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An Examination of the Role of Leadership Style in the
Implementation of Customer Development
Methodology in Mature Startups; A Comparative Case Study
of Five Mature Startups
Master of Science Thesis
in the Management and Economics of Innovation Programme

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Abstract

The following study examines the role of leadership in the implementation of Customer Development in mature startups. This study has defined mature startup as, “Established firms with a known business model and repeatable sales process that are capable of growth. A mature startup could be small, but may have a corporate structure with an established leadership and a shaped mindset to operate.” This study applies the transactional-transformational leadership model to discover the most appropriate style for a successful implementation of Customer Development methodology. The model addresses leadership from several aspects thus providing a comprehensive analysis. This study has been conducted based on literature and empirical data gathered from five companies in different industries participating in the CBI’s Consortium for Innovative Growth project and intending to apply the Customer Development method. The data suggests a positive correlation between transactional style and performance, but no direct correlation was found for transformational style. Empirical data further show a positive correlation between Intellectual Stimulation and Management by Exception-active, as components of styles, and performance. Besides, insights obtained from the following discussion and analysis point to the challenges and barriers that more mature companies might face in the implementation of the Customer Development methodology. Finally, this study suggests solutions to overcome those barriers.

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1. Introduction

There are many innovative ideas on their way to become commercial products or services. Those ideas might become new commercial products by established firms or early stage startups. Ideas go through different product development processes to become products or services¹. Different firms have their own product development processes. Still, as Blank states, almost 9 out of 10 new products fail to become commercially successful (Blank, 2007).

When it comes to radical ideas, even mature companies have to deal with a lot of uncertainties. They first need to answer a number of questions through investigation and then start planning. Even when everything is known, a company still needs to plan accordingly and implement it (Furr & Ahlstrom, 2011). Following a linear development process without any input from customers is very likely to lead to an unsuccessful product (Blank, 2007).

As an alternative, Steve Blanks introduced a new model called “Customer Development” (“CD”) (Blank, 2007). The model is a step-by-step process explaining how to use customers’ feedback to develop and improve both the product and the business model. The model is used along with the product development process. CD minimizes the risks and wastes involving developing a product that never gets adopted by customers. The mitigation of such risks and wastes is as important to mature firms as it is to new startups.

As early stage startups mature, the process of developing a new product becomes complicated by internal processes. Different activities associated with different elements of a business model could impact a new product development. CD can be applied for a systematic business development. It can also be applied in almost all industries and for different types of products (Blank, 2007).

In the past few years, CD has attracted a lot of attention among scholars and practitioners. Blank emphasize that CD has no value unless there is an effective execution (Blank, 2007). Relevant techniques of its implementation have been the topic of discussions on entrepreneurship so far. Although, CD is a methodology recommended for both startups and established firms (Blank, 2007; Furr & Ahlstrom, 2011), there is a lack of studies focusing on mature companies. Ries (2011) defines a startup as an organization that is to create a new product/service under uncertainty. This could be one person in a garage or group professionals in a large company with hundreds of employees. The common characteristic of both is their mission to mitigate the uncertainty and discover the right path to a successful business (Ries, 2011).

¹ The reference to the term “product” throughout the rest of this paper will also encompass the concept of service.

Besides, there is a point when startups have passed the early stages and are aimed at growing, but still are not considered as a fortune large company. This study calls those companies as “mature startups”. Relatively, mature startups have been defined as:

Established firms with an established business model and repeatable sales process that are capable of growth. A mature startup could be small, but may have a corporate structure with an established leadership and a shaped mindset to operate.

In spite of CD’s importance and popularity, no specific research has been found on the application of the CD methodology in mature startups. However, the topic has been covered to some extent by some scholars (Blank, 2010; Ries, 2011; Furr & Ahlstrom, 2011).

1.1. Problem Statement

Many mature startups fail to implement and get optimum results out of CD. This problem was noted and hypothesized through the Consortium for Innovative Growth project by the Center for Business Innovation (the “CBI project”). CD was the fundamental method applied in the project to help companies achieve a systematic business development. The challenges associated with the application of CD were observed mostly in mature companies.

The role of leadership in organizational performance has been well proven by researches. (Avolio & Howell, 1992; Barling, 1996; Yanga, et al., 2011; Brymer & Gray, 2006). When it comes to the implementation of CD in mature startups, the role of leadership becomes even more significant. Both Blank (2007) and Furr & Ahlstrom (2011) have stressed the role of leadership in implementation of CD.

A CEO has a significant role in leading a mature startup. A leader¹ has an important impact on the organizational culture, mindset and structure that shapes over years. When a startup becomes mature and routines and processes get established, further changes turn out to be difficult. In such an environment, changing the existing routines to a new structure for customer involvement and adaptation to subsequent changes has its own challenges. Those challenges make it difficult for mature startups to take the required steps of a CD effectively and get sustainable results. In this situation, leadership plays an important role in the creation, prevention, or handling of those challenges. Nonetheless, there is no specific research stressing the role of leadership in effective implementation of CD in mature startups. Thus the purpose of present study is to examine the role of leadership style in the implementation of CD in mature startups.

¹ This paper refers to “CEO” or “leader” as the same concept.

1.1. Research Questions

As stated above, CD has its own benefits and values for both early stage startups and mature startups. Although scholars have conducted a rather considerable body of research on CD in early stage startups, a focused study on mature startups is yet lacking.

Considering the proved role of leadership in companies' performance in both project and corporate levels, the focus of this study is on leadership. One of the most popular models used in several leadership studies is the transactional-transformational leadership model developed by Bass (1985) (Brymer & Gray, 2006; Zagoršek, et al., 2009; Kirkbride, 2006). The model has been validated by successful use in several studies. That model also considers leadership from several dimensions, thus providing a comprehensive analysis. This paper will use that model as a framework to investigate the role of leadership in the implementation of CD.

As the purpose of this study is to examine the role of leadership in mature startups' performance in the implementation of CD, the following research question has been defined:

How does the leadership style affect the implementation of CD in mature startups?

To answer the above main research question, the following sub-questions have been formulated:

1. *What is the correlation between the leadership style and companies' performance in CD?*
2. *What is the correlation between different components of transactional and transformational leadership and companies' performances in CD?*
3. *What problems and opportunities with leadership and implementation of CD methodology can be observed, given the aforementioned quantitative study?*

Correlation analysis is generally used for statistical evaluations of relations between variables. However, this study refers to correlation as relation between performance and leadership style and thus is not a solely statistical evaluation.

The results are expected to have implication in mature startups seeking to apply CD. Therefore, they can recognize what types of leadership fits best to execute the method. Further analysis and discussion on empirical data would suggest guiding principles for CBI' approach in conduction of the project

2. Delimitation

This study is limited to an examination of the role of leadership style in the implementation of CD in mature startups. It covers five mature startups participating in the CBI project during 2009-2011. The research does not cover other early stage startups that participated in the CBI project since they are not mature enough to fall within the scope of this study. The focus of the analysis is only on CEOs as corporate leaders and performance of cases in corporate level. The purpose for this limitation is to focus on the correlation between leadership style and the implementation of CD. However, both leaders and other individuals in different levels of organization are considered as sources of information.

3. List of Abbreviation

This section presents all abbreviations used throughout the entire study as follows:

- CBI- The Center for Business Innovation
- CD- Customer Development
- CR- Contingent Reward
- FRL- Full Range of Leadership model
- IA-Idealized Influence Attributes
- IB- Idealized Influence Behaviors
- IC-Individual Consideration
- IM- Inspirational Motivation
- IS- Intellectual Stimulation
- MBE-A- Management by exception-Active
- MBE-P- Management by exception-Passive
- MLQ- Multifactor Leadership Questionnaire

4. Literature Review

This section presents the relevant theoretical concepts studied by accredited scholars and researchers on Implementation of Customer Development and Leadership. It examines important concepts such as Customer Development, Business Model, Change Management, Leadership, Resource Dependency, and Path Dependency. The section will also provide guidance on the entire study by setting forth a framework for data collection and analysis based on previous publications and established ideas.

4.1. Customer Development Methodology

Research has shown that product development process is more structured in larger companies than early stage startups (Lundkvist & Yakhlef, 2004). In larger companies the process consists

of specific stages involving different functions in the organization. Ideally, customers are also involved in some specific stages of the product development (Lundkvist & Yakhlef, 2004).

According to Blank, new products fail mainly because they do not consider customer insights (Blank, 2007). A product developed solely based on ideas and insights from inside the firm is more likely to be rejected by customers. This is because customers do not perceive the finished product as valuable as the company had expected. On the other hand, customers' involvement based on formal methods has been found difficult to implement (Lagrosen, 2005).

In an attempt to mitigate the risk of product failure and make the customer involvement process easier, Blank introduced the CD model (Blank, 2007). The model primarily is a step-by-step process utilizing customers' feedbacks in developing and modifying products. It is a procedure that runs parallel to the development of a completely new product. The model's main goal is to involve customers from the beginning stages of the development process, before any major investment is made on the development of the actual product (Furr & Ahlstrom, 2011; Blank, 2007)

Inspired by Blank's book, "The Four Steps to the Epiphany," there have been other publications in the field by other authors. Among those, "Nail it Then Scale it" by Furr and Ahlstrom and "the Lean Startup" by Ries are the most popular. (Blank, 2007; Furr & Ahlstrom, 2011; Ries, 2011). Since the method developed by Furr and Ahlstrom (2011) has been found very similar to that of Blank, this study refers to both in explaining the CD process. The steps are however defined according to Blank's method.

In short, CD is simply about learning from customers while developing a product by getting out of the building and communicating with them (Blank, 2007; Furr & Ahlstrom, 2011). CD has also been defined as an "opportunity identification tool" as well, meaning that CD helps mature companies discover new areas for further growth (Alvarez, 2011).

Absent a meaningful consideration of customer's insights, an established company or a new startup is likely to fail in product development. (Blank, 2007). In an early stage startup, product failure means the loss of the entire investment. Similarly, in established firms, product failure is a disastrous outcome. In a mature startup, any change in the business model that affects customers negatively is considered a failure. Moreover, such changes could affect a company's long-term sales and profit making prospects. On the other hand, CD effectively helps a company become more responsive and agile to customers' demands. (Blank, 2007).

4.2. Customer Development Team

Implementation of CD involves a team comprising of individuals performing different functions such as engineering, management, sale, marketing, and other functions related to product development. What a company learns and what it achieves is the effect of team-work (Blank, 2007). A CD team must possess specific qualities, such as resilience, in order to achieve best results (Blank, 2007).

As CD is supposed to be performed by a team with certain characteristics as presented above, the team work can be considered as an influential factor on company's performance.

4.3. Business Model Canvas and Customer Development

Even though CD was initially developed as an effective model for new product development, it can also be applied to other aspects of business development, such as systematic business model. Since the combination of CD and Business Model Canvas has been applied as the main method in the CBI project, this section presents the Business Model Canvas and how it can be utilized along with CD. Moreover, this presentation provides a framework to evaluate the situation of participating companies in CBI project before and after the project.

Business model has been used as a tool to describe a business. "A business model describes the rationale of how an organization creates, delivers, and captures value" (Osterwalder, et al., 2010, p. 14). Recently, Osterwalder, et al. (2010) proposed a model, called the Business Model Canvas, developed based on their previous studies on the business model concept (Osterwalder, et al., 2010). Business Model Canvas is a strategic management tool to visualize the existing business model of a firm and/or develop a new one. The Business Model Canvas helps firms gain a comprehensive view of all relevant elements required to run the business and the relationship between them. It is built up by nine main building blocks (Osterwalder, et al., 2010), which will be explained in this section.

The role of business model and its changes in innovation management have been studied by some scholars (Chesbrough & Rosenbloom, 2002). Chesbrough and Rosenbloom (2002) argue that innovation can be based on the existing business model that a company has been using. However, in some cases, the existing business model is not appropriate for a successful commercialization of a new innovation. In this situation, a company cannot create and obtain any value from new innovation if it does not optimize the business model according to customers' needs.

In attempt to provide companies with a tool to design a right business model, Blank suggested combining the Business Model Canvas and CD (Blank, 2010). According to Blank (2010),

Osterwalder's Business Model Canvas can provide a framework for monitoring the progress in the CD process. The process helps organize the CD process in a systematic approach.

Although the Business Model Canvas has been recognized as a great planning tool, there has been no structured method to test it (Blank, 2010). Thus, combining it with CD will create a complete tool for a systematic business development with a focus on customers. In practice, a mature startup can design a potential business model based on new ideas. It can later translate Business Model Canvas boxes into a list of hypothesis that are to be validated through CD (Blank, 2010).

The nine elements of business model are *Customer Segments*, *Value Proposition*, *Channel*, *Customer Relationship*, *Revenue Stream*, *Key Resources*, *Key Activities*, *key Partnership*, *Cost Structure* (Osterwalder, et al., 2010). The combination of the elements of the Business Model Canvas and hypothesis formulation in CD is illustrated in Figure 1 below.

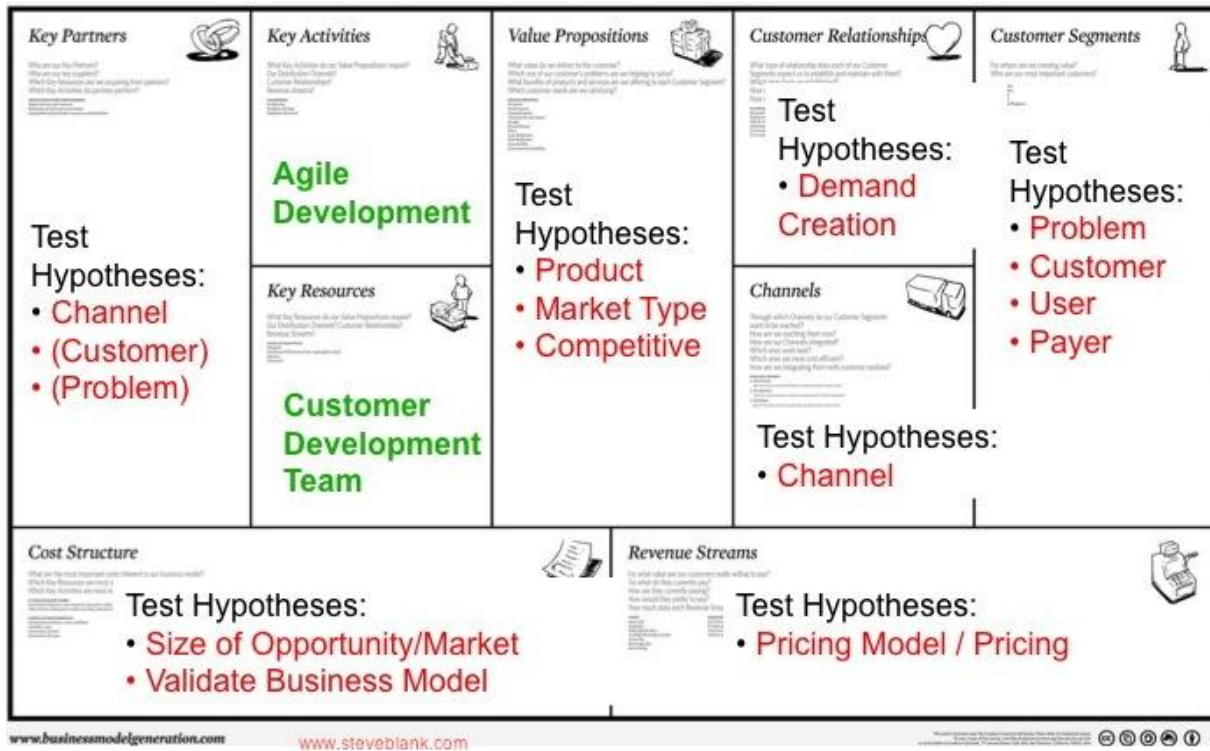


Figure 1. The combination of elements of the Business Model Canvas and hypothesis formulation in CD (Blank, 2010)

Customer Segment refers to different groups of customers that a company wants to reach and sell its products to. Customer segment includes a group of customers with common characteristics (age, location, needs, buying behavior, etc.). Customer Segment is the core of business model and the need for other elements depends on its existence and profitability. It therefore requires

a company to gain a deep understanding of customers to make right decisions with respect to other elements as well (Osterwalder, et al., 2010).

Value Proposition defines the product or services that create value for Customer Segment. Value Proposition has to resolve a customer's unsolved problems, thus determining whether a customer segment is willing to pay for it or not (Osterwalder, et al., 2010).

Channel defines how Value Proposition is communicated and/or delivered to Customer Segment. Channel is an important element since it determines customers' experience of a company and its Value Proposition. It is through Channel that a company can increase customers' awareness with respect to new Value Proposition and their willingness to pay for it (Osterwalder, et al., 2010).

Customer Relationship refers to how a company can establish relationship with each Customer Segment. The relationship could be customized according to customers' needs or it could be a self-service relationship, for example. An effective relationship type depends on the type of Customer Segment and its experience of Value Proposition (Osterwalder, et al., 2010).

Revenue Stream explains how a company can make money from each Customer Segment. Therefore, the amount and the term a Customer Segment is willing to pay for the Value Proposition determine the profitability of the business. Accordingly, for a company to be successful, it is important to create the revenue stream according to customers' needs. (Osterwalder, et al., 2010).

Key Resources refers to required resources to create and deliver Value Proposition, establish relationship with customer segment and finally make money. According to Osterwalder et al., "key resources can be physical, financial, intellectual, or human." (Osterwalder, et al., 2010, p. 34). Key resources also can be possessed by the company or provided by key partners (Osterwalder, et al., 2010).

Key Activities refers to the main activities required for a business model to work successfully. Key activities include all required processes to create Value Proposition, deliver it to a certain Customer Segment, establish relationship with Customer Segment and generate revenue. In short, key activities consist of all the processes involved in the production, sales and other parts of an enterprise to run a business (Osterwalder, et al., 2010).

Key Partnership represents the network of all partners required to run a business model successfully. Key partners could be suppliers, buyers, venture capitalists, or other enterprises a company needs to collaborate with in order to improve the business model. These

collaborations help a company share the risks of changes or acquire the essential resources to run the business model (Osterwalder, et al., 2010).

Cost Structure consists of all costs required to implement the key activities required for the creation and delivery of Value Proposition, preservation of the relationship with Customer Segment, and revenue generation, thus running a business model (Osterwalder, et al., 2010).

The application of Business Model Canvas along with CD expands the application of CD for mature startups. Accordingly, a mature startup can verify new ideas with respect to distribution channel, activities, partnership, and other aspects of the business model according to CD.

Mature startups can achieve a continuous systematic business development by first, visualizing hypotheses as Business Model Canvas, second, going and testing it through CD, and finally, iterating the process until the business model is validated. It is considered systematic since it covers all key aspects of running a business.

Accordingly, this study considers the application of CD by mature startups not only for development of a new product but also all aspects of the business model as presented above. The following section will explain the implementation of CD according to the available literature on CD that emphasizes new product development as the main application of the CD.

4.1. Implementation of Customer Development

CD consists of learning, discovery and failure (Blank, 2007). Firms that strongly emphasize execution rather than learning need to teach an adopt CD effectively before implementing it. (Blank, 2007). Implementation of CD demands sufficient persistence and flexibility. Hence, it is essential that all players understand the concept and the goal behind each step well. (Blank, 2007)

CD aims to reduce investment costs and wastes. These goals could be achieved by implementing the ideas that have already been proved to create value for customers. However, the implementation of CD still requires expenditures of funds. If the board or the leader does not perceive the value of CD's iterative processes, CD would not be effective enough (Blank, 2007). As mentioned above, CD requires the involvement of a group of actors ranging from engineers to CEOs. Hence, the commitment of the entire firm is necessary before the process starts.

