

BoKLOK, SWEET BoKLOK

A JOINT INNOVATION OF SKANSKA AND IKEA



AUTUMN 2007 - TERM PAPER

I ABSTRACT

This paper presents an innovative concept for functional, low-priced, privately-owned housing products called BoKlok and analyses the development as well as the commercialization of this concept as a joint effort of the home furnishing company IKEA and the international construction enterprise Skanska.

In the first chapter a short review on academic theory related to the paper is offered. In the second chapter the named housing products are introduced to the reader, their innovative characteristics are pointed out and an overview about the history of the concept as well as the current state of business related to the BoKlok products is given. In the third chapter the business model that is applied for merchandising BoKlok homes is analysed in detail. Chapter four and five each present a general overview about the companies IKEA and Skanska, which cooperated in the development project for the BoKlok concept. The development process as such is reviewed explicitly in chapter six. In chapter seven factors that significantly influenced the project results are identified and discussed in respect to relevant academic findings. Chapter eight illustrates how the BoKlok concept is continuously developed further in the present. The work concludes with providing some future perspectives for the concept in chapter nine.

Cover Picture: BoKlok home, model "Älmhult" **Source:** www.boklok.com

II ABOUT THE AUTHORS

Victoria Gómez Quesada from Spain attends the fourth and final year of the Spanish degree course in Publicity and Public Relations at the University of Alicante, Spain. Victoria was responsible for the chapters 2 and 3.

Contact: vicky_cq@hotmail.com

Claudia Idone from Italy attends the final year of the master's degree course in Management and Production Engineering at Politecnico di Milano in Milan, Italy. Claudia was responsible for the chapters 1, 4 and 9.

Contact: claudia.idone@gmail.com

Norman Meuschke from Germany attends the fifth and final year of the German degree course in Information Systems at the Otto-von-Guericke-University in Magdeburg, Germany. Norman was responsible for the chapters 6, 7 and 8.

Contact: norman.meuschke@googlemail.com

Nicolas Teboul from France attends the final year of the master's degree course in Electronic Engineering at Polytech'Nice-Sophia in Biot, France. Nicolas was responsible for the chapter 5 as well as for the layout of this paper.

Contact: teboul@stud.ntnu.no

III TABLE OF CONTENTS

| | |
|---|-----------|
| I ABSTRACT..... | 2 |
| II ABOUT THE AUTHORS | 3 |
| III TABLE OF CONTENTS | 4 |
| IV PREFACE | 6 |
| V SOURCES OF INFORMATION AND METHOD OF ACQUISITION | 8 |
| 1. THEORY RELATED TO THE PAPER..... | 9 |
| • MARKET ORIENTED INNOVATION..... | 9 |
| • NETWORKING | 11 |
| • PROJECT MANAGEMENT..... | 13 |
| • BUSINESS MODEL | 17 |
| 2. THE BoKLOK CONCEPT | 18 |
| • WHAT IS BoKLOK? | 18 |
| • BoKLOK'S HISTORY AT A GLIMPSE | 18 |
| • FRANCHISING STRATEGY | 19 |
| • BoKLOK IN FIGURES | 19 |
| • PRODUCT BASICS | 22 |
| • THE DIFFERENT BoKLOK MODELS..... | 24 |
| 3. BUSINESS MODEL FOR BoKLOK | 32 |
| • VALUE PROPOSITION | 32 |
| • TARGET CUSTOMER..... | 33 |
| • CUSTOMER NEEDS | 33 |
| • DISTRIBUTION CHANNEL..... | 33 |
| • VALUE CONFIGURATION | 34 |
| • CAPABILITY | 34 |
| • PARTNERSHIP..... | 35 |
| • COST STRUCTURE | 36 |
| • REVENUE MODEL..... | 36 |
| 4. IKEA | 37 |
| • HISTORY | 40 |
| • VISION AND STRATEGY..... | 42 |
| • INNOVATION AT IKEA..... | 45 |
| 5. SKANSKA | 47 |
| • SKANSKA WORLDWIDE | 48 |
| • VISION AND STRATEGY..... | 49 |
| • STRENGTHS | 53 |
| • MAIN PROJECTS OVERVIEW | 57 |
| 6. DEVELOPMENT OF THE BoKLOK CONCEPT | 59 |
| • EMERGENCE OF THE IDEA | 59 |
| • JOINT DEVELOPMENT PROJECT | 63 |
| • ANALYSIS | 66 |
| • DEFINING THE CONCEPT | 67 |
| • REFINING THE CONCEPT | 68 |
| • A NEW WAY OF CONSTRUCTION..... | 69 |

| | | |
|-------------|--|-----------|
| • | BoKLOK, THE PUBLIC AND THE MEDIA | 71 |
| • | COMMERCIALISATION OF THE CONCEPT | 72 |
| • | THE BoKLOK AB | 73 |
| 7. | ANALYSIS OF THE BoKLOK DEVELOPMENT PROCESS..... | 75 |
| • | NATURE OF THE INNOVATION | 75 |
| • | MARKET ORIENTATION | 76 |
| • | THE PROJECT TEAM | 79 |
| • | NETWORKING | 79 |
| • | SUCCESS | 80 |
| 8. | ONGOING DEVELOPMENT OF THE BoKLOK CONCEPT | 82 |
| • | ANALYSIS OF CUSTOMER NEEDS | 82 |
| • | NEW PRODUCT DEVELOPMENT | 82 |
| • | PROCESS IMPROVEMENTS..... | 84 |
| 9. | THE FUTURE OF BoKLOK | 86 |
| VI | LIST OF FIGURES | 89 |
| VII | LIST OF TABLES | 90 |
| VIII | LIST OF REFERENCES | 91 |
| IX | LEGAL INFORMATION | 93 |

IV PREFACE

This paper is a coursework within the course of Innovation and Information Management offered by the Department of Industrial Economics and Technology Management at the Norwegian University of Science and Technology (NTNU) in Trondheim during the autumn term 2007.

