

Stakeholder Theory meets Innovation - An investigation of stakeholder thinking in an innovation context

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Abstract

Purpose – The aim of this study is to advance stakeholder theory concepts into the realm of innovation. This benefits both stakeholder theory, which receives a new direction to unfold itself, and also innovation concepts which tend to deal more with partner networks.

Design/methodology/approach – The methodology involves a single case study from which data are derived and analysed using a chronological approach. The empirical data from the studied case are compared to a case from the literature and differences and commonalities are analysed. The findings from this process are then translated into implications for the literature and the research question(s).

Findings – The results of this study show in which way stakeholder thinking can be relevant to innovation and how both domains can benefit from each other. Especially the practical aspects of stakeholder management and engagement have shown to be particularly useful in this regard.

Research limitations/implications – The main limitation of this study is that it is only a single case study which doesn't allow generalizations that are deeply grounded. It does however make suggestions based on the findings that have great potential to be explored further by other researchers; in the domain of stakeholder theory as well as innovation.

Practical implications – The results of the study provide management with a perspective on the innovation process that highlights how stakeholder relationships throughout the process influence the innovation. Knowing this, managers can more consciously evaluate how choices in stakeholder management affect the stakeholder network and the innovation process.

Originality/value – Despite the great amount of work that went into various aspects of stakeholder theory, innovation concepts have never been explicitly the target of advancements through stakeholder theory. This study makes an original contribution by developing an approach based on multiple inputs from stakeholder and innovation literature, empirical case data as well as a case from literature, and the innovation sandbox concept.

Tags: Stakeholder theory, stakeholder management, stakeholder thinking, stakeholder, innovation, open innovation, innovation sandbox, Skanska, Boklok, CEMEX, Patrimonio Hoy, Positive Organization Scholarship.

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1 Introduction

The introduction chapter will first elaborate on the research problem by giving a background on the main themes. Subsequently the research problem, the derived research question(s) and the research objectives are being presented. An outlook on the methodology is given and the structure of the thesis is laid out. Some of the important definitions are presented in the beginning to increase readability and understanding.

1.1 Background and Research Problem

Stakeholder theory became popular in management research with Edward Freeman's *Strategic Management: A Stakeholder Approach.* The book, published in 1984, can be considered a managerial guide to dealing with the differing interests of various stakeholder groups. The basic idea of managing the various interests is very appealing to management, but when taking the acknowledgement of other's interests a step further, the business faces wicked questions. In academia these questions spread into areas such as business ethics, CSR, strategic management or business and society and were analysed by various researchers (Laplume et al., 2008; Freeman, 2010).

Laplume et al. (2008) argue that the attention stakeholder theory receives has plateaued recently and that it requires new impulses, thereby suggesting, for instance, an integration with other organization theories, following trends like positive organization scholarship and in general more empirical work. And indeed, when analysing stakeholder theory literature the assumption arises that this theory has not found its final place yet, which also becomes apparent when looking at Freeman's (2010) long list of suggestions for further research. Freeman (1999) states that what stakeholder theory needs are "[...] more narratives that are divergent — that show us different but useful ways to understand organizations in stakeholder terms" (233). Further stakeholder analysis and management are seen mostly as tools to deal with conflicting interest (Freeman, 2010), with only little attention to the potential symbiotic effects (e.g. Heugens et al., 2002; Plaza-Úbeda et al., 2009).

Combining these calls and looking at stakeholder literature, an inspection of innovation practices through a stakeholder lens might bring a fresh direction to stakeholder theory and might also offer a way to strengthen innovation concepts through the stakeholder approach. From the innovation side of the coin this approach is also appealing, as trends in innovation show that the innovation process that was once a firm internal effort now reaches out to wider partner networks (e.g. Chesbrough, 2003, 2006; Baldwin and Von Hippel, 2001; Lee et al., 2012; Van de Ven, 1999), thereby making innovation an excellent candidate to apply stakeholder thinking to. Further it is acknowledged that successful innovation plays a central role in creating value and competitive advantage, which leads to the attainment of corporate performance objectives and survival of the firm (Zahra and

Covin, 1994; Tidd, 2001; Chesbrough, 2003), thereby making this investigation even more valuable.

Because the term 'stakeholder' is very common nowadays it sporadically appears throughout the innovation literature. But apart from Wayne Gould (2012), who attempted to unite ideas of open innovation and stakeholder engagement, there has been no study yet (to the knowledge of the author) to explicitly investigate how stakeholder thinking and innovation concepts can benefit from each other.

1.2 Research Objectives and Relevance

Stakeholder theory is a management theory that, contrary to many other management theories, inherently entails questions of ethics. With innovation playing such a vital role in today's corporations and markets, it is obvious that taking stakeholder thinking into the realm of innovation might serve as a starting point for more relationship conscious innovation practices. Therefore the research question is formulated as follows:

Q: How can stakeholder theory and its concepts contribute to understanding innovation?

Due to the broad character of the main research question the following sub-questions have been developed to provide a more focused research setting:

Q1: How can stakeholder theory be developed further through applications in an innovation context?

Q2: What stakeholder concepts are most capable of contributing to innovation literature?

Q3: How can the findings of this study contribute to the innovation sandbox concept?

Q4: How can managers benefit from applying stakeholder thinking to innovation projects?

The objective of this study is to focus on the potential that exists in a stakeholder network and the benefits that innovation practices might reap when understanding the effects of stakeholder relationships for the innovation. In pursuing this objective this study is going into the direction of what Cameron, Dutton and Quinn (2003) describe as Positive Organizational Scholarship.

This study contributes to theory in various ways. Stakeholder theory benefits from a new divergent narrative that showcases its potential capabilities in a field that no corporation can ignore — innovation. This approach will hopefully spawn a new vital debate in stakeholder theory and encourage other researchers to further explore the bilateral benefits that these two streams of research have to offer to each other.

For innovation literature stakeholder theory might proof to be a welcome tool to deal with the myriad of relationships that the new modes of innovation entail. As described in the previous section innovation is not a solely internal process anymore and stakeholder thinking might help in finding a common denominator for innovation concepts to describe the nature of their relationships. Naturally also the innovation sandbox concept benefits from a thorough analysis and application to the studied case.

For practitioners this study aims to provide a bigger picture on the stakeholder networks and how decisions concerning the stakeholder relationships might affect the innovation process and subsequently the innovation. The study aspires to show that stakeholder management has an influence on the innovation and thereby pursues innovation managers to apply principles of stakeholder management.

1.3 Research Design

The research design of this study follows a logic based on the most important determinants – the research question(s) and objectives, the case data and the unfolding literature. Further it strongly follows Yin's (2009) framework for case study design and methods.

The study is carried out as qualitative research, with the chosen research strategy being a case study and the unit of analysis being the relationship between formation of the innovation and stakeholder relationships. The chosen case is situated within the Finnish construction company Skanska and the specific project is Boklok, which aims to provide affordable quality housing. A second case, which resembles several of Boklok's features regarding selection criteria, was chosen to strengthen the arguments that are put forward in this study.

The collected data was structured chronologically in order to make the innovation process more graspable. In the analysis the data from both cases was scanned for events that had stakeholder interaction and were relevant to the innovation process. These events were then discussed and together form the core argument for this study — the relationship between stakeholder interaction and formation of the innovation. Building on the core argument the research questions are answered one at a time.

The main data sources are interviews supported by other first and second hand documented material. These include internal documents, market studies, news articles, press releases, database records, Facebook communication and observations. The data for CEMEX's Patrimonio Hoy is solely secondary in nature.

A more elaborate description of the approach and case is presented in the research design and methodology chapter. It is also noted here that this being a single case study transferability and generalizability of findings should be treated with caution. More extensive limitations and recommendations for future research are presented in the concluding section of this study.

1.4 Definitions

Stakeholder Theory

Stakeholder theory is, according to Freeman (2010), more a set of ideas than a real theory, but in order to stay along the lines of literature, the expression of "stakeholder theory" will be used to summarize those ideas. There is a certain breadth that entails stakeholder theory (Donaldson and Preston, 1995; Stoney and Winstanley, 2001; Freeman, 2010) which makes it hard to summarize it into a brief definition. The following definition is offered for this study, with the remark that a comprehensive discussion is the only way to understand the versatility of the concept:

Stakeholder theory is about value creation and trade and how to manage a business effectively through stakeholder management (Freeman, 2010).

Stakeholder Thinking

Stakeholder thinking, in this study, aims to express notions or aspects of stakeholder theory without necessarily referencing to the theory itself. This is the case when it comes to describe the historical roots of stakeholder theory — a time when stakeholder theory obviously didn't exist; or when reframing other concepts in the language of stakeholder theory — for instance, stakeholder thinking is apparent in the concept of open innovation. Further it is used to express common sense thinking that borrows from stakeholder theory or as an all-encompassing expression. The terms "stakeholder concept" and "stakeholder approach" fulfil a similar function, though often referencing stakeholder theory; they have to be seen in context.

Stakeholder

The term stakeholder has been defined in a myriad of ways (e.g. Clarkson, 1995; Mitchell et al., 1997; Pajunen, 2006) of which Freeman's (1984) definition is probably the broadest and most cited one: "A stakeholder in an organization is (by definition) any group or individual who can affect or is affected by the achievement of the organization's objectives" (46), and also responsible for the continuous efforts to redefine it. This definition is used in the literature review. Knowing a broad definition is good but not useful. Therefore a narrower definition is used for the empirical part of this study:

A stakeholder in the organization's innovation process is defined as any group or individual who contributes to or benefits from the commercialized innovation.

Further the terms "interest group(s)" and "group(s) of interest" are used interchangeably.

Stakeholder Management

Stakeholder management is the practical extension of the ideas and principles that stakeholder theory contains. It contains practical tools for managers on how to deal with their stakeholders.

Innovation

Innovation is another candidate suffering from definitional problems. In an effort to resolve the issue Baragheh et al. (2009) examined 60 definitions of innovation and merged them into what they describe as a cross-disciplinary definition:

"Innovation is the multi-stage process whereby organizations transform ideas into new/improved products, service or processes, in order to advance, compete and differentiate themselves successfully in their marketplace" (1334).

This is the definition used in this study. It is appealing in that it doesn't require innovation to be radical by asserting that improved products, services or processes also fall into the definition of innovation. This is relevant in that the studied case doesn't represent an innovation in the narrower sense. Boklok has been developed in Sweden and has been successful there. A first attempt to bring Boklok to the Finnish market failed and only in the recent attempt, which is analysed in this study, Boklok was successfully re-invented for the Finnish market, thereby making Boklok an innovation in the sense of the definition. Further the use of plural (organizations) allows stakeholder thinking to take root in this definition.

Innovation Sandbox

The innovation sandbox is a central concept in this study. It is an innovation concept for the BOP context that asserts that by cultivating constraints corporations can achieve breakthrough innovations (Prahalad, 2006). A modified version of the concept supports the research objectives of this study.

Formation of the Innovation

This phrase aims to express the innovation process in a way that highlights the subsequent steps that lead to an innovation; small steps that together form the final innovation. It has a better fit with the research objective in that it can express the interplay between a step in the formation of the innovation and stakeholder interaction.

1.5 Thesis Structure

This study consists of five chapters: (1) Introduction, (2) literature review, (3) research design and methodology, (4) empirical findings and (5) analysis and discussion. The current chapter introduces the research problem, the objectives of the study, the main concepts and methodology, thereby explaining how the pieces of this study coherently fit together. The second chapter introduces the relevant literature, the main themes being stakeholder theory, innovation concepts and literature that provides a cultural context. The third chapter explains the methodological choices and the overall research design, including data collection, data analysis, reliability and validity of the study. The fourth chapter presents the empirical findings, both for the Boklok case (mostly primary data) and for the case of Patrimonio Hoy (solely secondary data). The fifth chapter then discusses the findings and relates them to the reviewed literature, answers the research questions, discusses limitations, makes suggestions for further research and finalizes with a conclusion on the study.

2 Literature Review

This chapter presents the theoretical approach to this study. In the first section the author's initial approach from the theoretical side is explained and why a rethinking of the theoretical basis was undertaken. Then a review of the literature on stakeholder theory is given, including historical roots, a description of the major theses, stakeholder theory and ethics, stakeholder management and stakeholder engagement.

Then the relevant innovation literature is reviewed. First an introduction to innovation is given and the trend of innovation to extend to wider partner networks is presented. Following this the most significant innovation concepts that follow this trend are explained and their ties to stakeholder thinking are presented. Then the *Innovation Sandbox* is explained, which is an innovation concept for the BOP context that asserts that cultivating constraints spurs innovation. A modified version of this concept supports the research objectives of this study.

The next section provides a cultural context for this study. This is deemed necessary as stakeholder theory deals, after all, with people and their behaviour and contributes to a better understanding of the study's findings. The final section briefly recaps the discussed literature and summarizes the most important arguments.

2.1 Development of the Literature Approach

Initially the case of Boklok seemed interesting because of the user integration that took place in the product innovation process, which led to a theoretical preparation that revolved around said user integration. The reviewed concepts were co-creation in different forms (e.g. Prahalad and Ramaswamy, 2004; Hoyer et al., 2010; Grönroos and Voima, 2013), co-

production (e.g. Bendapudi and Leone, 2003; Etgar, 2008), open innovation to some extent (e.g. Chesbrough, 2003) and a more abstract background logic in the form of service dominant logic (e.g. Vargo and Lusch, 2008), which also dealt with the co-creation of value.

After a more extensive exploratory interview with the case company it turned out though that the assumption of user integration being the central theme in the case was not confirmed. Even though users had been integrated into the product innovation process, it was the multi-stakeholder approach in the process that was most noticeable. Further the exploratory interview revealed that a set of constraints accompanied the process, which corresponded well to the innovation sandbox concept by Prahalad (2006).

Following these insights the now relevant literature on stakeholder theory and innovation was reviewed and the empirical data collection focused on the stakeholder relationships and formation of the innovation.

2.2 Stakeholder Theory

Stakeholder theory can be attributed its mainstream entrance with Edward Freeman's 1984 book *Strategic Management: A Stakeholder Approach*. In the following sections a detailed account of stakeholder theory is given, taking Freeman's book as a temporal separation line. The section on stakeholder theory's historical roots explores the path leading up to this point in time, while the subsequent sections deal with the development of stakeholder theory thereafter. These include the major thesis in stakeholder theory, the role of ethics, stakeholder management and stakeholder engagement.

Many of the topics cannot be dealt without clashing into other themes, making it difficult to keep a clear separation. In some cases therefore, answering on some matters is postponed to a later point.

2.2.1 Historical Roots of Stakeholder Theory

Edward Freeman is widely accepted as the father of stakeholder theory, laying the mainstream foundations with his 1984 book *Strategic Management: A Stakeholder Approach*. But the development of the theory, both before and after his book, requires considerable attention if one wants to understand the concept in its entirety. Freeman (1984) himself gives credit to previous works and revisits the evolvement of stakeholder theory over the years (e.g. Freeman, 1994; Philips, Freeman and Wicks, 2003; Freeman, 2010). Amongst others Näsi (1991, 1995), Donaldson and Preston (1995) and Laplume et al. (2008) made significant efforts to better understand the emergence of stakeholder theory and especially to clarify its purpose, function and confine its comprehensiveness. Regarding the exploration of the historical roots, there are more contributions than can be mentioned in this review, but the most important ones were chosen to give perspectives from different streams of literature.

Stakeholder thinking, stakeholder theory and the term stakeholder have different origins. On the one hand, as with many theories, a considerable amount of work built the basis to transform the ideas of stakeholder thinking into what is today known as stakeholder theory. The first references to the term stakeholder are more straightforward to summarize.

The Stakeholder Term

A search on *Google Books Ngram Viewer* (appendix 1) with the words "stakeholder" and "Stakeholder" shows that the term emerges towards the end of the 17th century with very little mentions, though a quick check reveals that in the process of scanning old books the Dutch word "Stadtholder" (vicegerent, governor) is falsely interpreted by algorithms. The next appearances stem from the domain of law throughout the second half of the 18th century, where a stakeholder literally holds the stakes: "A stakeholder is the agent of both parties, or rather their trustee" (Chitty, 1832: 487), referring mostly to gambling and the like. This is not necessarily relevant for stakeholder theory, though it should be remarked that in its beginnings the term stakeholder referred to a trusted entity.