4.1.1. Customer Discovery

The main goal of this step is to understand who the actual customers are and if you are solving one of their significant problems. In order to achieve this goal, the CD team needs to get out of the office and talk with potential customers instead of acting based on guesses (Blank, 2007).

The actual execution consists of hypothesis statement regarding customers' problems and product, testing the hypotheses and verifying them. (Blank, 2007). A hypothesis includes the assumptions a company might have regarding customers, solving customers' problem, current competitors, pricing, market and demand (Blank, 2007).

In Blank's view, sales and marketing executives are not just good at listening and not selling (Blank, 2007). For example, when a sales person gets out of the building to test the hypotheses regarding the problems and the company's potential solution, he is more likely to pitch customers about a product they will launch soon. The project executers might also overlook feedbacks from customers due to their biases regarding their ideas or products (Blank, 2007). Consequently, the way in which the project and its goals are communicated and perceived by executers at the beginning of the project execution is very important.

After the problem testing phase, the role of the CD team is to convey the entire findings to all players engaged internally (Blank, 2007). Afterwards, the product development, management and customer development staffs need to verify their assumptions and evaluate the possible options to change (Blank, 2007). Next, the new set of iterations starts to test the hypothesis regarding product features as solution (Blank, 2007). Finally, after the product development staff and other executives complete a number of reality checks, their findings should be verified. The firm also has to assess whether the business model associated with those findings is profitable or not. This is the stage at which a firm should decide whether to move forward and iterate the process or exit (Blank, 2007). It is therefore critical for decision makers to be open and flexible throughout the procedure until reaches at a valid conclusion.

If the team decides to move forward, the next assignment is to understand customers more. For a business to survive, it is critical to have sufficient sales. Thus, the CD team should examine if there is adequate number of customers who are enthusiastic enough to pay for the product (Blank, 2007).

4.1.2. Customer Validation

Customer validation's goal is to validate a repeatable sales road map and sufficient number of customers who are willing to pay for the product (Blank, 2007)

The focus of this phase is to build the sale road map. This is different from the regular development of sales forces or sales visits in mature companies (Blank, 2007). What sales persons may perceive as the sale road map is likely to be guesses rather than validated ideas. (Blank, 2007; Furr & Ahlstrom, 2011) According to Furr and Ahlstrom, by understanding the customers' "buying process," companies can make a repeatable sales model (Furr & Ahlstrom, 2011). Customers are still the best source of information in understanding the buying process and market infrastructure.

After the customer validation phase, a company should have enough data to modify and build up a business model (Furr & Ahlstrom, 2011). It is important for a company to make sure a business model will be profitable in the future before it takes further steps. (Furr & Ahlstrom, 2011). The next step is to create demands for the new product according to the new business model that has already been verified (Blank, 2007; Furr & Ahlstrom, 2011).

4.1.3. Customer Creation

Customer creation is about marketing plans and demand creation in verified markets. (Blank S. G., 2007). As a result of the Customer Creation process, a company can verify if there is sufficient demand for its new product before starting to sell it (Furr & Ahlstrom, 2011).

Following successful initial sales in Customer Validation, Customer Creation's goal is to scale up sales. Accordingly, a company increases the customers' knowledge about the new product and their willingness to buy through marketing activities (Blank, 2007). All the things the company has learnt about customers and the market since the beginning until this point have an important role in further marketing strategy (Blank, 2007). In the Customer Creation phase, a company launches the final product and finalizes its positioning (Blank, 2007).

Subsequently, the company needs to finalize its positioning strategy and statement for both the company and the new product. Since an effective positioning statement requires a comprehensive knowledge of the market that the company may be lacking, the company needs to get professional help from the experts in the field (Blank, 2007). However, the final positioning is made based on findings from both outside and inside of the company. That is what Blank call "positioning auditing." (Blank, 2007). The CD team needs to discuss and modify all that has been understood by the help of experts and analyst outside of the firm (Blank, 2007; Furr & Ahlstrom, 2011)

It is only after verification of Customer Creation strategy that a company could take a step further and start execution and monitoring of the plans (Blank, 2007).

4.1.4. Business Model Modification

The final step of CD is called Company Building since the focus of the previous literatures on CD has been on entrepreneurs (Blank, 2007). This study, however, calls the final step "Business Model Modification" since the focus is on mature startups with an existing business model, seeking further business model development. At this point, as a company has already gained an in-depth knowledge of customers and the market, it requires more planning, execution and agile response to changes (Blank, 2007). At this stage, the company may encounter internal resistance to changes, thus hindering the company's further growth (Furr & Ahlstrom, 2011). It is therefore important to have the verified ideas implemented. Accordingly, this study

considers further changes in the business model as the outcome of CD and thus a sub-variable to measure Company's performance.

At this point, when a company starts growing, it is very likely that executives overlook the importance of continuous interactions with customers and tracking their success over time. They may rely on short-term objectives such as high sales costs rather than facts (Blank, 2007; Furr & Ahlstrom, 2011). Finally, as Blank (2007) recommends, the final step is to build "fast-response" departments to have continuous interactions with customers and keep track of changes (Blank, 2007).

As explained in the above section, CD consists of four main phases, of which customer interaction is a major part. The section also discussed the role of Business Model Canvas, in addition to CD. From the discussion above, one can conclude that, depending on a company's objectives, background, and knowledge of the customers, a mature startup may start with different phases of CD. For example, if a company has already verified the customer segment and value proposition, it is more likely to start with the Customer Creation phase for the purpose of scaling up sales. Moreover, the discussion above shows that CD is a continuous process that can be applied by mature startups for different purposes than only new product development.

While literatures recommend CD for both early stage startups and large mature companies, they have not covered the application of CD in mature startup sufficiently. As mentioned above, CD can lead to further changes in the existing business model of a mature startup. Accordingly, the concept of Change Management is relevant to this study, which addresses the barriers in the implementation of CD in mature startups. The following section will briefly explain the concept of Change Management

4.2. Customer Development as a Change

An innovation that makes a business successful is not necessarily what is required to stay successful in long run. At times, to achieve a continuous success, the sources of success need to be changed (Kimberly, 1979). Those changes can create major challenges for firms.

As an early stage startup scales up, it needs to take three main steps. First, it must develop customers from the early evangelists to mainstream customers. Second, it needs to shape the company's organizational structure and culture. Finally, it must monitor the implementation of strategies across the organization (Blank, 2007). That means the business model, including the customer segment, activities, etc., is established when a company starts to scale up. When it comes to mature startups, the organizational structure and processes are already shaped and the business model is established. The established business model and structure may influence

the CD process and its outcome in two different ways: First, the application of a method changes the work processes and structure and is likely to affect an individual's experience of the related work task, and thus make her uncooperative (Kieffer, 2005). Accordingly, a mature startup should have its own approach for customer involvement. All functions are already defined and relevant staffs are assigned to different tasks. Hence, conducting customer interviews according to a particular CD structure may be considered a significant change by the involved staff. The involved staff's perception of that change may depend on their previous experiences of customer involvement. Furr and Ahlstrom (2011) state that a CD team would perform best when its size is small enough to allow flexibility. In a mature company with a considerable number of employees, the flexibility to process changes may decrease.

Second, changing a company's strategy changes the organizational structure and process and thus may lead to individual dissatisfaction (Kieffer, 2005). The CD's goal is to minimize the risks of failures by implementing verified ideas (Blank, 2007). Therefore, the CD process would be successful if the verified ideas are implemented effectively. Even if a company succeeds to get validated ideas, it needs to be flexible to change the processes accordingly.

There are many models that can be used for successful organizational change. Although required changes differ in terms of degree, frequency, and speed, they all are expected to result in companies' success (Kimberly, 1979). According to Pryor et al. (2008), companies that respond to changes in the environment by learning, adapting, and acting rapidly are more likely to succeed (Pryor, et al., 2008). In their study, Pryor et al. (2008) further emphasize that organizations need to use a model for an effective transformation and must cope with changes in the long run.

Similar to many other new methods, the implementation of CD in a company demands initial preparation by the involved individuals. As Bennett argues, underlining the benefit of a customer focused method in an organization is effective when it is not limited only to the staff, but also the method's effect on business profitability by creating value for and with customers. (Bennett, 1993).

Studies have proved the critical role of the appropriate managerial leadership in the success of changes in the company (Sumukadas, 2006; Perles, 2002; Das, et al., 2011). Des, et al. argue that leaders can motivate an excellent product quality by involving employees in change activities. For example, employee involvement in strategy formation and decision-making has been proved to enable a successful TQM implementation (Das, et al., 2011).

In order to engage individuals in implementing some change, the leader must adopt the change first (Spreitzer & RE., 1996). When the leader adopts the change, his behavior will change in favor of the new direction and goals. As a result, the followers' behaviors will change accordingly. Therefore, after some time, the entire organization undergoes some change in behavior and mindset (Spreitzer & RE., 1996). Hence, if the leader does not support the CD, the CD team is likely to fail to implement CD successfully.

In summary, CD process and/or its outcome can be considered a change in the companies who apply it. The company's previous experiences of customer involvement and leader's attitude are two important factors in managing that change. The previous literatures covering the role of leadership in company's performance, allied with research purpose, will be presented in next section.

4.3. Leadership

In general, leadership can be defined as consisting of the two roles of management and leadership (Cleland, 1995; Yukl & Lepsinger, 2005). According to Kotter (1990), management concerns controlling and planning with the focus being on financial aspects of the project. Leadership, however, is defined as guiding, motivating, inspiring a group of individuals (Kotter, 1990; Engwal & Sjogren, 2003).

Management's efforts are considered as competition for drawing resources from a pool of capitals through formal power (Engwal & Sjogren, 2003), while leadership concerns involving, influencing, and motivating followers in change initiatives (Das, et al., 2011).

According to Kotter (2001), leadership and management are completely different roles, but, essentially, not performed by different individuals (Kotter, 2001). Management can play the leadership role and vice versa. Accordingly, this study considers the CEO of a mature startup as a leader since he usually has both leadership and management roles. Hence, this paper uses the terms "CEO," "leader," and "leadership" interchangeably.

Scholars have set forth several leadership competencies and characteristics, of which adaptation to new changes, and being eager to acquire new knowledge from different sources are two of the most significant ones (Barner, 2000). Further, Thompson and Richardson (1996) refer to leadership competencies as the ability to take risks and deal with uncertainty (Thompson & Richardson, 1996). Considering all characteristics as mentioned above, in this study leadership is referred as "*the process of influencing others towards achieving some kind of desired outcome*" (Jeroen & Deanne, 2007).

Available literatures on CD address the role of leadership in the implementation of CD to some extent (Blank, 2007; Furr & Ahlstrom, 2011). According to Blank, since the beginning phases of CD until hypotheses are validated, a CEO who is resilient and passionate to learn and explore is referred as an entrepreneurial-driven leader (Blank, 2007). From the point in time that hypotheses are validated, the company needs a CEO with leadership and management skills who can pursue defined missions and plans. Such a CEO is called a “mission-oriented leader.” (Blank, 2007). Further, Furr and Ahlstrom (Furr & Ahlstrom, 2011) emphasize the critical role of leadership in effective implementation of CD in larger companies and the leader’s personal perception in influencing a company’s performance.

In addition to the leader’s perception and attitude as stated by Blank, Furr, and Ahlstrom, the leadership style may affect the company’s performance in the implementation of CD.

4.3.1. Leadership Style

Muller and Turner (2007) have studied several companies within different industries located in eight countries. As a result, they concluded that the project manager’s leadership style influences the project’s success and that different leadership styles are appropriate for different types of project. Inspired by Muller and Turner’s study and considering the CD process as a project at the corporate level, this study applies the leadership style model as a framework to investigate the role of leadership in the implementation of CD.

Several scholars have studied the role of leadership style on organizational performance. There is a considerable body of research that emphasizes the importance of the leadership style in performing different types of project in an organization (Avolio & Howell, 1992; Brymer & Gray, 2006; Muller & Turner, 2007). However, the relationship between the leadership style and outcome is still considered as being rather complex (Bass & Riggio, 2006).

Burns (1978) has introduced two types of leadership style, namely the transactional and transformational leadership styles, and Bass (1985) has further expanded Burns’ study (Brymer & Gray, 2006). Literatures classify three major types of leadership behavior: transactional leadership, transformational leadership, and laissez-faire (referred as non-leadership) (Barling, 1996; Brymer & Gray, 2006; Bass & Riggio, 2006).

The transactional-transformational model identifies two types of leaders, namely those who communicate their values and focus on relationships, called transformational leaders, and those who focus on the process, called transactional leaders (Bass, 1990; Muller & Turner, 2007). Laissez-faire leadership is defined as the absence of leadership in situations where the leader is completely passive. This style of leadership is also known as the most ineffective style (Bass & Riggio, 2006). According to Bass & Riggio (2006), a laissez-faire leader is the opposite of a

transactional leader since he does not make any necessary decision. In other words, the laissez-fair leader does not use his authority and thus avoids getting involved when needed.

Full Range of Leadership model (FRL) includes laissez-fair leadership, combined with the transactional style (Bass & Riggio, 2006). Some forms of FRL include laissez-faire as a separate category (Hinkin & Schriesheim, 2008). However, Hinkin and Schriesheim (2008) have questioned the effectiveness of Multifactor Leadership Questionnaire (“MLQ”) in measuring laissez-fair as respondents typically do not distinguish between laissez-fair and MBE-P as describing their leaders. Moreover, the study by Edwards, et al. (2012) has shown that laissez-fair and MBE-P are the same. Because laissez-fair leadership characterizes non-leadership and is not positively correlated to the outcomes, this study does not address laissez-faire leadership.

In their study, Muller and Turner (2007) categorized project attributes based on the model developed by Crawford, et al. (2005). They further concluded that for repositioning projects, a more transactional style seems to be more suitable, while a more transformational style would work better for renewal projects. They further explained that repositioning projects are more focused on achieving the targets and therefore a transactional style would be more effective. On the other hand, renewal projects require an extra impact on stakeholders and therefore a more transformational approach would work better (Muller & Turner, 2007). Moreover, Crawford, et al., state new product development as an example of Repositioning projects and maintenance projects as an example of Renewal projects (Crawford, et al., 2005).

In principle, the CD model was developed and applied as a tool for an effective new product development. Thus, the CD process can be defined as a repositioning project for which the transactional style is more suitable. However, as explained before, CD was later combined with Business Model Canvas (Blank, 2010). As a result, the application of the CD model was expanded from new product development to a systematic business development. Accordingly, the type of CD project cannot be easily determined and, depending on the purpose of the application, it may differ. Moreover, depending on the type of changes in the business model, the CD process could lead to different types of project.

Based on the available literatures about the project type, it is not clear what type of project CD is. Thus, it is difficult to refer to the studies that have explored the impact of leadership styles on different types of project.

In order to examine the role of leadership style in the implementation of CD, the following section will explain the transformational and transactional styles, along with their components.

4.6.1.1. Transformational Leadership

Transformational leadership goes beyond simple transactions with followers. Transformational leaders communicate their expectations, and, at the same time, enable the followers to enhance their capabilities. They inspire followers by involving them in challenges and providing them with guidance. Their focus is on understanding individuals and helping them achieve their full potentials (Bass & Riggio, 2006).

Transformational leadership seeks to achieve higher performance by employing one or more of its four main components, namely *Idealized Influence attribute*, *Idealized Influence behavior*, *Intellectual Stimulation*, *Inspirational Motivation*, and *Individual Consideration* (Bass & Riggio, 2006). All the four components, referred to as the “five I’s,” are explained below.

Idealized Influence – attribute and behavior (IA and IB) refers to when the leader acts as a pattern and hero for followers. These leaders share their visions, identify how to reach them, get engaged, and overcome obstacles and thereby become role models for their followers. Hence, the followers become motivated and faithful to pursue the leader’s visions (Bass & Riggio, 2006).

II could be considered from two aspects, namely attributes and behaviors. Attributes refer to the features that the followers attribute to the leader. Behaviors concern the behaviors that the followers relate to the leader. This study analyzes and distinguishes these two aspects of II.

II is about capturing the followers’ full commitment. Leaders with high levels of II are willing to take risks. They have consistent behavior and attitude and demonstrate highly ethical approaches (Bass & Riggio, 2006). The leader should have excellent communication skills so that he can communicate and convey the goals and desires to the followers clearly. The leader’s behavior should not infringe upon employees’ freedom and creativity (Blank, 2007).

Studies show that individual leaders have important impacts on organizational strategic moves (Miller, et al., 1982; Jeroen & Deanne, 2007). The leader’s influence on strategy would lead to changes in the organizational structure. The leaders often set firm’s strategic directions and decisions based on their personal values and beliefs (Yan, et al., 2007).

Inspirational Motivation (IM) is the leader’s ability to encourage and inspire the followers by giving meaning to their work (Bass & Riggio, 2006). A leader influences the follower’s team spirit and enthusiasm so that they get motivated to achieve challenging goals. Hence, a leader’s job is to obtain the followers’ emotional commitment to achieve the company’s goals (Bass & Riggio, 2006; Avolio & Howell, 1992; Barling, 1996).

As mentioned earlier, CD includes a lot of iteration and extensive work. Thus, CD requires a committed and motivated team. IM may be required and effective to achieve the goals of CD.

Individual consideration (IC) is about giving the followers specialized attention to understand their needs and concerns and consequently enhance their capabilities. This development occurs when leaders gain an understanding of the followers' unique needs and abilities and delegate tasks accordingly. Leaders monitor delegated tasks to see if the followers need support. It also helps leaders assess the progress, which is very critical in achieving high performance (Bass & Riggio, 2006). This approach not only motivates the followers, but also enhances their abilities. Leader's personal relationship with followers is the key to gain a better understanding of the followers.

The responsibilities of leaders are not limited to resource-based challenges. There are different types of customers (stakeholders) for a development project (e.g. product development, market development, etc.). It includes the buyer, functional executives, engineers, shareholders, suppliers, contractors and the rest of team members (Beatty, et al., 1996; Ireland, 1992).

For a leader, as the most dominant individual, it is important to be aware of the interests and prospects of all engaged persons in the project. Such awareness enables a cooperative environment that is open enough to positive changes (Ireland, 1992). Such an environment is formed where the expectations are fulfilled and conflicts are well resolved. In Ireland's view, in such settings, the advancement of a project becomes possible by making a product that is appreciated by customers. In contrast, the leadership's failure to meet those customers' expectations threatens product quality, which creates value for buyers (Ireland, 1992).

Ireland further argues that a leader needs interpersonal skills and knowledge in order to be able to recognize and balance expectations effectively (Ireland, 1992). That becomes even more important when every stakeholder wants to change the application of available resources and/or product features in their own desired way (Kaulio, 2008). If leaders allow the personal values to guide them, it might cause the project to deviate from the right track. Evidence shows that value-guided leadership performance is rather unchanging over time (Simsek, et al., 2005).

Intellectual Stimulation (IS) is that aspect of leader's behavior that guides the followers' thinking, consideration, and creativity. According to Hsu et al. (2002), a leader can enhance the followers' ability in realizing and solving problems in creative ways. IS among the followers occurs when the leader sees the problem from new perspectives, articulates new ideas, and consequently encourages the followers to practice new approaches. As there is no direct criticism to their mistakes, the followers are encouraged to try new ideas (Bass & Riggio, 2006; Hsu, et al., 2002). IS is one of the aspects of transformational leadership, which plays an important role in change processes (Jandagh, Zarei Matin, & Farjami, 2009).

Leadership has a significant role in keeping the balance between orientation toward results and openness to new ideas during projects (Sundström & Zika-Viktorsson, 2009). According to Sundström & Zika-Viktorsson (2009), the leader can achieve this balance by the implementation of some factors. The vision and goals should be clear to all project members and all should be responsible to achieve the company' goals. Leaders should make sure that new solutions and ideas are implemented within the final product effectively. It is important to keep the involved people motivated (Sundström & Zika-Viktorsson, 2009).