The given task was to choose a product or process innovation, to describe the respective development process for that innovation and to discuss important events and influencing factors during the development phase.

Being confronted with this challenge, we experienced the phenomenon, which our lecturers pointed out frequently throughout the course to be the hardest task whenever something new shall be created – Identifying the right idea to pursue. Many suggestions for possible innovations to analyse had been raised by the group members – innovations from the ICT industry, within the automotive sector, biotechnology and so on and so forth. We decided to discuss them in the restaurant on top of the Tyholt Tårnet, a TV tower in Trondheim. Several hours of intense discussions had already passed, and many suggestions had already been discarded for individually different reasons when the tower restaurant had turned into a position that allowed seeing the local IKEA store. “What about IKEA? They are always very innovative” one group member said. “Yes, I think; I read something about that they have started to offer complete houses in Sweden.” was the answer of another member. Although we only had some basic facts about the product at that moment, the whole group was quickly convinced that this should be the innovation we would focus on. The product was interesting, clearly innovative, the concept was comprehensible (not a complicated set of highly specialized technologies) and we believed that the product has the potential to cause a significant shift in its business sector.

Having the right idea is important, finding the right persons helping to realize it might be even more important. We were lucky enough to receive the generous support and advice of several persons that we would like to thank at this point.

First of all, we would like to express our deepest gratitude to our two main contact persons for this paper. Mrs. Inger Olsson, an engineer and Project Manager of Skanska in Sweden, and Mr. Lars Wild-Nordlund, the current Managing Director of BoKlok. Both dedicated much of their time and energy for answering our numerous questions during several interviews and through written communication. Without their kind help this paper wouldn't have been possible to be written. We appreciated the open and friendly way in which they supported us a lot. It has been a great pleasure for us to work with them.

Secondly, we would like to thank the whole “teaching team” of the course Innovation and Information Management – our professors Per Jonny Nesse and Alf Steinar Sætre, our teaching assistant Delia Proteasa as well as all guest lecturers for an interesting course and all the help and support they provided to us.

Trondheim, November 2007

Victoria Gómez Quesada | Claudia Idone | Norman Meuschke | Nicolas Teboul

V SOURCES OF INFORMATION AND METHOD OF ACQUISITION

Most of the information related to the development process of BoKlok in the past and in the present (chapter 6 and 8) as well as concerning the concept itself (chapters 2 and 3) have been collected through four interviews with our two main contacts, Mrs. Inger Olsson and Mr. Lars Wild-Nordlund.

Mrs. Olsson used to be the Project Manager of the BoKlok development project between 1995 and 1997. Later on she became the first Product Manager for BoKlok from 1997 until 1999. Mrs. Olsson provided us valuable information about the emergence of the BoKlok idea, the development of the concept and its early commercialisation within the time interval of late 1995 until 1999.

Mr. Lars Wild-Nordlund holds the position as Managing Director of BoKlok AB since June 2007. Before that, he used to work as Product Manager at the firm for two years. Prior to joining BoKlok in 2005, Mr. Wild-Nordlund worked with Skanska for a short time in the 1990's. In between he spent more than eight years within the Management- and IT-Consultancy industry. Mr. Wild-Nordlund answered our questions concerning BoKlok for the period between 1999 and late 2007 when this paper was written.

For providing a comprehensive overview about the topic, which we intend to be understandable for everybody, we amended the information about BoKlok as provided by our contacts with publicly available facts that we retrieved through intensive internet researches. Within the chapters 2, 3, 6 and 8 we abstain from highlighting exactly which information have been named by our contacts during our interviews and which have been retrieved by ourselves for the purpose of a better readability. The final version of those chapters has been reviewed and revised by our contacts in order to assure that the information presented is correct in its entirety according to the best of knowledge of all participants.

The chapters about theory related to the topic (chapter 1), IKEA (chapter 4) and Skanska (chapter 5) are not based on information from our contact persons, but on inquiries of ourselves. Furthermore, chapter 7 presents our personal independent analysis and judgement of the development process and its success. Chapter 9 provides a mixture of real plans concerning the future of BoKlok that Mr. Wild-Nordlund told us about and fictional scenarios that we added as a kind of suggestion.

1. THEORY RELATED TO THE PAPER

While trying to choose the theory topics that could fit this case best, we have been very doubtful. Not a single subject discussed during the lectures perfectly fits to BoKlok's development process. It became clear to us that, since we are discussing about innovation, its uniqueness is obvious. Every innovation is one of a kind. Likewise unique is the development process for BoKlok. In consequence, we decided to select those topics of the course of Innovation and Information Management that could "guide" our work through different stages. It won't be possible to strictly apply what we learnt to the case, but the theory could still help us to perform the analysis as complete as possible.

