakeholders. These activities concern attempts to change itself by achieving conforming. Question 6.4 of the questionnaire consists of six internal activities with the purpose of creating consensus within a company about vision and mission, educate people about expectations of stakeholders and organize and take company excursions and retreats with the aim of building group cohesion. Entrepreneurs can indicate with an ordinal five point scale from never to very often if they carry out these activities. The variable '*Organize and take company retreats with the aim of building group cohesion*', also *company retreats*, is used in the final model since researchers argue that positive employee attitudes and behaviors have a considerable influence on business outcomes (Koys, 2001; Saari and Judge, 2004). By increasing group cohesion the attitudes and behaviors of employees may positively be influenced what subsequently lead to organizational effectiveness. Since retreats are mostly linked to a spiritual meaning and concern in general withdrawal and seclusion, this variable can be understand as building group cohesion by activities with are separated from crowded day-to-day activities.

In the third endeavor to measure conforming strategies I defined two conceptions which represent core values about conforming strategies. The first is: Serving customers and the environment by delivering sustainable products and systems, while respecting the environment in your manufacturing process. The focus in this core value is on responsible entrepreneurship, because this is, as explained earlier, a generally accepted action that is desirable, proper and appropriate.

The second variable is: Complying with ESG (sustainability) guidelines, (international) standards, and regulations within local and international society. This strategy covers the conformance strategy discussed by Zimmerman and Zeitz (2002). By complying to guidelines, standards and regulations a company is following the rules and achieve conformity with the demands and expectations of the existing social structure.

¹ Due to a sample size of 47 companies it is not possible to put all the variables used in the questionnaire in one model. The more variables a model contain, the higher the R^2 . The coefficient of determination R^2 is used to investigate how much of the proportion variance of the DV is explained by the model. If the R^2 becomes too high, the model is not reliable any more. Therefore it is necessary to adjust the amount of variables in the model to the sample size. Consequently, I need to select one or two variables, or combine different variables, to obtain best represent conforming, transforming and control indicators.

Question 6.6 comprise these conceptions and ask the question: How important and successful are the following strategies in your effort to gain support from stakeholders and society for product/s, service/s, or innovation? Entrepreneurs can answer this question with two five point scale from not important to very important and from not successful to very successful.

Both variables of question 6.6 are used in the model since they both have a close link with sociopolitical legitimacy and conforming strategies. The scores for the importance and successfulness of the variables will be sum up to one variable with the name *serve* and a variable with the name *comply*.

3.3.2 Transforming legitimacy strategies

Based on available information and earlier research I operationalize transforming strategies along three dimensions. The first area comprises the question: What are the benefits of belonging to a membership? Second dimension focus on different lobby activities to change current policy regulations in favor of the company. Last and third dimension discusses the underlying reason why companies carry out specific strategies.

Likewise for transforming strategies, by developing proper indicators it is important to investigate the interaction and communication between a firm and its environment. However, instead of examining the expectations of stakeholders and the activities and perspectives they appreciate, a transforming entrepreneur needs to find out which message(s) he or she wants to transfer to important stakeholders. For transforming entrepreneurs it is very important to persuade stakeholders that their activities and the produced product, service or innovation are credible and desirable, in particular when he or she produces an unknown product, service or innovation. As a result especially the third step in the process of interaction and communication is of crucial importance for a transforming entrepreneur, which concerns how the entrepreneur transfers its message to important stakeholders. Therefore two of the three transforming dimensions in this thesis indicate this third step.

Regarding the first area, questions 6.11 to 6.15 contain variables relating to the benefits of belonging to a membership. This could be a member of an independent initiative or association or, on the other hand, are nominated for or won any awards or prizes. Since belonging to a (high esteem) membership can yield positive attention and is favorable for the reputation of a company, it is beneficial to endeavor to be a member of such an initiative or association or actively search and apply for awards and prizes. In addition, if the initiative or organization has government sponsored credentials and/or the acceptance is conditional on a screening process, this increases the esteem of the membership and enlarges the benefits for a company to belong to such a membership. On the other hand, if a company is nominated for or win an award or prize or is selected to become a member of an initiative or association without exercise many effort, it

could also be a confirmation that the activities of a company are legitimate. Otherwise the company would not be nominated for or won an award or prize or would not be accepted in the initiative or association. Assuming that especially being nominated for (or won) any award or prizes increase the chance of obtaining legitimacy since this normally boosts the reputation of a company considerably, the variables in question 6.11 and 6.12, respectively 'Do you have employees (including yourself) actively searching and applying for awards and prizes?' and 'Is/has your company nominated for (or won) any awards or prizes?', are combined to the variable *awards and prizes* and used for the final model.

Second dimension focuses on different lobby activities to change current policy regulations in favor of the company. Question 6.16, 'Does your company actively seek changes in public policy developments such as subsidies and tax benefits through any of the following?', comprises those activities and contains the following response options:

- Through joint partnerships and associations with other related companies
- Through third parties such as non-profits
- Through individual action alone
- None are applicable

Most firms have answered to this question that they especially seek changes in public policy developments through third parties such as non-profits. Therefore this variable will be used in the model, with the name *changes in public policy*.

Concerning last and third dimension, question 6.10 discusses what the purpose is for an entrepreneur to follow different transforming strategies. A fundamental reason to produce another product, service or innovation is to gain a competitive advantage or to differentiate in a competitive market. Although it takes more effort to convince stakeholders at start, in the end such a firm is mostly more beneficial than firms which carry out conforming strategies or which do not differentiate. If the underlying strategy is to differentiate or to gain a competitive advantage, an entrepreneur is mostly aware about the effort it takes to convince stakeholders that the firm is credible and desirable. Since gain a competitive advantage could be relevant for all industries and not only for a competitive market, this variable is chosen to put in the model, and is named *gain competitive advantage*.

3.4 Control variables

It is necessary to use control variables to be sure if a measured significant relation between an independent and dependent variables is not caused by other variables. The questionnaire contains various control variables. Main variables which can have an influence on the performance of a company, whereby the influence of legitimacy strategies on the performances of a firm can be biased, are the age and size of firms and the industry in which it operates.

Firstly, as mentioned before, new firms are subject to a liability of newness, which contributes the high percentage of new venture failure (Stinchcombe, 1965). The

survival of new ventures may be significantly reduced in the absence of growth, where established firms have already achieved a level of viability and survival (Buederal et al., 1992). In general, a few years old company has acquired more resources than a firm just started. It is easier for this company to increase growth and consequently perform better than the just started company. Therefore the questionnaire contains questions about how long a firm is doing business.

Besides the age of firms also the size of firms is important for the amount of acquired legitimacy and resources. An exhaustive set of studies acknowledge that new ventures face a liability of smallness (Caroll, 1983; Gilbert et al., 2006). In order to grow a company needs to acquire resources. Small firms have fewer resources than large firms what could influence their growth potential. They also deal with a lack of economies of scale, which are benefits associated with bulk purchasing. Besides, in general it is more favorable to trade with bigger companies due to higher trade-offs. I will measure the size of a company by looking to the number of full-time employees at the end of the past 4 years.