Silbert (1952), in a paper on finance, mentions the term stakeholder in the context of exchange, as a middle man in between manufacturer and buyer of a product, in essence a holder of liabilities. The stakeholder is again positioned as a trusted middleman, and very likely borrowed from the law context.

The first appearance in management literature came about in an internal memorandum of the Stanford Research Institute in 1963 where the term was representative for the notion that stockholders are not the only interest group that an organization should be responsible to. Stakeholders were defined as "those groups without whose support the organization would cease to exist" (Freeman, 2010: 30).

Stakeholder Thinking

With a lot of imagination it is probably possible to interpret and find blurred traces of stakeholder thinking very far back in time, but from a certain point on it can be argued, there is no additional gain anymore. Therefore, Dodd's (1932) paper is chosen as a temporal starting point. As a Fellow of the Harvard Law School he stated: "If incorporated business is to become professionalized, it is to the managers, not to the owners, that we must look for the accomplishment of this result" (Dodd, 1932: 1153). By professionalized he means that a business should serve also the public and fulfil its responsibilities towards the community, thereby questioning the role of business in society. Dodd quotes former General Electric president Gerard Swope and chairman Owen Young, both agreeing over the following groups that have an interest in the company or which the company has responsibilities to: employees, stockholders, the general public and customers (Dodd, 1932). This marks a point where interest groups start to become a topic of discussion and what is striking is that the initial impulse was coming from the domain of law as well as from practitioners.

In Management's Responsibilities in a Complex World Abrams (1951) describes business management as a profession that has yet to learn that they have responsibilities to more

than just one group. He argues that the dominant paradigm of prioritizing stockholder's interests results in an interest conflict with other groups only because of differing short term interests and that true long-term interests are actually coinciding. His views make him utter what could be considered a contemporary statement in stakeholder theory: "The job of professional management, as I see it, is to conduct the affairs of the enterprise in its charge in such a way as to maintain an equitable and workable balance among the claims of the various directly interested groups" (Abrams, 1951: 29).

In another theoretical corner Cyert and March (1963) elaborate on the theory of the firm, organization theory, organizational goals and business decision making behaviour. In the course of doing so they suggest viewing the organization as a coalition and give examples of various organizations' coalition members, which are tantamount to what are considered stakeholders nowadays. They also deal with the problem of goal formulation in a coalition and highlight the conflicting goals of individuals and groups (Cyert and March, 1963: 46). However, in their effort to solve the goal conflict problem they miss out on establishing a clear boundary of the organization and its coalition members, making it difficult to derive further stakeholder thinking from their work. What they unearth though is the debate over the objective function of the organization, which is a question of significance in stakeholder theory. They also mention the changing nature of the coalition and the need for business goals to adapt – another important aspect of stakeholder thinking.

Ansoff (1965), who was a fully-fledged strategist and aware of Abrams' and Cyert and March's work, argued against what he even refers to as stakeholder analysis on the basis that it tries to treat responsibilities and objectives as synonymous, which according to him poses the considerable problem of manager-owner conflict, amongst others (Ansoff, 1965). As can be seen the question of the objective of the firm is again an underlying criterion when it comes to judging the stakeholder approach. Depending on whether profit maximization, long-term survival, serving the public or a mixture of values compile a firm's objective(s), the implications for stakeholder theory are enormous. But Ansoff's (1965) rejection is not surprising in a time where profit maximization as the main goal of business is widely supported and prominent scholars like Milton Friedman (1970) title their work *The Social Responsibility of Business is to Increase its Profits*.

Around the same time in Sweden Eric Rhenman (1964) and Rhenman and Stymne (1965) also started to develop their version of the stakeholder concept, making explicit use of the term and also define it: "Stakeholders in an organization are the individuals and groups who are depending on the firm in order to achieve their personal goals and on whom the firm is depending for its existence" (Rhenman, 1964: 22). Also they were among the first ones to frame these ideas explicitly as stakeholder theory (Näsi, 1995: 20). Rhenman is very focused on the democratic aspects, especially in regards to workers. This leads him to ideas such as co-optation, which means that a stakeholder is represented on the management of an organization and provides the stakeholder with a position of some influence (Rhenman

1964). This might arguably be a step too far in trying to democratize the organization, but it showcases how far one can take stakeholder thinking.

Russell Ackoff, a pioneer in operations research and systems theory, started to make use of the stakeholder concept in an attempt to tackle societal problems. His argument was that by designing a system of stakeholders that support each other and who interact in a symbiotic way, common efforts can actually solve problems. Thereby he also calls for stakeholders to be included on the board (Ackoff, 1974; Freeman, 2010). Ackoffs work though goes beyond the single corporation; what he envisions is a complete system of organizations and institutions, guided by stakeholder principles and inclusion.

Going back to management literature, Dill (1975) contributed by highlighting the bidirectional characteristics of stakeholder thinking in form of both responsibilities and influences. He further laid a foundation for the identification of important stakeholders in decision making and also integrates the concept better into the strategic planning function of the firm.

Freeman, who studied philosophy and mathematics, accepted a position at Wharton School in the late 70ies, where also Russel Ackoff was working. The stakeholder concept was very much present, primarily through Ackoff, but also in various other projects and Freeman was encouraged to start working on it. The work turned out to be very much in collaboration with outside companies who were interested in ways to deal with the external environment. In the wake of developing tools a stakeholder was defined as "any group or individual that can affect or is affected by the achievement of a corporation's purpose" (Freeman, 2010: 53), and the approach started to be called stakeholder management. Freeman had to catch up with many of the contemporary management theories and collected most of his practical knowledge from the companies he was working with, developing the stakeholder ideas into strategic management concepts, while at the same time researching its roots (Freeman, 1984, 2010). The work culminated in his 1984 book where he defines a stakeholder in the following way:

"A stakeholder in an organization is (by definition) any group or individual who can affect or is affected by the achievement of the organization's objectives" (Freeman, 1984: 46).

He also outlines in the book the work that needs to be done to develop stakeholder theory into a full-blown theory of management. Encouraged through the work with his colleague William Evan he also started to explore the normative aspects of stakeholder theory.

As shown the historical roots of stakeholder theory draw a picture that brings together influences from a variety of literature streams. Arguably not all the scholars mentioned here had a direct influence on Freeman's work, but it shows how appealing the idea can be in different fields. This is also the reason why stakeholder theory is so vulnerable to extensions

beyond its core. The next section will describe the core aspects of stakeholder theory as they are discussed in the literature following Freeman's work.

2.2.2 Stakeholder Theory – Main Thesis

As the previous section dealt with stakeholder thinking before the significant year of 1984, it is worth noting that Freeman's book, though also building on ideas that questioned the behaviour and purpose of the corporation, presents itself as a very practical book. It is very pure in its practical tools for better managing a corporation and even suggests having a stakeholder manager position to support other business units in reaching profit oriented performance goals (Freeman, 1984). This is a very different picture than one might get from a 10-minute stakeholder theory introduction, which might give significant time to ethical considerations. Therefore, it is remarked here, that Freeman's 1984 version of stakeholder theory created what might be labelled an "intention – perception gap". It can be argued that this gap spawned the initial debates that stretched the theory, making it both more prominent but also controversial.

Following right up, stakeholder theory is not only controversial because there are scholars arguing for and against it on various levels, but also because some of the well-intentioned contributions turn out to be misinterpretations, following Phillips, Freeman and Wicks (2003) clarifying words. The general character and subsequently the room it creates for interpretation determine the breadth of the concept, leading Freeman (2010) to describe it more as a set of ideas than a real theory; but in order to stay along the lines of literature, the expression of 'stakeholder theory' will be used to summarize those ideas.

To provide an initial overview into the composition of stakeholder theory Laplume et al.'s (2008) literature review is very helpful. In their extensive review on stakeholder theory they identify 179 articles after applying systematic review criteria. They group them into 5 themes: (1) Definition and Salience, (2) Firm Actions and Response, (3) Stakeholder Actions and Response, (4) Firm Performance and (5) Theory Debates (Laplume et al., 2008). A mentionable review criterion was the limitation to works that reference Freeman, due to the fact that the term stakeholder can be used very generically, as Stoney and Winstanley (2001) observe. Figure 1 shows the theme frequencies by year and gives an impression of the development of stakeholder theory over time.

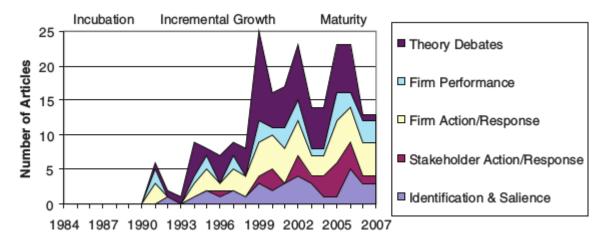


FIGURE 1 - LAPLUME ET AL. (2008) - THEME FREQUENCIES BY YEAR

An important feature of stakeholder theory is that it acknowledges the interests of other groups. In that sense stakeholder theory differs from other theories of management in that it doesn't recognize shareholders as the single most important interest group, but suggests managing in the interest of all stakeholders (Jones and Wicks, 1999, Laplume et al., 2008). The implications and questions that arise from this are wide ranging, but in order to find acceptance in the management literature stakeholder theory needs to stand up to at least these questions:

- Can it explain how firms behave?
- Can it explain how behaviour affects firm performance?
- Can it prescribe how firms should behave? (Donaldson and Preston, 1995)

These three questions represent different layers of stakeholder theory, making it easier to understand the discussions that surround it. The separation helps to understand the integral parts that make it up but as shown at a later point, that separation presents a barrier to get to the core of it.

Donaldson and Preston (1995) dedicated their paper to the clarification of three aspects of stakeholder theory, which correspond directly to the questions above. They compare the justifications and evidence around stakeholder theory by scrutinizing descriptive, instrumental and normative aspects. Figure 1 represents their nested model of the three stakeholder aspects:

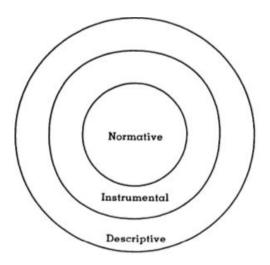


FIGURE 2 - THE THREE ASPECTS OF STAKEHOLDER THEORY ACCORDING TO DONALDSON AND PRESTON (1995)

Stakeholder theory is **descriptive** because it aims to describe the nature of the firm in form of a model through characteristics and behaviour. This model can then be used to analyse and even predict a firm's behaviour (Brenner and Cochran, 1991; Donaldson and Preston, 1995). **Descriptive** evidence for stakeholder theory is the simple existence of stakeholder management practices in real business environments, collected through empirical work. Thereby it is not even necessary that managers know about the stakeholder concept, but practice its content, namely, to recognize the interests of other stakeholder groups than the stockholders.

Descriptive work around stakeholder theory aims to develop models that are capable of more accurately describing how corporations work, driven by the fact that the basic proposition of stakeholder theory is too general (Donaldson and Preston, 1995). Thereby scholars examine specific contexts and draw on other theories to combine with stakeholder theory. Jawahar and McLaughlin (2001), for instance, take the stages of the organizational life cycle and describe for every stage firm-specific behaviour towards its stakeholders. They draw on resource dependency theory and prospect theory to translate behaviour in each stage into a descriptive stakeholder theory (Jawahar and McLaughlin, 2001).

The **instrumental** aspect deals with the questions of whether corporate performance (growth, profitability, stock value) is enhanced through the practice of stakeholder management (Donaldson and Preston, 1995). But there are also other corporate performance measures, such as corporate social performance (CSP), that aim to determine social performance metrics and that could also be achieved through stakeholder management (Clarkson, 1995). Without prematurely engaging in the debate over the objective function of the firm Freeman's (1999) more general words help out by declaring that "instrumental theory links means and ends" (233). An advantage of instrumental theory is that it can simply link behaviour of a certain type to a certain outcome without the need to explain underlying human behaviour (Jones and Wicks, 1999). This makes it easier for researchers to build a case for stakeholder theory in instrumental terms, but Donaldson and

Preston (1995) argue that normative arguments provide the underlying base also for instrumental justifications.

This is why according to Donaldson and Preston (1995) a **normative** foundation builds stakeholder theory's core. It aims to root stakeholder theory on ethical grounds and thereby draws on established theories from ethics. Donaldson and Preston (1995) chose to argue on the basis of the theory of property, which is a derived mix of higher level philosophical ethics. Others applied feminist ethics (Burton and Dunn, 1996), Kantian ethics (Lea, 2004) or Aristotelian ethics (Wijnberg, 2000) amongst others.

No matter which is the philosophy of choice for the normative foundation, the central question stays the same: How should firms behave? The diverse approaches and opinions hardly merge into one clear solution. As a possible alternative to finding an ethical/philosophical fit for stakeholder theory it is offered here to compare stakeholder theory's fit to those of other management theories. This would at least produce a relative normative position, making it easier for stakeholder theory as a rather open and broad theory to establish itself next to other prominent theories.

After examining descriptive, instrumental and normative aspects separately, their interrelationship deserves attention, too, as they are after all overlapping in a most tricky way. The instrumental aspect, for instance, tries to answer the question of whether increased performance is a result of stakeholder management, thereby unveiling a question that lies very much at the heart of stakeholder theory, as Jawahar and McLaughlin (2001) so accurately remark: "A fundamental assumption is that the ultimate objective of corporate decisions is marketplace success [...]" (p. 399). The question for the objective of the corporation is indeed a fundamental question, already captured in stakeholder theory's roots, and enters the realm of normative deliberations. This very example also explicates why Donaldson and Preston (1995) suggest the normative aspect to be at the core of stakeholder theory, as it guides the objective function – which is pursued by instrumental claims – of the corporation.

In the aftermath of Donaldson and Preston's (1995) paper their greatest contribution was probably that other scholars were subsequently required to more accurately design and describe their work around stakeholder theory, which, given its broad character, is a significant contribution.

But as helpful as Donaldson and Preston's (1995) account of stakeholder theory is for understanding its composition, it might create troublesome confusion around its core purpose, namely, to unite questions of how to conduct good business (instrumental aspect) while also applying moral principles (normative aspect). Ansoff (1965) framed this question in terms of objectives and responsibilities, claiming they are not synonymous and Goodpaster (1991) wrote, in a critique of stakeholder theory, the following:

"It seems essential, yet in some ways illegitimate, to orient corporate decisions by ethical values that go beyond strategic stakeholder considerations to multi-fiduciary ones" (Goodpaster, 1991, 63).

In what he describes as a paradox in stakeholder theory, he means that management cannot assume the same moral obligations for stockholders and other stakeholders, as this would imply a breach of trust between management and stockholders (Goodpaster, 1991). For Goodpaster (1991) there exists a strategic and a multi-fiduciary version of stakeholder theory, of which he only sees the strategic one fit to trustfully carry out stockholders' ambitions. He refers to the multi-fiduciary one as 'ethics without business' and to the strategic one as 'business without ethics', thereby suggesting a third alternative that combines fiduciary obligations to stockholders and non-fiduciary obligations to other stakeholders (Goodpaster, 1991). This critique presents an opportunity to fully embrace the business and ethics debate in stakeholder theory, which is so essential to the understanding of business from a stakeholder theory perspective.

2.2.3 Stakeholder Theory and Ethics

Freeman, who is until today stakeholder theory's most consistent advocate, replied to Goodpaster's (1991) critique in his 1994 paper by suggesting that there is in essence no paradox. His reasoning is based on the rather ordinary assumption that a multi-fiduciary approach simply needs to acknowledge differences in its fiduciary obligations towards all stakeholders (Freeman, 1994). What is expressed by Freeman in a very simple statement possesses way more depth than is revealed at first glance. Under the surface slumbers the debate between 'business' and 'ethics'. This debate, which naturally also exists outside of stakeholder theory, holds a temporal connection which resonates with the general role of business in society.