Some of the topics guided us to structure the questionnaire for the interviews, some other to explain the development process itself. The main references to theory will be according to the following topics:

- Market oriented innovation
- Networking
- Project management
- Business model

■ MARKET ORIENTED INNOVATION

Market orientation is the main topic that guides the analysis of the BoKlok case. It can be defined as "collection of market information regarding the present and future customer needs in the whole organisation, diffusion of market information between departments, and reaction based on this market information throughout the organisation" (Kohli & Jaworski, 1990). Furthermore, it "denotes that those working in a company recognise that the products they develop, make and sell, have to satisfy the needs of the users and do something about it" (Holt, 2000).

How does market orientation influence the development process itself? How does it enable to spot the opportunities that arise from the environment?

Market orientation implies listening to the "voice" of the customer in all product development phases, performing market surveys, external testing etc.. It also

entails a strong orientation of the whole organisation towards the market itself. It is like “a window on the world outside the company”, the world of customers – with their needs, standards, selection criteria and demands – a world that judges the value, which the product provides.

Product development involves technical, economic and market related factors throughout the process from the idea to the launch. The market analysis is the first step to do towards the customers, in order to:

- Describe the market structure
- Forecast the market development
- Explain how the market functions

This is very valuable, since it allows a company to learn from their customer's buying behaviour, discovering their hidden needs and wants, and even to prevent them.

Both the Manufacturer-Active Paradigm (MAP) and the Customer-Active Paradigm (CAP) (Figure 1.1) defined by Eric von Hippel and mentioned in (Kohli & Jaworski, 1990) explain how the organisation could exploit the opportunities that arise from the market for generating new ideas once the customers are involved in the process.

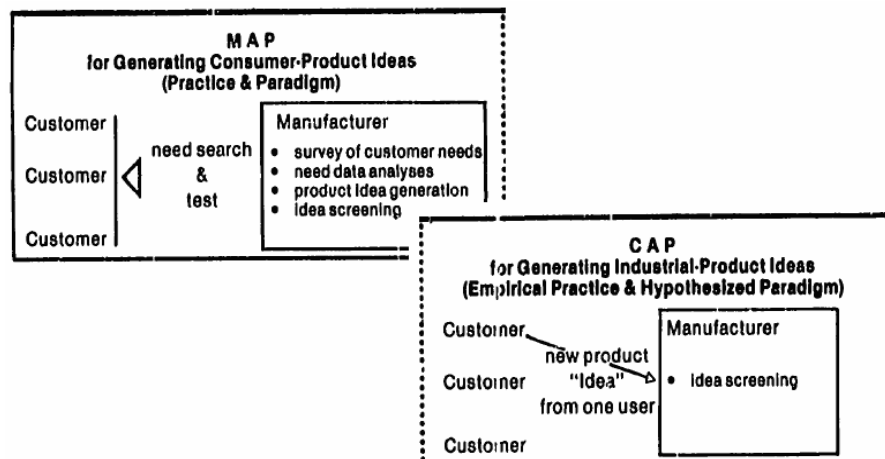


Figure 1.1: MAP and CAP
Source: (Kohli & Jaworski, 1990)

A customer focus – as explained in the article written by Ajay Kohli and Bernard Jaworski – is a central element of a market orientation since it involves obtaining information from customers about their preferences. The market orientation is the result of taking actions based on market intelligence that

includes the consideration of exogenous market factors, which affect present and future needs of customers. Together with the customer focus, an organisation should engage in so called coordinated marketing, since it is critical for a variety of departments and functions to be customer oriented.

The analysis conducted by the two mentioned authors reveals that at least one department should be engaged in activities geared towards developing an understanding of customers' current and future needs and the factors affecting them and that it should share this knowledge across departments in order to develop activities designed to meet selected customer needs.

■ NETWORKING

Network theory is the new frontier of strategic management. Historically, firms organized Research and Development internally and relied on outside contract research solely for relatively simple functions or products. Today, companies in a wide range of industries are executing nearly every step in the production process, from discovery to distribution, through some form of external collaboration. These various types of inter-firm alliances exist in many forms, ranging from R&D partnerships, to equity joint ventures, to collaborative manufacturing, to complex co-marketing arrangements. The most common rationales offered for this upsurge in collaboration involve some combination of risk sharing, obtaining access to new markets and technologies, speeding products to market, and pooling complementary skills.

Networks are the perfect habitat to create and share new knowledge, ideas, and best practices. They allow different types of valuable co-operation, such as: mutual exchange of technological information, joint development of activities, long-term technological collaboration.

The relationships should be set up with both suppliers and clients, but what about competitors? It is hard to find an answer to the secular debate "when to compete and when to cooperate", especially because the answer depends on the case. Still, it is interesting to understand that competitive advantage is no more the only key to reach success.

Co-operation is another driver to success (Figure 1.2). Usually performed by different forms of formalized and non-formalized relationships, such as: long term

agreement, joint company (as it is the case for BoKlok) and informal design; co-operation enables the company to exploit many opportunities that could arise from its environment.