A third control variable is the industry in which a firm operates. Industries have different degrees of legitimacy that can be conferred upon the firms operating within them. Entrepreneurs of start-up companies in new industries face an even bigger challenge to gain legitimacy than entrepreneurs of start ups in well-established industries (Aldrich and Fiol, 1994; Scott, 1995a; Suchman, 1995; Zucker, 1998). It is therefore plausible that in new industries entrepreneurs carry out different strategies to acquire legitimacy than entrepreneurs in well-established industries. For instance, the strategies clean tech firms carry out will vary from new companies in existing fields. Therefore the industry in which a firm operates is measured by asking in what technological field and area the company is active.

Because a relatively small sample size, only those control variables can be put in the model which have a significant influence on multiple dependent variables. Different pre-regressions will be carried out to reveal those control variables, age, size or industry, which have an important influence. After those regressions the variable size of company was only for a few regressions significant and did not show an important influence on the performance of firms. Likewise, the exploratory regressions did not reveal a specific area or technological field that stands out. As a result both control variables size and industry will not be used in the model. In contrast, the variable 'In what year did your company register with the regional government of authorities?' showed a significant influence on different performance indicators. Therefore this variable will be used in the model to control for the age differences between companies.

3.5 Analysis

Since most variables in the questionnaire have an ordinal scale, logistic regressions are used to estimate the effect of legitimacy strategies on the different performance indicators. The model can be expressed as:

$$\text{Odds of performance well} = e^{\beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \beta_7 x_7 + \beta_8 x_8}$$

where

- x_1 = Report and communicate business partner issues to stakeholders
- x_2 = Organize and take company retreats with the aim of building group cohesion
- x_3 = Serving customers and the environment by delivering sustainable products and systems, while respecting the environment in manufacturing process
- x_4 = Complying with ESG (sustainability) guidelines, (international) standards, and regulations within local and international society
- x_5 = Actively search and apply for awards and prizes and nominated for (or won) any awards or prizes
- x_6 = The company actively seek changes in public policy developments such as subsidies and tax benefits through third parties such as non-profits
- x_7 = The purpose of the earlier mentioned transforming strategies is to gain a competitive advantage
- x_8 = Year of register

To control for multicollinearity, a Spearman's correlation was conducted on the data. The results show three potentially problematic correlations (see appendix). The first two correlations are between two conforming variables, business partners and company retreats, and between two transforming variables, awards and prizes and changes in public policy, with a magnitude of respectively .385 and .342. Since both correlations have a magnitude below 0.4, this value is too low to potentially disturb regression analyses results. Also for the third correlation between business partners and year or register is the value of 0.409 too low to disturb results, although this magnitude is slightly above 0.4. To conclude, the magnitudes of the correlations are too low to potentially confound the regressions results.

4. Results

Table 1 presents the results of the different regressions. With respect to the predictive power, all models appear highly predictive of resource acquisition, financial success or growth. The research models can explain 63% and 51% of the variance of

human capital, 67% and 64% of financial capital and financial success and 74% and 61% of growth.

Table 1: Regression results

Variables	Education level	Education level and years of experience	Initial capital	Revenues 2010	Growth 1	Growth 2
<i>Conforming</i>						
Business partners	1.335**	.075	-.198	.377	.378	-.258
Company retreats	.508	.323	.659**	.582*	.826**	.610
Serve	-.248	.029	.461**	-.513**	.278	.017
Comply	-.107	-.063	.142	.277*	-.247*	.045
<i>Transforming</i>						
Awards and prizes	.728**	.325**	.056	.552**	-.160	-.341
Changes in public policy	-.704	1.078	-1.036	2.741*	.668	4.086*
Gain competitive advantage	1.764*	.617	-.800	1.205	.217	1.692
<i>Control</i>						
Year of register	.018	.026	.056	-.189**	.010	.021
Education and experience					.479	.633
Initial capital					-.256	.067
R square	.63	.51	.67	.64	.74	.61
* p<0.1						
** p<0.05						
*** p<0.01						

When examining the different conforming legitimacy strategies, it appears that, conforming strategies have a low influence on human capital and growth, and a high influence on financial capital. For human capital only one variable is significant. Although the regression coefficient of this variable is high, one of eight reveals a marginal influence. The financial capital outcomes demonstrate four of eight positive significant variables. Especially the variable company retreats is important for financial capital since both influences are significant. For growth two variables have a significant value, however, one is positive and the other negative. This means that the results do not show a positive influence of conforming variables on the growth of a company.

To conclude, the results reveal that the first two hypotheses are true. Especially the results for financial capital show a high positive influence. The third hypothesis can not be confirmed.

With respect to the transforming strategies, it seems that they have a positive influence on all three performance indicators. Most impact is exerted on human capital, where half of the variables are significant. Main variable for human capital is awards and prizes since both values are significant. Transforming strategies have a reasonable influence on financial capital, two of four variables are significant. The significant growth variable indicates a high impact on the second growth indicator since it has the highest regression coefficient in the model. However, the overall influence of transforming on growth is modest, due to the significant impact of only one variable.

In sum, hypotheses four, five and six are all true where hypothesis four, the impact of transforming on human capital, is most clearly demonstrated. Hypothesis five is confirmed to a lesser extent and hypothesis six is least convincing since only one variable is significant.

By examining the effect of resources acquisition on growth neither the human capital variable nor the financial capital variable has a significant influence on growth. Therefore this research does not indicate that resource acquisition has a positive influence on growth. Hypothesis seven and eight can not be confirmed with this research.

The control variable, 'In what year did the company register with the regional government or authorities?', reveals only a significant (negative) relation with revenues. This means that, in accordance to expectations, the older a company is, the higher the revenues are. Further is the overall influence of this control variable weak, because it only have an impact on 1 of the six performance variables.

In summary, conforming strategies have especially an influence on financial capital and in a lesser extent on human capital. The results reveal no clear positive impact on growth. Transforming strategies have a positive influence on all performance indicators. A high influence on human capital, a reasonable influence on financial capital and a modest impact on growth. The outcomes do not show a effect of resource acquisition on growth. Neither the human capital variable nor the financial capital variable indicates a significant relation.

5. Discussion

As in other studies, this research also has its limitations. I acknowledge that my thesis is restricted in at least four ways and therefore I offer the following advice for future scholars which will study legitimacy and wants to improve this research.

First, the aim of this thesis is to confirm earlier defined concepts about legitimacy by empirically measure the influence of different legitimacy strategies on the performance of companies. Because research on new venture legitimacy is still in its infancy and earlier research fails to empirically prove how legitimacy perceptions matter for performance, there is almost no knowledge available about good indicators. Since

existing studies lack to create good indicators due to difficulties in measuring legitimacy, information is deficient about proper indicators. Therefore one should see the indicators used in this research as a first attempt to measure earlier developed legitimacy concepts. This study is a start for making good legitimacy strategy indicators, however, a lot of improvements are possible.

Second, this research is limited by its sample size. Since data gathering is a very time consuming activity it is difficult to obtain enough data in a limited time span. In present research I collected 47 questionnaires while the results will be more reliable by increasing the sample size. A possible consequence of a small sample size is that regression outcomes can be different for a higher amount of responses. Therefore I recommend future researchers to acquire a larger sample due to the reliability of the results. In addition, since almost all companies within this sample are approached with the help of Rabobank it is for future research better to approach companies more randomly to decrease the possibility of biased results.