Therefore a brief background:

Corporations were initially founded (at least in the 1800s Americas) with the main purpose to serve the public and their right could easily be withdrawn if they didn't comply. But a legal revolution paved the way for corporations that were no longer required to serve the public interest (Banerjee, 2008; Dodd, 1932). And so it came that business has found itself in a separate domain (Friedman, 1970) with the sole objective function of maximizing shareholder value for most of the last centuries (Jensen, 2001??; else??) . That business practices have been separated from other responsibilities than value maximization in management research is shown by Wicks and Freeman (1998). Now there is more room for the notion that business decisions also require moral consideration and the oxymoron that surrounds "business ethics" is weakening its grip (Freeman, 2010).

Stakeholder theory was born at a time when this separation was still very much existent in the minds of academics and managers alike. Even Freeman (1984) argued for stakeholder theory on a managerial basis that centred on instrumental justifications (for the profit objective) and with less philosophical considerations as he admits in his 1994 paper. Following the strong push of ethics into stakeholder theory Freeman (2000) reminded that:

"We need to see stakeholder theory as managerial, as intimately connected with the practice of business, of value creation and trade. That was its original impetus, in the sense of re-describing the practice of value creation and trade to ensure that those with a "stake" in this practice had attention paid to them. (Freeman, 2000: 173)

This reminder also implicitly suggests the denial of what Freeman calls the separation thesis, which holds that business and ethics are inseparably connected – that each business decision goes hand in hand with moral considerations (Freeman, 1994, 2010). By reminding of stakeholder theory being managerial Freeman doesn't aim to distance stakeholder theory from ethics or moral considerations in management. On the contrary, this is probably the most important thing to understand for every practitioner and scholar who wants to come to grips with stakeholder theory. Stakeholder theory doesn't try to unite business with ethics; it suggests a version of business that is inherently moral, and stakeholder management is the practical tool to achieve this version of value creation and trade.

Stakeholder theory has been from the very beginning – referring to Freeman (1984) – managerial, as recognized by some scholars (e.g. Walsh, 2005; Donaldson and Preston, 1995), but many saw it as an opportunity to attach morals onto stakeholder theory and business in general.

From ethics it was only short while until CSR (Corporate Social Responsibility) started to make stakeholder theory work for itself (Freeman, 2010), but for the same reason as with ethics, CSR is meant to be directly integrated into the strategic approach of stakeholder theory. This should in no way devalue the great contributions that CSR and business ethics made to stakeholder thinking or business in general, but the main point is that by acknowledging others interests these concepts become inherent to stakeholder theory and should not be seen as an extension of it — at least from the stakeholder theory perspective.

Returning to Freeman's (1994) reply to Goodpaster's (1991) critique, it should be more obvious now that the built-in morals in stakeholder theory — by paying attention to the interests of all stakeholders — make it possible to at least acknowledge all obligations but also apply moral and fiduciary differentiation; the compliance through actual decisions being another topic.

Back to the temporal component, the managerial kick-off that stakeholder theory received probably came at the right time. A stronger focus on the opportunities that stakeholder theory provides for ethics would probably not have withstood academic literature at that time. Now, at a time where CSR, moral behaviour and sustainability have become a

potential source of competitive advantage (Smith, 2007) stakeholder theory and its proposition to create value for all stakeholders, might find more justification in business cases.

2.2.4 Stakeholder Management

Stakeholder management can be considered the practical extension of stakeholder theory in that it presents a toolbox to analyse, prioritize and manage stakeholders. Freeman (1984) attributes stakeholder management to be "deceptively simple" (246) as the identification of stakeholders is fairly easy compared to managing them in the aftermath.

In terms of identifying and classifying stakeholders Clarkson (1995) suggested to distinguish between primary and secondary stakeholders. Primary stakeholders are those groups, without whose on-going participation the firm could not survive in the long run, whereas secondary stakeholders do not have an existence threatening character and do not engage in transactions with the firm (Clarkson, 1995). Frooman (1999) picks up Goodpaster's (1991) thinking and separates stakeholders into strategic and moral ones. The strategic stakeholder group needs to be managed in order for the corporation to achieve its own interests. The moral group on the other hand requires just some balancing of interests. To manage the strategic group he suggests looking at the strategy literature, whereas for the moral group the ethics literature is suggested (Frooman, 1999). Even though the logic behind the classification is different, Clarkson's (1995) and Frooman's (1999) approaches probably largely overlap in practice, mostly because they are rather simple. Mitchell et al. (1997) proposed a more sophisticated model based on stakeholder attributes. Power, legitimacy and urgency of a specific stakeholder, so they argue, are the crucial factors that determine how the firm should take stakeholders into account.

Departing from the identification and classification, Preble (2005), who builds on Clarkson's (1995) typology, provides a comprehensive model for stakeholder management:

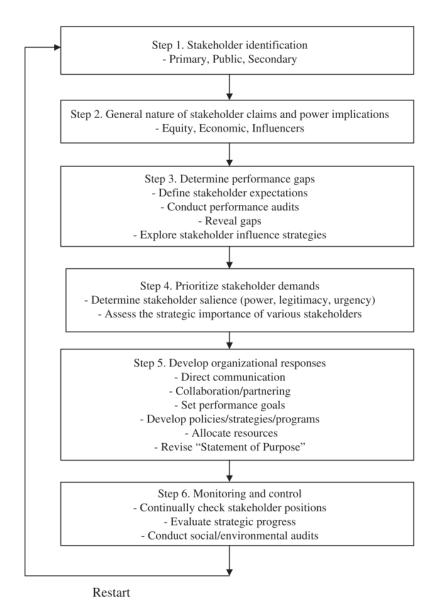


FIGURE 3 - COMPREHENSIVE STAKEHOLDER MANAGEMENT PROCESS MODEL (PREBLE, 2005: 415)

The model, derived from literature, provides a general outline on how to deal with stakeholder interests and serves as a template for practicing managers. It shows how identification of stakeholders is just the tip of the iceberg if one wants to successfully manage them.

In a contribution examining instrumental justifications Berman et al. (1999) empirically test two stakeholder models with external database data. The first one is called *strategic stakeholder management model* and basically describes how firm strategy influences stakeholder relationships. So if the firm sees a stakeholder as a means to a certain end, the relationship to this stakeholder is managed in a way that achieves the specified end. The *intrinsic stakeholder commitment model* on the other hand suggests that relationships with stakeholders are based more on moral commitments. For both models maximizing financial performance was assumed for the objective function. The results provide support for the first model, but not so for the second (Berman et al., 1999). Again the separation takes place

between moral and strategic, which builds an on-going thread through this stakeholder literature review. This shows again how tight the questions of the objective function, morals and business strategy are related and how relationships as the unit of analysis unite these questions in stakeholder theory.

Whereas stakeholder management is mainly about dealing with conflicting interests or balancing them, there is also a side to stakeholder theory where scholars embrace the positive aspects to it.

2.2.5 Stakeholder Engagement

To highlight positively reinforcing aspects Freeman (2010), at one point, frames the purpose of the stakeholder approach as follows: "A stakeholder approach to business is about creating as much value as possible for stakeholders, without resorting to trade-offs" (28), thereby highlighting the room that exists for joint-ness in stakeholder relationships as opposed to the often central question of managing various differing interests (Freeman, 2010). Stakeholder engagement is often seen exactly as this purely responsible practice, where stakeholder relationships are taken care of out of moral reasons and joint-ness is a central premise; this makes it the tool of choice for corporate responsibility (Greenwood, 2007). But Greenwood (2007) suggests that stakeholder engagement is essentially a morally neutral practice and thereby defines it simply as a practice where stakeholders are involved into an organization's activities. He develops the following stakeholder engagement model:

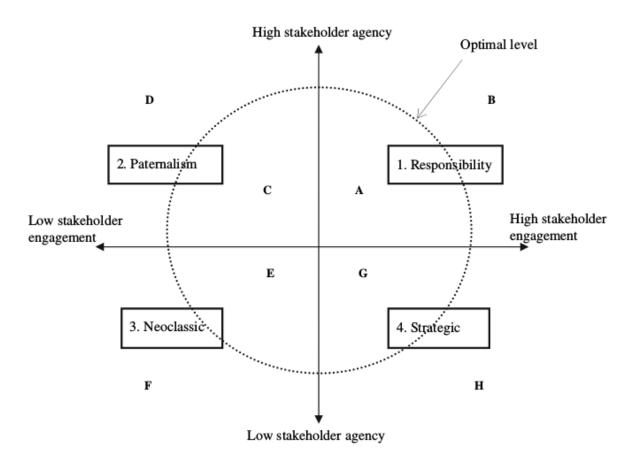


FIGURE 4 - STAKEHOLDER ENGAGEMENT MODEL ACCORDING TO GREENWOOD (2007)

The model is divided into four quadrants. The first quadrant represents the domain of corporate responsibility, where stakeholder engagement is about balancing the interests of legitimate stakeholders based on moral principles. Quadrant 2, paternalism, represents low stakeholder engagement and high stakeholder agency, meaning the organization acts in the interests of stakeholders without necessarily engaging with them. The third quadrant suggests little interest in engagement and also a low level of interest in the stakeholders' interests. This quadrant basically follows the basic logic of neoclassical economics, treating the stakeholders as means to an end. The fourth quadrant, strategic, is about engaging with stakeholders for strategic purposes, with the strategic intent of the corporation winning over the stakeholders' interests; this does not necessarily conflict with moral values (Greenwood, 2007). Most of the stakeholder management thinking in literature can therefore be subscribed to quadrants two and three, where a lower level of stakeholder engagement resides. This does not necessarily mean though that stakeholder engagement is not a part of stakeholder management. To the contrary, if in stakeholder management a stakeholder is identified as being important, stakeholder engagement might serve as the means to establish an adequate relationship.

In another contribution Andriof and Waddock (2002) unfold stakeholder engagement by embracing a wider context. In this context they draw on business in society stakeholder and strategic relationships theories to construct a conceptual foundation for stakeholder

engagement. One of the main insights is that companies are moving from reactive towards proactive strategies in dealing with their external environment, thereby making stakeholder engagement the tool of choice in creating long-lasting relationships with strategically important stakeholders. They define stakeholder engagement as trust-based collaborations and attribute it to have strategic importance when it comes to resources and information. "Stakeholder engagement can thus be viewed as a process for managing a company's social risk, connecting with stakeholders and building social capital" (Andriof and Waddock, 2002: 42). Heugens et al. (2002) present another model for stakeholder integration which showcases four different stakeholder integration mechanisms (Figure 5).

Locus dimension	Dyad	Network	
Modus dimension			
Structural	Co-optation	Buffering	
Processual	Mutual learning	Meta-problem solving	

FIGURE 5 - TYPOLOGY OF STAKEHOLDER INTEGRATION MECHANISMS ACCORDING TO HEUGENS ET AL. (2002:40)

Buffering suggests building closer relationships to larger, representative organizations in order to avoid dealing with a myriad of smaller stakeholders. An example would be to work with Greenpeace in order not to be vulnerable to other small environmental protection organizations. Co-optation presents a mechanism in which an important stakeholder's interests are absorbed into the organizations strategy in order to minimize risk. Contrary to the two already mentioned mechanisms, mutual learning and meta-problem solving focus on discovering and acting on symbiotic interdependencies. They identify a common ground or common problem which needs to be solved by all parties based on intrinsic motivation (Heugens et al., 2002)

It can be seen that stakeholder engagement (sometimes also stakeholder integration) presents trust-based relationships where stakeholders are integrated into an organizations activities and where benefits for both are expected. The final call though often lies with the strategic intent of the corporation, which is heavily influenced by the business case for moral behaviour.

2.2.6 Conclusions on Stakeholder Theory

As it has been demonstrated, stakeholder theory is a broad and simultaneously deep concept, and therefore requires justification on all ends, of which there are many; from philosophical underpinnings, to challenging the single stockholder-oriented objective function, to prescribing managerial action and response. This broad character brought in many contributions, critique as well as misinterpretation, making stakeholder theory a very interesting theory for further developments. Therefore the question is what stakeholder theory can be in the future and how it can be useful in conduction successful business; business that, more than ever, is rooted in the relationships organisations engage in with other individuals, groups, organisation and institutions. Innovation, as one of the most crucial requirements in today's fast moving business landscape, presents an opportunity to showcase the importance of relationships, and will be the theme in the next literature review section.

2.3 Innovation

This section gives a review on the relevant literature of innovation in order to convey the relationship to stakeholder theory and the relevance for this study. First a brief introduction to innovation is given. Then innovation concepts that deal with external partners are presented and the case for relevance of stakeholder thinking in these concepts is explained. Finally Prahalad's (2006) concept of the innovation sandbox and its purpose in this study are explained.

2.3.1 Introduction to Innovation

Innovation is a very common expression and its meaning is easily conveyed, for instance by Merriam Webster: "a new idea, device or method" or "the act or process of introducing new ideas, devices or methods" (Merriam Webster, 2014). Finding a widely accepted definition of innovation in academic literature is a more difficult task, as different disciplines respectively define the term within their own language (Damanpour and Schneider, 2006). In an effort to construct a common ground Baragheh et al. (2009) examined 60 definitions of innovation and merged them into what they describe as a cross-disciplinary definition:

"Innovation is the multi-stage process whereby organizations transform ideas into new/improved products, service or processes, in order to advance, compete and differentiate themselves successfully in their marketplace" (1334).

This definition is adapted for this study as it doesn't require innovation to be radical, thereby also allowing product improvements to fall into this definition. Further the formulation in plural "... whereby organizations transform ..." leaves room for an interpretation that includes interactions between organizations. A formulation in singular "... whereby an organization transforms ..." would not have allowed this and shut out

stakeholder thinking. Whereas there is a lot of argument about the definition of innovation, it is widely acknowledged that successful innovation plays a central role in creating value and competitive advantage, thereby subsequently safeguarding the attainment of corporate performance objectives and survival of the firm (Zahra and Covin, 1994; Tidd, 2001; Chesbrough, 2003).

2.3.2 Innovation and Stakeholder Thinking

In order to show that there is a demand in innovation literature for dealing with stakeholder relationships in the innovation process, this section describes the concepts that are most absorptive for this idea.

Eric Von Hippel has gained popularity since he introduced the term 'lead user' in his 1986 paper. He defines a 'lead user' of a novel product, process or service by bestowing him/her with the following characteristics:

- Lead users face needs that will be general in a marketplace-but face them months or years before the bulk of that marketplace encounters them, and
- Lead users are positioned to benefit significantly by obtaining a solution to those needs. (Von Hippel, 1986: 796)

This may sound like a trivial discovery, that there are users who are at the very forefront of user needs, but it signifies an embarkation point from what Baldwin and Von Hippel (2011) describe as Schumpeter's producer model of innovation. In this model Schumpeter outlines that innovations originate on the producer side, as producer innovators will profit from a large quantity of consumers purchasing products and services, thereby justifying the investments made (Baldwin and Von Hippel, 2011). Lead users present a potential source of insight because they are ahead of market needs and might therefore be used by firms to support them in their innovation efforts. Von Hippel (1986) identifies 4 steps to utilize lead users:

- (1) Identify an important market or technical trend;
- (2) identify lead users who lead that trend in terms of (a) experience and (b) intensity of need;
- (3) analyse lead user need data;
- (4) project lead user data onto the general market of interest.

(Von Hippel, 1986: 797)

This process suggests that after identifying lead users the relationship to these lead users needs to be managed in order to effectively extract needs and incorporate knowledge, subsequently making use of them in the firm's innovation process. Stakeholder theory helps to see lead users as stakeholders in the firm's stakeholder network and the tools of stakeholder management can offer ways of managing them.

Open innovation, introduced by Chesbrough (2003), is another innovation concept that presents itself as a potential candidate to apply stakeholder thinking to. The main themes in the concept are research and development, intellectual property, technology, knowledge and value creation; all related to innovation. Open innovation, according to Chesbrough (2003), means that external ideas and knowledge should receive equal importance as internal ideas and knowledge. Knowledge monopolies are not possible anymore in the contemporary business environment and a new logic of innovation has to be adapted in order stay competitive. It deals with questions of how external knowledge is integrated, which internal knowledge is released and with whom it is shared. Open innovation sees the business model as the tool to position the firm in the industry value chain and places importance on decisions regarding how internal and external pieces fit together in the innovation process. Chesbrough (2006) states that open innovation is "[...] almost by definition related to the establishment of ties of innovating firms with other organizations" (205). He further outlines that interorganizational relations, networking and subsequently network management are crucial dimensions of the concept. He acknowledges various entities such as other firms, universities, research institutes, or even individuals who have a certain expertise to be valuable partners in the networks (Chesbrough, 2003, 2006).