Second, leaders should facilitate communication both internally and externally. One important role of a leader in innovative projects is to arrange a platform to let feedbacks flow and be applied effectively (Sundström & Zika-Viktorsson, 2009).

According to the factors mentioned above, it seems that CD, along with a leader with a great deal of IS, can strike a balance between orientation toward results and openness to new ideas when developing a project. For example, the insights gained through customer contacts have no value if they do not transfer into technical solutions and idea by product development team and implemented within product successfully.

4.6.1.2. *Transactional Leadership*

Transactional leadership limits the relationship between leaders and followers to simple exchange of an expected work in return for certain rewards. Transactional leadership refers to when a leader rewards or disciplines the followers based on their performances (Yanga, et al., 2011; Bass & Riggio, 2006). Transactional leadership has three key components: a more positive reinforcement as *contingent reward*, the more negative ones as *active management by exception*, and *passive management by exception* (Bass & Riggio, 2006).

Contingent Rewards (CR) refers to when a leader clarifies for the followers what tasks should be done and what would be the rewards if those were done satisfactorily. CR is considered transactional when the reward is a material one, like bonus. This dimension of transactional leadership is recognized as an effective way to encourage the followers to increase their performance (Bass & Riggio, 2006).

These leaders can be even more effective if they clarify goals and expectations and focus on the long-term developments of followers as well (Bass & Riggio, 2006).

Management by exception- Active (MBE-A) occurs when leaders actively observe the followers in order to ensure that standards are met. This way, leaders monitor mistakes in the followers' work and take corrective actions if needed (Bass & Riggio, 2006). In other words, the leader tries to anticipate mistakes and prevent them.

Studies on multi-project organizations by Kaulio (2008) have shown that project leaders have to deal with a lot of anxieties and concerns regarding activities that threaten the project's goals and directions. Those threats become even greater when it comes to the resource-base of the project. The concerns influence the behaviors of leaders in different ways (Kaulio, 2008). What they are expected to achieve based on the available resources force them to ignore some significant emerging changes (Kaulio, 2008). For that reason, it is very important to form an organizational structure that allows rapid response to changes arising during procedures and resolves the conflicts.

In Kaulio's study (2008), a multi-project environment is defined as an environment in which a number of projects are running in parallel. However, in almost all established firms the focus is on more than the development of just one idea. Instead, the company needs to run different small or big projects in order to achieve growth and development goals. Therefore, a leading a customer development project, as an important part of product development project, is considered to have the same challenges as stated above. Moreover, besides the corporate level, there are always pressures and requirements throughout a project that stress out the people involved. One main source of pressure is usually setting goals and detailed activity plan of the project. (Sundström & Zika-Viktorsson, 2009). In their case study, Sundström and Viktorsson (2009) concluded that the obligation to the project's goals makes it difficult to devote time to acquire knowledge during the project. In this condition, the tendency to meet goals and milestones make the team ignore required changes.

Management by exception- Passive (MBE-P) refers to how long a leader waits to intervene when the followers deviate from standards and/or make mistakes. Typically, a leader takes action after deviances becomes serious (Antonakis, et al., 2003; Bass & Riggio, 2006). When leaders are not actively involved in the CD process, they are much more subject to act autonomously (Furr & Ahlstrom, 2011).

The distinction between passive and active management by exception is based on the timing of a leader's interventions. According to Bass and Riggio (2006), MBE-A might be required in situations where safety is important. MBE-P is needed when a leader has to supervise a considerable number of followers who report to him directly. However, in general, MBE, as a corrective action, is found to be less effective than CR (Bass & Riggio, 2006).

4.7. Other External/Internal Factors; Path Dependency and Resource Dependency

In addition to leadership style, there are other potential factors that might influence either the performance or leadership. This study addresses path dependency and resource dependency as

major inhibiting factors to further development of established companies. These two factors have been proven to inhibit further innovations and changes in mature firm (Pavitt, 1998; Tushman & O'Reilly, 2008). Since path dependency and resource dependency may constrain the implementation of CD processes and outcomes that are considered as change in a mature startup, this section reviews previous studies on these two concepts.

4.7.1. Path Dependency

Companies with existing products and customers are very likely to suffer from rigidity and inertia (Pavitt, 1998). Established firms are less flexible to cope with changes in the environment. However, their failure is rarely related to the lack of technological competence (Pavitt, 1998). Established firms usually have the required competence or are able to develop it; but they fail due to organizational complications such as inertia and lack of coordination (Pavitt, 1998; Tripsas & Gavetti, 2000).

According to Leonard-Barton (1992), core capabilities can both empower and hinder the firm's innovation development. Core Capabilities can prevent a firm from further development if they create inertia. A company's tendency to preserve existing core capabilities and consequently core policies that make it resistance to changes is called inertia (Tushman & O'Reilly, 2008; Tushman & O'Reilly, 1996). That means all processes that have made a company successful in the past affect what the company will do in the future, regardless of the changes in the environment. Inertia makes a company use the same processes for new projects (Rod Coombs, 1998; Richard Nelson, 1982). That is why new product development projects are typically accompanied with conflicts between the need for fundamental change on one hand and preservation of core capabilities on the other (Leonard-Barton, 1992). This is an important matter that needs to be taken into consideration when developing a new business model.

Inertia may negatively affect a mature startup's performance where there are experienced individuals developing and commercializing new ideas. Experienced people may find it unnecessary to get out of the building and talk with customers since they believe they know what is required to develop an idea (Furr & Ahlstrom, 2011).

From a knowledge-based view, core capabilities are defined as a set of knowledge that provides competitive advantage (Leonard-Barton, 1992). An important part of the firm's core capabilities is the know-how knowledge and principles that have been shaped over time leading to a common organizational mindset. That common mindset is what Prahalad and Bettis (1986), call "Dominant logic". Dominant logic is built up by norms, rules and beliefs that lead managerial decisions and actions and is realized too hard to change (Chesbrough & Rosenbloom, 2002). Dominant logic controls managers' attention in searching for new opportunities for the firm. It also allows smooth organizational coordination through different parts of the organization. In

addition, it indirectly filters out ideas and actions that are not according to the dominant logic in a company (Chesbrough & Rosenbloom, 2002). Established firms are constrained by dominant logic shaped with time and old business models that have been successful in past while new startups are less constrained because of their flexibility in the beginning. Accordingly, learning from the customers to adjust the business model is central and the development of the business model should become a dominant logic (Chesbrough & Rosenbloom, 2002).

Considering all the sources of failure as discussed above, Tushman and O'Reilly (2008) argue that an outstanding leadership can resolve these contradictions. Leaders can manage development processes allowing for both the exploitation of existing resources and new capabilities to lead to strategic reorientation (Tushman & O'Reilly, 2008). Achieving this goal requires a skillful leadership that overcomes path dependency by providing both a strategic vision and commitment within the organization (Tushman & O'Reilly, 2008).

All in all, path dependency constrains the firm's openness to acquire external knowledge and consequently the firm's potential to create radical changes in different parts of the business (Rod Coombs, 1998; Leonard-Barton, 1992). This study therefore considers path dependency as a moderating variable which may affect both the leadership and the company's performance in the implementation of CD.

4.7.2. Resource Dependency

Resources may constrain or enable effective research and development behaviors and organizational learning (Kraatz & Zajac, 2001). All the resources that have been accumulated over time affect development strategy of the organization. Firm's tendency toward the development of what they have already established becomes greater as firms age (Kraatz & Zajac, 2001). That tendency is what hinders mature firms from further discontinuous innovation. Hamilton and Singh (1992) define discontinuous innovation as an innovation that disconnects an established firm from its core competences. A technological discontinuity can lead to the replacement of the existing technology and/or the product with a new one, thus eliminating the need for the current firms' capabilities and resources. Discontinuous innovation is also referred as disruptive innovation (Christensen, 1997). A discontinuous innovation can be a new product, service, or even business model changes (Sandström, 2010).

In their study, Kraatz and Zajac (2001) argue that firms reduce the uncertainty of outcome by developing the existing resources instead of exploring new areas that demand new resources. This is why many firms focus their attention on improving their existing products for current customers instead of applying a very adaptive strategy (Kraatz & Zajac, 2001; Tushman & O'Reilly, 2008).

Christensen explains how established firms face the threat of environmental changes and fail due to customer lock-in. Mature companies get captured by their existing customers and their current needs and thus do not see the need for further disruptive changes (Christensen, 1997). Accordingly, firms perceive themselves as being successful so long as they have customers buying from them. However, they ignore that being successful at one point in time does not guarantee a continuous survival.

Christensen has also studied cost structure as another factor that locks firms into existing products or customers. If an inherent firm's cost structure is focused on high margin segments, it definitely hinders further disruptive changes that are accompanied by costs and low margin, at least for some period of time (Christensen, 1997). However, as customers' knowledge regarding new needs and new solutions could be limited, it is dangerous to focus on satisfying the customers' expressed needs or current demands (Lettl, et al., 2006). Instead, firms have to understand the customers' needs, which lead to important changes and even discontinuous innovations.

Similar to path dependency, resource dependency may prevent mature companies from further changes in the business model. According to the literatures discussed above, resource dependency and the companies' success with the existing business model may negatively affect the company's success in long run. Moreover, scholars have pointed out to the leadership role in coping with path dependency. Thus, both path dependency and resource dependency are considered as moderating variables, which may affect both the leadership and a company's performance in the implementation of CD.

4.8. Theoretical Framework

Based on the research's objectives and the insight gained from the literatures studied, the following theoretical framework has been generated. The figure below shows the theoretical framework.

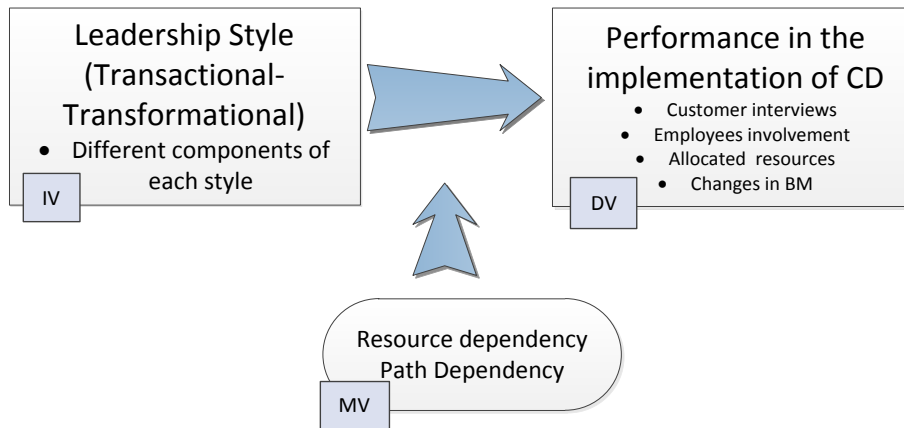


Figure 2. Theoretical Framework

The above model corresponds to the following variables and sub-variables:

Performance, dependent variable; Reviewing the entire CD process has provided a satisfactory understanding of the method and its application. The review helps define the criteria to assess the performance of companies in the implementation of CD. The framework therefore identifies the following criteria for performance assessment:

- 1) The number of customer interviews conducted for the purpose of project, since CD is about getting out of the building and learning from customers.
- 2) Team work and employee's involvement in different functions, since CD should be implemented by a team including individuals from different functions.
- 3) The resources allocated to the project since CD is an iterative process which demands resources to implement.
- 4) The results of the project as changes in the business model since if the verified ideas during CD process are not implemented, a company would not achieve CD's goal.

Leadership, independent variable; the review section has considered the concept of Change Management to some extent. That section pointed to the challenges mature firms face when implementing changes. That section further related those challenges to the CD process. The purpose for that section is to support the analysis section by addressing related barriers the leaders has to overcome.

This study uses the transactional-transformational leadership model as a framework for the analysis of the leadership role to measure the leadership style of leaders through the MLQ

questionnaire (also known as MLQ 5X short) (Bass & Avolio, 2012). The scope of the measurement will be narrowed down to all components of transactional and transformational leadership. In other words, by using MLQ, the study evaluates different aspects of leaders' leadership styles.

Other barriers, moderating variable; The application of previous studies on path dependency and resource dependency is for the purpose of considering other main external /internal factors that might influence either leadership or a company's performance. However, as stated earlier, leadership has an important role in handling those factors. Hence, this study investigates the companies' experiences with respect to any of those barriers and the leaders' approach toward them. The purpose is to support further analysis by considering other moderating variables that might impact the outcome of CD in a mature start up. Still, the focus of the study is to evaluate the correlation between leadership styles and their components in the context of companies' performance in CD.

The initial framework is designed on the basis of theory and then developed in the light of empirical case studies. As shown by the literature review, there has not been any previous research on this subject. Thus, based on the created theoretical framework, empirical data will be collected to answer research questions. .

5. Methodology & Design

This chapter presents the design and methods used to answer research questions. Therefore, it describes three research methods used in this research project, semi-structured interview, questionnaire and secondary sources. The chapter will further discuss the purpose of the method, sampling structure, design, and the analysis of each method. Furthermore, the application of data findings for the following research methods is considered.

5.3. Research Approach

There are two typical alternative research approaches: deductive and inductive. These two approaches provide a structure to relate theory to practical data. A deductive approach starts from the already known theories and hypothesis are made and tested empirically. The inductive approach, on the other hand, focuses more on practical findings and interpretations. The results are used as bases for generating new theories (Bryman, 2011).

Because of the purpose of the study and the unknown conditions existing at the very beginning, this study will be based on a combination of both approaches, which is called the *abductive* approach. An abductive approach combines available theoretical knowledge with empirical findings. Current literatures will be used as the framework for empirical data collection. This

combination, along with the discussion section, is expected to contribute to the new literatures. Moreover, because of the exploratory nature of this study, it seems more appropriate to conduct it based on an abductive approach instead of a deductive or inductive one.

5.4. Research Design

As case study can be a practical solution for further empirical study, this research is designed based on the case study method. Case study provides a better understanding about how leaders and their approaches are connected to different circumstances.

It is clear that in order to meet the objectives of the study and figure out the impacts of the leadership style, a single case study would not be sufficient. Moreover, in order to complement the analysis and support the outcome, studying more than one single case was required. Therefore, a comparative case study approach has been selected in order to address the challenges and problems more rigorously and make a comparison between the cases (Bryman, 2011).

Although case studies have the significant advantage of providing practical data and a deeper insight into the leadership's behavior, they also have some weaknesses. One of the most criticized aspects of the case study method is its external validity or generalizability (Bryman, 2011; Yin, 1984). This study also suggests that the results of this case study are not generalizable. Instead, the findings are expected to represent new areas for further theory building. In order to strengthen both the structure and the outcome of the study, this multiple case study is associated with valid theories. To identify the relevant researches, an extensive literature review, including published articles and books, have been conducted.

Five different companies, defined as mature startup, have been selected for analysis for this study. However, the data are collected from different levels within the organizations as well as other sources. Moreover, in the data collection phase, triangulation has been used to increase the reliability of results. The applied methods for data collection and analysis are presented and discussed in the following sections.

5.3. Research Method and Analysis

In general, there are two different research methods: qualitative and quantitative. While qualitative research aims to understand a particular experience, quantitative research can create a clear picture of the context (Bryman, 2011).

Considering the theoretical framework that this study departs from, a mixed approach including both qualitative and quantitative research methods seem more appropriate (Bryman, 2011). Therefore, in order to get close to the source of data and get a better understanding of

both companies' performances and their leaders' attitudes, this study applies the qualitative method. On the other hand, leadership styles of subjects of interests have been measured according to the quantitative method.

In order to answer our research question and discover the more effective leadership style in the implementation of CD, the study has used a mixed method.

5.3.1. Exploratory Sample

In the first place, the object of interest and analysis were mature startups participating in CBI's project. The project goal was to increase the participating companies' profitable growth through the application of a systematic business development process, and by doing so strengthen the companies' long-term competitive abilities. Respectively, CD, along with the business model canvas, has been used as a tool to achieve the project goal. Hence, five sample companies from different industries and with different backgrounds have been selected as an exploratory sample for the research. There are two main reasons for this: 1) All participating companies sought to apply CD as a model for a systematic business development, and 2) The problem area was initially recognized as analyzing the participating companies' performance during the course of the project.

All of the case companies operate in Sweden and some other countries. As a motivation to participate in the research, the companies have been promised an analysis of leadership style. All five companies showed interest and were collaboration..

In order to conduct data collection, three different methods of *semi-structured interviews*, *questionnaire*, and *secondary data* were applied. The process for each will be described in following sections.

5.3.2. Semi-Structured Interview

As a key method for data collection, this study has used a semi-structured interview format. The purpose for the semi-structured interviews was to get in-depth knowledge about the case companies, their performance, and their leaders' attitudes.

In order to assess companies' performance based on pre-defined sub-variables, interviews have been conducted. In addition, interviews allowed a deeper understanding of leadership attitude.

Semi-structured interview rather than the open (unstructured) interview method has been chosen for several reasons. The research is a comparative case study and the results must be compared to answer research questions. The semi-structured questions as the interview method will allow for data analysis and comparison (Bryman, 2011)

Moreover, Semi-structured interviews (compared with open interviews) with more pinpointing questions will minimize the irrelevant data. Structured interviews on the other hand will limit the new area, which might be opened up during the other types of interview. Therefore, semi-structured interviews allow for both in-depth knowledge regarding specific variables and at the same time for new topics (Bryman, 2011).

5.3.2.1. Sampling

As stated in previous sections, all the five cases were selected from 16 companies that have participated in “CBI’s Consortium for Innovative Growth” project in different years of the project (2009-2011).

According to the definition of mature startups stated in the introduction section, the five companies that matched the definition were selected by senior faculties of CBI as main organizers of the project. Most of the excluded companies were in very early stages and thus could not be considered as mature startups. The other few mature startups were excluded to keep the scope of analysis controllable and conduct more in-depth investigation than broad. Therefore, how case companies have implemented and benefited from the method could be tracked and investigated in a more organized way.

Five case companies are different in terms of size, resource availability, organizational structure, culture, and the opportunities they have for further growth. Although companies’ different characteristics may have resulted in different performances, they all fall within the scope of study as mature startups. Accordingly, selecting these five mature startups provides an opportunity to compare companies based on their performance. Then, this study examines the correlation between performance and the leadership style. Therefore, this study addresses the role of leadership style and does not cover companies’ different characteristics and their impact on companies’ performance.

Following that, the two following groups of respondents were selected.

- *CEOs of case companies:* The actual one year of the project was conducted in project teams involving the CEO and one top executive from the companies. The CEO is the key person directing the project with authority for resource allocation and decision making (CBI, 2010). In other words, the CEO is recognized as the company’s leader and thus the subject of interest in this study. Leaders, as the most involved persons in the project were selected as the source of information regarding the implementation of the CD.
- *CBI project mentors and coaches:* In addition to CEO and one top executive from companies, one business development coach from Sweden's top university incubators, one experienced serial-entrepreneur, and one senior faculty from CBI monitor the

procedure (CBI, 2010). So, a number of semi-structured interviews with mentor and coaches as another source of information were conducted. The purpose for this was to triangulate the data collection regarding the companies' performance and gain a better understanding of the leaders' attitude.

The structure and process of conducting semi-structured interviews will be presented in following section.