Third, since linear regression is used and no data is available which measures the influence of legitimacy strategies over time this research is not suitable to measure the different feedback loops between the independent and dependent variables. A possible solution to this problem is to collect data for several years in order to measure the influence of legitimacy strategies over time and to measure the influence of different feedback loops.

A fourth limitation is the object of legitimation. Here the organization as a whole is used while there are also specific practices and utterances within a company which could be the object of legitimation, like a certain routine, activity, technology, name or symbol. Future researchers can spend more attention to these different objects of legitimation. For instance, to what extent different legitimacy strategies influence different objects of legitimation.

However, despite those restrictions this research contributes to the current legitimacy debate for two important reasons. First, by examining the differences between conforming and transforming this thesis provides new insights in the agency versus environment debate. The early institutional school suggested that organizations receive legitimacy by conforming to system-wide norms, beliefs, and rules (Meyer and Rowan, 1977; DiMaggio and Powell, 1983; Scott, 1995a,b). In viewing legitimacy as something operating largely at the subconscious or preconscious level, little was said about how to go acquire this legitimacy. This stream of literature argues that due to isomorphism, a new venture cannot take purposive action to increase legitimacy in an environment. Contrary to organizational theorists, the entrepreneurship literature suggest, from a management perspective, that entrepreneurs can manage their narratives, symbols and perceptions. In other words, they can exercise strategic choice to alter the type and amount of legitimacy they possess (Deeds et al., 1997; Scot, 1995a; Suchman, 1995).

To investigate the general influence of legitimacy strategies on performance it is possible to answer earlier asked questions related to agency: Do entrepreneurs have the ability to transform a social environment or do they always have to conform to it? And

can they do this alone or collectively? The outcomes of this thesis show that a firm can take purposive action to increase visible consistency with the environment by conforming and/or transforming the environment in which it exists. Since each legitimacy strategy has at least a significant impact on one performance indicator, one can assume that an entrepreneur can take purposive action to minimize controversy between the new venture and the social structure in which it operates.

In addition, the results also argue that entrepreneurs may use conforming and transforming strategies depending on what they are trying to legitimate, applying the strategies separately or in combination. For instance, if a firm has problems to attract quality employees a solution is to search and apply for awards and prizes and consequently increase the chance to be nominated for or win an award or prize. Simultaneously with the transforming strategy awards and prizes an entrepreneur can also carry out the conforming strategy business partners i.e. report and communicate business partners' issues to stakeholders. This strategy also has a positive significant influence on human capital what increase the chance even further to attract and keep top managers and valuable employees.

Moreover, entrepreneurs can execute transforming strategies alone but also collectively. For the strategy changes in public policy an entrepreneur actively seek changes in public policy developments through third parties such as non-profits. Since changes in public policy have a positive influence on both financial capital and growth, it is also possible for an entrepreneur to cooperate with other parties. Since both significant variables have a very high regression coefficient it can be interesting to examine the influence of partnerships to obtain legitimacy more extensively in further research.

A second contribution of this research to current legitimacy debate is the differences between the outcomes for conforming and transforming strategies. Earlier researchers have examined legitimacy strategies by making a distinction between the strategic choices of the strategies, based on the different streams of literature. However, the results reveal no large differences between conforming and transforming strategies. It can be interesting for further research to use another approach. A possibility is to investigate the interaction and communication between a firm and its environment. Especially the last two phases can provide new insights in obtaining relevant information about the acquisition of legitimacy. Since communication to stakeholders is very important in the legitimacy process, it is interesting to examine the differences in transferring a specific message to stakeholders and if this message is receives as initially was intended. Differences in this process can contribute to the performance of firms.

6. Conclusion

Although researchers have recognized the importance of legitimacy for new venture success, research on new venture legitimacy is still in its infancy. Due to

methodological problems earlier research lacks to empirically prove how legitimacy perceptions matter for firm performance. This research attempts to create valid indicators for legitimacy strategies and to link these strategies to resource acquisition and growth. The research question of this thesis is: *To what extent do legitimacy strategies influence the performance of companies?*

A quantitative research is carried out to explore this relationship. Indicators are developed by focusing on the interaction and communication between a firm and its environment and with the help of Rabobank and earlier theoretical research. There are three main findings in this research. First, conforming strategies have especially an influence on financial capital and in a lesser extent on human capital. The results reveal no clear positive impact on growth. Second, transforming strategies have a positive influence on all performance indicators. A high influence on human capital, a reasonable influence on financial capital and a modest impact on growth. The last en third finding is that the outcomes do not show an influence of resource acquisition on growth. Neither the human capital variable nor the financial capital variable indicates a significant relation.

5.1 Implications of findings for theory and practice

5.1.1 Implications for theory

The purpose of this thesis is to confirm earlier defined concepts about legitimacy. Currently, there is almost no literature about the specific influence of different strategies on the success of a firm. By demonstrating these concepts make sense and certainly have an impact on the performance of firms, I hopefully encourage other researchers to examine different legitimacy concepts to investigate their impact on new and or established companies in different industries. What will result in a decline or closure of this literature gap. I focused on the legitimacy literature in order to understand the role of legitimacy strategies for the performance of firms. Hence, the findings of this research have implications for three streams of literature: (1) social embeddedness and institutional research, (2) organizational growth, and (3) entrepreneurship literature in general.

First, this research contributes to the social embeddedness and institutional literature because instead of showing that noneconomic factors which affect economic outcomes only are embedded in the network ties of individuals within firms (Uzzi, 1996,1999; Broschak, 2004) I focus on firm-level social resources that accrue to firms as a whole also have a material impact on a firm's (economic) performance. Thus, beyond firm employees this research extends past research on the economic impact of embedded ties to firm-level noneconomic resources that are actively acquired by firms. In addition, this thesis responds to recently calls to study the relationship between institutional pressures and entrepreneurship (Eckhardt and Shane, 2003) and to pay more attention to how organizations deal strategically with the institutional processes and pressures that affect them (Oliver, 1997; Khaire, 2010). Although some recent

empirical work explores these relationships, much remains to be done (Sine et al., 2007).

Moreover, it extends recent work on the strategic implications of the institutional environments of organizations. I found that firms can strategically deploy institutional legitimacy by actively adopting institutionalized practices and activities and by modifying external audiences' perception of the nascent organization. These findings are important in bridging the dichotomy between institutional and strategic legitimacy described by Suchman (1995).

Past research about social embeddedness and social capital of firms concentrate on social mechanisms that affect economic activity. By using a resource constrained context, i.e. new ventures, I show that social resource legitimacy can compensate for the absence of economic and material resources. In particular, by taking purposive action, i.e. executing legitimacy strategies, this lead to increases in financial and human resources.

This research also made a much-needed empirical addition to the social embeddedness and institutional theory by developing indicators which are necessary to acquire on of the most, maybe the most, important social resource legitimacy.