In another contribution to innovation literature Lee et al. (2012) discuss the evolution of innovation concepts. They start with the paradigm of closed innovation which coincides with how Chesbrough (2003) describes the preceding paradigm to open innovation. Then they go on to fit in what they call collaborative innovation before they reach Chesbrough's (2003) open innovation model. Going even one step further they present the concept of coinnovation which they see as the next, more dynamic step in the evolution of innovation. Co-innovation, so they argue, is different from open innovation in that they see the firm as an innovation platform that builds the center for its innovation network. This co-innovation platform "[...] is built on principles of convergence of ideas, collaborative arrangement, and co-creation of experience with stakeholders" (Lee et al., 2012, p. 824).

Other scholars, unrelated to the concept of the co-innovation platform by Lee et al. (2012), also explore themes in co-innovation. Beelaerts et al. (2008) reference Beelaerts (2006), by defining co-innovation as "the creation of a partnership between companies and/or institutes and/or customers on sharing knowledge, costs and benefits in order to create unique value for the customer" (7). For Odenthal et al (2004) co-innovation goes beyond the usual innovation process and tries to combine internal innovation efforts with those of the external partner network, thereby strategically approaching the flows of knowledge. They provide a managerial view in which they highlight strategic partnering within the innovation network to be of importance (Odenthal et al., 2004). Again another form of co-innovation is discussed by Bossink (2002), who explores the interaction patterns in different stages of the co-innovation process. The co-innovation process in his work though includes the formation of an organization between the organizations — essentially a joint venture. The strategies

that companies apply throughout the stages are in the limelight and the strategic balance between autonomous and cooperative strategy formulation builds a key

Another way to look at it is that there is a need for partner networks when innovating. Firms often cannot possess all the resources, competencies, knowledge or creativity to successfully innovate (Van de Ven, 1999; Chesbrough, 2006). This means that companies have to engage with other stakeholders in the innovation process simply out of strategic reasons, as building up certain capabilities or knowledge themselves would arguably take too long in today's fast moving markets. Further Van de Ven (1999) gives examples on the dynamics in the innovation process and how the interorganizational relationships shift and evolve over time. The web of cooperative, competitive and regulatory relationships that the process entails is a central point and he even calls for theories that explain the richness in the process (Van de Ven, 1999). Again stakeholder theory might offer a solution as relationships as the unit of analysis could provide a profound basis to explain the process.

The reflections of aspects of stakeholder thinking in the presented concepts are clear but the language of stakeholder thinking is only sporadically used and references to stakeholder theory are made at no point. An attempt to unite stakeholder thinking and open innovation was undertaken by Wayne Goulds (2012), who describes the similarities between the two concepts as follows:

"In both cases, the focal organization reaches outside its boundaries making an explicit effort to access essential information. Yet the two concepts, and their associated languages and discussions, have remained isolated from each other" (6).

In open innovation benefits are expected through the cooperation with external partners, but there is also a risk that these partners misappropriate those benefits. Stakeholder engagement presents a way to minimize risks in the open innovation concept, by creating a better understanding of the stakeholder's needs and desires. An interesting observation is that the traditional stakeholder categorizations may not be best suited to group the stakeholders involved in the innovation process (Wayne Gould, 2012).

It can be clearly seen from these examples that there is a significant amount of work in innovation literature that deals with innovation that involves partner networks. Even more so, some of them acknowledge that there is a need to manage the relationships that form throughout the innovation process. This presents an opportunity for stakeholder thinking to hook into this demand for stakeholder concepts in innovation.

2.3.3 The Innovation Sandbox

In 2002 Prahalad and co-authors started to outline some characteristics and assumptions about what was already known as a potentially valuable market, the BOP market – short for bottom of the pyramid, referring to the economic distribution of income:

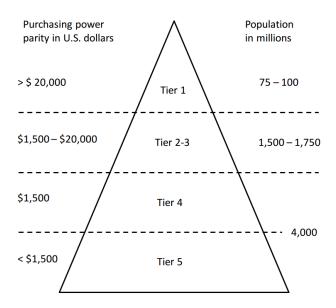


FIGURE 6 - BOP ACCORDING TO PRAHALAD (2010) AND PRAHALAD AND HART (2002)

They outline the untapped potential in monetary terms and what were perceived as market entry barriers for multinationals: corruption, illiteracy, inadequate infrastructure, currency fluctuations and bureaucratic madness. Observations in BOP markets though show a proof of concept for revenue growth, cost efficiency and innovation (Prahalad and Hammond, 2002; Prahalad and Hart, 2002). Especially regarding innovation companies are "turning the limitations of BOP markets to strategic advantage" (Prahalad and Hammond, 2002: 9).

The topic of innovation is continued in 'The Fortune at the Bottom of the Pyramid' where Prahalad (2010; original from 2004) outlines 12 principles of innovation for the BOP market and again states that it can become a major source of innovation. The 12 principles discuss the major differences to Western markets that companies need to consider when innovating for BOP markets. It draws a holistic picture of how consumer insights, managerial practices, new processes, educational functions and communication have to flow together to successfully innovate under given conditions (Prahalad, 2010).

In *The Innovation Sandbox* Prahalad (2006) elaborates on why the BOP markets can become a source of innovation and presents the notion of the innovation sandbox. The sandbox's main premise is that it encourages unconventional thinking once the innovator defines certain constraints in which operations take place (Prahalad, 2006). From a creativity perspective constraints have already been proven to be beneficial to creativity under certain circumstances (Joyce, 2009; Rosso, 2011). The following conditions were identified by Prahalad for breakthrough innovations in BOP markets to take place:

- 1. The innovation must result in a product or service of world-class quality
- 2. The innovation must achieve significant price reduction at least 90 percent off the cost of a comparable product or service in the West.
- 3. The innovation must be scalable: It must be able to be produced, marketed, and used in many locales and circumstances.

4. The innovation must be affordable at the bottom of the economic pyramid, reaching people with the lowest levels of income in any given society. (Prahalad, 2006: 3)

The following figure visualizes Prahalad's (2006) innovation sandbox as applied to the health care industry in India:

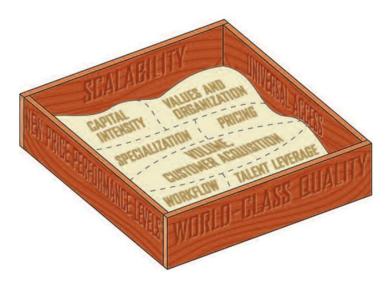


FIGURE 7 - INNOVATION SANDBOX FOR THE HEALTH CARE INDUSTRY IN INDIA (PRAHALAD, 2006)

The denotation of innovation sandbox was chosen "because it involves fairly complex, free-form exploration and even playful experimentation (the sand, with its flowing, shifting boundaries) within extremely fixed specified constraints (the walls, straight and rigid, that box in the sand)" (Prahalad, 2006: 3).

In an attempt to develop the concept further Dabholkar (2009) takes the innovation sandbox and argues that there is a way to create a more generic version of it. Framing it in strategic innovation terms he suggests altered assumptions of the innovation sandbox. First, where Prahalad (2006) sees the walls of the sandbox (constraints) as fixed, Dabholkar (2009) argues that learnings throughout the experimentation process might alter the constraints. Second, the assumption of generic constraints not being possible is turned into the possibility of at least identifying a minimal set of types of constraints. A third, added assumption, states that the ability to create an environment that supports experimentation and prototyping is crucial to strategic innovation (Dabholkar, 2009). Apart from Dabholkar's (2009) analysis being very shallow, the first and third assumptions are not important in the context of this study, but number two is. The constraints are a crucial element in Prahalad's (2006) thinking but they should not be seen as set in stone, neither in their number nor in their formulation or strictness. Rather they should be seen as a metaphor for a difficult task, to create something novel – to innovate. Creating more generic constraints, as Dabholkar (2009) suggests, is therefore arguably the wrong approach. The constraints present a useful scheme to explain the unconventional thinking that follows but they are nothing more than the expression of a firm's willingness to innovate. Already in the process of setting

constraints, it can be argued, the firm is thinking unconventional and with a tendency towards innovation. Nevertheless, this willingness to innovate and the constraints dictate the features of the product or service to be developed, which makes it useful for predicting which capabilities and resources are necessary to innovate.

Linking the innovation sandbox to the main thesis of this study, it is required to again look at how Prahalad (2006) sees the steps of the process he suggests:

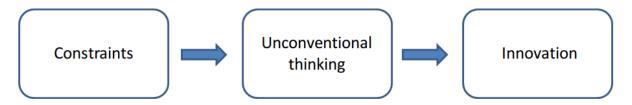


FIGURE 8 - INNOVATION SANDBOX MODEL TO ACHIEVE INNOVATION ACCORDIND TO PRAHALAD (2006)

Prahalad (2006) raises the point that the organization has to create an ecosystem of alliances, but doesn't explore the importance of the stakeholder interaction in the ecosystem as a basis for achieving innovation further. By looking at the three Indian cases that brought innovations to the health care system the assumption arises though that stakeholder interaction plays a role in the innovation process. Therefore a modified version, which suggests stakeholder interaction and stakeholder management as a central part in the innovation process, is presented:



FIGURE 9 - MODIFIED INNOVATION SANDBOX MODEL WITH EMPHASIS ON STAKEHOLDER INTERACTION

This modified model is subject to investigation in this study. The notion of constraints will also be adapted as it signifies a starting point for the innovation process. The focus though is on the relationship of the stakeholder interactions and the formation of the innovation.

2.4 National Culture Context

National culture influences the way business is handled and how interactions take place; therefore the cultural contexts of Finland and Mexico require attention. They provide a deeper understanding to this study's findings. Further stakeholder theory benefits from an underlying context because stakeholder thinking is, after all, about people and their behaviour. The culture comparison is undertaken using Hofstede et al.'s (2010) *Cultures and Organizations* (original study from 1980), which can be considered one of the most significant studies in this area. Additionally results of the *Globe Study* by House (2004),

which also extensively investigated culture and leadership in organizations, support the analysis.

It is noted that the typologies, dimensions and characteristics that aim to describe the national cultures do not and cannot reveal the complete magnitude and diversity of the respective cultures. Rather, they portray a general picture with the objective to stimulate discussion within this study.

Hofstede et al. (2010) describes six dimensions of national culture: Power distance, individualism and collectivism, masculinity and femininity, uncertainty avoidance, long-term orientation and indulgence and restraint. The *Globe Study* comprises nine dimensions of which some coincide with those Hofstede et al. (2010); whenever possible a comparison is undertaken.

Power distance measures the interpersonal power or influence between a superior and a subordinate as perceived by the subordinate. It aims to express whether members of an organization agree that power should be shared unequally (Hofstede et al., 2010; House, 2004). Finland ranks low (score: 33; rank 68) on the power distance index which means that the hierarchical distance between two individuals in an organization is rather small. Mexico to the contrary ranks very high (score: 81; rank 10-11), suggesting that employees in Mexico acknowledge the power of their superiors simply based upon their hierarchical position within the organization (Hofstede, 2010). The Globe study follows Hofstede et al.'s (2010) definition of power distance and the results correlate significantly. Employees in Mexico are therefore expected to be loyal towards superiors, leaving decision making to higher ranking management, whereas the relationships in Finland are more open and allow for more interaction. An employee in Finland has therefore a greater chance to influence his superior with his ideas and opinions.

Individualism, or collectivism, aims to describe how people live together, thereby capturing the relationship between the individual and the collective. An individualistic characteristic is that individuals look after themselves or their immediate families, whereas a collectivist characteristic is that individuals tend to be integrated into strong cohesive groups. In organizational terms individualism can be best expressed in an individual's goals that are independent from the organization as opposed to goals that accompany those of the organization (Hofstede et al, 2010; House, 2004). Finland ranks high (score: 63, rank 22) on the individualism index, which means that individuals tend more towards pursuing their own goals, prefer autonomy and are more self-reliant while working in a company. Mexico ranks in the middle (score: 30; rank: 48-50) but is already considered as a collectivist culture, thereby emphasising collective goals and cooperation (Hofstede, 2010). The *Globe Study* presents a similar conceptual definition of individualism/collectivism and the results show that the countries that are identified as individualistic or collectivist coincide consistently (House, 2004). Individualistic cultures, like Finland, tend to have more loose relationships between individuals and family ties are not as strong as in collectivist cultures. In terms of

business relationships individualistic cultures tend to establish relationships on a purposeful basis with the relationship largely being terminated when the purpose is fulfilled. In collectivist cultures relationships are more long term oriented, just as individuals are part of groups or their extended family throughout most time of their lives (Hofstede et al, 2010; House, 2004).

Masculinity, or femininity, deals with the social roles that are distributed in a society based on the biological sexes. A national culture with high masculinity suggests that values and work goals of men and women in the same job differ widely. The masculine pole emphasises earnings, recognition, advancement and challenge, the female pole to the contrary cooperation, living area and employment security. Finland ranks very low (score: 26; rank 68) on the masculinity index, which means that work goals, for instance, are more similar between men and women, making Finland a feminist society. Mexico ranks very high (score: 69; rank: 8) on the index, making Mexico a more masculine, male dominated culture (Hofstede et al., 2010). In the *Globe Study* the masculinity/femininity dimension was divided into two separate dimensions — assertiveness (which was not explicitly measured by Hofstede et al. (2010)) and gender egalitarianism. A correlation to Hofstede et al.'s (2010) work could only be shown in the assertiveness dimension, not in the gender egalitarianism dimension. An exact reason could not be given (House, 2004).

Uncertainty avoidance deals with structure in an organization and relationships in order to keep things predictable. It should not be confused with risk; uncertainty cannot be expressed in probability. A low level of uncertainty avoidance, for instance, means that individuals and organizations accept uncertainty, thereby allowing a less structured environment around them. High uncertainty avoidance reflects more rules and regulations that are in place to cope with uncertainty (Hofstede et al, 2010; House, 2004). Finland ranks low (score: 59; rank: 50-51) on the uncertainty avoidance index, whereas Mexico ranks in the middle (score: 82; rank: 26-27) (Hofstede et al., 2010). In high uncertainty avoidance cultures, like Finland, uncertainty is perceived as a threat and the facing of such situations leads to implementation of new laws, formalities or structures. In Mexico on the other hand acceptance of uncertainty is more inherent to day to day life, compared to Finland. The results from the Globe Study cannot be compared easily due to different measurements methods, even though the conceptualizations are similar (House, 2004). But looking at the countries individually it can at least be shown that Finland and Mexico reside in a similar position relative to each other, with Mexico showing less uncertainty avoidance than Finland.

Long term orientation, or short term orientation deals with a society's time horizon and weather the society gives more attention to future or past/present structures and events. Normative societies who score low on this dimension value their traditions and norms and are more sceptical towards change. High scores indicate a cultures tendency to a more pragmatic approach that encourages action that aids in preparing for the future, for

instance education. Finland is positioned rather low (score: 38; rank: 51-54) on the index, making it a short term oriented society, while Mexico (score: 24; rank: 74-76) finds itself in the lower third of this index. Looking at the cores both cultures can be classified as normative. This attributes them to hang on to their traditions and not to save extensively for the future (Hofstede et al., 2010). Even though the *Globe Study's* future orientation dimension gives the impression of being linkable to Hofstede et al.'s dimension here, this is not the case. It even suggests that this dimension lacks validity and should be treated with caution.

Indulgence, or restraint, deals with the degree of freedom that a society grants its individuals when it comes to the gratification of human desires. Finland ranks high (score: 57; rank: 27-29) on this index, making it an indulgent society that allows its members to freely pursue their dreams and values. Mexico ranks very high on this index (score: 97; rank: 2), which means that Mexican culture can be attributed to be leisure time oriented, impulsive, positively minded and optimistic, with a general tendency to enjoy life. (Hofstede, 2010). The *Globe Study* does not deal with this dimension, hence it is not discussed there (House, 2004).

The following table summarizes the data from Hofstede et al. (2010) regarding the six dimensions. The colour coding facilitates the readability: red = high rank, upper third; orange = medium rank, middle third; green = low rank, lower third.