5.3.2.2. Interview Design and Guide

The following processes were conducted to achieve the empirical data as described in above section:

1. *Interview design*: The interview guide was prepared considering the theoretical framework and research objectives. For the CEOs, the key questions were designed to collect information on each of the following areas: interviews done with customers, how leaders have involved other employees, how resources were allocated to the process, what changes have been made afterward, and any experience regarding path/resource dependency. For the interview with mentors and coaches, in addition to the mentioned area, the leaders' attitude and approach toward project was also questioned. The key questions were followed up with complementary questions to get more comprehensive knowledge and also prevent any misunderstanding. Appendix 1 and Appendix 2 show the interview guide used for interviews.
2. *Initial contacts*. Selected companies were contacted and their agreement to participate in the research was obtained. At this point, the CEO at each company was contacted to explain the research purpose and set a date for an interview. In addition to the CEOs, mentors and coaches were also contacted for in person interviews. All respondents were promised anonymity.
3. *Interview*: Interviews with mentors and coaches were conducted in three groups consisting of the senior faculties from CBI, incubator coaches, and serial-entrepreneurs. The main purpose of the interviews in the groups was to let feelings and opinions be discussed from different points of view. The interviewees in groups are also expected to produce more than the sum of each individual alone. (Krueger & Casey, 2009) Moreover, as the number of respondents was about 12 people, splitting them within three groups seems more time-efficient. Since the researcher could not be present in the interview with incubator coaches, she reviewed and analyzed the data through the

transcript. Every interview was recorded and later transcribed. Following that, semi-structured interviews with CEO were conducted as visiting the companies.

5.3.2.3. Results and Analysis

After each interview, transcripts were prepared and marginal notes were added to highlight the key points. Marginal notes were also used to identify areas where clarification was needed. They were later followed up through the post-visit contacts.

Preliminary analysis and data reduction was accomplished. Following the completion of all interviews, comparative case analysis was performed. All data were codified (Bryman, 2011) and categorized based on different concepts as identified before.

The analysis assesses the performance of companies on a scale of low, medium, and high based on four sub-variables of customer interviews, employees' involvement, resource allocation, and the outcome of the project. As explained in Theoretical Framework section, these four sub-variables are considered important according to the literatures on CD process. This assessment allows classifying and comparing companies based on their performance in accordance to CD process.

The attitudes of leaders toward the project direction turned out to be different across companies. The experiences of companies regarding path/resource dependency and their approach for handling related challenges were explicated. The correlation of findings at this point and leadership styles (to be found through questionnaire) will be presented in Empirical Analysis chapters.

5.3.2.4. Limitations

This study shows that the sampling of interviews could be broader in terms of involving others within the companies. In addition, reaching the CEOs and the interview time took a rather long time and due to set timeline for this project, the sampling was limited to CEOs, along with mentors and coaches. However, in one of the cases, interviews with the other people involved were also conducted. The main purpose for these interviews was to assess companies' performance and as the most involved person was the CEO, the CEOs were expected to provide the most information. The major data required to assess companies' performance and get a primarily understanding of leaders' attitude is obtained though.

5.3.3. Self-completion Questionnaire

For the measurement of leadership styles, the MLQ was used. MLQ is one of the most widely used and tested tools for measurement of transformational and transactional leadership. The

questionnaire has been refined and tested and validity and reliability is proven to be appropriate (Avolio, et al., 1999; Bass & Avolio, 2012).

MLQ is a comprehensive survey including 45 items that measures a broad range of leadership style. It therefore consists of all components of transformational and transactional styles as well as laissez-fair (Bass & Avolio, 2012). As mentioned earlier, the analysis of laissez-fair non-leadership is out of the scope of this study.

5.3.3.1. Sampling

The sampling method was mainly according to the guideline of MLQ. Therefore, the sample set of “raters” included the employees within companies referred to followers. Sample was selected by leaders as they were asked to select those followers who know them well. According to MLQ instructions, ideally 8-12 raters should rate each leader (Bass & Avolio, 2012). Therefore, a number of employees (Between 7-10) from different levels (lower than leader, same, and higher) were identified and their contact information were obtained through the leaders.

Because of the different sizes of companies with 7-40 employees, this study reached this goal for some and the minimum number of 6 respondents was reached.

5.3.3.2. Self-completion Questionnaire design

The following processes were conducted to achieve the empirical data as described in above section:

1. *Questionnaire design*; the license of the MLQ survey online was purchased from Mind Garden Inc. As the MLQ survey can be administered either in print or in electronic format, the electronic format was selected. In comparison with the printed format, the electronic format is expected to minimize administration time. In addition, the electronic format enables one to reach more respondents.

The MLQ asks respondents to rate the frequency of the leader’s behaviors on a 5-point Likert scale from 0 (*not at all*) to 4 (*frequently, if not always*). Each item begins with the phrase, “The person I am rating.” For example, the following items are asked: “talks optimistically about the future”; “Spends time teaching and coaching”; “Avoids making decisions”.

2. *Initial contacts*; as all respondents were informed by the CEO in advance, emails including a link to the questionnaire were sent to them. The deadline was set and anonymity was promised. They were also informed that the questionnaire would take about 15 minutes to fill out.
3. *Questionnaire administration*; several reminders through either emails or telephone calls were made to get non-respondents to provide their feedback through the questionnaire. As a result,

the response rate increased considerably. Finally, a summary of responses in addition to raw scores to all 45 items were provided by Mind Garden Inc.

5.3.3.3. Results and analysis

Based on the raw scores for either components or transformational leadership, we calculated means to summarize the data to one score for each leader. Going through all responses, we categorized the results for each case, thus allowing for comparison.

Results suggested different levels of transformational style among sample leaders. However, when it came to certain components, the difference was not as much.

The results at this point, along with the outcome of the interviews, will provide an opportunity to find out the relation between leadership styles and performances. Both data and analysis will be presented later in following chapter.

5.3.3.4. Limitation

Some studies have shown that followers' bias and/or their cultural background may affect their perception of the leader and thus responses to the MLQ (Popper, et al., 2001; Lievens, et al., 1997). However, we have asked the leaders to introduce the followers who may know the leaders well, thus minimizing the effect of followers' bias. Moreover, since all five case companies have been selected from Swedish startups, followers are expected to have the same cultural background.

5.3.4. Secondary Data

In order to complement the empirical data and gain a more in-depth knowledge about companies following secondary data were inspected.

- A range of company documentation including annual reports and financial statements to monitor company's growth.
- Companies' websites to gain a better understanding of their business.
- Research on internet on leaders and their background professions to gain a better understanding of leaders.
- A range of CBI's documentation regarding the project goal, modules, participants, achievements, and any other valuable information related to the research in order to understand the infrastructure of the CBI project.

The Analysis chapter analyzes the data from the secondary data together with the result from the other two research methods in order to address the research questions.

5.4. Validity and Reliability

There are two main issues to consider in achieving a high quality study, reliability and validity. The following section will evaluate the reliability and validity of the study.

Reliability

Reliability questions whether the results of the study are repeatable by other studies with the same purpose and procedures. The reliability in a case study including both qualitative and quantitative methods, is likely to be low. This is due to the fact that collected qualitative data is the results of researchers' interpretation. Moreover, the informants' preference and bias may affect the data they provide. In order to enhance reliability, the qualitative results are triangulated by using several sources in the data collection. Also, all interviews are recorded and transcribed to minimize interviewer's misunderstanding, thus increasing reliability. As a result of triangulation and interview recording, the reliability is increased and the results can be meaningful and consistent.

Meanwhile, the information is collected in a certain time span. The information provided by informants may have been influenced by their perception of the concepts being studied at that time. Thus, the results are subject to change if data are collected in the future.

Validity

Validity is defined as the integrity of the results of the study (Bryman, 2011). This section evaluates the validity of the study by addressing three types of validity including measurement validity, internal validity, and external validity.

Measurement validity questions whether a particular concept really measures the variation being studied (Bryman, 2011). For measurement of companies' performance, more than one sub-variable (four) was defined based on theory. This study therefore maximizes measurement validity by including several sub-variables in measurement.

Internal validity is concerned with the causal relationship between variables (Bryman, 2011). The internal validity of this study is enhanced by considering a moderating variable (path dependency and resource dependency) as described above. This way, the research ensures that the potential impact of factors other than independent variables (leadership style) on dependent variables (performance) is taken into consideration.

External validity concerns to what extent the results of the study can be generalized in situations other than the research context (Bryman, 2011). As mentioned above, the situation of case study makes its results difficult to generalize. However, the study makes an effort to improve external validity by addressing different cases from different industries, using valid

instruments, and increasing the reliability of the study. Hence, the results of this research provide valid insights for both practitioners and guidance for further studies on the topic.

6. Empirical Data

The following section presents the data findings through all three research methods of semi-structured interview, questionnaire and secondary sources. As the companies were promised anonymity, they will be mentioned as company A, B, C, D and E. In order to keep the promise of anonymity and the focus of study, the chapter will present a short description of each company. Each description will be followed with the key findings of data collection according to theoretical framework as described above. Finally, the results will be summarized at the end of this chapter.

6.1. Company A

6.1.1. Profile and Background

Company A produces a breakthrough innovative product that gives superb competitive strengths and markets it to different types of customers. The core technology was invented and developed by a scientist. Company A was founded by the cooperation of its current CEO and vice president to make and market the innovative product. Although the company has not substantially changed the product's core technology, it has changed and modified the product's application for different customer segments over time. Accordingly, the extensive demand to various applications is well proved. Company A has been recognized as a very innovative company because of its continuous product development for various applications.

Company A was a 6-year-old startup with 30 employees when it participated in the CBI project. at that time, the company was in a growing phase with a growth of 118% compared to its previous year and still seeing a high potential for systematic development of its business model. The company also realized the importance of having an effective operational structure for further growth. Hence, Company A's main goal was to find the most optimized customer segment for its technology and create an effective operational structure for sales processes.

At the beginning of the project, Company A had already been a part of a systematic business development program for three times. Customer involvement was not a new concept to Company A as customers were already the most important drivers for the company's further strategic planning. Company A would involve customers by visiting and interviewing them continuously. Nevertheless, the customer interaction was limited to the company's sales persons and, occasionally, its technical staff. Furthermore, the company's customer involvement was not in accordance with a specific model such as CD.

6.1.2. Performance in the Implementation of Customer Development

According to the gathered data, Company A' leader and it's vice president understand the benefit of customer involvement for further business development very well. As one senior faculty from CBI commented, the company's CEO and its vice president "are open-minded and good at listening and understanding the value of these kinds of material (referring to the CD methodology)." Company A conducted several customer interviews before and during the project according to the project module. However, Company A did not follow any particular structure for customer interviews.

As mentioned above, Company A has a technology that could be applied by different types of customers,. Hence, the company benefits from several development opportunities. The company's leader has realized that to find a customer segment that generates the most value for the company, the company needs to find out which customer segment would benefit the most from its technology. This mindset has motivated the leader to allocate resources to the project to conduct several interviews with various customer segments. The leader was also very eager to find out the best way to improve the sales processes. He was therefore impressed by the project modules and created a structured sales process with a focus on customer involvement.

Although Company A's leader was not directly involved in customer interviews, the vice president was directly engaged in customer interactions. The vice president had a central role in leading the entire project process. The vice president's role included delegation of tasks, assigning sub-projects to employees, and conducting interviews with customers. Hence, he had a major role in conveying the customers' insights into internal decision-making processes.

Accordingly, both the CEO and the Vice President built up the leadership team and complemented each other's capabilities. However, they both had almost the same understanding with respect to customer involvement benefits and both supported the CD methodology. As a result of their close collaboration, the CEO led major organizational and operational activities and the vice president directed all the processes related to the CBI project. However, at the end, they were both directly involved in the decision making process. In other words, the CEO reinforced the application and the execution of the method and his close associate played a very important role in the effective implementation of the project.

As a result of Company A's leader's and vice president's systematic approach, complementary roles, and similar appreciation of the project module, Company A faced no major conflicts throughout the process.

As Company A moved forward through the project processes and tested different assumptions through its customers, it made considerable changes to its business model such as customer segmentation. However, it is not yet the right moment to determine if there is a direct

correlation between those changes and the company's financial results during the relevant period as it usually takes a long time before one can identify the concrete financial impacts of those changes.

Company A has to some extent achieved its main goal of identifying the best customer segments for its technology. It could achieve its goal by identifying the unsolved problems of all potential customer segments and selecting those customer segments that could benefit most from the company's technology. To that end, the company has started to allocate its resources to selected segments to expand its business.

Company A's other achievement has been its success in putting in place structured mechanisms for further customer involvement. During the project, the CEO realized that when the company scales up the number of its customers, the company needs to provide sales teams with tools and structured mechanisms to make customers' insights move into the company properly. According to the CEO, the company has now a structured mechanism that helps transfer customers' input into the company's decision-making processes. Hence, depending on the type of information, the mechanism triggers relevant divisions into action. For example, complaints go toward the quality division, while customers' requests go to the company's technical and/or product development division.

6.1.3. Path Dependency and Resource Dependency

Company A's history shows that the company has been flexible to changes and has therefore not remained locked in the then existing capacities. Despite of its successes with its existing customers, the company has been developing its technology so that it could constantly appeal to new customer segments. From 2008 to 2009, Company A had a sales growth of about 118% and a sales growth of about 70% between 2009 and 2010. However, these growths have not prevented the company from making further improvement in its business model. For instance, Company A had a decline of -18% in profitability because of its investments on further growth opportunities. That investment included acquiring new resources and, to some extent, removing existing resources. However, one should not ignore the fact that because of the company's significant technology developments, several opportunities have become available for the company's further developments. Hence, the company has mainly been prioritizing among several alternatives to make the most rational decisions and investments.

Therefore, leadership has not been influenced by path dependency and resource dependency. Instead, the leader has been eager to optimize existing resources in favor of a long-term development.

6.1.4. Full-Range Leadership Profile

The leader's full-range leadership style has been rated by the followers. The raw scores for all components were analyzed and the averages were calculated. The figures below summarize Company A's leader's scores in various areas. The average frequencies for each leadership style and its different components can be interpreted on a scale of 0-4, with 0 as "Not at all" and 4 as "Frequently, if not always.". The figures therefore show how frequently the leader behaves according to a particular style.

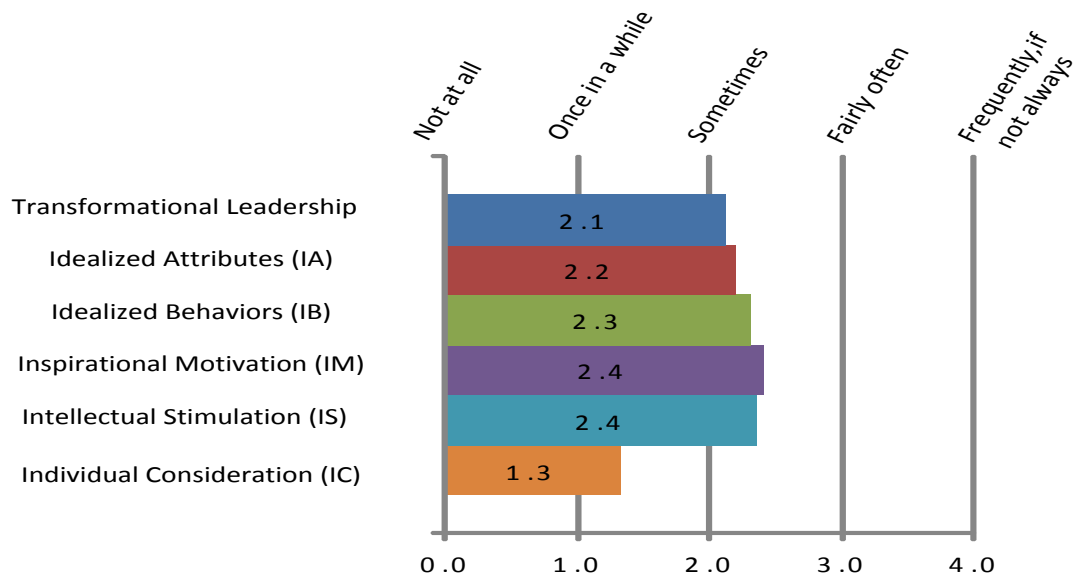


Figure 3. Frequency of transformational leadership style and its components for Leader A

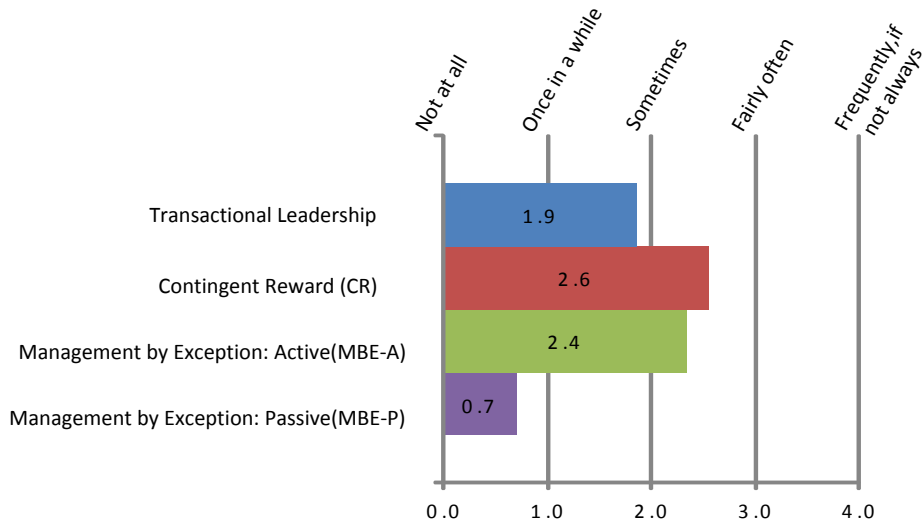


Figure 4. Frequency of transactional leadership style and its components for Leader A

As shown in the above figures, leader A displays both the transformational and transactional leadership styles to the same extent. Leader A displays all components of the transformational components but displays the IC occasionally. In contrast to the MBE-P, which was leader A's least frequent behavior, CR was his most displayed behavior.

In summary, empirical data present Company A as a high performing company. Data further suggest that the leader shows transformational style almost as frequently as transactional style. Path dependency and resource dependency have been found not to have a negative effect on the company's performance or leadership. Evidence shows that despite successful experiences with the existing business model, the company has been flexible to new development opportunities and thus has not been locked in the then existing business model.

6.2. Company B

6.2.1. Profile and Background

Company B designs and supplies an innovative product, which brings a better performance and cost-effective solution for customers. The company serves a number of customer segments by providing them with customized solutions. The company has a core technology, which can be utilized in different functional designs, in accordance with customers' requests. The idea was initiated by the company's founder and current CEO and further modified and developed by an expert in the field. The company has gone a challengingly long way to identify the best customer segments for its solution. Still, the company is vigorously struggling for further improvements in its current business model.

Company B was a 5-year-old startup with 4-5 employees when it participated in the CBI project and began applying CD. At that time, Company B was in the growing phase with a growth rate of 167% compared to its previous year. At the same time, the company contemplated expanding its business by setting up its own production line.

Company B started as a service material supplier and consultancy service company. After listening to some customers, the company recognized that customers need a more simple value proposition. The company therefore decided to develop a module in accordance with what customers asked for. Nevertheless, before taking further steps, the leader was eager to investigate if customers really benefit from the new value proposition. In the interview, one senior faculty of the CBI stated, “he (the CEO of company B) understands that it (the new value proposition) should benefit customers first and then the company consequently.” Accordingly, the company’s major goal was to figure out whether the insourcing of the production could create added value for the customers.

Although the company had never used a structured mechanism for customer involvement, it would get customers’ insights through occasional open meetings with its customers. The meetings with the company’s existing customers allowed the company to identify some problems and some opportunities for further development. The meetings also provided customers with the opportunity to communicate their desires and needs.

Company B had discovered areas for further development and the project was to help it determine whether their assumptions were correct or not. The company’s CEO sought to find out whether setting up the company’s own production line would add value for customers. Therefore, the project’s goal was driven by company’s internal strategy.

6.2.2. Performance in Customer Development

The leader of Company B prioritized the project since he considered customer involvement valuable for further business development.