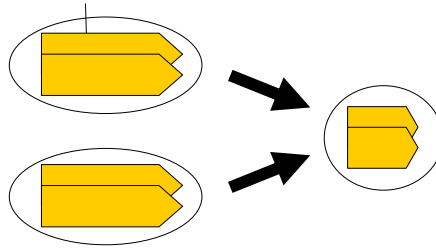


Figure 1.2: A type of co-operation: the joint venture
Compare to: (Bartezzaghi, 2005)

If we consider the relation “one-to-one”, there are two well known models that show the connection between a company and its client (or supplier). Depending on the type and number of functions involved in the relationship the diamond and the butterfly are distinguished, as shown in Figure 1.3.

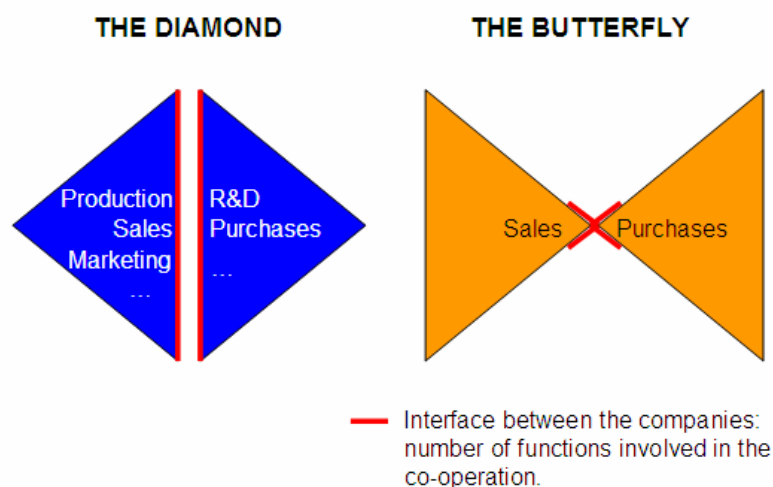


Figure 1.3: Co-operation one-to-one
Compare to: (Bartezzaghi, 2005)

Instead, when considering the relation “one-to-many” while analysing innovation, it is possible to spot two important opportunities, such as project network and innovation network. (Figure 1.4)

| | | Type of innovative co-operation | |
|--------------------------------|----------|---------------------------------|--|
| | | Project | Series of projects and/or other episodes |
| Number of cooperation partners | Single | Project relationship | Innovation relationship |
| | Multiple | Project Network | Innovation Network |

Figure 1.4: Analysis of innovative co-operation
Compare to: (Bartezzaghi, 2005)

When there is a regime of rapid technological development, research breakthroughs are so broadly distributed that no single firm has all the internal capabilities necessary for success. Many groups of competitors are likely to be working on the same targets; the rewards go to the swiftest. Thus, new technologies are both a stimulus to and the focus of a variety of cooperative efforts that seek to reduce the inherent uncertainties associated with novel products or markets. In addition to competitors, the relations could be established with both suppliers and clients.

■ PROJECT MANAGEMENT

This topic related to theory helped us both to prepare the questionnaire for the interview, and to analyse the process.

A project can be defined as “a set of people and other resources temporarily assembled to reach a specific objective, normally with a fixed budget and with a fixed time period. Projects are generally associated with products or procedures that are being done for the first time or with known procedures that are being altered” (Kalchschmidt, 2006).

Projects can also be regarded as an impulse process, as it is explained in Figure 1.5.

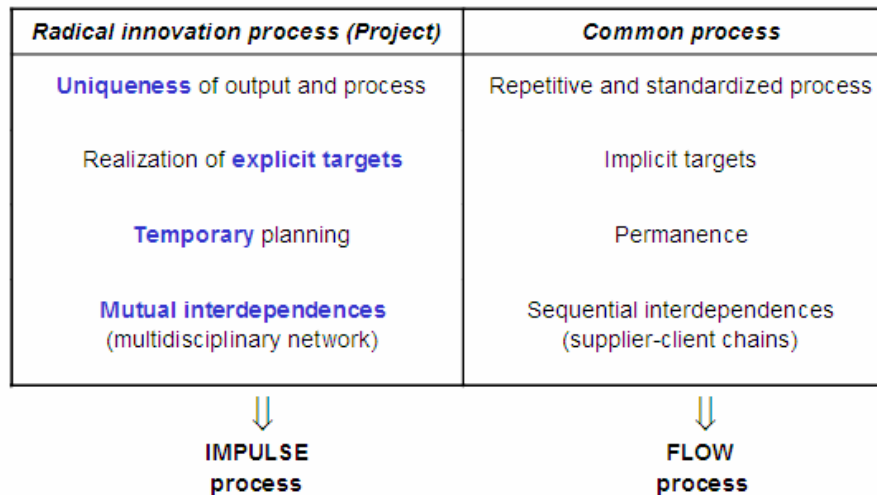


Figure 1.5: The project as an impulse process
Source: (Kalchschmidt, 2006)

Furthermore we can analyse the project lifecycle, as shown in Figure 1.6:

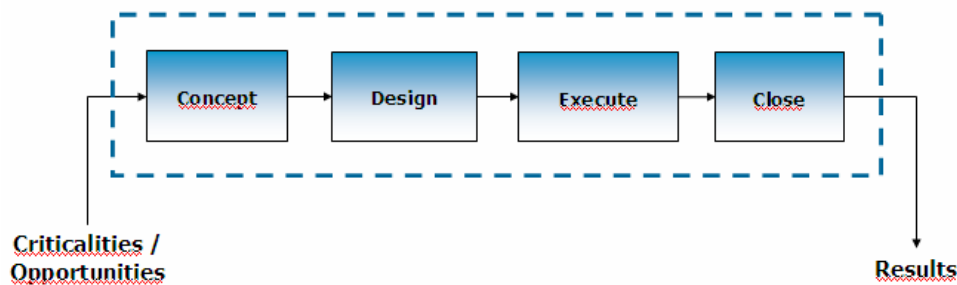


Figure 1.6: The project lifecycle
Source: (Kalchschmidt, 2006)

The success of a project depends on factors, like:

- Project objectives: project objectives and requirements should be clearly defined.
- Project personnel: project manager and project team members possess the required knowledge and capabilities.
- Support from above: the project is supported by the top management.
- Resources: money, time, material and people are sufficient to do the job.
- Communication and control: communication channels between project manager and senior management, project manager and team leaders, team leaders and team members, project group and client are in place and adequate.

As we can learn from the literature, the key principle of project management is the anticipation of constraints pursuable by a feed-forward control, a natural timing of the project based on milestones and delegation of the responsibility with alarm control by the project manager.

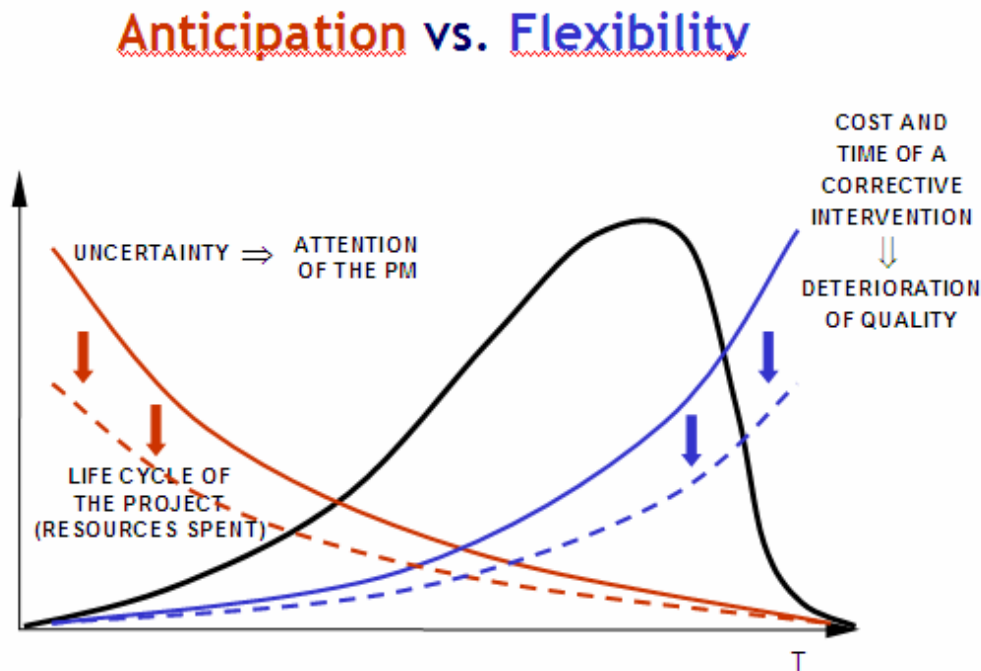


Figure 1.7: The project key principles
Source: (Kalchschmidt, 2006)

The project manager is the person responsible for achieving project goals. That guaranties integration, controls resource utilisation and solves conflicts.

What does a project manager do?

- Estimates and plans
- Assembles the team
- Reports and liaises with senior management
- Manages and co-ordinates the activities
- Manages unexpected changes

Furthermore, the project manager's importance and influence on a project, as a balance between role and responsibility, is explained in Figure 1.8.

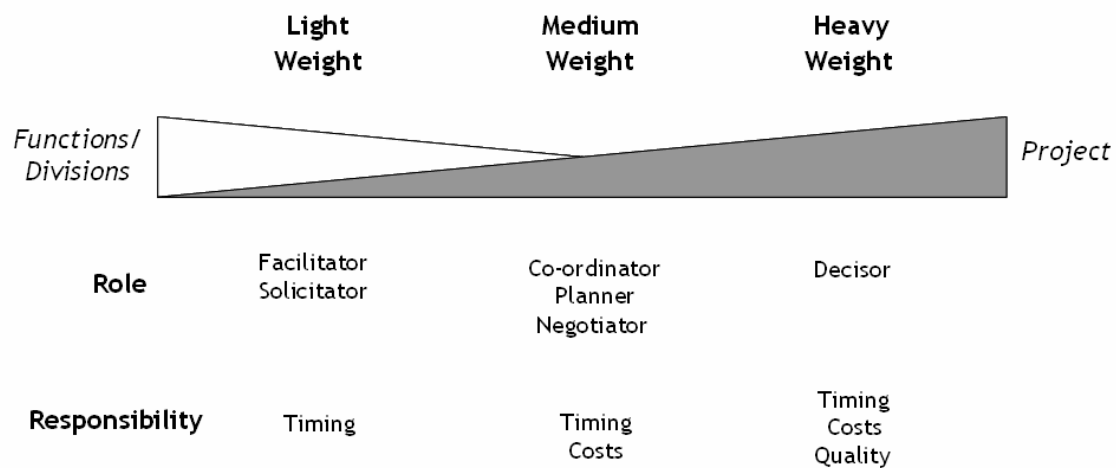


Figure 1.8: The weight of the project manager
Source: (Kalchschmidt, 2006)