Second, since most organizational studies in general, and research on organizational growth in particular, focus on large, well-established firms this study addresses one of the most important limitations of these studies, the resource acquisition and growth of *new firms*. In particular processes will be described that explicitly take into account young firms' lack of resources, which even lacked in research that specifically studied new venture growth (e.g., Dávila et al., 2003). This research focus on specific legitimacy strategies which are relevant to new ventures' unique issues and problems whereby it overcomes the limitations of previous growth-related studies. Besides by addressing the importance of taking purposive action to increase the chance on resource acquisition and growth, this thesis reject prior research which focus on passive characteristics of a new organization instead acquiring legitimacy by active behavior (Tornikoski and Newbert, 2007).

Third, the choice of human capital, financial capital, financial success and growth as the dependent variable makes a significant contribution to the entrepreneurship literature. Due to the paucity of detailed data on new ventures, most entrepreneurship studies have tended to use firm survival as a performance measure for new ventures (Khaire, 2010). With the help of a unique data set, it was possible to study factors that affect resource acquisition and growth of new firms rather than survival. The indicators used in this research for performance, human and financial capital, financial success and growth, broaden our understanding of factors affecting performance. All these indicators are a desirable outcome for new ventures, they overcome the problem of reliability of newness by generating the benefits of being a large firm instead of small and young.

Further has previous entrepreneurship literature tended to focus on high-tech firms, while the context in this research is particularly on new and emerging industries, e.g. the cleantech industry, to emphasize the differences between industries regarding

legitimacy. By focusing on different industries this research widens the scope of entrepreneurial research.

5.1.2 Implications for practice

The results of this thesis yields several advantages for entrepreneurs and increase our understanding about factors that contribute to new venture success. First, the finding that an entrepreneur can take purposive action to increase their performance suggests that what nascent entrepreneurs do may be more important than whom they are. I think this is important in that it provides hope for all nascent organizations in that their chance of acceptance by society can be increased by carrying out specific strategies which will solve issues and problems related to the acquisition of resources and deficient grow. Acceptance by society does not seem to be a function of their backgrounds, but rather of their efforts.

A second advantage of present research is that the results show that specific legitimacy strategies have an influence on a specific resource indicator. For human capital the strategies business partners, awards and prizes and gain competitive advantage play an important role. Financial capital can also be acquired by the strategy awards and prizes. Financials success can be enhanced by the strategies company retreats, comply, awards and prizes and changes in public policy. The final performance indicator, growth, can be obtained by the strategy company retreats and the strategy changes in public policy.

Third positive outcome of present study is, in addition to the fact that an entrepreneur may use conforming and transforming strategies depending on what they are trying to legitimate, they can apply the strategies separately or in combination. For instance, if a firm has problems to attract quality employees a solution is to search and apply for awards and prizes and consequently increase the chance to be nominated for or win an award or prize. Simultaneously with the transforming strategy awards and prizes an entrepreneur can also carry out the conforming strategy business partners i.e. report and communicate business partners' issues to stakeholders. This strategy also has a positive significant influence on human capital what increase the chance even further to attract and keep top managers and valuable employees.

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Appendix

Appendix 1

Questionnaire

Onderzoek Rabobank/ Universiteit van Utrecht

1.

Name of company

1 General company questions

2.

1.1 Is your company active – or intends to be active – in any of the following technological fields? (More than one is possible)

- Electrical and electronics
- Information and communication technologies
- Engineering and production engineering technologies
- Biotechnology
- Chemicals and plastics
- Alternative energy, soil or other clean technologies
- Not applicable
- Other, please specify:

3.

1.2 Is your company active – or intends to be active – in any of the following areas: (More than one is possible)

- Solar technologies
- Wind technologies
- Biomass (biofuels) technologies
- Other alternative energy generation
- Water purification and management
- Alternative energy storage
- Alternative energy infrastructure
- Alternative energy efficiency
- Sustainable transportation & logistics
- Air quality
- Manufacturing/Industrial (of environmental products) (bio-plastics, etc)
- Materials recovering & recycling
- Sustainable agriculture and nutrition
- Not applicable
- Other, please specify:

4.

1.3 Is/was the company a subsidiary of a larger corporation (in the home country or abroad)?

Please note that a subsidiary is defined as a venture of which another organization possesses more than 50% of voting shares.

- Yes, currently [go to question 1.6]
- Yes, but independent now
- No

5.

1.4 Was / Is the company a spin-off or an independent start-up?

Please note that a spin-off occurs when a division of an organization (like a company, research lab, university department etc.) becomes an independent business, whereby the founders of this new venture take assets (such as

intellectual property, technology or products) from the parent organization.

A spin-off from another organization

An independent start-up

Other, please specify:

Don't know

6.

1.5 In what year and month did your company register with the regional government or authorities?

7.

1.6 In what year and month did your company make its first sale?

8.

1.7 What is / are the average education level(s) among employees in your company?

Employees are hired on the basis of a temporary or a permanent employment contract and paid with a regular salary. Note that students, trainees, and interns are frequent examples of employees with a temporary employment contract, but also subcontracted workers from a temporary placement agency should be considered as employees.

Primary education,

Pre-vocational secondary education (VMBO)

Senior general secondary education (HAVO)

Pre-university education (VWO)

Senior secondary vocational education (MBO)

Higher professional education (HBO)

- Academic Higher education (WO)
- Adult education
- Not applicable
- Do not know

9.

1.8 What is the highest level of education among (full time) employees in your company?

- Primary education,
- Pre-vocational secondary education (VMBO)
- Senior general secondary education (HAVO)
- Pre-university education (VWO)
- Senior secondary vocational education (MBO)
- Higher professional education (HBO)
- Academic Higher education (WO)
- Adult education
- Not applicable
- Do not know

10.

1.9 What are the average years of experience in the industry of the employees in the company?

- 0 years
- 1-2 years
- 2-4 years
- 4-6 years
- 6-8 years
- 8 -10 years
- 10 or more years
- Not applicable
- Do not know

11.

1.10 Do the founding member(s) of your company have prior experience in any of the following areas? (More than one possible; please indicate the number of years)

Note that a founding member is defined as a person who contributes regularly and substantially to setting up a venture by bringing in funds, manpower, or expertise etc.

Lead entrepreneur in another venture; years

Financial management experience; years

General management experience; years

Industry experience; years

Other (please specify in comment box as well the number of years)

2 Innovation and product development

12.

2.1 How would you describe the degree of novelty of your products/services? (More than one answer is possible)

Radically new INNOVATION: The product has never been available to potential customers beforehand.

Partly new IMPROVEMENT: Only less sophisticated versions of the product have been available to potential customers beforehand.

Traditional REPRODUCTION: Similar versions of the product have been available to potential customers beforehand.

Do not know

13.

2.2 Which customers does the product /s of your company address?

For example: users of mobile phones, producers of solar panels, developers of technologies for wind turbines etc.

14.

2.3 Do other companies offer product /s and/or service/s that are similar to those offered by your company?

- Yes, there are other companies that offer the same products or services.
- No, the products and services we offer are original but there are similar competitive products and services.
- No, our products and services are original.
- Do not know.

15.

2.4 What is the most current percentage of full-time employee work hours spent on research and development (R&D)? (Must be done on a systematic basis, not occasionally, and includes both money and labor).