During the CBI project, the company made a number of customer interviews that were in accordance with the project modules. Although the CD model had inspired the leader, the company did not conduct the interviews in a step-by-step fashion as required by CD. For example, they did not formulate the questions based on a list of hypothesis before getting out of the building and talking to the customers. Instead, they met customers to inform them about the company’s potential strategy and new value proposition and asked for their opinions.

According to the leader, the project motivated the company to involve customers more actively. However, Company B did not conduct its customer interviews as thoroughly as Company A did. Company B did not have as many potential customer segments as Company A and had

fewer employees as well. As the leader of Company B mentioned, they could not involve more employees since only 4-5 people could run the entire company.

According to the interviews with the mentors and coaches of the CBI project, the leader of Company B is considered as an open-minded person and a good listener. However, he was not engaged in customer interviews considerably. As mentioned above, the company had only a few employees and therefore the leader had to manage organizational and operational aspects of the company. The company's vice president was also involved in customer interactions regarding the project. In addition to the vice president, the sales representative of the company was engaged in the project to some extent. During the project, the company faced no major obstacle hindering its further progress.

The vice president seemed to have a significant influence on the company's strategic decisions. His significant role in the company, along with his direct engagement in the project, has influenced the company's performance with respect to the project. The insights gained through meetings with customers were discussed in subsequent decision-making meetings and affected company's further choices.

During the project, customers showed some interest as the company communicated its potential strategy with them. Customers responded positively and approved the company's assumptions. The customers' supportive feedback made the company confident to operate its production internally and consequently produce a new value proposition for the customers.

As explained above, it is difficult to measure financial impact of the changes made in the business model now. The changes were made less than two years ago and it takes time to figure out the financial results related to those changes. However, financial data suggests an increase in the company's profitability so far. Moreover, inspired by CD, the company has started to put in place some mechanisms to allow more customer involvement. The application of customers' insights as a key driver of further development has become more important to the company.

6.2.3. Path Dependency and Resource Dependency

Although the leaders were pleased by customers supporting their ideas, implementation of a new business model was not such a simple process. In order to develop a new value proposition, the company was required to replace existing resources by new ones. Since the decision-makers were confident that this replacement would result in further growth, they removed the then existing equipment and invested on new production equipment.

Yet, existing resources were not the only obstacles to the desired change. Although most customers supported changes in the business model, there were a few key customers who did not find it according to their needs. Those customers were happy with the old value proposition

that was more profitable for them than the new one. Buying the new value proposition could make their existing resources useless, thus lowering their profit margin.

As a solution to this problem, Company B did not change its business model and continued selling the old product to a few key customers. Although those customers are currently still profitable for the company, they may become obstacles of future growth. The company’s ultimate goal is to make all customers adapt to the new business model. It is not known how the company would have reacted if more of the existing customers had opposed the new business model.

6.2.4. Full-Range Leadership Profile

Based on the results of the questionnaire, the leader’s full-range leadership style was measured. Accordingly, the average raw scores for all leadership components were calculated. Figures 5 and 6 below present the scores for the leader of Company B in several areas. The figures show how frequently the leader displays behaviors associated with each style and its components.

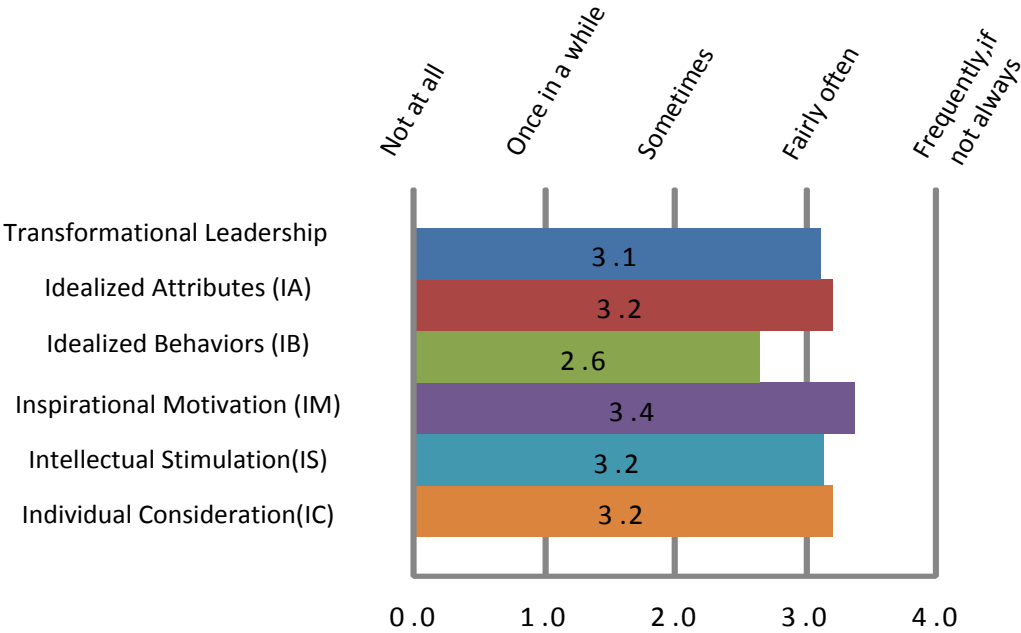


Figure 5. Frequency of transformational leadership style and its components for Leader B

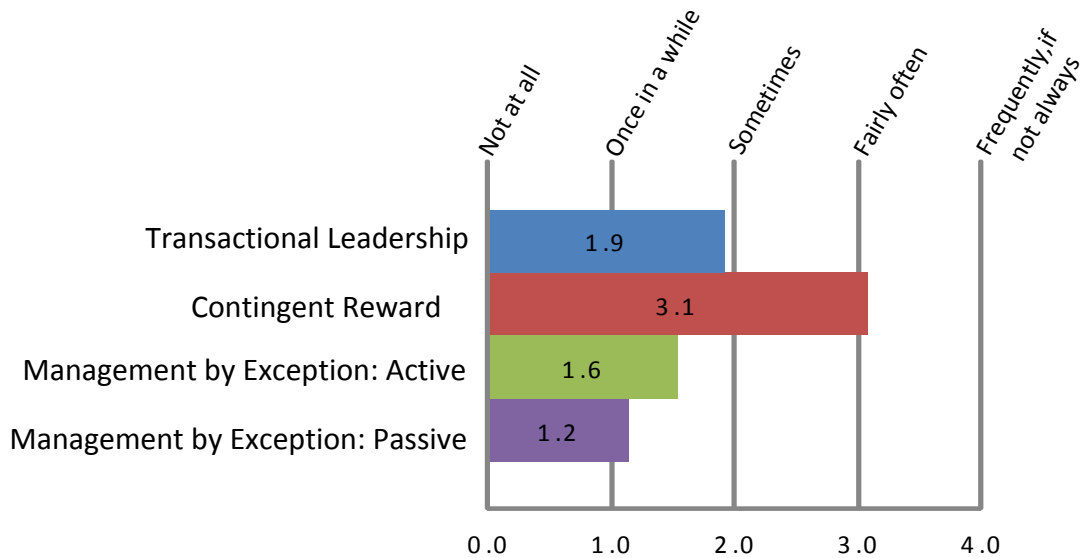


Figure 6. Frequency of transactional leadership style and its components for Leader B

As Figure 5 illustrates, leader B displays the transformational style fairly often and is therefore recognized as a transformational leader. Furthermore, Figure 6 suggests that the leader displays the transactional style less frequently than the transformational one. However, he does show CR-related behaviors fairly often. He is rarely perceived as a leader with MBE-B-related behaviors by followers.

In summary, similar to Company A, Company B is recognized as a high-performing company. However, Company B is not as high performing as Company A since it does not conduct customer interviews as thoroughly as Company A does. Leader B displays the transformational leadership style fairly often and displays the transactional style occasionally. Evidence shows that Company B is still dependent on a few key customers who are skeptical about the new business model. Although this dependence has not prevented the company from further changes, it might affect its overall performance in long term.

6.3. Company C

6.3.1. Profile and Background

Company C manufactures a broad range of products, which perform better than other solutions available in the market. Thanks to its unique product recipe, the company offers competitive prices while enjoying a high profit margin. The competitive prices are valuable for

resellers and end users since they provide them with high profit margins on Company C's products.

Company C was founded 12 years before participating in the CBI project, based on the founder's innovation. During the first years of the company's establishment, the core innovation has been expanded to a full range based on market's demand. The company's aggressive product expansions and improvements resulted in considerable growth for Company C in its early years of operation. However, despite its high potential for growth, the company has not grown significantly in the last few years.

Company C was a mature startup with 12 employees at the time of its participation in the CBI project. At that point, the leader had already become aware of major problems hindering company's further growth. Among those problems, Company C prioritized its inadequate brand and positioning strategy so that they would be the focus of the CBI project. Accordingly, Company C's goal was to create branding and positioning strategies that would facilitate its business growth.

In regard to the Company C's branding strategy, the company has been selling its products in two different brands over the years. Having two brands for the same products has made both the internal and external operations more complicated and costly. As a consequence, the company has not been able to establish a single strong global brand as half of the company's customers recognize only one of the two brands and the remaining half recognize the other brand as being the company's product.

Looking back at the history of the company, the company has been too flexible in fulfilling its customers' demands. Company C often manufactures customized products according customers' specifications. Although the company's relative small size allows for such flexible customization, too much customization has made internal processes complicated, thus preventing scaling up of the company. Consequently, the more diversified and customized the products are, the higher the administration and set up costs would be.

As evidence shows, Company C has never applied a structured process for customer involvement. Instead, it has made substantial efforts to fulfill and accommodate its customers' requests, without considering the long-term consequences.

In short, as the leader of Company C has been aware of the problems, his goal was to find an effective tool to resolve the company's problems and increase its sales. Therefore, the company was seeking to create a sales strategy by the end of the CBI project. As mentioned above, the absence of unified branding and positioning strategies were considered as the company's major problems.

6.3.2. Performance in Customer Development

The leader of Company C neither supported nor directly opposed the CD methodology. The leader did not play an active role throughout the project. Instead, he delegated the responsibilities of the project to the director of U.S. subsidiary and the business development department of the company. According to one CBI senior faculty member, Company C realized the importance of the CD methodology and accordingly allocated some resources to the project.

As mentioned, in the early stages of the project, Company C's main objective was to create branding and positioning strategies based on feedbacks from customers. Shortly after the project began, the company decided to create a single brand to replace the old ones. It was also concluded that the new brand should be associated with positioning statements. Although the importance of having a strong brand and a positioning strategy has been clear to the company, the company has not been able to decide on new branding and positioning strategies yet.

Similar to the Company A and Company B, Company C did not follow CD on a step-by-step basis in obtaining customers' feedback. Instead, the company's activities were inspired by the CD method as they tested new ideas with customers iteratively. Hence, the company conducted several customer interviews to test new ideas regarding positioning statements and a new brand. Initially, the new ideas were tested internally with sales staff. If the sales staff approved the a new idea, the company would test that idea with customers. Although, a number of ideas were tested according to CD, none of those ideas were selected and implemented.

The company's CEO mentioned in an interview that the sales staff resistance to change was one of the company's major obstacles in creating single branding and positioning strategies. Interviews with the mentors and the questionnaire's results demonstrated the leader of Company C as a passive person in the company. One member of the company's board of directors commented that the company's CEO does not execute many of the decisions and policies adopted in board meetings. One senior faculty member of the CBI project stated that "the CEO sees what is important, but instead does things that are more important to him." While Company C has performed relatively well throughout the project, it has not yet have made any significant achievement. Neither the company's subsidiary director nor the business developer engaged in the project had the authority to make final decisions and implement them.

As the project moved forward, Company C decided to restrict the scope of the project from the parent company to its subsidiary in the U.S. The main purpose for that decision was to facilitate the decision-making process. This way, the company expected it could rapidly create an effective sales strategy and then scale it up in the parent company.

Company C's progress speeded up after the decision mentioned above. However, the effects of the decision have been limited to the U.S. subsidiary and have not yet benefited the company as a whole as expected. Accordingly, there has not been any perceived change in the business model designed through feedbacks from customers.

Overall, Company C has not been able to achieve its goals for two major reasons. First, The sales staff has been resistant to any change regarding the company's strategies. Second, some of the existing customers have not supported the proposed changes in the company's branding and positioning strategies.

6.3.3. Path Dependency and Resource Dependency

Apparently, Company C's performance has been influenced by customers' lock in and sales team's inertia to changes. Company C has been responding to customers' demands flexibly over the years. Creating new changes in the company's strategy at this time may not be pleasant to many of the company's customers, thus posing a threat to the company's further development.

In addition, Company C has never had integrated sale and marketing strategies shared within the organization. As a result, the internal sales strategies are too fragmented and the members of the sales staff follow their own sales approaches. In this situation, the creation and integration of a unified sales strategy becomes difficult as they may contradict the shaped mindset of the sales staff, thereby making the sales staff skeptical about changes. This is because what the sales staff members have learnt from their success and failures over time has made them resistant to changes.

Company C's sales persons were skeptical about conducting customer interviews and testing their assumption. Instead, they had a tendency to provide the team with their own insights and perceptions. The sales persons had two excuses for their approach: first, they said they knew customers well and that there is no need to ask customers for feedback directly. Second, they said they had to spend their time on other prioritized activities, such as sales.

In short, Company C's performance has been negatively affected by path dependency and resource dependency. The passive role of the company's leadership and the dominant role of the company's sales staff and their resistance to change have negatively affected the company's growth.

6.3.4. Full-Range Leadership Profile

Company C's leader's full-range leadership style was rated by followers by using the MLQ. Like the other companies in this case study, the average raw scores of all components were calculated. Figures 7 and 8 below summarize Company C's leader's scores in several areas. The tables demonstrate how frequently the leader demonstrated each leadership style.

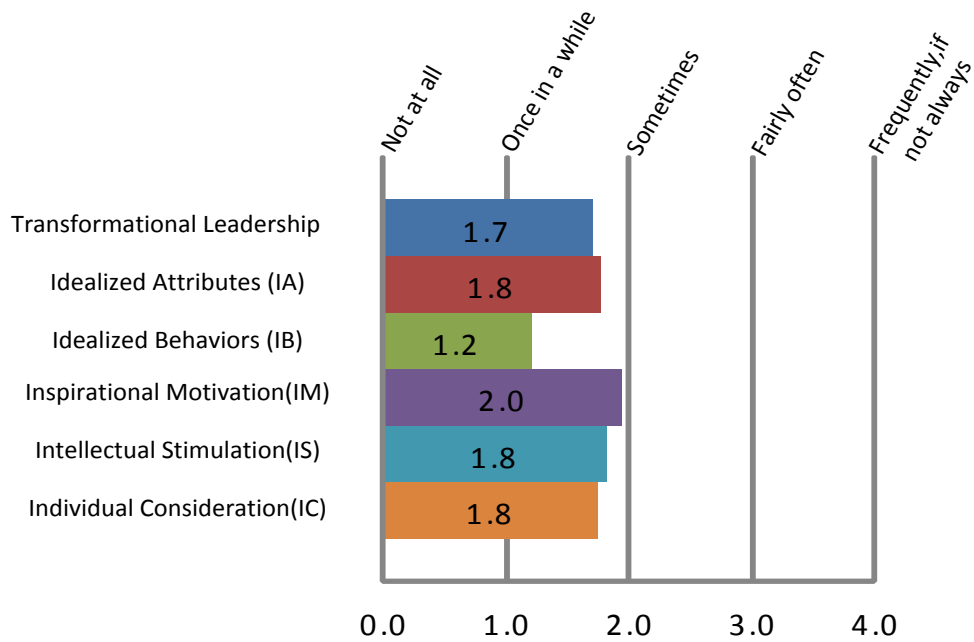


Figure 7. Frequency of transformational leadership style and its components for Leader C

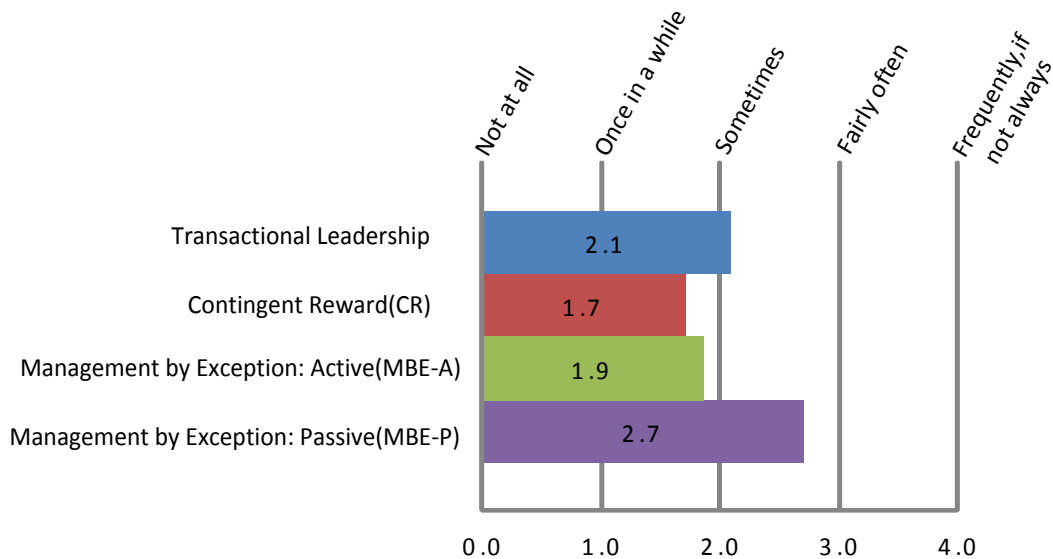


Figure 8. Frequency of transactional leadership style and its components for Leader C

As shown in the figures above, the leader of Company C displays the highest level of transactional style and the lowest level of the transformational style compared to the leaders of Company A and Company C. Accordingly, the leader displays MBE-P with the highest frequency and the IB with the lowest frequency.

In summary, Company C is considered as a medium performing company. Data further suggests that the leader is mostly a transactional style leader and displays the MBE-P behaviors more often than the other leaders discussed previously. Evidence also shows that Company C is highly influenced by inertia and customer's lock in. The passive role of the leadership has intensified the negative effects of path dependency and resource dependency.

6.4. Company D

6.4.1. Profile and Background

Company D is the manufacturer of a range of technology-based products that create a more optimized and cost-efficient processes for customers. Because of the very innovative nature of the product, the company has faced many challenges to find the most relevant customer segment at the very beginning of its operation. Company D has modified its value propositions several times based on the demands of different customer segments. However, the company has not stopped modifying its products, thereby improving and optimizing product features over time. Company D was founded based on innovative ideas of a few entrepreneurs and was later developed by its current CEO.

Company D was an 8-year-old startup company with more than 30 employees at the time it participated in the CBI project and sought to implement CD. Company D began marketing its innovative product at a very small scale but rapidly increased its production and grew dramatically within a few years after its establishment. Although its business model has been successful in the Scandinavian market, the company has found some business opportunities for further development in the international market. Therefore, Company C's purpose was to take advantage of the CBI project to discover important factors allowing for its further business development.

Company D considered acquisition as a suitable option for its further market development. Hence, the company acquired a few potential competitors in other geographical segments thus making horizontal integration. Through those acquisitions, Company D has become one of the top suppliers of their products in Europe.

Overall, the company's structure of interactions with customers is in the form of meeting with major customers in particular segments. The company also provides customers with web seminars, giving them information on how to use new products. Through those seminars and meetings, Company D occasionally receives insights and feedbacks from customers. Moreover, before the company develops a new product, it conducts group discussions with some major customers to get their feedback on product development. The group discussions usually start in groups of 30 to 40 customers that are later broken down into smaller groups. In an interview,

the CEO gave an example of a new product that was developed through feedbacks received from customer meetings.