Cultural Dimensions	Finland		Mexico	
Cartara Dimensions	Score	Rank	Score	Rank
Power distance High rank = high power distance (Countries: 76; score range: 11 – 104)	33	68	81	10-11
Individualism / Collectivism High rank = high individualism (Countries: 76; score range: 6 – 91)	63	22	30	48-50
Masculinity / Femininity High rank = high masculinity (Countries: 76; score range: 5 – 110)	26	68	69	8
Uncertainty avoidance High rank = low uncertainty avoidance (Countries: 76; score range: 8 – 112)	59	50-51	82	26-27
Long term vs. short term orientation High rank = long term orientation (Countries: 93; score range: 0 – 100)	38	51-54	24	74-76
Indulgence vs. restraint High rank = indulgent (Countries: 93; score range: 0 – 100)	57	27-29	97	2

TABLE 1 - CULTURAL DIMENSIONS - SCORES AND RANKINGS ACCORDING TO HOFSTEDE (2010)

As can be seen Finland and Mexico show significant discrepancies in their cultures, the most extreme contrast being in power distance and masculinity. These strong contrasts make the cultural component a meaningful factor in this study. Still, the cultural dimensions as laid out by Hofstede et al. (2010) and House (2004) cannot draw a complete picture of the respective countries' cultures. Further, other environmental factors that also influence business should not be neglected.

2.5 Summarizing the Literature Review

In the literature review it has been demonstrated how the themes of stakeholder theory, innovation and national cultural flow together in this study. Stakeholder theory and its concepts bring a version of value creation and trade to business which is inherently moral. Stakeholder management as the practical extension of stakeholder theory presents a way for managers to acknowledge other stakeholder's interests and manage them accordingly. But the development of stakeholder theory is stagnant and new impulses are welcome to suggest new directions. In the review of innovation literature it has therefore been shown that there are innovation concepts that are in need for tools to manage the partner networks that are more and more necessary in innovation processes. The innovation sandbox has been identified as a model that, after modification, serves in linking stakeholder interaction to the formation of the innovation. The review of the national culture serves as means to better understanding the two cases which are from very contrasting cultures.

3 Research Design and Methodology

This chapter presents the research design and methodology applied in this study as well as the explanation and reasoning behind choices that have been made in accordance with the defined research question(s) and the case at hand. First the overarching research strategy is presented and the choices explained. The next section explains the selection of the case study and describes the case company as well as the case. Then data collection and analysis are explained and finally validity and reliability of the study are evaluated.

A couple of terms have to be defined in order to avoid confusion in the empirical and methodological descriptions:

Project is the term used from the managers' perspective and refers to Boklok, meaning from the early ideas to the commercialized product. From the methodological perspective Boklok is always referred to as **case**. So the **case of Boklok** and the **Boklok project** are essentially the same (the case also includes the context of the wider environment which is of relevance in this study). **Concept** is used to describe the conceptualization of Boklok as a product from the managers's perspective. **Phenomenon** is synonymous to the unit of analysis which is the relationship between stakeholder interaction and formation of the innovation. It is mainly used in the methodological description. Exceptions from these rules are explicitly stated.

3.1 Research Strategy

The chosen research strategy and methods are based on the nature of the social phenomenon (Morgan and Smircich, 1980) and the posed research question (Yin, 2009), as those are determining the suitability. According to Yin (2009) a case study is an adequate research strategy under the subsequent circumstances:

(1) "How" and "why" questions are being posed:

In regards to how research questions are being formulated it is important that the research questions require an elaborate answer of qualitative nature. In that sense small pieces of literature and empirical findings have to be combined in order to provide a satisfactory answer. This study achieved this by formulating the research questions in exactly this way;

(2) the investigator has little or no control over events:

The case of Boklok has offered no control to the author of this study. The project is led by the responsible managers at Skanska and the investigation of the case in no way influenced the events. Further the investigation happened at a time when major parts of the project were already completed;

(3) it is a contemporary phenomenon and the context is "real-life";

The phenomenon that is the subject of study in Boklok is contemporary and situated in a real life context. It occurred throughout the last three years, is relevant in the contemporary business environment and deals with real organizations and individuals.

(4) an extensive and in-depth description of the social phenomenon is required;

In order to understand the phenomenon a holistic perspective as well as orientation toward details is necessary in this case. The broader context is needed to show how the phenomenon is situated in the whole case.

Following Yin's (2009) criteria and their fulfilment this study is carried out as a case study. Critiques of case study as a research strategy are for instance, lack of rigour and reliability as well as the issue of generalizability (Johnson, 1994). The lack of rigour and reliability is arguably strongly situated in the researcher's domain and will be addressed in the section on reliability and validity. The issue of case study research not dealing with generalizability or not being able to produce generalizable theory is debateable. Whereas Eisenhardt (1989) argues that 4-10 cases are necessary to produce empirically grounded and convincing theory, Dyer and Wilkins (1991) in response, list examples and state that a single case as the unit of analysis can indeed advance theory. As a rather shallow, nevertheless illuminating example one might consider the following statement: People who go to church have worse eyesight than those who don't. This statement has a hidden variable in the form of the age of people who go to church. Only a deeper insight sometimes reveals the true nature of a

phenomenon; or "[...] the careful study of a single case that leads researchers to see new theoretical relationships and question old ones" (Dyer and Wilkins 1991). In this discussion it very much depends on what is understood by building theory. Building rigorous theoretical models arguably requires convincing empirical evidence that draws on multiple cases but it can also be said that generalizability is not a criterion to advance theory in another sense. Contributions to or advancements in theory can take a form where new theoretical directions are being pointed out that spark new ideas and present opportunities that drive new theory developments. This is the intention of this study.

The unit of analysis is an important decision in the overall research strategy. The unit of analysis in this study is the relationship between the formation of the innovation and stakeholder interaction; it was chosen because it is at the center of the formulated research questions and is capable of constructing implications for all of them.

Another part of the research strategy was a chronological approach for structuring the data in this case study. This is recommended when the objective is to describe a development over time and when the sequence of events is important (Velde et al., 2004; Yin, 2009). It was clear from the beginning that the case of Boklok required a chronological data structure due to its procedural nature; the early knowledge of these circumstances allowed the use of tools in data collection to support this data structure. Also the analytical technique that Yin (2009) describes as logic model is used in this study and plays a central role in the overall research strategy. Though being designed for the data analysis the use affects the study design. They will be further discussed in the data management and analysis section.

3.2 Case Selection and Description

This section describes the case selection process, the studied company and the specific project for the case of Boklok, first, and then for the complementary case of Patrimonio Hoy.

3.2.1 Boklok

As explained at the beginning of the literature review there has been a pivot in the theoretical approach to this study following the first exploratory interview with the case company which showed that the assumption of user integration in the innovation process being the main theme was wrong. Because of this the initial criteria for the case selection were not relevant anymore. The case of Boklok was kept for its interesting nature regarding the multi-stakeholder approach in the innovation process. The theoretical approach was modified in order to meaningfully research the phenomenon. Retrospectively the following case selection criteria have been established:

1. The outcome of the innovation process is an innovation in the sense of the definition used in this study.

- 2. The process of developing the innovation shows stakeholder interaction.
- 3. The constraints setting from the innovation sandbox concept can be applied.

The first criterion represents the innovation literature, the second the stakeholder theory literature and the third the innovation sandbox concept.

The Company

Skanska AB is a multinational construction and development company with the group headquarters being located in Stockholm, Sweden where it is also listed on the Stockholm Stock Exchange. The four main business streams are construction, residential development, commercial property development and infrastructure development. Skanska's operations in Finland cover construction services, residential and commercial project development and public-private partnerships. Construction services include building construction, building services, and civil and environmental construction. Table 2 shows key figures regarding Skanska Finland and global.

Skanska 2013	Finland (including Estonia)	Global
Revenue	695 (EUR M) ¹	15,775.5 (EUR M) ²
Profit	NA	435.6 (EUR M) ²
Employees	2,377³	57,105³

TABLE 2 - SKANSKA REVENUE, PROFIT AND EMPLOYEES FOR FINLAND AND GLOBALLY (SKANSKA ANNUAL REVIEW, 2013: ¹P. 47, ²P. 103, ³P. 160)

What is Boklok?

Boklok is an affordable housing concept that puts its target customers' needs right at the center. The product is positioned as a smart living solution for young singles and couples that don't have children yet, young families with small children and seniors of 50+. Efforts in floor plan and interior design make an efficient use of the available space possible. The location of Boklok homes are outside of the city, close to nature and have a good public transport connection as a requirement. A typical Boklok apartment block contains around 36 apartments in 3 different sizes and provides a communal living experience in a village-like setting. The very detailed attentive concept aims to balance aspects of communal living vs. privacy, standardization vs. customizability and various other aspects of living that are important to the target groups. It aims to make living as well as buying easy and also provides support in financing the homes. For a visual impression a photo of a Boklok house that was taken during a site visit can be found in appendix 2.

History

The origin of the idea behind Boklok goes back to 1993, to a fair for private homes in Karlskrona, Sweden. A regional manager of Skanska and a senior marketing director of IKEA met there because of an ongoing collaboration where IKEA should furnish example domiciles for Skanska. Maybe influenced by the actual event they started talking about the current market situation in Sweden and how constructing private homes had become

unaffordable for huge parts of the Swedish society. Combining Skanska's and IKEA's competences to provide affordable housing sounded like a promising business idea to those managers. How the evolution of the idea evolved between 1993 and 1995 is unclear, but by 1995 this opportunity became clearer. IKEA and Skanska were already collaborating at that time and the venture, which was to become Boklok, was officially established during a meeting on December 19th 1995. Top management supported the idea from a very early stage (Boklok Sweet Boklok, 2007).

Boklok in Finland

The model worked very well in Sweden and following the success Boklok approached Finland first in 2001. The first Boklok homes were built in 2003 and altogether 5 projects were built in Finland before it was discontinued in 2006. In 2011 the project was relaunched in Finland. The case in this study deals with the relaunch of Boklok in Finland.

3.2.2 Patrimonio Hoy

A second case was chosen to serve as a comparable, with the purpose of creating a more profound basis for analysis and discussion of the empirical findings, and subsequently also the conclusions of this study.

The first three selection criteria for the second case, which was chosen from the literature, correspond directly to the primary case. The fourth criterion aims to establish a close resemblance with the primary case:

- 1. The outcome of the innovation process is an innovation in the sense of the definition used in this study.
- 2. The process of developing the innovation shows stakeholder interaction.
- 3. The constraints setting from the innovation sandbox concept can be applied.
- 4. The context of the case should resemble the primary case as close as possible.

The case of Patrimonio Hoy was finally chosen because it fulfilled the first three criteria and additionally showed a close resemblance to Boklok. Patrimonio Hoy is, just like Boklok, situated in the construction industry and aims to provide affordable quality housing. Additionally Skanska and Cemex are similar in terms of size, measured by employees.

The Company

CEMEX is a global building materials company that provides products and service to customers and communities throughout the Americas, Europe, Africa, the Middle East, and Asia. CEMEX produces, distributes, and sells cement, ready-mix concrete, aggregates, and related building materials in more than 50 countries, and maintains trade relationships in approximately 108 nations. Table 3 shows key figures for CEMEX worldwide.

Annual sales	US\$ 15.23 billion
Operating EBITDA	US\$ 2.64 billion
Employees worldwide	43,000
Production capacity (cement)	94 million tons

TABLE 3 - KEY FIGURES FOR CEMEX

Figure 10 describes the sales distribution by product and geography. Mexico is one of the biggest markets for CEMEX and cement makes up for a major part of the sales.

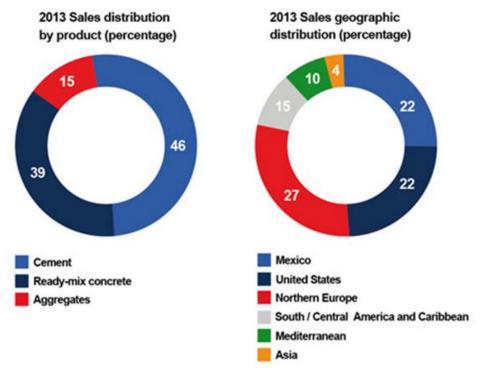


FIGURE 10 - SALES DISTRIBUTION FOR CEMEX BY PRODUCT AND GEOGRAPHY

The Case

Patrimonio Hoy is described by CEMEX as a social enterprise and was developed in 1998 with the objective of providing a market-based solution to address the housing needs of low-income families, thereby empowering them to improve the quality of their lives. The first instance was developed in Guadalajara, a Mexican city with a population of more than 4 million in the metropolitan area. Patrimonio Hoy provides low-income families living in urban and semi-urban areas with access to building materials such as cement, concrete blocks, and steel. Patrimonio Hoy provides these products at average market prices as well as microfinancing, technical advice, and logistical support to assist participants in building their own homes. This is accomplished through a collaborative network of local CEMEX distributors, community-based promoters who build trust and the families themselves.

3.3 Data Management

This section describes the data collection and the rationale of the subsequent management and analysis of the data.

3.3.1 Data collection

In case study research it is recommended to use multiple sources of data, called data triangulation, in order to make strengths of one data collection method compensate for weaknesses of another (Yin, 2009). The data collection in this study can be divided into field work and desk research.

The field work includes interviews and communication with the most important involved stakeholders as well as site visits and informal talks. At Skanska the project manager of Boklok as well as the business development manager and the market analyst were interviewed alone as well as together (product development manager and market analyst) in order to facilitate recall of past events. Further three people representing the city of Vantaa were interviewed in a joint interview. Another interview was conducted with the head of the contracted architecture firm. A responsible from IKEA was only available to answer questions via email. Additionally the field work included excursions to get a better understanding of the product and the locations through observations. A visit to an openhouse showing at the nearly finished construction site in Nikinkumpu offered impressions of a fully furnished home as well as meeting involved employees. Further a visit to the Nikinkumpu site on the official move-in date as well as to Kivistö (6 months past move-in) facilitated understanding of the product in its real, social environment and the opportunity to interview customers. At the Nikinkumpu site 8 micro-interviews (around 3 minutes each) with customers were conducted; at the Kivistö site 2 interviews. All of the interviews were held in English, recorded and transcribed. An exception is the interview with the architecture firm, which was conducted by a fellow researcher who is a Finnish native speaker. He also translated the transcript into English. Also, the eight micro-interviews with customers from the Nikinkumpu site were partly in Finish and not recorded. In all of the interviews a second researcher was present, thereby supporting especially the reconstruction of the non-recorded interviews, which was done right after the interviews.

All of the interviews were, as Yin (2009) suggests, open-ended. An agenda for each interview was prepared in order to follow a checklist of important themes for each respondent. Apart from this the interviews followed the narrative of each respondent in order to get personal perspectives and collectively deep information on the case. In the interviews with Skanska employees a poster was used to reconstruct the process and different stages of the project on a timeline (see appendix 4). This was especially useful for both interviewers and interviewees as it visually supported the chronology of events and thereby increased mutual understanding and accuracy of information. Further it supported the chronological data structure that was chosen for this study.

The full spectrum of primary and secondary data for the case of Boklok include market studies and consumer research reports, news articles, press releases, observations, interviews and Facebook communication. For the case of Patrimonio Hoy only secondary and tertiary data was collected. A list of sources including literature on Patrimonio Hoy is presented separately in appendix 3.

The data collection took place between February and September 2014, with the interviews being conducted from February to June 2014. The collected data concerns mainly the period from mid-2011 until mid-2014, the time when Boklok was re-launched in Finland. Additional data were collected from the period between 2001 and 2005, which deals with the first launch of Boklok in Finland. The reasons for collecting these data was that the interviewees at Skanska studied this period themselves in order to extract learnings from the discontinued project. Therefore this data was also relevant for the current case.