- Less than 1%
- up to 5%
- up to 10%
- up to 15%
- up to 20%
- up to 25%
- Do not have full-time employees dedicated to R&D.
- Do not know

3 Financing

16.

3.1 What was the amount of the total initial capital investment during the initial start-up phase of your company?

Please note that start-up is defined as the month timeframe when the company made its first sale.

- Less than 10,000 Euro equivalent
- 10,000 to 25,000 Euro equivalent
- 50,000 to 100,000 Euro equivalent
- 100,000 to 250,000 Euro equivalent
- 250,000 to 500,000 Euro equivalent
- 500,000 Euro or more
- Not applicable

17.

3.2 What was / were the origin(s) of the initial capital reported above? (More than one answer is possible)

Please note that owners and partners are those who provide finance in return for becoming a proprietor (shareholder) of the company, loan providers make funds available which are to be paid back together with a certain amount of interests (including zero interests) and sponsors provide finance without asking for returns.

- Owner's savings
- Owner (Venture capital)
- Owner (Partner)
- Sponsors (family/life partner)
- Sponsors (friends)

- Loan providers (family/life partner)
- Loan providers (bank credit or mortgage)
- Parent firm
- Subsidies
- Security (borgstelling)
- Not applicable

18.

3.3 How long did it take for your company to attract sufficient financing during the start-up?

Recall that start-up is the month prior to and after the first sale.

- Within three months
- Within three up to six months
- Within six months up to a year
- Within one year up to two years
- More than two years
- Not applicable

19.

3.4 Has your company gained additional financing after the first round of financing from any of the following sources?

- Bank credit/loan(s)
- Personal bank loan/mortgage
- Venture capital
- Parent firm
- Not applicable
- Other; please specify:

20.

3.5 How long did it take for you to attract additional financing?

- Within three months
- Within three up to six months
- Within six months up to a year
- Within one year up to two years
- More than two years
- Not applicable

4 Performance

4.1 Please fill in the following financial tables:

21.

4.1.1 Revenues

	<1k EUR	1-4k EUR	5-19k EUR	20-50k EUR	>50k EUR
2007	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2008	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2009	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2010	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2011 (expected)

22.

4.1.2 EBITDA (Earnings before interest, taxes, depreciation and amortization)

	<-5k EUR	-5k to 0 EUR	0 to 4k EUR	5k to 10k EUR	>10k EUR
2007	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2008	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2009	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2010	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2011 (expected)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23.

4.1.3 Sales

	<1k EUR	1-4k EUR	5- 19k EUR	20-50k EUR	>50k EUR
2007	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2008	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2009	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2010	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2011 (expected)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

24.

4.2 Has your company reached the break even point? If no, when does your company expect to reach the break-even point?

- Yes, currently at or above the break-even point
- No, this fiscal year
- No, within 1 year
- No, within 2 years
- No, within 3-5 years
- No, within > 5 years
- Do not know

25.

4.3 What was the number of employees (full-time) at the end of the past 4 calendar years?

	2007	2008	2009	2010
Total number of full-time employees at the end of each calendar year	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Jobs created through mergers and acquisitions	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Jobs created through organic growth (there is an increasing demand for sustainable products/ services)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Jobs lost through divestures or disposals	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Jobs subtracted due to layoffs	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

5 Current problems and barriers

26.

5.1 Does your company currently have problems in any of the following areas? (more than one answer is possible)

- Problems with licenses and registration
- Problems of acquiring technology, knowledge or innovation
- Problems with financing (such as providing examples of the potential profitability and return on investment over time)
- Problems with finding a suitable location
- Problems with finding suitable employees
- Problems with convincing suppliers
- Problems with convincing clients
- Problems with government regulations and policy
- Problems with adverse public attitude towards your business activities
- Problems with adverse media attention
- Problems with building networks
- Other, please explain

27.

5.2 Could you please indicate your current top three problems at start-up and at the present?

Start-up 1

Start-up 2

Start-up 3

Present 1

Present 2

Present 3

28.

5.3 Additional difficulties/problems

	No, do not agree	No, not generally	Yes, somewhat	Yes, very much so	Do not know	Not applicable
Do/did you find it difficult for your company to acquire financing relative to business ventures in the same industry or sector?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has the company had problems, since start-up, in attracting suitable skilled employees?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has the company had problems in keeping suitable skilled employees over the past three calendar years?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

29.

5.4 Indicate the level of agreement and importance of the following. Note: The definitions of categories are explained below.

	Do not agree		Very much agree		Less important		Very important		Not applicable
Threats by new entrants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Threat of substitutes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Consumer negotiating power	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Supplier negotiating power	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>

Regulatory power



Examples of threats/powers

Threats by new entrants:

Easy barriers to entry and high competition can reduce your company's market share.

Threat of substitutes:

The ease of imitating your company's competitive position through similar products or services.

Consumer negotiating power:

Few clients/consumers that restrict the ability of the company.

Supplier negotiating power:

Few suppliers that restrict the ability of the company.

Regulatory power:

Company's competitive position depends on government subsidies or tax breaks, or higher policy benefits to a similar competitive industry restrict the ability of the company

6 Strategy

30.

6.1 Has your company developed a clear mission statement?

Please note that a clear mission is a brief, documented description of your company's fundamental purpose. A mission statement answers the question, "Why do we exist?" Moreover, the mission statement articulates the company's purpose both for those in the organization and for the public.

Yes

No

Not applicable. (Please provide an explanation in the comment box).

31.

6.2 Have you implemented this mission statement throughout the company?

Yes, the mission statement is very extensive communicated and implemented within the company.

Yes, the mission statement is communicated within the company.

No, but plan on doing this soon.

No intention on communicating a mission statement.

32.

6.3 Does your company strive to grow in terms of sales and/or employees?

Yes, agree strongly

Yes, agree somewhat

Neutral

No, generally not

No, definitely not

33.

6.4 Does your company carry out any of the following activities?

	Never	Infrequently	Sometimes	Somewhat often	Very often	not applicable
Persuade employees that company's mission, values and	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>

vision are achievable and desirable?						
Educate employees of the expectations of customers, suppliers, and/or other stakeholders.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Organize and take company retreats with the aim of building group cohesion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Organize and take company excursions (such as volunteer work, dinners, outdoor activities).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Internal presentations by upper management about the (future) mission, values and vision.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Others: (please specify in the comment box below)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>

34.

Other activities:

35.

6.5 Do you report and communicate to (important) stakeholders any of the issues below?

Please note that aspects of the issues are explained below this question

Never

Infrequently

Sometimes

Somewhat often

Very often

Not applicable

Resource consumption	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Waste emissions and toxicity reduction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Research and technology choices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
A full life cycle assessment of your products or services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Employees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Human rights	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Business partners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Governance principles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Board related principles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Management systems and transparency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Shareholder related principles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Stakeholder and community related principles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Recommendations or test results from reputable institutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>

Aspects of issues mentioned above

Resource consumption:
Energy, water, materials consumption, land use.

Waste emissions and toxicity reduction:

Pollution prevention, waste handling, CO₂, particles emissions.