The CEO also commented that in a rather large company such as Company D, customers' insights need to be discovered and discussed in board meetings so that the board can make further decisions based on those insights. However, the CEO found it impossible for large companies to get feedbacks from all customers and incorporate them into the decision making process. He further stated that involving customers to ask for their opinions helps gain a better understanding about different customers, while increasing their expectations.

Company D prioritizes customers' needs and desires based on their profitability for the company, their impact on the competition environment, and their impact on the company's position in the market. One of Company D's major concerns has been finding an effective and efficient way to strike a balance between the company's and its customers' interests.

Based on the interview with Company D's CEO, one can say that Company D did not have a certain and concrete goal for participation in the CBI project. In contrast to Company A, Company B, and Company C, Company D did not have any assumptions to be tested by customers. Instead, Company D's leader's main intention was to discover key factors allowing for the company's further development. As the company's CEO stated, the company needed more practical tools to develop its business.

6.4.2. Performance in Customer Development

Company D's leader is a relatively professional director with significant experience in other companies. The interviews with the mentors and the coaches demonstrate the leader of Company D as being more dependent on his own ideas and preset rules than the ideas of other people. Although the leader considered the project important, he did not have any tendency for further investigation through customers and thus did not allocate resources to the project. Moreover, an academic community about whom the CEO was rather skeptical had initiated the project.

Despite all the resources readily available to Company D, the company did not conduct a significant number of customer interviews for the purpose of project. Instead, the company maintained its own way of customer involvement through group meetings.

As mentioned earlier, at the time of the project, Company D was involved in an acquisition process. In the interview, the company's CEO referred to the challenges facing the company during the acquisition period as being the major obstacle to the company's ability to fulfill the project demands. Although the leader was eager to discover key factors facilitating the company's further growth, he did not give priority to the project since in his point of view, CD

is not practical enough. Accordingly, the leader did not substantially involve other employees in the project. Instead, a few of the company's key staff members participated in the tutorial workshops of the CBI project. According to the company's CEO, "you get some ideas in the workshop and get back to daily work and forget them."

The interviews with the senior faculties of CBI revealed that Company D has had some conflicts and tensions among its management team. In addition, the company's CEO was considered as very biased about his thoughts and ideas, making it difficult for him to come to an agreement or be open to instructive ideas such as those mentioned during the project.

Company D did not execute any of CD's steps and thus did not achieve a certain outcome accordingly. However, as a result of the acquisition that happened during the project, the company reached an organic sales growth of about 400%. It is therefore unknown how the company could increase this growth by applying CD and understanding customers in new markets. It is expected that, applying CD in the newly acquired markets could generate new insights, thus facilitating integration. Moreover, those insights could lead to the modification of the business model in those markets as well.

6.4.3. Path Dependency and Resource Dependency

In general, Company D has been responsive to customers' resilience, while making new changes in the company's business model. From the leaders' point of view, customers become even more resilient when it comes to changing the value proposition. Every time the company has made some changes, there have been some important customers who were not happy with those changes.

Any time the company finds some changes beneficial to both the company and its customers, it tries to convince the customers to adopt the change. However, that attempt sometimes leads to the dissatisfaction of both the sales team and the customers. According to the leader of Company D, the company has always tried to implement new changes rapidly as he perceives changes as key drivers of the company's sustainability in the long run.

The empirical data discussed above show that resource dependency is not an influential factor in the company's performance. However, leaders D' reliance on his past experience and success has made him unwilling to adopt new ideas.

6.4.4. Full-Range Leadership Profile

The leader of Company D's full-range leadership style has been rated by the followers. Similar to the other leaders in this case study, Company D's leader's raw scores for all items were

analyzed. Figures 9 and 10 below summarize Company D's leader's scores and show the average frequencies for each leadership style.

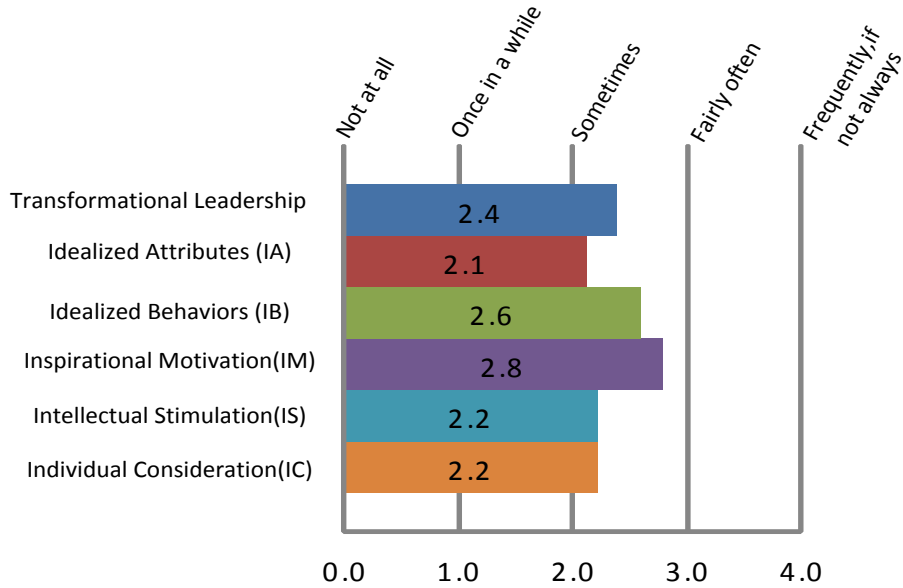


Figure 9. Frequency of transformational leadership style and its components for Leader D

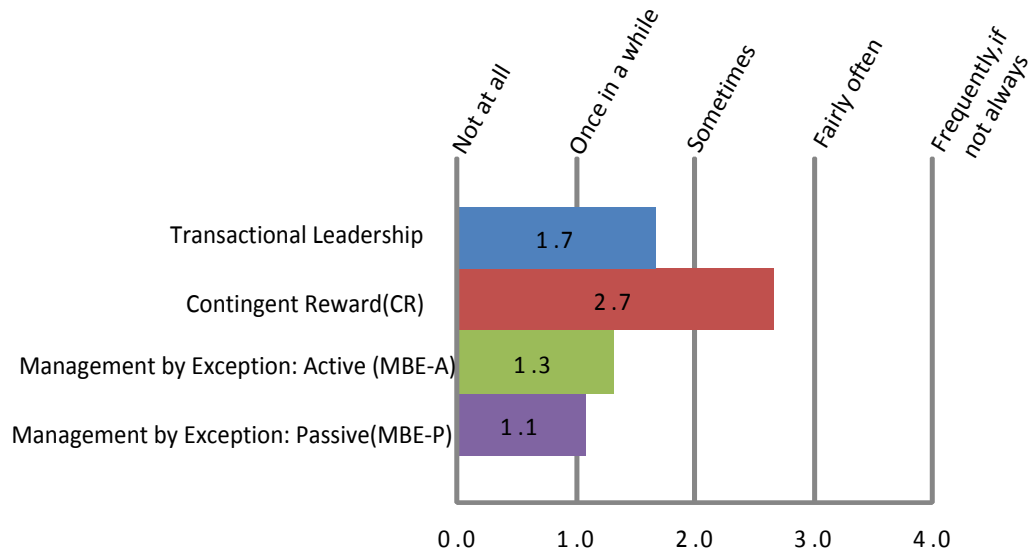


Figure 10. Frequency of transactional leadership style and its components for Leader D

As shown in the above figures, the leader of company A displays the transformational style more than the transactional one. Except for a few instances, the leader of Company D displays

all components of the transformational style. In contrast to MBE-P as the least frequently displayed behavior by the leader of Company D, IB, IM, and CR are his most frequently displayed behaviors.

In summary, Company D has been recognized as a low performing company. Moreover, CD has not been established and communicated by the leader, thus preventing further execution of the method. The data further show the leader of Company D as being mostly a transformational leader. However, it seems that his inertial reaction to the method has negatively impacted the company's performance.

6.5. Company E

6.5.1. Profile and Background

Company E is the supplier of an advanced cutting-edge technology. The company was founded by its current CEO and based on a core technology that further developed into a range of products in different designs and formats for different customer segments.

Company E, was an 8-year-old startup company with nine employees when it participated in the CBI project. At that time, the company was struggling to survive even though its turnover growth rate was 390% compared to its previous year. The leader wanted to take advantage of the project to find practical guidelines for the company's business development.

According to the CEO, the company involves customers in product development by making prototypes and asking for customers' opinions. The products are then developed according to customers' comments. The company involves customers in its product development process on an improvised basis, with no specific structure. The development of a new product is basically initiated by a business case and demand from customers.

Company D does not follow a specific structure for getting customers' feedbacks. However, when the company's sales staffs receive customers' comments, depending on the type they convey them to different divisions. For example, if a customer contacts the company regarding a small technical problem, the company directs the problem to the technical staff. If the problem concerns some major aspect of a product, the company directs it to the board of directors so that the board can discuss the problem.

In short, similar to Company D, Company E's goal was to discover practical guidelines to facilitate further business development. Overall, Company E did not have particular hypothesis to be tested through its customers. Instead, it was struggling for further growth and development.

6.5.2. Performance in Customer Development

The interview with Company E's CEO showed that he is familiar with CD very well. From the CEO's point of view, it is hard to get customers to share information about their needs. This is because, according to the CEO, customers view a company's contacting them as business solicitation, and are therefore reluctant to provide the company with specific information in these situations. The CEO further commented that when a company asks customers how much they are willing to pay for a new solution, they hesitate to answer directly. However, according to the CEO, if you approach them as a consultant, they are more willing to share information."

The company's CEO criticized the CD method by mentioning "when you reduce wastes by not developing a product first, it is not like making an innovation as it used to be and thus it is not an innovation anymore." Accordingly, the CEO perceived CD as a theoretical method that cannot be applied easily in different cases and therefore considered CD as a method that companies cannot realistically benefit from. He also mentioned that at the time of the project the company was at a critical stage of development and was struggling to survive. Thus, the CEO did not give priority to the project and did not involve other employees since he did not want to distract the employees by involving them in a new project.

As a result of the leader's mindset about the CD method, Company E did not conduct any customer interviews for the purpose of the project. The company continued its own method of customer involvement through prototype tests and occasional workshops. Interestingly, the leader commented that after becoming familiar with CD, he became confident that the company's improvised customer involvement method was consistent with CD. The leader mentioned that the company had "some idea about being more structured." However, the "idea of being more structured" never manifested itself during the one year of the project.

The leader of Company E is a relatively experienced person who had worked as a CEO for two other companies before joining Company E. The mentors and coaches mentioned in the interview that the leader is perceived as a very hard working person who plans and performs based on his own philosophy. They also mentioned that the leader is not willing to share information that might endanger his position and power in the company.

Similar to Company D, Company C did not execute CD in accordance with the CBI project structure. Hence, Company C did not achieve specific results based on its execution of CD.

6.5.3. Path Dependency and Resource Dependency

Like other companies, Company E has experienced difficulties while making changes in its business model. According to the CEO, the major challenges are caused by customers' resilience to new changes. For example, when the company decided to add a new functionality to the existing product expecting it would add more value for the customer; customers were not

willing to pay for the increase in cost related to that change. As a result, company decided to allow customers upgrade to the new product with the new functionality free of charge. By that decision, Company E expected to increase its sales by offering the new functionality without charging the costumers for it. Still, the company needs to evaluate how profitable that decision would be in the long term.

The CEO stated that he was doubtful whether it was worthwhile to conduct more investigation to figure out the best way to distribute the new functionality. He mentioned that the company would wait a couple of months to see if the decision would work because the company had already finished the job. The CEO said that the company believed the customers would just upgrade their existing products, and that the customers did not do the upgrade because they were conservative. Accordingly, the leader of Company E perceived the customer segment and value proposition as the hardest obstacles to any change in the business model.

Company E does not seem to have a particular strategy to prevent the relevant consequences of path dependency and resource dependency. The leader seems too biased about the company's existing core capabilities and displays an inertial reaction to any change. He does not see any utility in CD while the company is dealing with customers' resilience to pay for a new product.

As an alternative, Company E could test its assumptions about customers' willingness to pay by Customer Discovery and Customer Creation process. Moreover, those processes could show new opportunities for further development and improvement according to customer's needs.

In short, the leader E' inertia toward new ideas and methods has considerably impacted the company's performance.

6.5.4. Full-Range Leadership Profile

The leader's full-range leadership style was measured through questionnaire. The raw scores for all components were analyzed and the averages were calculated. The Figures 11 and 12 below demonstrate the aggregate results for the leader of Company B. They demonstrate how frequently the leader displays behaviors related to each style.

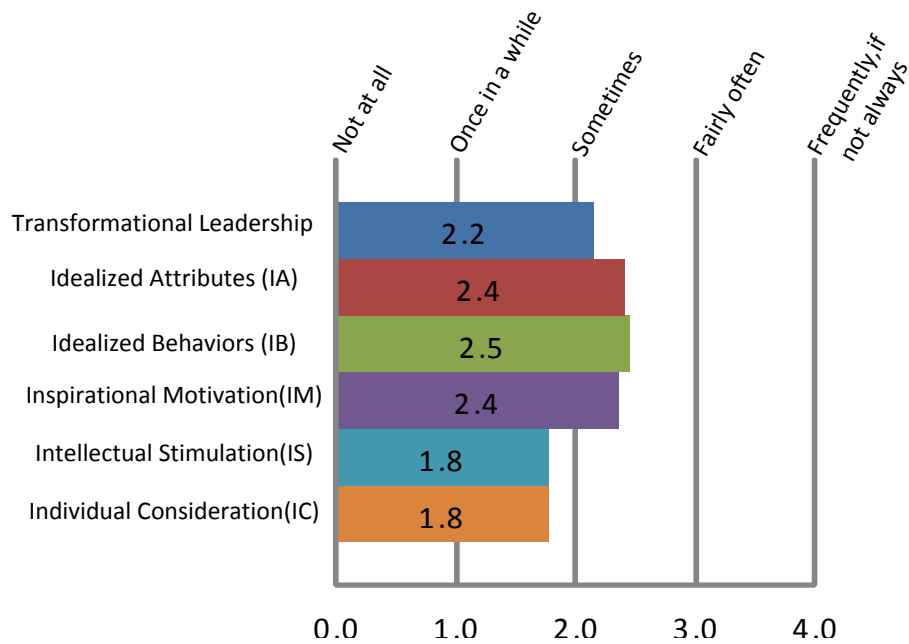


Figure 11. Frequency of transformational leadership style and its components for Leader E

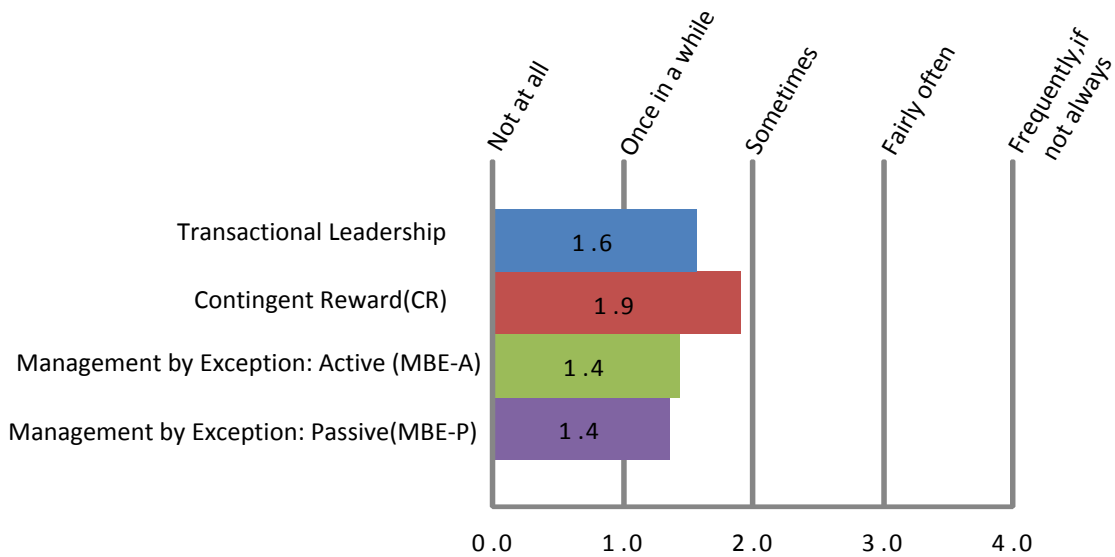


Figure 12. Frequency of transactional leadership style and its components for Leader D

As the above figures illustrate, leader E mostly displays the transformational leadership style and displays the transactional style the least among the previously discussed leaders. Accordingly, leader E shows IE, IB, and IM more often than MBE-A and MBE-P.

In summary, the above empirical data show that Company C is a low performing company. Data further suggests that the leader is mostly a transformational style leader and adopts behaviors associated with the transformational style more often than those of the transactional style. However, he displays IS rather less often than the other transformational components. Moreover, the leader’s inertia to new ideas and approaches has a negative influence on the company’s performance.

7. Empirical Analysis

This section presents an analysis of the data gathered in order to answer the research questions. This section will provide a summary of the data presented in empirical data section to analyze the correlation between leadership styles and the companies’ performances. The structure of analysis will be aligned with theoretical framework. This analysis found correlations among the transactional leadership style, intellectual stimulation, and management by exception-active and performance. This section also addresses the problems and opportunities with leadership in the implementation of CD.

7.1. Leadership Style and Performance

Considering all the empirical findings presented above, the correlation between leadership styles and performance was examined for all five case companies. In order to compare the companies, we first ranked the companies’ performance based on four sub-variables defined earlier. A quantitative score was assigned to each qualitative sub-variable on a scale of 0-2, with 0 as low, 1 as medium, and 2 as high. We then calculated the average and measured the performance for each case quantitatively. The following table shows the results.

Table 1. Performance Measurement of Five Case Companies

	Customer interviews	Employee’s involvement	Resources location	Outcome	Performance ale
Company A	High 2	High 2	High 2	High 2	High 2
Company B	Medium 1	High 1	High 2	High 2	High 1.75
Company C	Medium 1	Medium 1	High 2	Low 0	Medium 1
Company D	Low 0	Low 0	Low 0	Low 0	Low 0
Company E	Low 0	Low 0	Low 0	Low 0	Low 0

We calculated the average raw rating scores of leadership components for each leader and then measured the frequency of leadership style. Accordingly, we calculated the average of scores of all transformational components (Five I’s) to measure the transformational style. Similarly, we

measured the transactional leadership style. According to questionnaire design, the frequency of leadership styles are considered on a scale of 0-4, with 0 meaning not at all and 4 meaning frequently, if not always.

Using the quantitative scale for both variables of performance and the leadership style allows a more accurate correlation analysis. The results are summarized as a matrix classifying four main quadrants, allowing for a better comparison between cases. The dimensions used for the classification are leadership style frequency and performance in the implementation of CD.

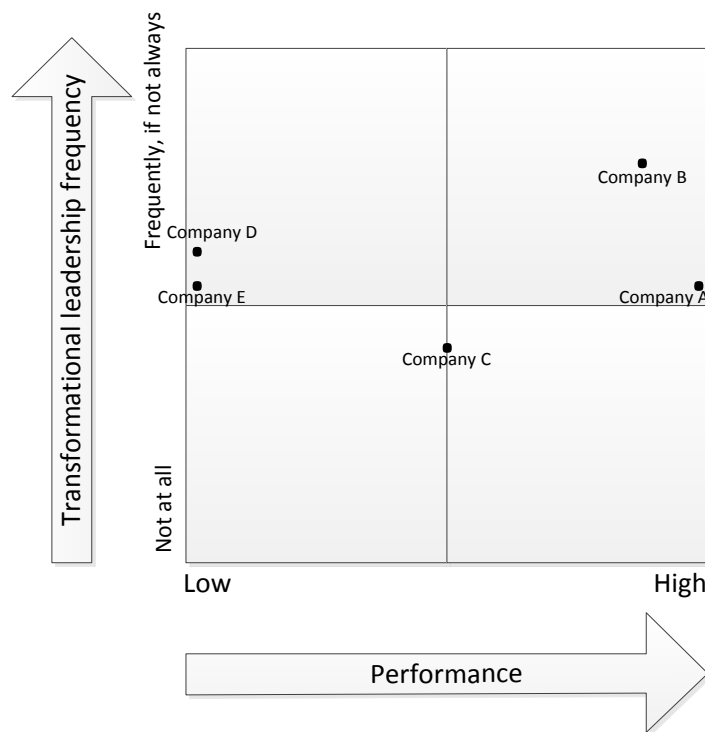


Figure 13. Correlation between transformation style and performance for five cases

The above matrix suggests no particular correlation between the companies' performance and the transformational leadership style.