Finally, we cannot forget to mention how the organisation impacts on the success of its projects. Literature suggests that there are different possible configurations, which the enterprise could choose from like a “dress”. These forms could be summarized as following:

| Structure | Advantages | Disadvantages | When to use it |
|---------------------------------------|--|--|---|
| Functional Structure | <ul style="list-style-type: none"> - Efficiency in the use of resources - Focus on functional-specific development of resources - Similar to day-by-day operations | <ul style="list-style-type: none"> - Low control on project objectives - Coordination difficulties - Interferences/noises from activities external to the project | When it is possible to divide the project into autonomous sub-projects that can be entrusted to functions; usually they are not very innovative |
| Project Structure (Task Force) | <ul style="list-style-type: none"> - Focus on project objectives and results - Clear responsibilities - No interferences/ noises from external activities - Higher motivation for team members | <ul style="list-style-type: none"> - Duplication/low flexibility of resources - Difficulties in finding resources - Problems in resources release - Detachment from functions (excessive autonomy) | Used for strategic projects, where failure is not accepted at all |
| Matrix Structure | <ul style="list-style-type: none"> - Efficiency in the use of resources - Focus on project objectives and results | <ul style="list-style-type: none"> - Complexity (dual command, responsibility without authority) - Interferences/noises - Conflicts and negotiations | When the project is innovative or a good result is desired, but it is not such strategic to justify very high expenses |
| Contract Team | <ul style="list-style-type: none"> - Not overloading of internal resources - Exploit of external specific competences | <ul style="list-style-type: none"> - Low control on project activities - Difficulties in retaining competences | When the project is innovative or strategic, but the company does not have enough competences or resources to be allocated to the project |

Figure 1.9: Project organisation forms
Source: (Kalchschmidt, 2006)

BUSINESS MODEL

Business model theory shall help us to properly analyse the new product that we are discussing about: the BoKlok concept.

“A business model is a conceptual tool that contains a set of elements and their relationships and allows expressing a company's logic of earning money. It is a description of the value a company offers to one or several segments of customers and the architecture of the firm and its network of partners for creating, marketing and delivering this value and relationship capital, in order to generate profitable and sustainable revenue streams.” (Osterwalder, 2004).

For describing the business model of BoKlok in chapter three, we refer to the framework (Table 1.1) developed by Alexander Osterwalder, which he presents and discusses within his thesis at Lausanne University.

| PILLAR | BUILDING BLOCK OF BUSINESS MODEL | DESCRIPTION |
|----------------------------------|----------------------------------|---|
| Product | Value Proposition | A Value Proposition is an overall view of a company's bundle of products and services that are of value to the customer. |
| Customer Interface | Target Customer | The Target Customer is a segment of customers a company wants to offer value to. |
| | Distribution Channel | A Distribution Channel is a mean of getting in touch with the customer. |
| | Relationship | The Relationship describes the kind of link a company establishes between itself and the customer. |
| Infrastructure Management | Value Configuration | The Value Configuration describes the arrangement of activities and resources that are necessary to create value for the customer. |
| | Capability | A capability is the ability to execute a repeatable pattern of actions that is necessary in order to create value for the customer. |
| | Partnership | A Partnership is a voluntarily initiated cooperative agreement between two or more companies in order to create value for the customer. |
| Financial Aspects | Cost Structure | The Cost Structure is the representation in money of all the means employed in the business model. |
| | Revenue Model | The Revenue Model describes the way a company makes money through a variety of revenue flows. |

Table 1.1: The nine business model building blocks

Source: (Osterwalder, 2004)

This model seems very complete to us and appropriate for analysing the impact of the factors that could describe a product and its success.

2. THE BOKLOK CONCEPT

■ WHAT IS BOKLOK?

BoKlok homes, pronounced 'Boo Clook', are ready-made, fully equipped houses and flats that consist of mostly wooden modules, which are pre-fabricated in a standardized factory-based production process. These parts are transported to the actual construction site and erected on spot usually within less than one day. The homes are intended to be a low-price, but nevertheless qualitative product and hence affordable for people having too little disposable income to afford buying another privately owned home in the market.

Therefore, BoKlok is an innovative concept of housing, owned by the homonymous company BoKlok AB, which combines space-saving, functional, good quality housing with a price that enables as many people as possible to afford a privately owned home. The literal translation of the words 'bo klok' into English is 'live smart' or 'smart living'. At the same time, this is the definition of the company BoKlok concerning what they offer to people who buy a BoKlok house.