Research and technology choices:

Use and development of: cleaner technologies, sustainable energy, low carbon technologies.

Employees:

Working conditions, diversity, representation, remuneration, equal opportunities, health and safety, training and development, grievance mechanisms.

Human rights:

Freedom of association, collective bargaining, discrimination, abuse, child labour, forced labour.

Customers:

Ethical conduct and compliance, communication, labeling, health and safety, efficiency, quality.

Business partners:

Ethical conduct and compliance, compliance with standards, communication.

Community:

Ethical conduct and compliance, communication, public health and safety, political activities, bribery and corruption, taxes and compensations.

Governance principles:

Culture and ethical behavior, integrity, mission, code of conduct, whistle blowing, anti corruption and bribery, governance philosophy, compliance with laws.

Board related principles:

Composition, election and appointment, responsibilities, evaluation, independence, compensation, conflicts of interests.

Management systems and transparency:

Crisis and risk management, board oversight, audit, tax planning policy, remuneration, accounting standards, information disclosure, non-financial business reporting, brand value, balanced monitoring.

Shareholder related principles:

General rights, major decisions, shareholder responsibilities, rights of action, ownership, information, voting.

Stakeholder and community related principles:

Communication, community participation, stakeholder dialogue, public health and safety, political activities and lobbying, fines and sanctions.

36.

6.6 How important and successful are the following strategies in your effort to gain support from stakeholders and society for product /s, service/s, or innovation?

	Not important			Very important			Not successful			Very successful			Not applicable
Serving customers and the environment by delivering sustainable products and systems, while respecting the environment in your manufacturing process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Complying with ESG (sustainability) guidelines, (international) standards, and regulations within local and international society	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>

37.

6.7 Does the company benefit in the past two years from subsidies, such as government grants or feed-in tariffs, to be competitive?

- Government grants
- Tax rebates
- Tax holidays
- Personnel
- Research and development
- Others; please specify
- No
- Not applicable.

38.

6.8 How important is it for your company to communicate and persuade to the following stakeholders that the product/s, service/s or innovation of your company are credible and desirable?

	Not important			Very important			Not applicable
Possible suppliers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	
Potential customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	
Local government	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	
National government	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	
International authorities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	
Potential financial institutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	
Potential investors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	
Public and private research institutes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	
Non-governmental organizations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	
Trade/industry associations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	
Others: (please specify in comment box below)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	

39.

Other stakeholders:

40.

6.9 How important and successful are the following strategies in your effort to persuade stakeholders and society that your company's product/s, service/s or innovation are credible and desirable?

	Not important					Very important					Not succesful					Very succesful					Not applicable
Engaging in public policy debates (e.g. tax and subsidies in private sector)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
General public debates (newspaper columns, lectures, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Attending high-profile events (e.g. key-note speaker, leading workshops, international conference, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Hold high exposure positions in trade/industry associations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Soliciting and receiving assistance from assistance organizations (networking)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Marketing campaign (including website information) to increase a positive public image of the company	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Join in lobby efforts to increase awareness and credibility of your company	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Engage with people through social media (e.g. Facebook, LinkedIn, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Encourage participation by all employees in using best management practices to	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>

protect environment and promote environmental responsibility											
Communicate recommendations or test results from reputable institutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Others: (please specify in the comment box below)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>

41.

Other strategies:

42.

6.10 What is the purpose of following the above strategies? (More than one answer is possible)

To have enable access to resources

To gain a competitive advantage

To create a coherent company culture

To differentiate company in a competitive market

None apply

Other:

43.

6.11 Do you have employees (including yourself) actively searching and applying for awards and prizes?

- Yes, we have formally allotted employees
- Yes, but informally all employees search for awards and prizes
- No, there are no employees searching for awards and prizes
- Not applicable

44.

6.12 Is/has your company nominated for (or won) any awards or prizes?

- Yes, the company won several awards and prizes
- Yes, the company won an award and/or prize
- Yes, the company is several times nominated for awards and prizes
- Yes, the company is/was nominated for an award and/or prize
- No, the company has never been nominated or won any award or prize
- Not applicable

45.

6.13 Is/was your company a member of an independent initiative or association that supports the growing of networks for firms in your industry/sector or other start-ups?

- Yes, currently a member
- Yes, but no longer a member
- No [If No, go to section 7]

46.

6.14 Does this initiative or organization have government sponsored credentials?

Please note that government sponsored credentials are government recognized procedures that entitles one to confidence, credit, or authority.

Yes

No

47.

6.15 Is/was the acceptance into the independent initiative or association conditional on a screening process? If so, does this screening process evaluate on any of the following?

Please note that a screening process is an evaluation of the company on specific standards and procedures. (More than one answer is possible)

The sustainability of the business (including environmental impact, social equality, and/or sustainable governance)

The business potential

Other; please specify

Not subject to a screening process

48.

6.16 Does your company actively seek changes in public policy developments such as subsidies and tax benefits through any of the following?

Through joint partnerships and associations with other related companies

Through third parties such as non-profits

Through individual action alone

None are applicable

Other; please specify

7 General individual questions

49.

7.1 What is your position within the company?

- Founder/manager
- Manager
- Department head
- Employee/ Other

50.