3.3.2 Data Management and Analysis

In order to give the data a more comprehensible structure a chronological approach was chosen as the main data management method. As briefly outlined before, this is recommended when the objective is to describe a development over time and when the sequence of events is important (Velde et al., 2004; Yin, 2009). The development of Boklok was a process over a long period of time and the unit of analysis is the relationship between the formation of the innovation and stakeholder interaction, thereby being predetermined for a chronological approach. By putting the events into a chronological order it is possible to see the process more clearly and how events build and depend on each other, creating a structured basis for analysing the data. As supportive structures stakeholder profiles and the constraints setting have been used to better manage the data and subsequently build arguments in the analysis. The rationale for the respective structures lies in their value for supporting answering the research questions. The same data structure that is used for Boklok also serves for the case of Patrimonio Hoy whenever there is sufficient data available.

For the data analysis the analytical technique of logic model is applied in this study. The logic model sets up a cause and effect relationship pattern, which should be defined first theoretically (Yin, 2009). This was done through the unit of analysis being set to the relationship between the formation of the innovation and stakeholder interaction. Thereby a specific cause was not postulated to be linked to a specific effect; rather this is about the mere existence of a cause and effect, namely that the way stakeholders interact with each other influences the innovation. In the analysis therefore the main focus is on exactly this relationship, which builds the core argument from which the research questions are being answered. The process of analysing was to go through the chronologically structured data and look for events with stakeholder interaction. These events were relevant when they could be logically linked to having an effect on the innovation. The sum of these events then

builds the core argument for each case. After doing this for both cases the cases are compared to each other and similarities and differences are discussed.

3.4 Validation and Reliability of the Study

This section elaborates on the reliability and validity of this qualitative study. Yin (2009) suggests four criteria to evaluate qualitative research: (1) construct validity, (2) internal validity, (3) external validity and (4) reliability.

Construct validity refers to the degree to which the methods applied actually produce the intended results (Yin, 2009). In this study it means that the collected data and the methods used to collect it are appropriate to answer the research question. The subjectivity of the researcher and the choices being made are therefore a factor that affects construct validity. To counter subjectivity and increase construct validity triangulation is an effective tool. It reduces the subjectivity through application of multiple methods and strengthens the construct by funnelling several kinds of data towards the research objectives. The various data sources and methods, as explained in the data collection section, aim at supporting the research construct.

Internal validity deals with the issue that event *x* actually leads to outcome *y*, without having a hidden variable *z* influencing the outcome (Yin, 2009). The question for every event in the cases that is subject to analysis is: Was it really the stakeholder interaction that caused the outcome? It is argued here that it is not solely the way stakeholders have interacted with each other that produced a certain outcome, but that it is a factor that needs to be accounted for. The sum of events that make this claim, so it is argued, helps to increase internal validity.

External validity refers to the generalizability of results (Yin, 2009). This is especially difficult in single case studies as they provide only a one dimensional perspective on the phenomenon. The second case from the literature serves as an enhancer of external validity, but the effect is arguably little. Following, generalizations per se are not intended to be made in this study, also because the theme is too broad to do so and would negatively affect the quality of the study. Rather the objective is to make suggestions for possible themes to be explored further.

Reliability, just as validity measures, has historically been a tool to support quantitative research but has found its way also into qualitative research. With the purpose of determining quality, reliability in a qualitative study aims to help the reader in understanding the often confusing phenomena in a qualitative study. The sole application of reliability to a qualitative study though easily creates a situation where scholars do not come to terms with how to best deal with reliability in qualitative research (Golafshani, 2003; Stenbacka, 2001). Regarding reliability Yin (2009) states that the reproducibility of the

study plays a crucial role; this means that if somebody conducts the study again and follows the same steps, this researcher would arrive at the same results.

For this study the author suggests that trustworthiness in the undertaking and process of the research is important; that the steps are explained in detail and that the decisions being made are sound. As this study takes a rather broad theme the structure is especially important for the sake of capturing the essence of the broad argumentation. Thereby the "red line" that leads the reader through the logical chain of arguments plays a significant role. After all it is the goal to make the reader understand the conclusions being made, which also includes the limitations and contestations surrounding it. Interpretation of data is also a crucial part in qualitative research, making it another area where sound and clear argumentation is important. In the end the conceptualizations that are put forward as a result of this study have to be capable of spawning interest and attention in the reader, and this can only be achieved through a thoroughly documented process with a clear "red line".

4 Empirical Findings

This section presents the empirical findings of the study. Thereby a holistic picture on the case is presented for Boklok and Patrimonio Hoy respectively in order to embrace the wider context in which the significant findings are embedded. Only in the next chapter, where the findings are discussed and analysed, the significant findings receive more focused attention and interpretations are put forward; this ensures a separation of empirical facts and interpretations.

4.1 Boklok

In this section the findings regarding the case of Boklok are presented. First the involved stakeholders are presented and a brief description explains their role in the project. Then the constraints according to Prahalad's (2006) innovation sandbox are presented for Boklok. Following, the whole project is described in chronological order.

4.1.1 Stakeholder Profile

First an overview of the stakeholders that were involved in Boklok is given. In the description column their role in the project is explained.

Stakeholder	Description
Skanska project	One responsible project manager was assigned to overview the
manager	whole project from start to finish.
Skanska departments	This group comprises Skanska departments and single employees
and employees	that were involved in the project. Departments include
	procurement, installation services, construction services,
	estimation, structural and design departments as well as Skanska
	Kodit (residential development unit).
Skanska top-level	Top level executives had the function of approving the project at
executives	certain stages.
Boklok AB	Boklok AB is the Boklok franchiser, owned to 50% by Skanska and
BORIOR AD	IKEA respectively. Boklok AB is comprised of a small team and is
	ambitious to expand Boklok to new markets.
Hanken School of	Hanken School of Economics organized a stakeholder workshop for
Economics	the Boklok project. There was already an on-going collaboration
	between Skanska and Hanken and the Boklok project provided an
	opportunity for both to bring in actual themes important to them.
Stora Enso	The construction company was contracted to produce the
	prefabricated parts for the Boklok houses and assemble them on
	site. They were chosen for being a reliable partner in construction,
	their capability to produce the pre-manufactured modules and a
	local production site.
City of Vantaa	The city, located north of Helsinki, is home to the building zone of
	Boklok. Previous struggles with municipal differences in building
	regulation, plot negotiations and building permits present the main
	reasons for collaboration.
Ark7	The architecture firm translated the conceptions into concrete
	designs and played a central role in the process.
Determination of	Debautial contamon identifical theory is a contational to
Potential customers,	Potential customers were identified through a market research
users	company and quantitative and qualitative studies were conducted to concretise the product features.
	to concretise the product reatures.
Kopla Helsinki	The research company was contracted to conduct quantitative and
	qualitative studies with potential customers/users.
IKEA	The furniture and interior company plays a crucial role in the
	The state of the s

	project. They were involved in several phases throughout the project. IKEA's value lies in interior design competences, which was crucial to efficient use of space in the apartments. Further they have extensive consumer knowledge and a recognizable brand image in consumers which was of value for marketing and sales.
Нуро	The bank offers a pre-negotiated deal for people who want to buy a Boklok home and have to take out a loan.

4.1.2 Constraints for Boklok

The model of constraints that Prahalad (2006) developed in the innovation sandbox concept is applied to Boklok. The constraints that created the boundaries for the project are presented below. They were defined by the project team following an initial market study and considerations regarding the target groups.

1. High quality housing

Quality of housing can be defined in various ways. For Boklok and its target customers the following aspects determine high quality housing:

- Very close to public transport
- Shops, day care centre and/or school close by
- Maximum 45 minutes from the city
- Well thought through floor plan design for efficient use of space
- Balance of communal and private aspects of life
- Safe environment to raise a family

2. Affordability

An important constraint was that Boklok is affordable to people with low income levels. For the different apartment sizes model families were created respectively. An example is a single mother, working as a pre-school teacher, with one teenage child. A family like this would need a two bedroom apartment. The follow-up question was what the apartment can cost on a monthly basis so that there is enough money left each month to life a decent life. This was the main criterion in determining the price level.

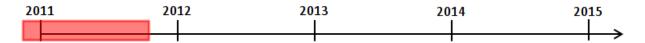
3. Scalability

A central idea behind Boklok is that it is a concept, not a project as it is usually the case in the construction industry. The concept is not designed for a specific plot but independently, so that several projects can then be built from the concept. The cost of developing the concept is seen as an investment and calculations for every single project are then done separately. The central point is that this system is designed for scalability and financially dependent on it. The scalability has its limitations though, in form of geographically differing customer needs, which is the reason why the concept had to be reinvented for the Finnish market.

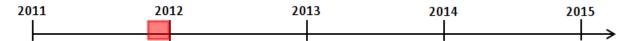
4.1.3 Process of Developing Boklok

The process of developing Boklok is described from start to finish. An illustrative timeline is used to provide a better understanding of the temporal component and the phases of the project of which there are four: (1) Initiation, (2) concept development, (3) marketing, sales, PR and construction, and (4) moving in and customer care. The phases were designated throughout the data collection and management by the author and do not represent the interviewees' opinion.

Phase 1 – Initiation

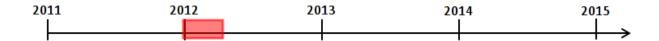


Before the beginning of 2011 Sanska Finland and Boklok AB were at the same time thinking of new business opportunities and Boklok came to the mind of both. Boklok AB has the intention to expand to new markets set in their business plan and has a scheme for entering new markets worked out which Skanska could make use of. A project manager was assigned at Skanska and the project was then continued from there. Communication between the project manager at Skanska and a responsible for expansion at Boklok AB happened on a biweekly basis.



Toward the end of 2011 the project manager at Skanska started to involve the first people at Skanska. Boklok AB's market entry process template was used as a guideline and a market feasibility study was commissioned. After the results of the market feasibility study were available, Skanska and Boklok AB decided together to go forward. The approval of executives in both organizations was given. After that a market study was conducted which determined the customer promise, the price level and how Boklok would fit in the market. Essentially the constraints were developed from this study.

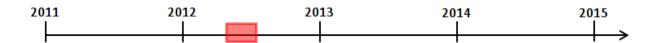
Phase 2 – Concept development



Concept development is a different approach than Skanska usually takes. Normally there exists a plot of land and Skanska decides what to build on that specific plot. In Boklok the full design was developed without having a plot to construct the houses first. The idea was to do the concept properly and then build several projects from it, which justifies the amount of resources that went into it and also scalability as a constraint.

When the concept development started more people from within Skanska got involved. These included procurement, construction services, estimation and Skanska Kodit (the residential development unit). Collaboration between the departments was essential in more accurately defining the price levels. The initial designs for the apartments were then made by the contracted architecture firm in conjunction with Skanska's structural and design departments who together defined structure and building techniques.

In between a stakeholder workshop was organized in conjunction with Hanken University. The theme of the workshop was "home as a service", including user experience and customer engagement with the purpose of creating a common understanding of what Boklok is and for central stakeholders to meet each other. These included employees from IKEA, Skanska, Stora Enso, the city of Vantaa and Ark7 (for a complete list see appendix 5). Students from Hanken had conducted interviews with Boklok customers from the earlier Boklok projects, which represented a customer story.



Following the workshop work on the first floor plans started. Two initial designs – which according to the project lead were both not perfect – had a strong focus on the floor plans and were used in the consumer research study to be evaluated by the participants.

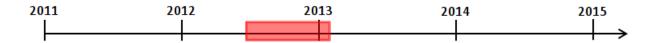
The study, which was conducted in April and May, was divided in a quantitative and a qualitative part and was carried out by research agency Kopla. In the quantitative phase the sample comprised 541 people who were interested in living in small scale blocks of apartments in the capital region. The age range was from 20 – 72 and the utilized method was a survey with questionnaire and conjoint analysis. Amongst other questions the participants had to choose between the two initial floor plans that were designed and decide on a favourite. The quantitative part was done between 4th and 9th of May 2012 and took place online with help of a software designed by Kopla. From this sample willing participants were recruited for the qualitative part of the study. A total of 34 persons participated in the qualitative study which took the form of online focus groups for which

again a special software was utilized. The participants were split into 3 groups which corresponded to the 3 defined target groups.

The online focus groups were conducted on the 22nd and 23rd of May. The participants accessed the focus group software over the internet. The Boklok team at Skanska designed initial questions and tasks for the participants which were carried out by a research team at Kopla. The project manager, business development manager and market analyst followed the discussions live from a conference room at Skanska. They were not able to communicate with the participants directly but were able to forward new questions to the research team in the on-going discussion. Participants had to submit their personal answer to a question before they were allowed to read others and engage in discussion which avoids being biased by other participants. The online panel also provides the possibility to vote on certain topics or show files (e.g. floor plans). Each of the 3 focus groups lasted 1 ½ hours and covered various elements of the concept which included floor plan layouts, the common sauna, which elements should be customizable, community aspects, kitchen details, yard arrangements, the financing model and also perception of the concept in general. The favourite floor plan that was chosen by participants in the quantitative study was modified by the participants with elements from the second floor plan in the qualitative study. A significant change in the floor plans was for instance that participants didn't want to be forced to enter the apartment through the kitchen.

Following the qualitative study the research agency summarized the results and presented them at Skanska offices. The architect who was present at this presentation started working with the feedback right away and designed new floor plans. With the floor plans taking on a final form IKEA got involved. They provided feedback on furnishability of the apartments, thereby suggesting movements as little as 5cm, for instance of windows, increasing efficient use of space.

Phase 3 – Marketing, sales, PR and construction



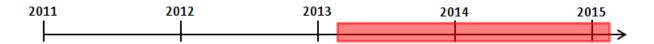
With the concept being in the final stages an agreement was reached with Stora Enso to produce the prefabricated modules and to do the construction work. Around the same time the first plot of land was negotiated and signed with the city of Vantaa; in the price negotiations the fact that Boklok was building affordable housing was financially beneficial to Skanska.

In August 2012 a press release was issued to announce that Boklok is coming to Finland, followed by another press release on the Stora Enso cooperation in the end of 2012. In December an event at IKEA was used to furnish example homes and three interior design

bloggers wrote about the event. The event was used to present customer stories, show floor plans of all 3 apartment sizes, showcase interior design options and meet and interact with potential customers. In general, the phase from August 2012 until January 2013 had a strong focus on PR and marketing. These efforts culminated in a lottery event at IKEA for the first houses to be sold in Vantaa.

During the construction of the first houses one mentionable event occurred. Stora Enso, who was known to Skanska as being very safety conscious, neglected safety standards on the construction site and construction had to be stopped temporarily. As a consequence Skanska trained Stora Enso construction workers in their safety park for the next houses to be built.

Phase 4 – Customer care and moving in



The moving-in dates for the three Boklok projects (refers to three apartment blocks in different locations) existent at the time of research are as follows:

- 4th of Dec 2013 for Boklok Saunapolku customers
- 12th June 2014 for Boklok Nikinkumpu customers
- Dec 2014: Planned move-in date for Boklok Kerava customers

Facebook groups were introduced as the main communication channel with customers for each Boklok project. Customers can communicate with each other as well as with Skanska employees. This channel is also used to collect feedback from Boklok customers, especially in the first projects, to continuously improve Boklok. The Facebook groups are established after the first buyers are found and are kept until three months after the move-in date. After that Skanska employees leave the group to the respective Boklok community for continuous use amongst each other.

4.2 Patrimonio Hoy

This section describes the case of CEMEX's Patrimonio Hoy programme. It is one of the cases that Prahalad (2010) describes in *The Fortune at the Bottom of the Pyramid*. It is assumed that Prahalad didn't list this case in his examples for the innovation sandbox because the achieved price reduction did not answer to his requirement of a 90% reduction. But as discussed in the literature review, the constraints are understood more as a metaphor for something that is difficult to achieve. The case contains a set of constraints sufficient for this studies purposes and more importantly serves as comparable case to Boklok as they are both situated in the construction industry and aim at providing affordable quality housing. A mentionable difference to Boklok is that it is not the process of developing the innovation

that is investigated but an implemented business model. A list of sources for Patrimonio Hoy can be found in appendix 3.