Figure 16 below shows the correlation between the transactional leadership style and performance.

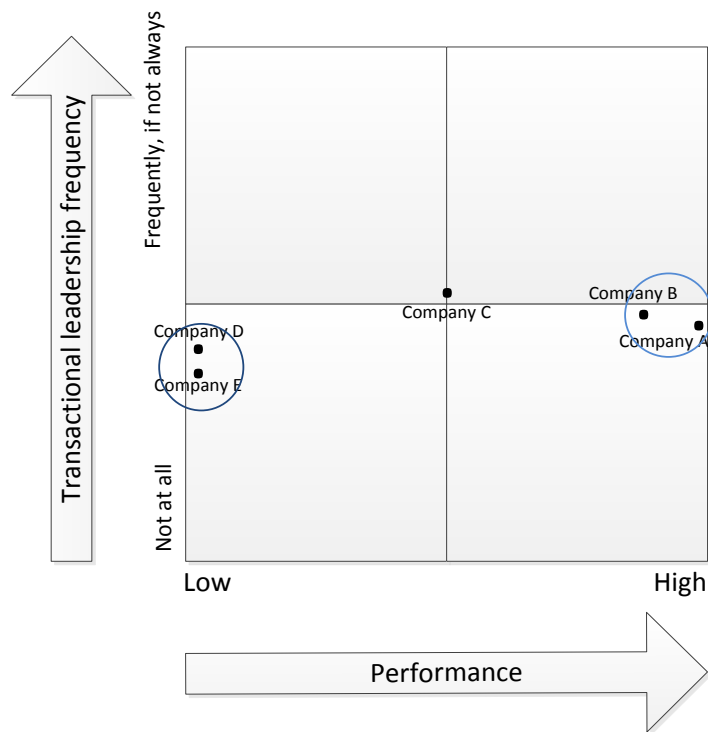


Figure 14. Correlation between transactional style and performance for five cases

The above matrix does not show any direct correlation between the transactional leadership and performance. However, if we consider the leader C's style as non-leadership since he shows the highest level of MBE-P (also known as non-leadership), the results would be different. Thus, except for Company C, one can observe a positive correlation by classifying the cases within the two groups of high performing (A and B) and low performing (D and E). The leaders with higher frequency of transactional leadership display a higher performance.

The analysis up to this point answers the first sub-question:

- **Analysis of data in the five cases showed no direct correlation between transformational leadership styles and performance.**
- **Classifying cases within the two groups of low and high performing, the data suggest a positive correlation between the transactional leadership and performance. However, leader C with medium performance was discounted; otherwise no correlation was found.**

7.2. Components of transactional/transformational leadership and Performance

Narrowing down the scope of analysis of leadership style, this section examines the correlation between each component of leadership style and the companies' performance in the implementation of CD. Except for Company C, we found a positive correlation between the following components and companies performance: IS and MBE- A.

The previous section measured both the performance of the companies and the average of the style's components' frequency for each leader. This section illustrates the results in the matrixes below. Each matrix presents the correlation between each component and performances, similar to what was done for leadership styles.

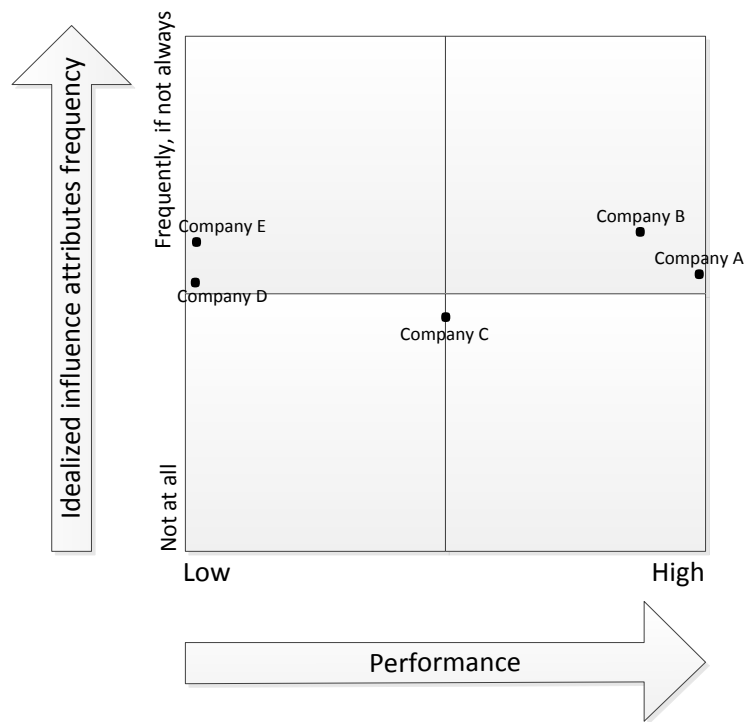


Figure 15. Correlation between idealized influence (attribute) and performance for five cases

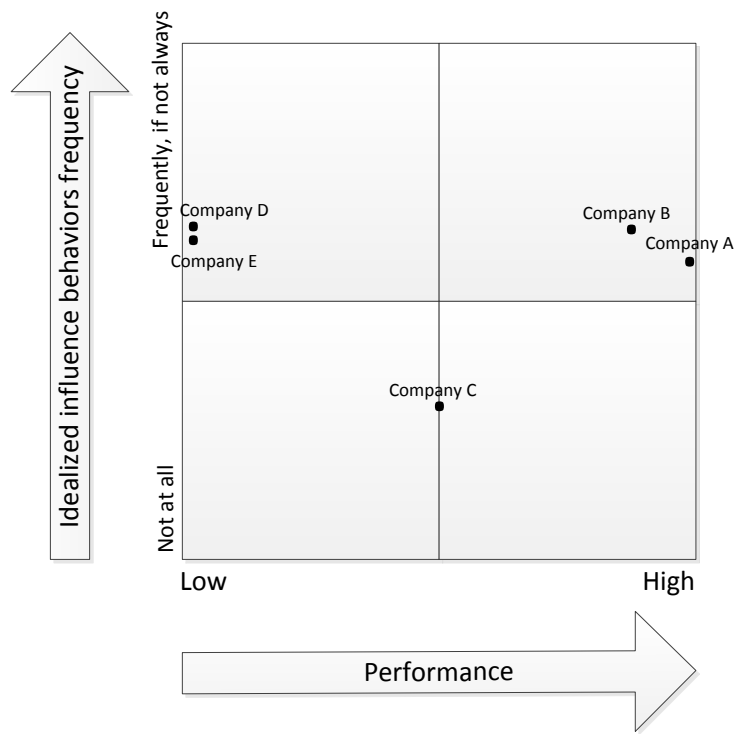


Figure 16. Correlation between idealized influence (behavior) and performance for five cases

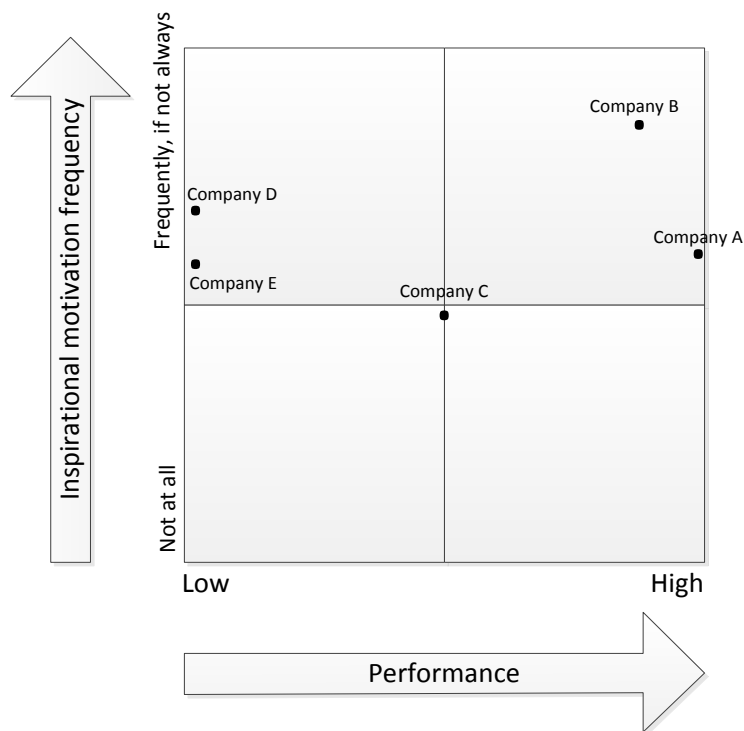


Figure 17. Correlation between inspirational motivation and performance for five cases

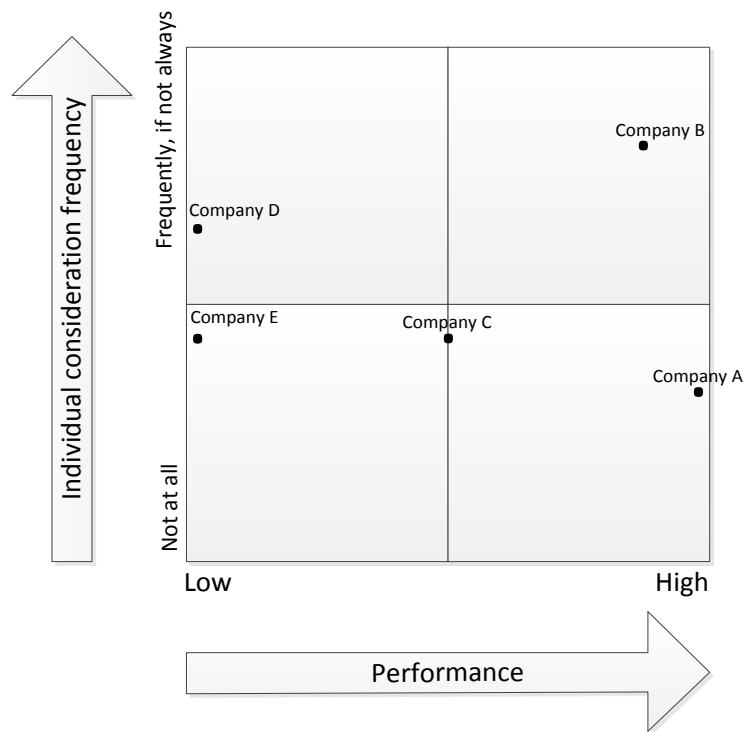


Figure 18. Correlation between individual consideration and performance for five cases

As we can see from the four matrixes above, there is no direct correlation between the four components of the transformational leadership style and performance. The results are in line with the results of the other section in which there was no correlation between the transformational style and performance. However, the matrix in Figure 20 shows different results for the last component namely IS.

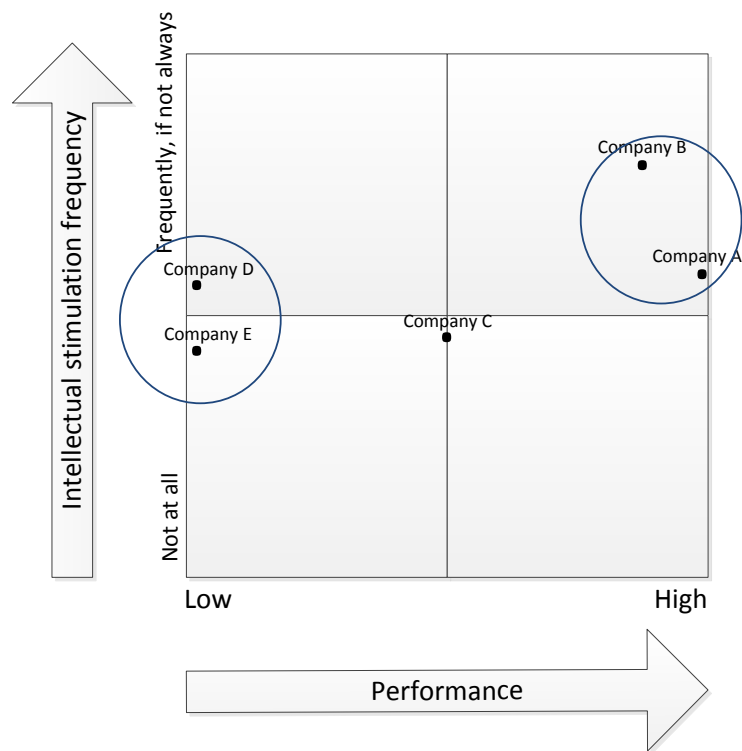


Figure 19. Correlation between intellectual stimulation and performance for five cases

Except for Company C, a closer look at the data shows a positive correlation between IS and performance. That means the more frequently the leaders display IS, the better would be the company's performance in implementation of CD.

In addition to the transformational style, all the three components of the transactional style including CR, MBE-A, and MBE-P are presented in three Figures below.

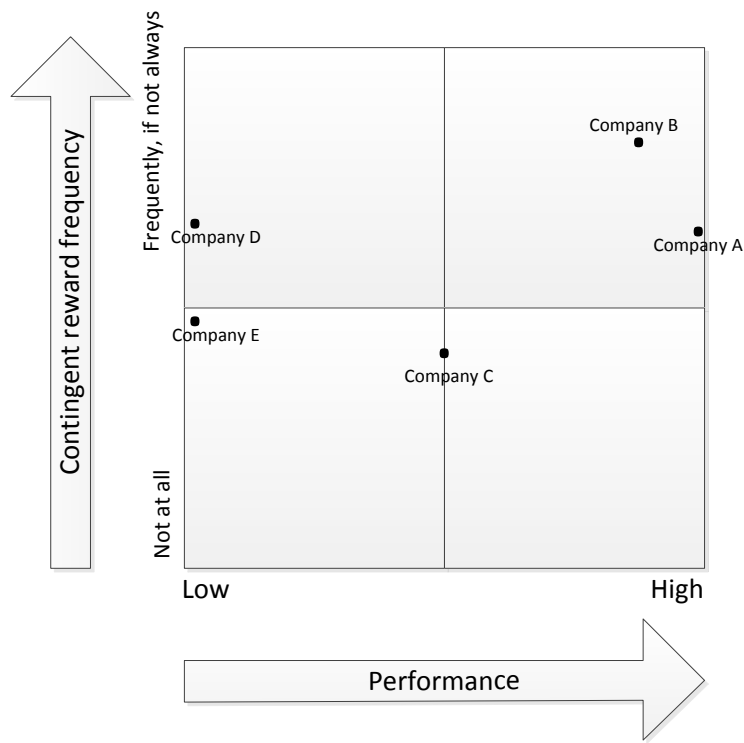


Figure 20. Correlation between contingent reward and performance for five cases

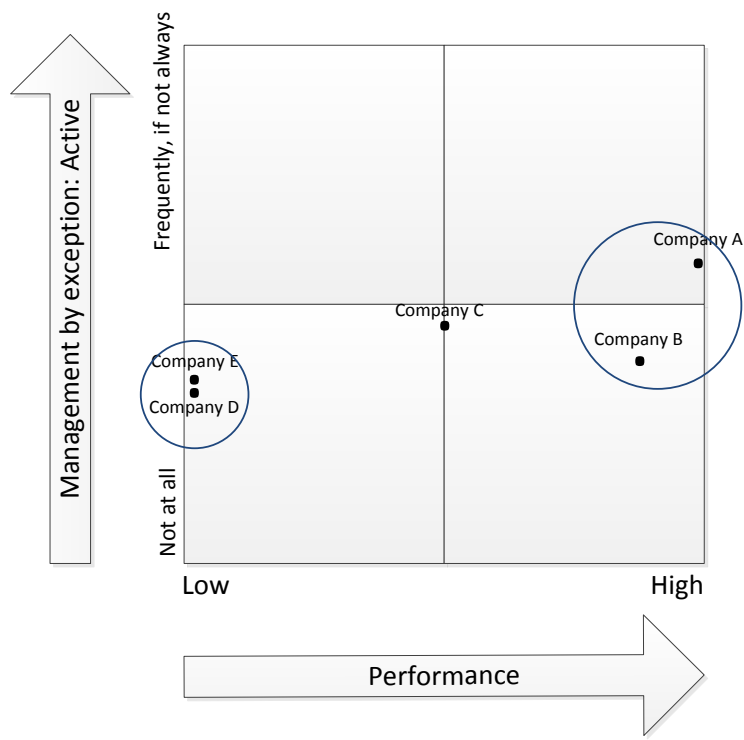


Figure 21. Correlation between management by exception- active and performance for five cases

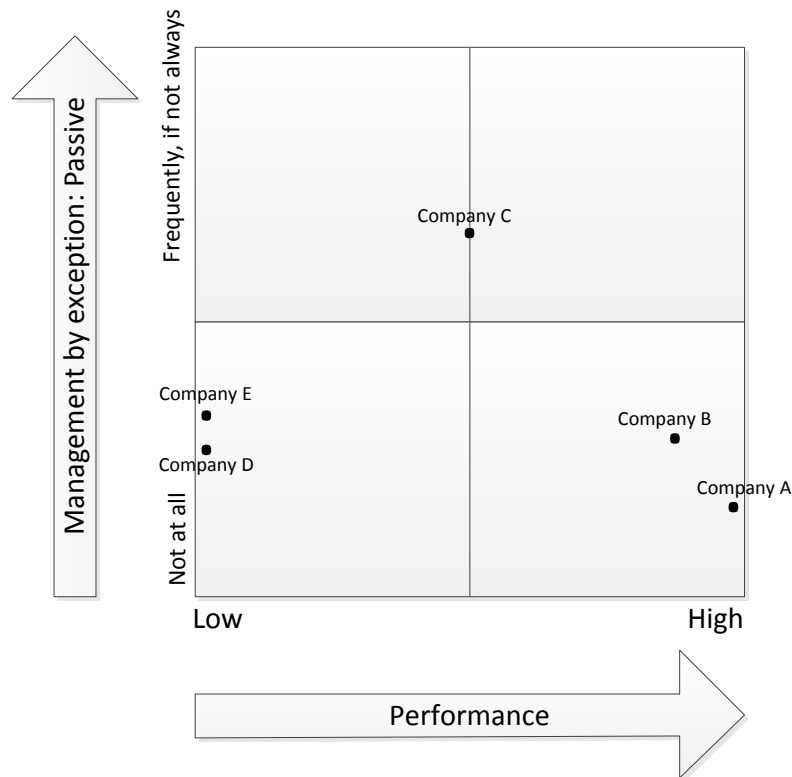


Figure 22. Correlation between management by exception-passive and performance for five cases

Considering all three Figures above, we have observed no correlation between CR, MBE-P.

However, as we can see, Figure 23 illustrates a positive correlation between MBE-A and performance. In comparison with the two low performing leaders of Company D and Company E, the other three leaders with medium to high performances display MBE-A behaviors more frequently. We can therefore conclude that the more frequently the leaders show MBE-A behaviors, the better would be the company's performance.