■ BOKLOK'S HISTORY AT A GLIMPSE

The concept for BoKlok was created in Sweden when a considerable need for low priced houses became obvious in the mid-1990s. During this period, there was practically no construction of privately owned homes in Sweden, though the demand was high.

Given this situation, the home furnishing company IKEA and the international construction company Skanska decided to cooperate and provide a low-priced product that provides more people the opportunity to buy their own home.

The development project for BoKlok started at the end of the year 1995. In 1997 the first BoKlok homes were erected in Sweden. After having been established successfully in Sweden, the concept was exported stepwise to other Nordic Countries and the United Kingdom.

- 1997 – The very first BoKlok homes are built in Sweden.
- 2002 – BoKlok homes are introduced in Norway.
- 2003 – BoKlok homes are built in Finland.

- 2004 – The concept is brought to Denmark.
- 2005 – A new product, the Villa BoKlok, is launched in Sweden.
- 2006 – BoKlok expands its business to the United Kingdom.

■ FRANCHISING STRATEGY

The BoKlok AB, located in Sweden, owns and develops the whole BoKlok concept, e.g. decides how the different houses and their surroundings should look like, what they are made of, how they should be marketed etc. However, this company doesn't build BoKlok projects. The BoKlok AB issues franchise licences to other companies for building houses according to the concept. Their licensees obtain the right to manufacture the products within the limitations of the concept and sell them to customers. The licensee is responsible for all necessary costs entailed in establishing itself and the BoKlok projects on the market. Furthermore, the licensee has to pay a franchise fee to the BoKlok AB depending on the volume of erected houses. Today, BoKlok can be found in the five markets named above for which five different licensees are responsible.

While different Skanska branches are the responsible construction companies for building BoKlok homes in all Scandinavian countries, Live Smart @ Home (www.livesmarthome.com) is the company for building BoKlok properties in the United Kingdom

■ BOKLOK IN FIGURES

In Sweden, more than 100 individual construction projects with a total number of around 2,700 BoKlok apartments, spread over large parts of the country, have been finished already. Around 800 BoKlok homes are newly erected in Sweden every year. The introduction of the concept within other countries has increased the annual number of newly erected homes to exceed 1000 units and growing. Overall about 3,500 BoKlok homes have been built. (Figures as of November 2006)

In Norway, for example, BoKlok is operating in the area of Bergen, Oslo and Trondheim, where a BoKlok project is planned within the so called "Lerkendal Park" (Figure 2.1). The park will consist of six buildings (Figure 2.2) that are

scheduled to be finished for 2009. Figure 2.3 displays a principle animation of the model of BoKlok buildings that shall be erected e.g. at Lerkendal Park.

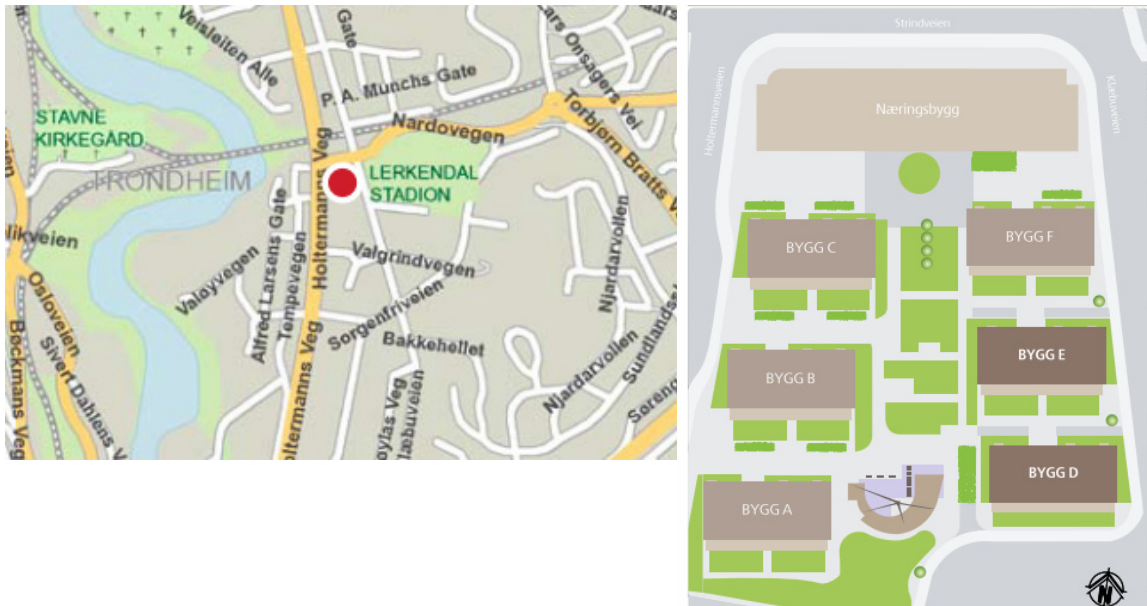


Figure 2.1 (left): Location of BoKlok construction site “Lerkendal Park” in Trondheim

Figure 2.2 (right): Overview of Lerkendal Park construction site

Source: (Skanska Bolig AS, 2007, p.6, p.8)



Figure 2.3: Animation of BoKlok models to be build e.g. within Lerkendal Park

Source: (BoKlok AB)

Most recently, the first permissions for BoKlok projects in the United Kingdom were issued in April 2007. 93 flats and houses will be erected at St James Village in Gateshead, a community in the vicinity of Newcastle Upon Tyne, Great Britain. The first move-ins in Gateshead will be in January 2008. Other planned sites in

the United Kingdom are Sussex, Greater London, Kent, Surrey, Hampshire and Teeside.