4.2.1 Stakeholder Profile

The most important stakeholders in the Patrimonio Hoy program are described below. The categorization is undertaken using the

Stakeholder	Description
CEMEX	Patrimonio Hoy is run as a social enterprise under the supervision of corporate CEMEX.
Patrimonio Hoy director	Patrimonio Hoy has one responsible program director assigned from CEMEX.
Cell employees	Cells are the local offices where community members can contact Patrimonio Hoy employees. In a large cell this includes (1) a general manager, (2) an engineer, a technical advisor or an architect, (3) a supplies manager and (4) a customer service representative. They are responsible to manage the cells, identify promoters and have close customer contact.
Promoters	Promoters are people from local communities who go from door to door to market the program. They are mostly women, customers themselves and play a crucial role in the program.
Customers/partners/socios	The socios are the actual customers who enrol in the Patrimonio Hoy program.
Wider community	The wider community can be described as the population that each cell targets. The community is an important stakeholder as the communities reaction to the program and its customers determines how well the program will be accepted.
Distributors	Distributors are responsible for storing and delivering the raw materials. The distribution partners were chosen by CEMEX according to a set of criteria.

4.2.2 Constraints for Patrimonio Hoy

Foregoing to establishing Patrimonio Hoy was an extensive market research that revealed living conditions of a chosen area and the amounts of money that went in cement from the total spent on construction materials. The chosen region, Guadalajara, was subject to a

three-month study revealing various demographic factors — social, religious, political and financial. The study revealed the following key areas of improvement/change for CEMEX that can be laid out as constraints:

1. Provide better access to credit and improve the savings system

There are existent saving systems called *tandas* which require improvements in especially payment discipline in order to keep customers in the program. Another issue is that access to credit needs to be improved so that people can start construction earlier and see results. The target group for Patrimonio Hoy are families that earn an average of 5 - 15, making the improvement of both aspects crucial.

2. Improvement of brand perception and trust from the low-income segment

Without establishing a certain level of trust it is difficult to do business with the low income communities. They are sceptical because they have been cheated by dubious businesses and their practices for years.

3. Scalability

The program only works with a certain amount of customers per area and depends on the constant revenue flows that it generates. In order to establish a cell in a neighbourhood a typical customer base of 5000 is required; this equals a community with a population of 50,000 - 100,000. This highlights the need for establishing trust as explained previously.

4. Improvement of distribution methods and construction practices

The low-income communities have limited knowledge of building technology and also lack planning skills when it comes to constructing room by room. Also the logistic access to building materials poses a considerable problem as they often don't own vehicles to transport the materials themselves. Another issue is that by storing the building materials at home they are at risk of being stolen or subject to damage through weather conditions.

4.2.3 Process of Establishing Patrimonio Hoy

The process after which the programme is established encompasses five phases: (1) Identification of offices/cells, (2) cell setup, (3) customer enrolment, (4) savings-credit payment cycle and (5) distribution and delivery.

1. Identification of offices/cells

The neighbourhoods in and around Guadalajara were screened for high-growth opportunities. The so called cells were identified based on income, construction progress, housing development, concentration of low-income individuals, distributor network and population growth.

2. Cell setup

Once a potential neighbourhood was identified, Patrimonio Hoy set up a cell for that neighbourhood. The average-sized cell targets a community with a population of 50,000 – 100,000, equalling a customer size of around 5,000 people. Depending on the cell size up to four employees manage one cell – (1) a general manager, (2) an engineer, a technical advisor or an architect, (3) a supplies manager and (4) a customer service representative. The general manager's task is to identify the "promoters" within the respective community who are then hawking to sell the savings-credit scheme. The supply manager is closely working with CEMEX and negotiates prices, interacts with distributors for delivery and monitors quality of delivery time, customer treatment and quality of materials.

3. Customer enrolment

Patrimonio Hoy has established a rather strict set of rules and standards for the program in order to avoid inefficiencies. The socios, who are the actual customers in Patrimonio Hoy, enrol in the program. Thereby they form a group of no more than three people because this group size makes it easier to enforce payment discipline and stronger relationships within the group help in emergency situations when one socio is not able to pay the fee. Promoters play a key role in that they serve as ambassadors for Patrimonio Hoy. They are mostly women from the respective communities and are paid on a commission basis depending on the number of socios and length of stay in the program. By signing up new customers for the program they get points, which they can exchange for cash or building materials.

4. Savings-credit payment cycle

When a socio group is formed they go to their local cell and file an informal application for the program. This means that no credit history, collateral or co-signers. The prices of raw materials are frozen throughout the plan's period and the only requirement is for each socio in the group to pay 120 pesos per week. After enrolment socios are eligible for an appointment with a technical advisor or architect to determine at least the following:

- Types and quantities of the needed materials for the first room
- What the next room will be in his/her home and the placement in the current layout
- The sequence of the following rooms to be constructed in the future

The members take turns every week to collect the amount due from the other group members and remits the weekly payment of 360 pesos of which 15 pesos are deducted for a membership fee which is used to support community building and events.

5. Distribution and delivery

The distribution partners are chosen by CEMEX according to the following criteria:

- Good understanding and appreciation of the new business model
- Excellent delivery capabilities with trucks to deliver to the local neighbourhoods with not-so-accessible roads and infrastructure

- Capacity for storage of raw materials
- Exclusive relationship with CEMEX

The socios are offered two options for delivery, either right away or a delivery voucher that can be used at a later time. Cash is not offered in order to make sure that the socios continue to work on the construction of their houses instead of spending their money elsewhere. If socios choose to receive the raw materials Patrimonio Hoy coordinates the delivery with the distributors and in case of a voucher the materials are stored at the distributor's warehouse. The optional storage preserves the materials' quality by avoiding exposure to weather and possible theft, which can't be guaranteed by the socios' themselves.

5 Analysis and Discussion

In this chapter the empirical findings are analysed and discussed and conclusions are presented in the light of the research questions. The first section builds the core argument of this study by discussing the relationship between stakeholder interaction and formation of the innovation. Then the posed research questions receive an elaborate answer. The limitations of the study are discussed and recommendations for future research are given.

5.1 Building the Core Argument

First the most significant findings are presented; they build the core argument from which the subsequent conclusions are deducted. This core argument consists of the description of the relationship between stakeholder interaction and formation of the innovation. This is done for Boklok and Patrimonio Hoy respectively, followed by a comparison of the two.

5.1.1 Boklok

In general the level of stakeholder interaction was very high in Boklok. Boklok AB and the project manager for Boklok at Skanska, for instance, had regular meetings scheduled every 2 weeks to exchange the actual state of the project which can be considered a "quite active cooperation" (project manager). Also the involvement of the internal workforce, meaning the various departments, was very sophisticated in that meetings had a large number of participants:

"Even though we had quite big team to, you know, discuss and to work with, it was still beneficial. And I think it sort of set a great foundation for all this future work" (project manager).

These practices cannot be linked directly to a specific feature of the innovation but it showcases the overall mind-set of the project management to involve participants in the project. This mind-set continued with the stakeholder workshop that took place at the very beginning of the concept development phase:

"So really all stakeholders were around one table. For me the purpose of that was to create common understanding of what Boklok is and what we are doing here, but also arrange possibility for everyone to meet each other and so forth" (project manager).

The participating architect commented:

"And in my view there in the end, there emerged this kind of positive spirit, with which specifically was aimed to advance and take them forward" (architect).

From this it can be seen at that the workshop, though not resulting in any features of the innovation, changes the way stakeholders perceive the project. With this workshop the external partners received a clearer picture of Boklok's goals and the pace for collaboration was set.

The central feature of the product is the floor plan, as it is one of the most important criteria in the customers' buying decision. Especially here several steps in the process showcase how decisions related to stakeholder thinking shape this feature. The two initial floor plans were designed by Ark7 (architecture firm) and were made use of in the consumer research. The form of engagement with the users was chosen to be done indirectly through Kopla (research agency) and an online application. This may sound like Skanska was applying the lowest level of engagement possible while still extracting the needed input. The indirect relationship through Kopla was chosen because as a matter of fact potential customers or users are hard to come by when it comes to specialized housing concepts; it is nearly impossible to find somebody who is committed to buying a certain product which is still in the distant future, so the pool of participants that Kopla had access to was arguably an adequate way to reach suitable participants. Regarding the indirect and electronic engagement of potential customers for research purposes the business development manager, who already had experience with ordinary focus groups, commented:

"[...] we've done lots of these discussions around the table and there's always somebody dominating the discussion and there is always somebody who is too shy to say anything. But now when they were typing even the loud ones had to stop and type" (business development manager).

In this case the engagement through the online panel was a positive experience for the project team. Further the online panel allowed every participant to give the first answer in isolation before the group discussion started, something very difficult to achieve in a face-to-face discussion with several people. Further the participants could be shown pictures and plans in an easy manner through the online panel. This doesn't mean that this form of engagement is suitable to all kinds of projects, but it raises the important question of how to engage stakeholders and suggests that different modes of engagement might result in different outcomes. Even though the market research was evaluated as successful by the project team the question needs to be asked whether there could have been an option that would have resulted in superior insights. The mode of engagement was working very well;

but were the stakeholders the most potent ones to contribute to the innovation? What if the Boklok customers from the projects that were built between 2003 and 2005 were engaged in the product development process? The question is not whether the insights might have been more valuable, but whether a framework to scan for potential stakeholders might have revealed them as a potential source of insight. After all they have lived in these houses for years and can be considered experts in that sense. The point is that when engaging stakeholders the question is not only how but also who might be of most value in terms of contributing to the innovation.

Following the online panel the results were compiled into a report by Kopla and presented at Skanska offices. The project manager invited the architect to participate in the presentation before knowing the results of the panel himself:

"We didn't filter any of that feedback and the architect said to me afterwards that this is the best feedback that he ever got of his work because it was really scientific and we had hundreds of people evaluating his work. And when we got the feedback I thought that it would mean delay in the schedule because the changes were going to be so big, but actually it was just maybe in a day or two the architect came back with a new layout, because he was so motivated by this good feedback that he did the design work so quickly" (project manager).

The architect, who had already completed around 3000 projects in his career, evaluated the feedback as "positive and inspirational" and also perceived the personal involvement as valuable throughout the whole process. Again the theme of stakeholder engagement takes a central role. How does the unfiltered and personal feedback influence the quality of the subsequent work? What are the dangers of exposing a stakeholder, in this case the architect, to information that was not previously checked? Can stakeholder engagement be used to model information flows in a way that contributes the innovation process? Especially the last question is one of importance when it comes to managing the stakeholders involved in the project.

Another relevant stakeholder interaction is with the city of Vantaa. Skanska was able to get a reduced price for the plot of land that was bought from the city of Vantaa for the first project due to the city's housing policy:

"We have a housing policy that says that if there is some [...] new models for affordable housing we can sell the plot cheaper" (Vantaa housing director).

Because Boklok aims at offering affordable housing they qualified for the reduced plot price. It can be argued that by inviting the city to the stakeholder workshop where the concept was pitched to all stakeholders, the understanding of Boklok and its requirements increased. This was also the intention of the project manager:

"[...] we have been communicating more and clear to municipalities on what Boklok is and how we can build affordable quality housing and what does it require from the municipalities" (project manager).

Standardization in Boklok is an important factor when it comes to keeping the costs low. Engaging the municipalities is a way of communicating that it is necessary for all to come together in order to make building affordable housing easier. At the time of research Skanska has only been working with two municipalities and no problems have surfaced yet. Nevertheless, the strategic intent to make standardization possible was implemented through strong communication and involvement. Apart from the stakeholder workshop this falls more into the category of stakeholder management. The city's interest is to provide good and affordable housing to all its citizens and it can be achieved by making regulations regarding building requirements more alike among municipalities. The initiative to raise this issue has to come from Skanska, as they are the ones facing the problem. In this case, stakeholder management and engagement contributes to the innovation by making the innovation possible from a cost perspective.

Another incident that deserves attention from a stakeholder thinking point of view is the neglected safety standards on the construction site by Stora Enso:

"[...] when you are working with several stakeholders you have to be very good at communicating and not assuming that much. And that was something we realized for example with safety. Stora Enso's factories are very keen on safety but then it turned out that their construction site was not keen on safety and that was a big learning for us" (business development manager).

This episode was resolved by training Stora Enso construction workers on Skanska's safety park. The question is whether this incident could have been avoided through better engagement of Stora Enso in the process. Stakeholder engagement leads to increased communication and better understanding of the partners, meaning that hypothetically it would have been the right tool to prevent such incidents,

The Facebook group that was established is another engagement strategy that has interesting implications:

"And I want to maintain that, even though the Facebook group means more work for us. I still see it as very beneficial for us because we, you know, consumer insight to me is very much about that. To dig into this soft information and hear and see what they are discussing and what they are interested in and what they are focusing on, because they might be totally different things" (project manager).

The Facebook groups served as an important source of information for Skanska. The crucial aspect of this form of engagement is that it creates a rather natural environment for people

to talk to each other. In this environment topics surface that would not in other engagement settings.

It has been shown on several occasions for Boklok how decisions related to stakeholder thinking can affect the formation of the innovation. Especially the modes of stakeholder engagement with customers, potential customers and the architect have shown how the innovation process can benefit from this.

5.1.2 Patrimonio Hoy

Patrimonio Hoy aims to reach a market segment that had negative experiences with the commercial sector as they have been cheated over generations by people who had no good intentions. The director of Patrimonio Hoy was aware of the distrust that inhabited the potential customers; therefore a major aspect of the program was to establish trust between the stakeholders.

Already the choice of distributors and suppliers is made in line with several criteria. Whereas most of the criteria have a functional basis one criterion asks for a good understanding of and appreciation for the business model. This essentially means that CEMEX wants to work with distributors who share a certain understanding of the people's needs, their situation and values. This ensures that distributers treat low-income customers just as those from higher income segments, an important aspect in building trust. These considerations can easily be put into stakeholder terms; CEMEX essentially has to ask itself which stakeholders it wants to work with by determining how the potential stakeholders fit into the stakeholder network and how their relationship to others would influence the network.

Whenever Patrimonio Hoy is introduced in a new area a group session takes place at the local cell's office. This ensures that the community learns about Patrimonio Hoy at the same time and avoids that people feel left out or left behind, as this would lead to a situation where members of Patrimonio Hoy are subject to suspicion and envy. This would subsequently lead to a situation where members do not promote Patrimonio Hoy to neighbours and friends, thereby drastically slowing down its spread and lowering revenue streams. Putting this into stakeholder terms CEMEX has to give thought to how the relationship between customers and non-customers is altered within the community. This is extremely significant and a highly complex situation to solve, especially from a stakeholder perspective. The community has to be prepared for this and the group sessions are an adequate means to do so.

Another aspect of the program is that women are crucial to the success of the program:

"In the low-income market, the man is the provider and his only worry is what to bring to the house the next day. But women see daily that the children are growing up in the streets. We discovered that women ensure the future – they are worried about what

kind of life they can expect for their children, and about their education. When you deal with a woman, you can be more secure that she will respect agreements – on average – than if you sign with a man. It's very difficult to gain her confidence, but when we do, it's a guarantee of her loyalty" (program director).

Research done by the Patrimonio Hoy team also revealed that while men are responsible for bringing home the paycheck, women are responsible for managing the savings. Hofstede (2010) categorizes Mexico as short-term oriented and also low in uncertainty avoidance, which makes it even more important that those family members are signed up who tend to have a more future oriented and structured mindset – the women. This leads right to the theme of customer retention in Patrimonio Hoy, whose business model builds on constant revenue streams. A consultant explains:

"We have found that support groups are extremely important for solving the issue of customer retention in lower income communities. People must give each other ongoing motivation, and listen to each other's challenges in keeping with their goals. Any kind of grassroots community development or local partnerships that facilitate these support groups and local networking make a difference in retention" (C1).

Organizing these support groups is a form of stakeholder engagement that aims at assisting in customer retention. The success of Patrimonio Hoy depends on every single customer who is able to finish the program and build a room or full house. Only then other members in the community are convinced and motivated to participate as well.

The promoters for the program are recruited from the community of which 98% are women. They receive a sales force training prior to starting their work:

"When we work with companies, we always include things like sales force training. We find we need to intervene in different areas like customer contact training because this is part of the offering, part of the experience [...]. It's part of getting the relationship right" (consultant 1).

That the hawking was done by women from the community is also a decision that, from a stakeholder perspective, makes a difference to potential customers. Potential customers probably trust promoters more when they are enrolled in the program themselves and are from within their own community. Further women understand other women's mindset better when it comes to planning for the future of the family. A last piece of evidence comes from the savings groups that the socios form. The fact that the group size is limited to three has implications for the relationship between the members. Small groups, so it was found, tend to form stronger relationships and are more likely to help each other when it comes to emergencies.