7.2 What is your age?

- 16 – 30
- 31 – 40
- 41 – 50
- 51 – 60
- 60 or older

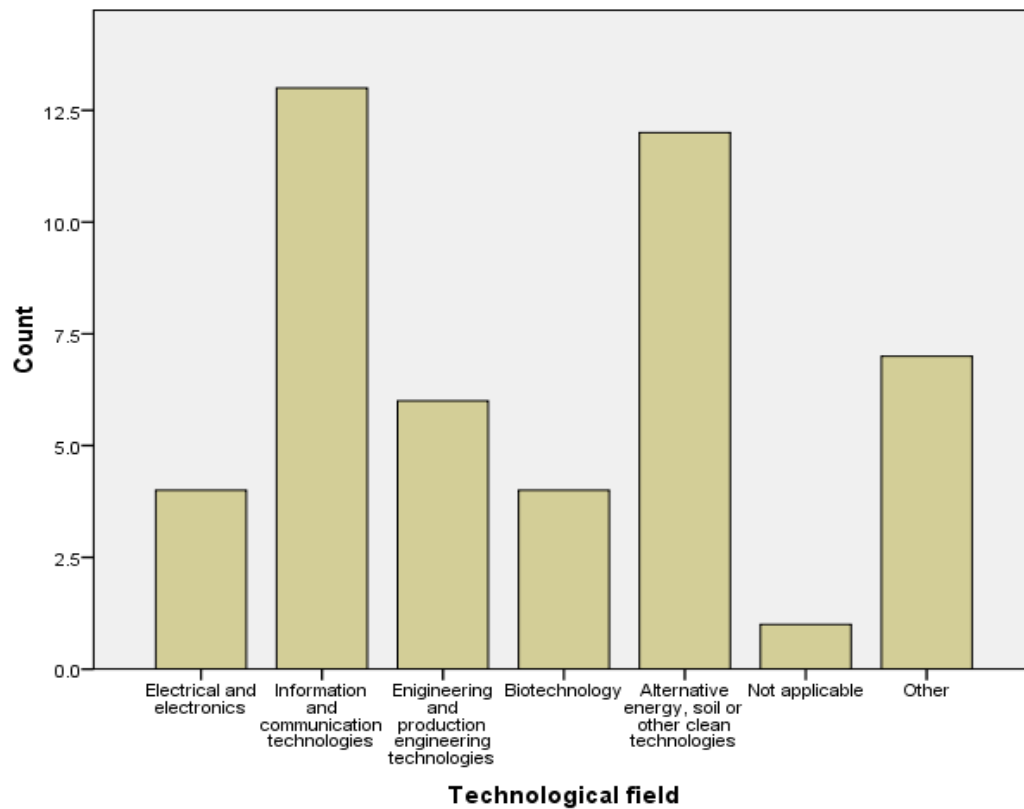
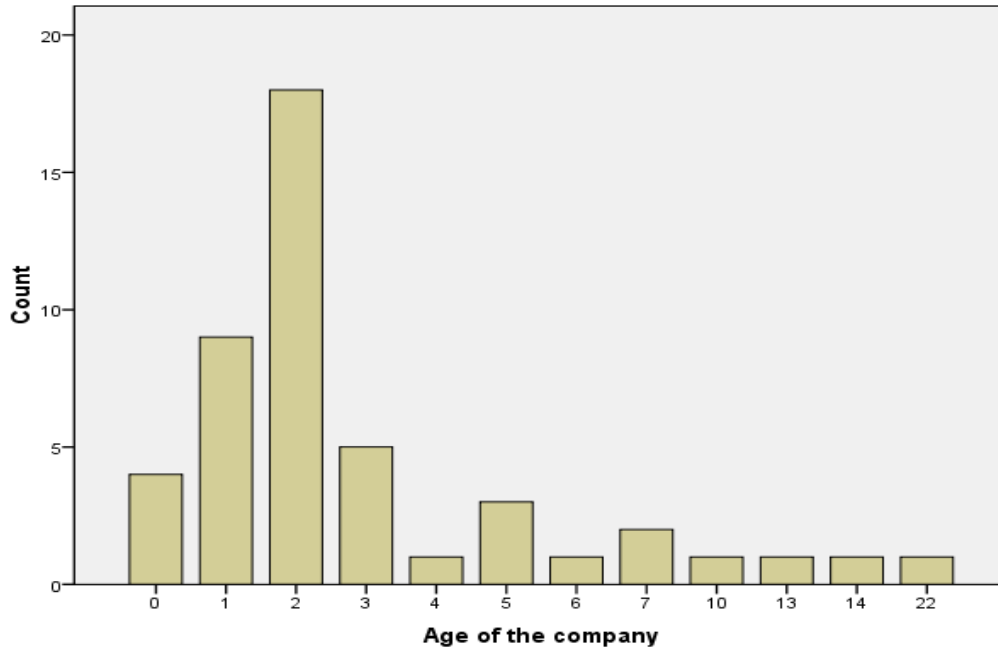
51.

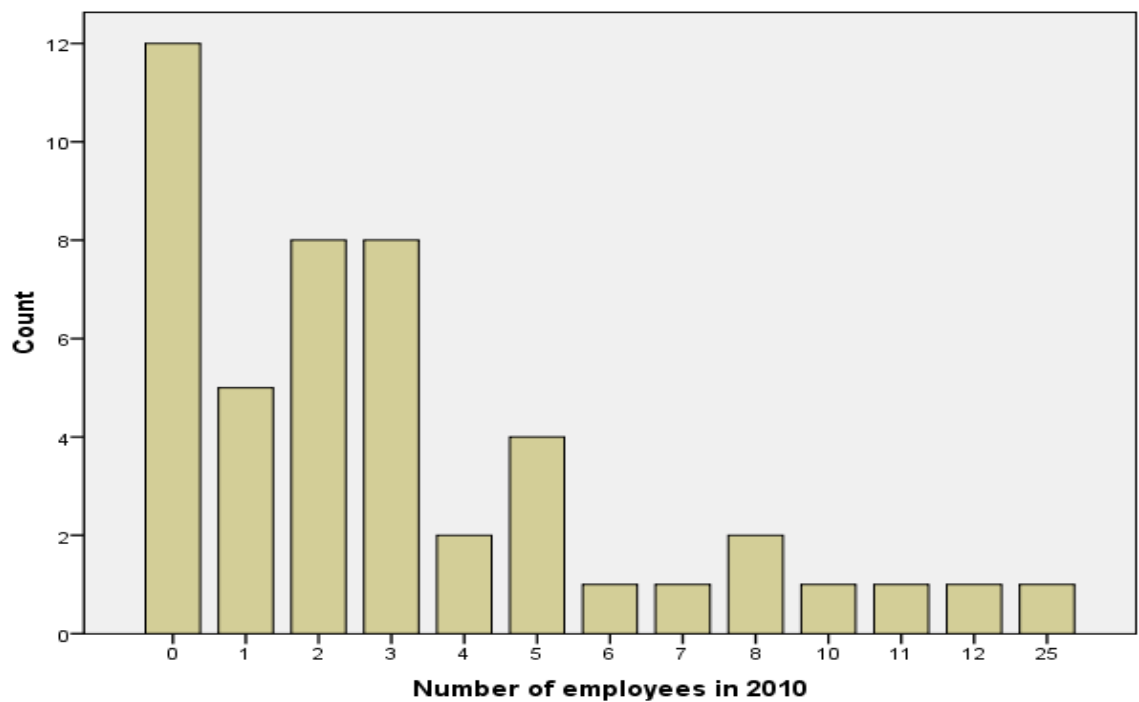
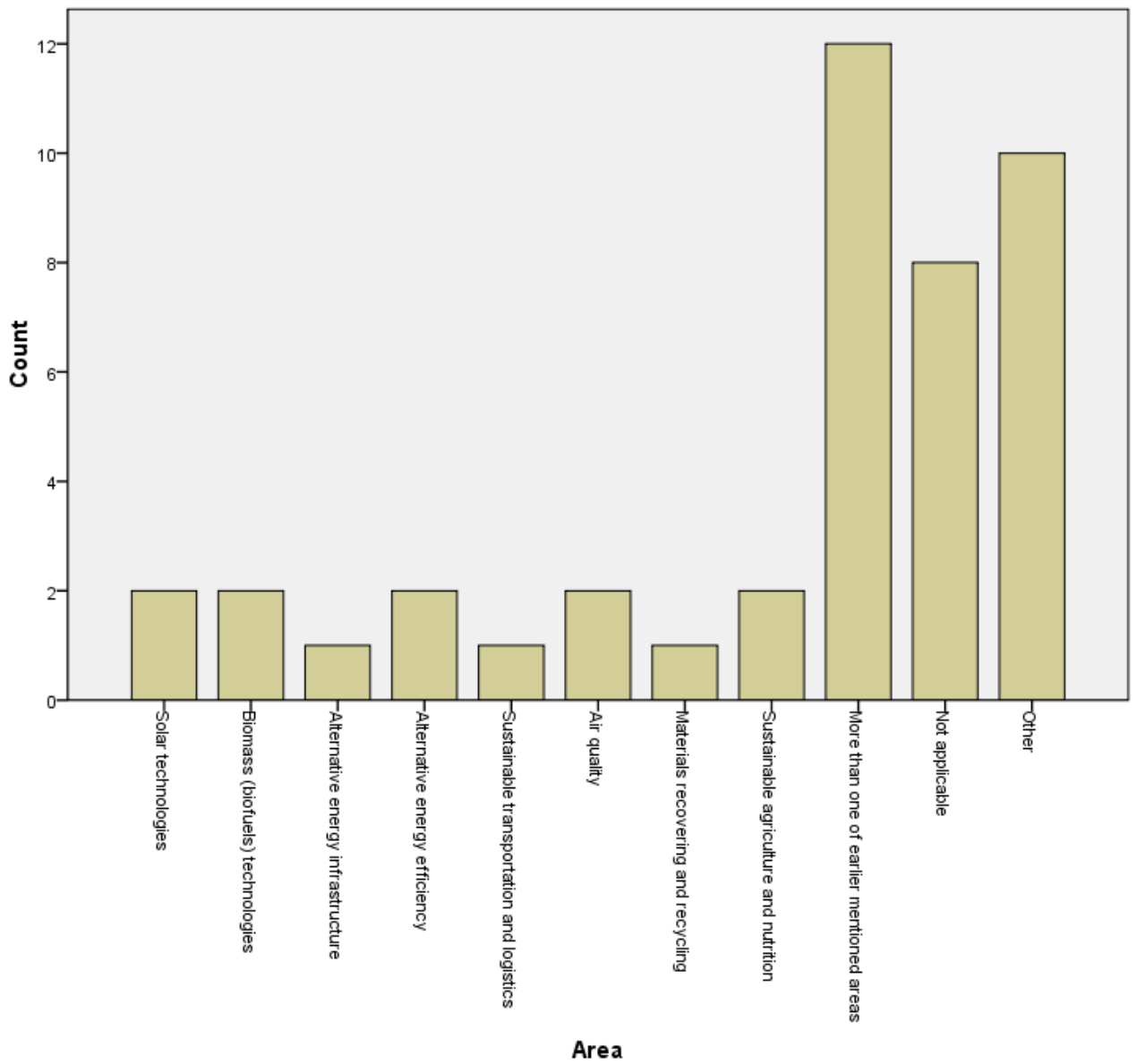
7.3 What is your highest level of education?