In summary, the analysis will answer the second sub-question according to the following:

- **Classifying cases within two groups of low and high performance, the analysis indicates a positive correlation between IS and performance. The medium performance company was excluded and no correlation between IS and performance was found.**
- **Further, analysis confirms a positive correlation between MBE-A and performance.**

7.3. The Influence of Path Dependency and Resource Dependency

Considering the empirical findings presented above, the influence of path dependency and resource dependency as moderating variables has been analyzed. As a result, this study has found path dependency as an inhibiting factor for an effective implementation of CD. Moreover, resource dependency can prevent the implementation of verified ideas through CD process.

Company A has been quite successful with existing customers and the leader's desire has been to obtain the most benefit by being flexible to new growth opportunities. Accordingly, the company has not been influenced by path dependency and resource dependency.

Company B has made investments to implement the new business model while it is still dependent on a few customers who oppose the change. Nevertheless, this types of resource dependency has not prevented the company from further changes.

Moreover, in Company C, both sales staffs and customers' resistance to change have negatively affected the company's growth. Accordingly, both path dependency and resource dependency affected the performance during the implementation of CD process and its results.

Although, resource dependency has not affected the company D's performance, path dependency has led to leader's inertia to the method. As a result the leader has never established the method in the company.

Similar to the leader D, the leader E' inertia toward new ideas and methods has considerably inhibited the company's effective performance.

Accordingly, the analysis up to this point answers the third sub-question:

- **As results show, a combination of both the leadership style and a leader's attitude influences a company's performance, and these two elements are interrelated with respect to the leadership's role.**
- **The leaders' inertia to new ideas and methods inhibit the implementation of CD.**
- **The staffs' inertia and more specifically sales persons' inertia to new processes and changes inhibit both implementation of CD processes and its outcome.**
- **The company's dependence on existing customers prevents the implementation of the verified ideas as results of the CD.**

8. Conclusion

This study has examined how a certain leadership style influences the implementation of CD in a mature startup. Applying the transactional-transformational leadership model, we conducted a comprehensive analysis while considering the two styles and their components.

The answers to the main research question and three sub-questions defined in the Introduction section illustrate the following results:

- In general, the leadership style can influence the performance of mature startups.
- There is no direct correlation between the transformational leadership style and performance in the implementation of CD.
- Among all the five components of the transformational leadership style, only IS has a positive correlation with performance.
- There is a positive correlation between the transactional leadership style and performance of startups in implementation of CD. However, this correlation could be affected by one of the transactional components, namely MBE-A, since only this component has a positively influence the performance.
- Among all the three components of the transactional style, only MBE-A has a positive correlation with performance in the implementation of CD.
- Path dependency leading to a leader's inertia to new ideas and/or academic methods negatively affects the company's performance in the implementation of CD.
- Resource dependency leading to customer lock-in negatively affects the company's performance in the implementation of CD.

Accordingly, we can conclude that in addition to transformational and transactional leadership styles, certain components of those styles may influence performance.

9. Discussion

The cases that were the subject of this study are five mature startups in five different industries. As we will see in the following discussion, leadership plays an important role in all of those companies. Leaders with different styles and attitudes play a key role in both enhancing and diminishing performance. However, none of the cases fined CD simple enough to implement it as a model that fits their business and needs completely. Instead, some have been inspired by CD and have used it according to their requirements. Others did not consider

it valuable and therefore avoided establishing it in their company. Consequently, at the end of the project year, the companies got different results. These different results are not only dependent on style, but also on the leaders' attitudes, among other factors. This section will go through all the factors that seem to have impacted the companies' performances, some of which may not have been considered in the analysis section.

Companies are different, so is their approach; Case companies have different backgrounds, problems, priorities, and opportunities, which all may affect their performances. This study assesses the companies' performances for a period of one year of the project and does not consider the impact of the above mentioned differences.

The companies had different levels of performance according to the CBI project instructions and, more specifically, CD processes. Therefore, although the infrastructure was the same for all cases, they had different internal characteristics. Those different characteristics cause the project to have different strategic importance for different participating companies and as a result, each company may perform differently.

To illustrate, Company A was a part of programs similar to the CBI project with a systematic approach. That participation may have affected its perception and openness toward the instruction of CBI project. As a result, the leader is more likely to use innovative methods like CD. Moreover, leader A realized that there are a considerable number of potential customer segments in different industries for their technology. The company also realized that in order to scale up the company's operations, they need to prioritize among those customer segments and move forward. They just needed to gain a better understanding of customers and then decide upon segmentation. Thus, they gave priority to the project, got out of the building and started talking with customers to find out what segments will benefit most.

In the second company, namely Company B, performance was driven by the company's strategy. As the company had come up with the idea of running its own production, the leader was eager to see if it really creates value for customers. Since he wanted to take advantage of the project to validate or reject the company's new strategy through its customers, the leader of Company B gave priority to the project.

Similarly, Company C was already aware of major problems and their importance and therefore considered the project important to get customers' feedback to finalize a positioning strategy.

In contrast, Company D may have performed differently if it had not been in an acquisition phase. Acquisition takes so much energy and focus that may make a leader unable to prioritize projects effectively. However, one could argue that acquisition is a good stage for conducting CD since it provides a company with the unique opportunity to become familiar with the new

potential customers that it hopes to gain through the acquisition. Company D could conduct a number of customer interviews testing its assumptions to see if an existing strategy fits the market and if it does not, how they can modify it to meet the market's needs. Although CD could help Company D achieve its acquisition goals efficiently and effectively, other preplanned activities affected the company's prioritization.

As the leader of Company E mentioned, the company has been struggling to survive and thus he did not give priority to the project.

It is not only the methods that can help companies develop their business effectively, but also what conditions they are in when applying those methods. According to the observations made in this study, two major factors are important in the evaluation of conditions:

- **Main goal of applying CD:** it is important that a leader's goals for applying CD are completely in line with the methods' objectives. Although CD, along with the business model canvas, creates a broad range of utilities with respect to systematic business development, those utilities need to be according to the company's requirements. For a company with no certain hypothesis to be tested, CD may not be the most suitable solution.
- **Available resource:** if a certain amount of resources is allocated for further investigation, CD is more likely to be given priority and implemented properly. In contrast, when a mature startup is struggling for resources and has other projects running at the same time, further in-depth investigation through CD becomes a nice-to-do process and thus neglected. In this situation, the company does not find it critical to test hypotheses, but is more likely to give priority to the implementation of pre-defined plans.
- **Customer-oriented mindset:** a mature startup in which leadership and individuals have a more customer-oriented mindset is more suitable for the implementation of CD. The customer-oriented mindset could be shaped based on previous experiences in using methods similar to CD. In comparison, companies with more improvised methods of customer involvement or more orientation toward products than customers are more likely to underestimate the utility of CD. Such companies are not in the proper condition to initiate and implement CD effectively.

CD is not a solid manual, but a guiding tool; Besides the impact of the leadership style on performance, the influence of leaders' attitudes toward CD, perceived as an academic method, should be taken into consideration. In all low performing companies, leaders were to some extent skeptical about CD and therefore disregarded it and gave priority to activities other than

the project. On the other hand, in high performing companies, leaders initially tried to understand the method and its value. Then, they customized the method according to their situation. In other words, instead of considering CD as a solid manual, they extracted the useful principles and methods and applied them internally.

In an interview, the CEO of Company A commented that the project helped them structure the company and that such structuring is important in scaling up and defining the sales processes and tools for the purpose of getting feedback from customers. The company did not necessarily follow project instructions step by step. Instead, it learned that having a structured process to get customers' insights is important as they grow. It therefore used the project's guidelines to train the sales staff how to communicate with customers and bring new ideas into the company.

In comparison, in Company D, despite the potential effect of CD mentioned above, the leader neglected it. He perceived the method as an academic exercise that does not address a company's concerns and challenges. However, the company's leader could have understood the rationale and values behind CD and adopted it according to the company's needs. For example, the company could have contacted potential customers in new markets to see if the existing business model would work there as well. That approach could enable the company to reach the most appropriate customer segment in a new market in the most efficient and effective way and even reveal new opportunities to the company. Nevertheless, the company continued to work according to its own method by involving customers through group meetings while developing new products. It took the company a rather longer time before it realized that the business model that works well in Scandinavia does not necessarily work well in other geographical areas.

The CEO of Company E perceived CD mainly as an academic doctrine that neglects the challenges of real life. Hence, the CEO did not see any utility in the implementation of the method at all. Moreover, he believed the project would distract employees from their prioritized activities, and therefore decided to avoid involving them in it.

However, in Company C, the leader was neutral and showed neither any interest nor any disinterest in applying CD. On the other hand, the vice president and the business developer were quite open toward adopting the method. Although they did not view the process as an instruction, they learned to use the method to test ideas with customers. But then again, when it came to making the final decision, the company failed.

Leader' leadership style and attitudes go hand in hand; Correspondingly, when it comes to IS, the result of leadership analysis is in line with the discussion above. Interestingly, results showed a positive correlation between leaders' IS-related behaviors and performance. As described in the Literature Review chapter, this aspect of transformational style refers to when

leaders are open to new ideas and display flexibility toward changes. They therefore encourage followers to try new ideas and approaches.

This aspect of leaders' style and their openness to an academic method will positively affect how CD is established, perceived and then implemented in the company.

On the other hand, all leaders in high and low performing companies showed almost the same level of II (attributes and behaviors). As theories explain, a leader with a high level of II communicates the values and goals and the way to achieve them. Although the study showed that leaders of low performing companies displayed almost the same level of II, they had different perceptions of the method from the beginning. They therefore, did not see any value in CD to discuss it with the followers. In other words, the project was never initiated and implemented. In contrast, the perceptions of the leaders of high performing companies of CD seem to have affected their communication with the followers and their further achievements.

However, the leader of Company C showed the lowest level II, while one of the major obstacles for the company was its sales persons' resistance to their assignments during the CD project. It seems that the leader's lack of ability to communicate the project's goals and values since the beginning of the project led to that problem. Although he was neutral toward the method and allowed the vice president to lead the project, he did not obtain the followers' full commitment to support the vice president. Hence, the sales persons did not value and prioritize their tasks.

In summary, the leadership style and attitude go hand in hand and both can influence a company's performance. Therefore, it is important to understand a leader's perception and attitude first, and then see how his style can improve performance. In other words, even if the leadership style is assessed as effective and supportive, a leader's attitude toward more academic arrangements, such as the CBI project, could affect a company's performance and outcome throughout the project.

Leadership could be defined as an individual or a team; Although a leader has the most dominant and therefore significant role in the company, the role of the second dominant person in the company is significant and should therefore be taken into consideration as well. In all the three medium-high performing companies, in addition to the CEO, there was another key person directly engaged in the project.

In Company A, while the CEO has been managing the operational and organizational aspects of the company, the vice president has been directing the CD project. The vice president has put his focus on the project, task delegation, and other functions related to the project. Nevertheless, both the vice president and the CEO have almost the same understanding of the project's value for the company, and this understanding facilitates effective decision-making and

implementation of new ideas within the company. Such a close collaboration between the CEO and the vice president helps organize ongoing activities and projects.

Similarly, the vice president of Company B was involved in the project, interacting with customers and making key decisions.

In Company C, the passive participation of the CEO has to some extent been compensated by the presence of the vice president, who has directed and monitored the processes. However, due to internal obstacles, the vice president could not complete the project up to a significant level within one year of its implementation.

In contrast, both CEOs of Company D and Company E were the chiefly involved persons in the project and therefore their perceptions and insights affected further steps directly. They did not find any utility in the method and thus did not involve other employees to take further actions.

Accordingly, high performing companies, both the CEO and the second dominant person contributed to the company's performance. One cannot ignore the fact that a leader's openness and common values with the second dominant person have a huge positive impact on the company's performance. Moreover, in addition to the CEO, other key involved persons in leading the process should be taken into consideration. In some cases, a leadership team should be the unit of analysis and not an individual leader.

Both Transformational and Transactional could be effective; As data suggests, there is an exceptionally positive correlation between MBE-A and performance. Accordingly, the more focused the leaders are on assigned tasks and standards, the better would be their performances in CD. Although MBE-A might lead to some constraints in general, it could become a stimulator as well. Moreover, as mentioned above, the results have shown that the leaders with higher level of IS are more likely to enhance the performance.

This study concludes that leaders can increase performance by incorporating a sufficient level of particular components from both the transactional and transformational styles into their operations. Hence, leaders can assign tasks to the followers and monitor their performances and interfere in case of deviation. But, at the same time, leaders need to be open toward new ideas throughout the project and accordingly maintain the capacity for learning and change. Leaders are expected to increase performance in implementing CD by keeping the balance between these two aspects.

Moreover, as mentioned in Literature Review, different leadership styles may be effective for different types of project. Accordingly, both leadership styles and/or their components may enhance companies' performance in different steps of CD process.

This study therefore hypothesize that a leader who displays IS more frequently seems to be more effective during investigation steps when CD team obtain new ideas. Then, when ideas are verified, a leader who displays MBE-A more frequently seems to be more effective for leading and monitoring the implementation of plans.

10. Implication and Further Studies

This study has applications for practitioners in mature startup and/or companies seeking to apply CD. First, companies need to analyze their situation including their current projects and available resources. Accordingly, they can clarify their goals and determine how CD can help achieving them. This way, the importance and priority of the project are well determined. If companies perceive the method and give the project high priority, then they can take the next step to make sure that the assigned leader has the same understating of the project's value and priority as others in the management team. If that is the case, then the project can be well communicated and established in the company. Next, the company needs to assess the leader's leadership style. According to the results of this study, the most important components to be considered are IS and MBE-A.

This study has also application for CBI for conduction of similar projects in future. Involving companies with different leadership styles and, more importantly, different attitude and background, demands more in-depth tutorial and monitoring efforts. It therefore requires more focus on practical aspects of applied methodology. Since there is no single best practice to be applied similarly in all companies, the study recommends following steps:

CBI can assess leaders and for some cases leadership team in terms of attitude and perception toward applied methodology, values, goals, concerns and priorities.

In order to help companies grow, CBI needs to address leadership capabilities in the first place. Leaders need to learn how to customize academic knowledge into practical application according to their needs. This cannot be achieved if CBI does not acquire a comprehensive understanding of companies and their leadership. It is through this understanding that CBI can suggest practical instructions. That could be achieved through several systematic discussions with leadership and other authorities in the company. Like this study, CBI can assess leadership style by validated tools such as MLQ questionnaire. Because results show how leadership is perceived by individuals in different levels of the company, this tool provide an opportunity for further leadership development as well.

In short, all participating companies cannot be treated in the same way and with one common instruction. As an alternative, CBI needs to help companies come up with their own way of applying academic knowledge or method based on their needs and characteristics. Besides the role of leadership, CD fits mature companies if it is in line with their strategies and concerns.

Finally, this study contributes to theory by addressing a new area that, to the author's knowledge, has not been covered by previous research. Scholars have studied the challenges that mature startups face in implementation of CD to some extent. Consequently, the role of leadership in implementing CD in mature startups has not been fully addressed so far. This study suggests findings of study do not represent a degree of theoretical generalizability for other mature startups, applying other customer focused and systematic methods. The small sample size in this study recommends conducting similar research using a bigger sample size and the following focus in further research:

- The role of a leader's attitude and personality toward on implementation of CD.
- Considering previous studies on the role of leadership on different project types, the recognition of the type of CD is important. The recognition of type of CD as a project and its characteristics in different steps of the project allow utilizing several successful leadership practices related with project type and/or different steps of the CD process.
- Empirical data shows the involvement of sales persons as one of challenging parts of CD. This study has addressed this topic slightly since it is beyond its scope. Accordingly, the study highly recommends further studies on the involvement of sales persons in implementing CD in mature companies.
- Organizational learning culture is perceived very important during the implementation of CD. This study has not addressed that issue since it require in depth data collection and analysis, which is beyond the scope of this study. Therefore, the study recommends studying the role of organizational learning on the implementation of CD.
- Finally, the results of this study can have implication for similar customer-focused methodologies. Thus, this study suggests the conduction of the similar studies with the focus on the processes of other customer-focused methodologies.

11. Study Limitations

This study has limitations in terms of both scope and the methodology which are presented in this section.

In order to examine the correlation between the leadership style and companies' performance, this study analyzed the empirical data collected from five companies. The results of analysis

may be different if a larger sample is selected. Moreover, considering the small size of the sample, what this research could have done differently is addressing the role of leadership from a more qualitative aspect rather than leadership style. This is because studying leadership style requires a quantitative analysis which may suit a larger sample.

In addition, as mentioned earlier, this study assessed the performance of companies in accordance to principles of CD. Thus, other factors such as resource availability, organizational structure, size etc., which may influence companies' performance, are considered out of the scope of this study.

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Appendix

Appendix 1. Semi-structured interview with CBI coaches in CBI consortium Innovation Growth 2009-2012

Introduction of the study

Purpose: The research project is performed in order to examine the role of leadership style in the implementation of CD in mature startups.

Introductory question

1. Could you please tell me about your contribution to CBI Consortium Innovation Growth project?

Key questions

2. How do you assess the performance of following companies on a scale of low to high? Why?
3. How did leaders contribute to the project?
Follow up: Did the leader conduct any customer interview?
4. Was the leader open/flexible enough to new ideas and feedback? Did he let information flow from outside to inside of the company?
5. Who else was involved in the project in addition to the CEO? What was their role?
6. Did following companies make changes based on the feedback they got from customers? If so, what was that change?
7. What element of the business model was the hardest to change? (Product features, customer segments, activities and etc.)
8. Did you see any conflict between individuals who were engaged in the project?
Follow up: was there any individual who held the team back from proceeding/ progress? How come?
9. In general, from your point of view what is the most inhibiting factor in application and sustainability of CD in mature startups?
10. Do you have any other comments on this subject that you would like to talk about?

Thank you!

Appendix 2. Semi-structured interview with the CEO of companies in CBI Consortium Innovation Growth 2009-2011

Introduction of the study

Purpose: The research project is performed in order to investigate the challenges and barriers companies experienced during the implementation of CBI Consortium Innovation Growth project.

*Remark: I assure that all information you provide is **confidential** and your identities will not appear in the report.*

Introductory question

1. Could you please introduce yourself and your role in CBI Consortium Innovation Growth project/ Customer Development process?

Key questions

1. Before participating in CBI consortium project, how did you involve customers in business development processes?
Follow up: could you please describe it more?
2. How do you assess the outcomes of that involvement (if any)?
Follow up: What strengths and weaknesses did you see in your approach?
3. In the CBI project, you were recommended to directly contact customers and involve them in development of your business model. How did you involve them in development of your business model accordingly?
Note: motivate for further description and clarification (to see how they perceive customer involvement and to what extent they have been effective)
Note: motivate the interviewee to clarify his/her role and contribution
4. How do you assess the outcome of project's approach (interaction with customers and involving them in development of business model)?
Follow up: What strengths and weaknesses do you see?
Note: The answer should indicate the CEO's perception and expectation from the project's method)
5. Did you make any change in your business model as a result of the project process?
What was that? *Ask for example (product features, segment, cost structure and etc.)*
6. To what extent other staffs within the company were involved? What functions?
Follow up: motivate to see what the purpose of involvement (if any) was.

7. Did you experience any conflict between staffs who were involved in the project (engineers, sales, marketing, CEO and etc.)? If so, how did you resolve it?
8. How did the process of decision making look like during one year of project? For example after new set of data/feedback entered into the company, who decided to whether apply them or not?
9. Was it easy to get required information about customers, market and competitors from staff in different functions, for example sales people?

Resource dependency & Path dependency

10. From research we know that there might be different factors which don't allow companies change their business model easily. For example your success with existing customers or all the investments you have made to grow current business model. Did you experience any of them? If so, what kind of problems did you face?
11. To what extent have you been able to cope with those?
12. In general, which aspect of business is the hardest to change (e.g. Distribution channels, product features and etc.)? Why?
13. Do you have any other comments on this subject that you would like to talk about?
14. May I have any of your financial data from 2008-2011? (Sale, profit, turn over, markets and etc.)- to see company's growth before and after project.

Thank you!