As it can be seen the stakeholder network in Patrimonio Hoy is very fragile and requires quite some considerations. Working with the right distributors, managing the relationship between customers and the community, signing up preferably women, the size of the

savings groups and appointing community members as promoters are all decisions related to stakeholder thinking, which taken together make up for a considerable part of the innovation's success.

5.1.3 Comparison: Boklok – Patrimonio Hoy

A huge difference between the two cases is that for Boklok it was the process of innovating that was looked at, whereas for Patrimonio Hoy it was the implemented business model that was subject to analysis. Even though in both cases the objective was to provide affordable housing the approaches were extremely different. In terms of stakeholder thinking though they share several characteristics.

In both cases it became apparent that it is not merely the relationship between a certain stakeholder and the firm that is of importance. Also the relationships between other stakeholders deserve attention. For Boklok the best example is how the potential customers were engaged through an online panel and how the architect received unfiltered high quality feedback from the potential customers. For Patrimonio Hoy the signature example is that the relationship between customers and the community needs to be managed in order to successfully establish the program within the community. For both cases stakeholder engagement was the key to deal with these situations. By actively bringing the right stakeholders together positive effects could be observed. In general, stakeholder engagement was the predominant tool in both cases. It was relevant because it allowed the firm to alter the relationships between stakeholders in the network.

5.2 Answering the Research Questions

The research questions for this study have been formulated by dividing a leading research question into smaller questions. First the sub-questions will be answered and then the overarching research question will serve as an aggregation of the findings.

Q1: How can stakeholder theory be developed further through applications in an innovation context?

Already in the very beginning of the analysis it became apparent that existing stakeholder categorization schemes are not particularly useful in an innovation context. Wayne Gould (2012) already observed this when he attempted to unite stakeholder engagement with open innovation, though he doesn't make any suggestions on how to categorize. Primary and secondary (Clarkson, 1995) or strategic and moral (Frooman, 1999) as stakeholder categories are too chunky to be particularly useful. Also power, legitimacy and urgency (Mitchell et al., 1997) are not sufficiently suitable to contribute to a better management of stakeholders in an innovation context. The categorizations need to be tailored; in the case of Boklok, for instance, it might be useful to know who is a contributor to the innovation,

who a profiteer and who both; or which engagement strategies are adequate for a certain set of stakeholders and then develop a categorization based on that. In the case of Patrimonio Hoy it is again different; trust plays a major role and for the project management it might be useful to categorize stakeholders according to their trust enhancing capabilities. This could reveal the weakest link in the value chain and management can focus on improving there. The possibilities are wide and depend strongly on the project. This suggests that it might not be the best way to develop a general categorization for stakeholders in an innovation context but rather to develop a framework that allows developing tailored categorizations for specific projects, depending on the purpose. Reflecting on stakeholder theory in general this would mean that the theory needs to go into more detail when it comes to evaluating and managing relationships. Managing interests is not sufficient anymore as interests alone are not representative for the complexities that are inherent in relationships. The innovation context especially demands more fine-grained stakeholder engagement strategies, thereby revealing shortcomings but also opportunities for the theory. Applying stakeholder theory to innovation contexts can spur development of more detail-oriented aspects as demonstrated through categorizations, which in turn can lead to stronger general frameworks.

Freeman (2010) attributes stakeholder management to be mainly a tool for managing conflicting interests. In innovation projects synergies among the stakeholders are just as important as managing the interests of stakeholders from the external environment. The innovation context presents an excellent opportunity to develop stakeholder engagement strategies further and focus on synergies in the network.

Q2: What stakeholder concepts are most capable of contributing to innovation literature?

It has been shown in the literature review that several innovation concepts that explicitly highlight the need for collaboration with other entities are also in need for tools to do so (e.g. Chesbrough, 2003; Van de Ven, 1999). From the analysis of both cases it can be deduced that stakeholder management and stakeholder engagement have the potential to provide the most value to innovation literature. If the innovation project is seen as a sphere and all stakeholders that are participants in the project reside within this sphere, then stakeholder engagement is mostly relevant to these participants whereas stakeholder management is more relevant to those outside of the sphere – the wider environment of stakeholders in which the project is embedded.

This means that stakeholder engagement is more suitable to manage the innovating partner network. Stakeholder engagement strategies determine how the partners are engaged in the firm's innovation activities. Open innovation deals with questions of how external knowledge is integrated, which internal knowledge is released and with whom it is shared (Chesbrough, 2003). These are exactly the questions that stakeholder engagement can help to answer. Stakeholder engagement strategies can determine which partners in the innovation network are eligible to receive a certain information or are invited to meetings. It

helps to answer these questions while at the same time looking at how the relationship might change. If partner A is not invited to a meeting but partner B is, will this change partner A's commitment to the project? How important is the information in the meeting to partner A and the success of the project? How will partner A and B's relationship change if A is not invited to the meeting and how might this influence the success of the project? These questions seem trivial but they can make a difference as the case of Boklok showed, where the findings of the market study spread positively through the network because stakeholders were engaged in a certain way. Turning to lead-users for innovation potential would also benefit through application of engagement strategies; how can this lead-user be best engaged in the firm's innovation efforts? What kind of relationship does he/she expect with the firm in order to share his knowledge? Posing these questions can help in making the right choices when it comes to approaching lead-users.

Stakeholder management on the other hand is more useful in dealing with how the innovation project is embedded in the wider stakeholder network, where communities, governmental bodies, suppliers and competitors are situated. In essence this is about dealing with stakeholders who may affect the outcome of the project. In Boklok the city of Vantaa had to give its blessing to the construction of the project, which involves construction methods, building regulation and also the plot allocation. The city is not contributing to the innovation itself but it is a crucial stakeholder whose interests need to be accounted for. Interestingly, this was acknowledged by Skanska and led to the invitation of the city representatives to the stakeholder workshop, essentially a stakeholder engagement strategy for this particular occasion. This also shows the sometimes blurred lines between stakeholder management and stakeholder engagement. The main point is though that both concepts are suitable to contribute to innovation literature.

Q3: How can the findings of this study contribute to the innovation sandbox concept?

Prahalad (2006) suggests that in order to achieve breakthrough innovations one must start by cultivating/identifying constraints, but he doesn't go into detail on how this is done. In Boklok as well as Patrimonio Hoy an initial market study was conducted and many of the constraints were deduced from it. Naturally the constraints were developed in a way so that it would still be possible to achieve them. For Boklok, for instance, the market study concluded that a single mother (pre-school teacher) with one child has to be able to afford an apartment at a certain monthly cost; and for Patrimonio Hoy providing access to credit before selling cement to the poor was the outcome of the foregoing market study. In both cases constraints were developed from primary empirical data and with clear reasoning, which means that the constraints were not made up from a leading vision alone.

In general the notion of constraints, the definition and meaning, is very hard to pin down logically. Every new product development process arguably starts with constraints; already by defining the target group or the materials to be used constraints are established. It could

even be argued that the market itself is a set of constraints for the innovator as it points out which segments and product categories are saturated. Nevertheless, constraints are useful to define the boundaries in which innovation takes place, thereby not suggesting possible solutions right away. For Patrimonio Hoy improving brand perception and earning trust among the poor was another constraint that was defined through the market study, but it didn't suggest a solution at the moment of definition. Arriving at the main theme, something that Prahalad (2006) probably underestimated is that setting constraints not only forces unconventional thinking within these boundaries but also leads to the need for capabilities and competencies outside of the firm's own repertoire. Prahalad (2006) highlights the ecosystem but undervalues the importance of the stakeholder network that evolves out of the constraints. As already outlined in the literature review the following model, with stakeholder interaction/management as an additional element, was developed from Prahalad's (2006) innovation sandbox model.

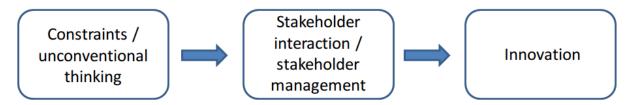


FIGURE 11 - IMPROVED INNOVATION SANDBOX MODEL

In the case of Patrimonio Hoy it was necessary to have community members do the promotion of the program within the community. An employee from CEMEX, no matter how well trained in the art of persuasion, would still have the disadvantage of not being a trusted person in the eyes of the community. In the case of Boklok it would not have been possible to develop such a tailored product if it weren't for the stakeholder engagement practices that were applied. At least from these two cases it can be said that stakeholders' participation was a decisive step between establishing constraints and arriving at a successful innovation. Generally speaking though, it depends on what the constraints demand in terms of capabilities, competencies, knowledge and resources. If the constraints of the innovation sandbox can be overcome with internal competencies and resources, there simply is no coercive need to involve other stakeholders. In the other case though there are two options. The first one is for the firm to develop whatever is needed by itself, which can arguably take a long time; or second, as suggested in figure 12, stakeholders who have these capabilities are involved. It is argued here that in the sense of breakthrough innovations, as Prahalad (2006) expresses it, it is more likely that external stakeholders need to be involved in order to innovate successfully in an acceptable timeframe.

Q4: How can managers benefit from applying stakeholder thinking to innovation projects?

Though being significantly different, both cases have shown that relationships to stakeholders and between stakeholders can play a role in the innovation process and subsequently also for the outcome. From a managerial perspective this means that more consideration should be given to the "design" of stakeholder relationships. It is argued here that actively giving thought to the consequences of what a certain relationship design will trigger can positively influence the process and value creation. Innovation is not merely about combining certain competences, capabilities, knowledge and ideas; it is also about how these are put together and how the stakeholders who possess them interact with each other. The manager of the innovation project has to understand the firm as the platform where innovation takes place, which is in a sense how Lee et al. (2012) describe their coinnovation platform. The manager decides how strong certain stakeholders are being engaged in the project, thereby determining how much contact they have to other partners in the stakeholder network. Thereby it is possible to control to some extent the flow of knowledge, ideas and general information between stakeholders.

Again the aspect of stakeholder management being mainly seen as a tool for managing differing interests on a corporate as well as project level has to be brought in (Freeman, 2010). Taking this thought a step further the practice of dealing with conflicting interests can be labelled as a "post-commitment management", that deals with stakeholder issues after a decision to go forward with a certain project is made. But there might be much more value in applying stakeholder analysis as a "pre-commitment tool", evaluating stakeholder constellations for various projects. Especially for innovation projects practitioners might pay more attention to potential synergies in their innovation partner networks and realize the projects that are most promising in terms of synergies and value for the whole stakeholder network.

Q: How can stakeholder theory and its concepts contribute to understanding innovation?

The answer to this question aims to summarize what has been discussed in the previous sections. Stakeholder theory essentially has the tools to advance the understanding of innovation but they need to be customized in order to better understand innovation through a stakeholder lens. Stakeholder categorizations, management models and engagement strategies need to undergo adaptions that make them more effective in the new context. In general, stakeholder theory has to depart from solely managing interests and has to immerse itself in the lives, values and mindsets of the stakeholders it aims to manage and engage. Practitioners have to learn that relationships require a more fine-grained understanding in order to be effectively managed.

5.3 Limitations

The major limitation of this study is that it is a single case study. The complementary case supports the core arguments that are put forward but as shown in the discussion the cases are significantly different in nature. Only a larger amount of cases would allow for deeper grounded implications and generalizability. Nevertheless, the intention of this study was to investigate the potentials that are inherent in the combination of stakeholder thinking and innovation.

Another debatable limitation is that stakeholder thinking can be easily interpreted into any form of business, as business naturally takes place between humans who have relationships with each other. As the saying goes: With a hammer everything starts to look like a nail; ergo, over-interpretation of the findings is a risk in this study. Being conscious of this the author has tried to be careful in this regard.

Finally it has to be stated that it cannot be determined to which degree stakeholder thinking is responsible for the successful innovations. The chain of evidence suggests that it does but internal validity is definitely a weakness in this study.

5.4 Recommendations for Future Research

As outlined in the limitations, research that looks at a larger set of cases would be required in order to more accurately measure the actual effect that stakeholder management and engagement have on the innovation process. This would provide especially practitioners with better grounded evidence on how their decisions regarding stakeholders affect the innovation and would allow for better resource allocation when it comes to engagement strategies.

This study has shown the potentials that lie in an application of stakeholder theory to an innovation context but the innovation concepts have been generalized in their need for stakeholder thinking. In line with Wayne Gould's (2012) attempt to unite stakeholder engagement and open innovation it is suggested as a next step to concretise the potentials in regards to one specific innovation concept.

Andriof and Waddock (2002) have argued that companies are moving from reactive towards proactive strategies in dealing with their external environment. Innovation, so it can be argued, is in itself a proactive strategy. Following, research on how stakeholder thinking might serve as a selection tool for innovation projects would be another opportunity to advance stakeholder thinking in the realm of innovation. Innovation projects could be chosen on a preliminary stakeholder analysis which determines the level of possible synergies.

More detailed research on stakeholder categorization would also help to create a more profound basis for other researchers who want to apply stakeholder thinking in an

innovation context. Also the concept and characteristics that define a relationship are in need for a better understanding as it builds the basis for many of the considerations that are inherent in stakeholder thinking.

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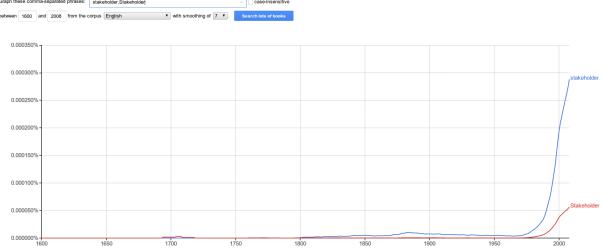
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Appendices

Appendix 1 – Google Books Ngram Viewer



Appendix 2 – Boklok house



(Photo taken during a site visit to Kivistö near Helsinki, Finland)

Appendix 3 – Sources for Patrimonio Hoy

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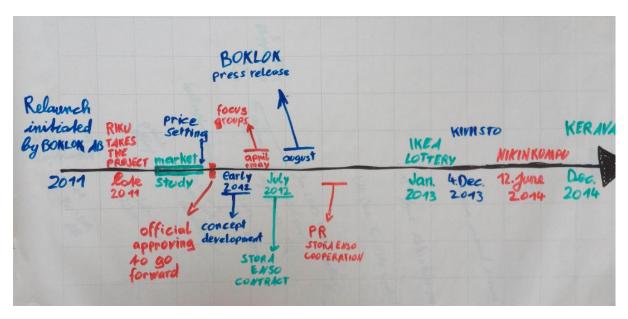
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Market Expansion Partners is a consultancy that helps companies enter markets previously declared impenetrable, saturated, or unprofitable. Market Expansion Partners helped develop the blueprint for Cemex's Patrimonio Hoy program. The two consultants that were involved are abbreviated with C1 and C2.

Appendix 4 – Timeline used in interviews to facilitate chronological understanding



Appendix 5 – Participants in the stakeholder workshop

Company	Role
City of Vantaa	Housing affairs manager
City of Vantaa	Layout designer
City of Vantaa	Building
Stora Enso	Development manager
Stora Enso	Technical Designer
Ark7	Architect
IKEA	Vice store manager
Skanska Kodit	Project manager
Skanska Kodit	Concept development
Skanska Kodit	Marketing and communication
Skanska Kodit	Consumer insight
Skanska Kodit	Interior design
Skanska Kodit	Land management
Skanska	Construction manager
Skanska	Purchasing
Hanken University	Facilitator

Appendix 6 – Interviewees for Boklok

Interviewee	Organization	Date and length
Business Development Manager	Skanska	05.05.2014 / 120 min
Market and Consumer Analyst		
Market and Consumer Analyst	Skanska	27.02.2014 / 45 min
Project Development Manager	Skanska	13.05.2014 / 75 min
Business Development, Director of Housing	City of Vantaa	27.05.2014 / 55 min
Affairs		
Business Development, Housing Specialist		
Housing Specialist, Land Use and Environment		
in the Business Services Sector		
Architect	Ark7	14.06.2014 / 55 min
8 customers from Nikinkumpu (informal)	Customer	12.06.2014 / 3min each
2 customers from Kivistö	Customer	24.06.2014 /15 min each