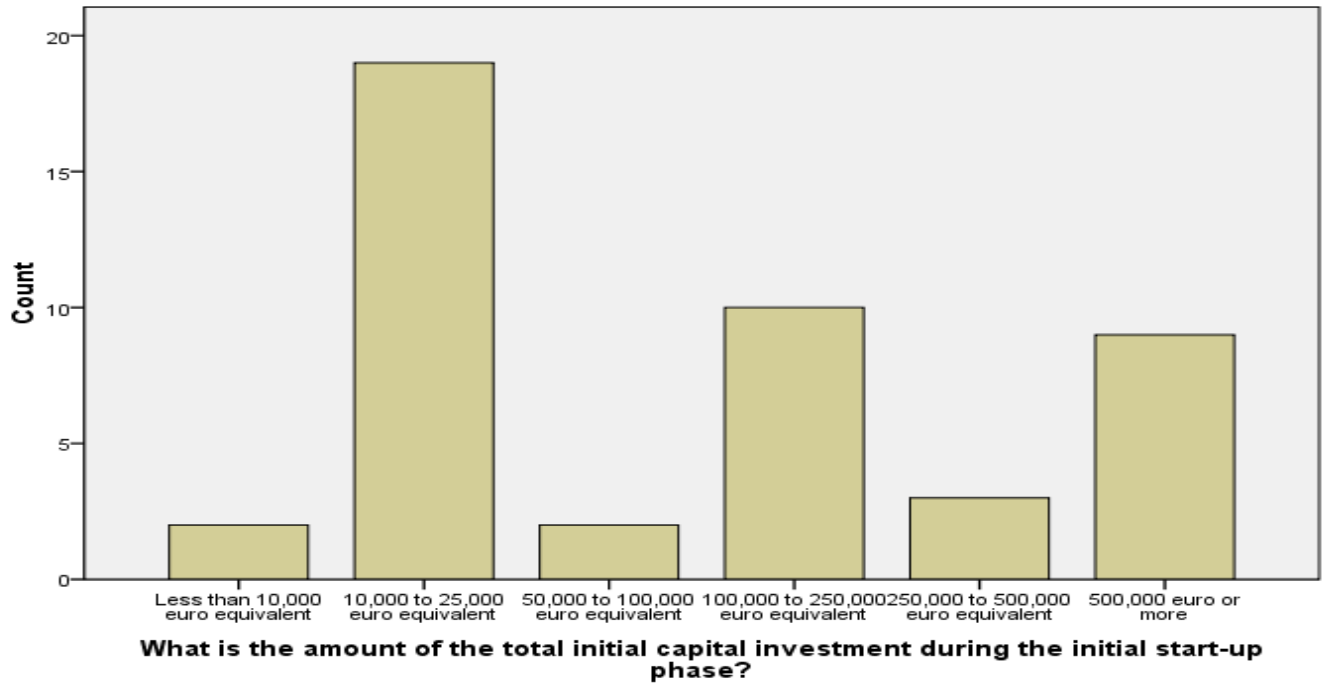
- Primary education
- Pre-vocational secondary education (VMBO)
- Senior general secondary education (HAVO)
- Pre-university education (VWO)
- Senior secondary vocational education (MBO)
- Higher professional education (HBO)
- Academic Higher education (WO)
- Adult education
- Not applicable

Appendix 2

Descriptive statistics about firms in sample







Appendix 3

Correlation matrix

	N	26	24	27	26	26	27	27	27
Comply	Correlation Coefficient	.163	.241	.318	1.000	-.134	-.054	-.063	-.260
	Sig. (2-tailed)	.437	.268	.113	.	.524	.794	.760	.200
	N	25	23	26	26	25	26	26	26
Awards and prizes	Correlation Coefficient	-.240	.108	.112	-.134	1.000	.342*	-.107	.016
	Sig. (2-tailed)	.159	.550	.587	.524	.	.031	.510	.922
	N	36	33	26	25	40	40	40	40
Changes in public policy	Correlation Coefficient	-.209	.189	.052	-.054	.342*	1.000	-.146	-.081
	Sig. (2-tailed)	.202	.269	.797	.794	.031	.	.327	.587
	N	39	36	27	26	40	47	47	47
Gain competitive	Correlation Coefficient	.235	-.146	.050	-.063	-.107	-.146	1.000	.060
	Sig. (2-tailed)	.070	.074	.	.110	.007	.007	.000	.100
	N	26	24	27	26	26	27	27	27

	Sig. (2-tailed)	.149	.395	.805	.760	.510	.327	.	.689
	N	39	36	27	26	40	47	47	47
Year of register	Correlation Coefficient	.409**	.224	-.062	-.260	.016	-.081	.060	1.000
	Sig. (2-tailed)	.010	.189	.759	.200	.922	.587	.689	.
	N	39	36	27	26	40	47	47	47

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).