An overview of BoKlok construction locations as well as of all production facilities of BoKlok modules can be found in Figure 2.4.

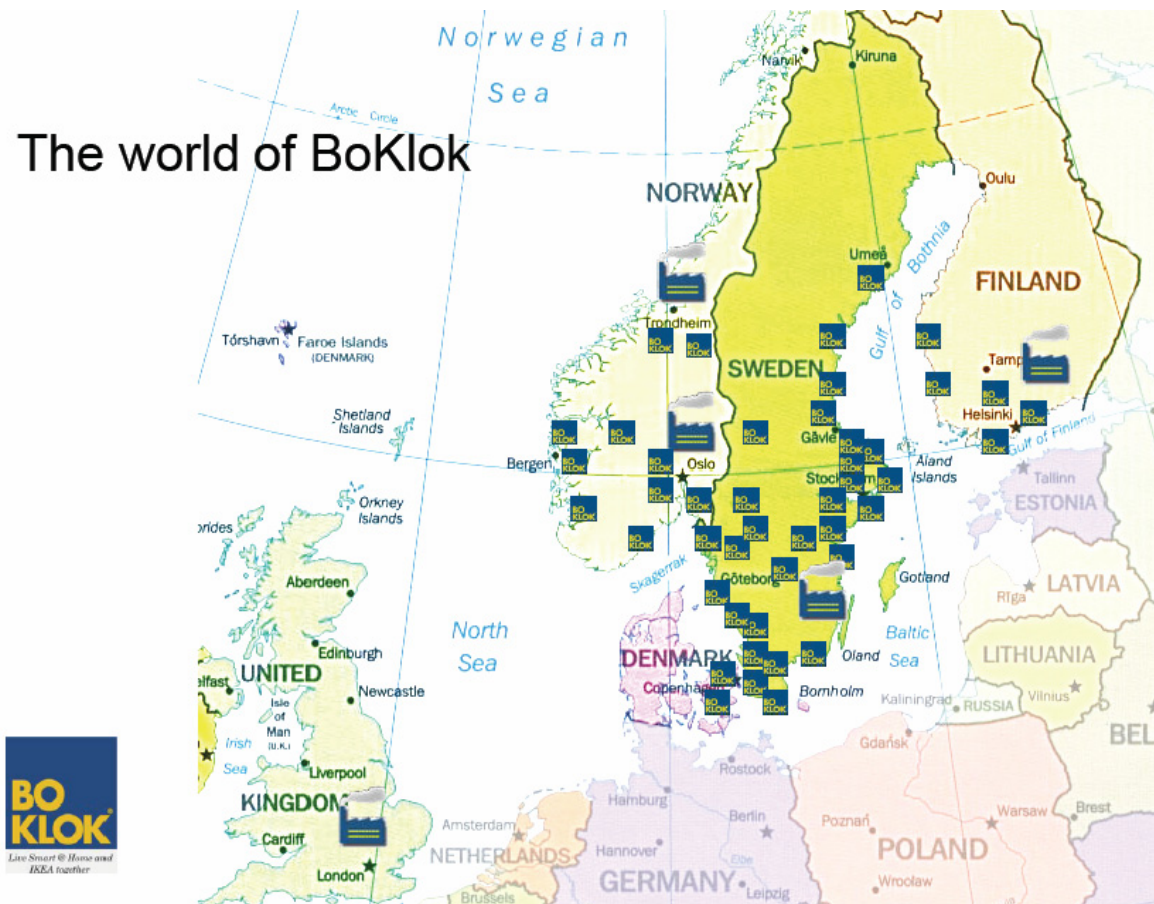


Figure 2.4: Overview of BoKlok construction sites and production facilities
Source: (Wild-Nordlund, 2006, p. 34)

■ PRODUCT BASICS

BoKlok homes are available in 3 basic formats:

- As flats within apartment buildings (model “Älmhult” and “Helsingborg”)
- As free standing detached houses (model “Villa BoKlok”)
- Most recently, as 1-, 2-, or 3-bedroom dwellings in terraced houses (model “Søndergaardbo” for Scandinavia, respectively models “Mölna”, “Ålsten” and “Järnbro” for the United Kingdom)

The most typical BoKlok arrangement is a two-storey block in L-shape having three apartments on each floor. Each apartment has windows on three different sides. The L shape is often extended with a low-rise building containing storage space for each dwelling thus making the block a U-shape. This way a semi-enclosed courtyard is created (Figure 2.5). BoKlok’s community approach is underlined by the fact that the houses are erected in small clusters. The habit of planting an apple tree for each block, which the residents can take care of together, providing a communal garden with landscaping as well as creating seating areas where neighbours can meet, are integral parts of each BoKlok project.



Figure 2.5: Layout of a typical BoKlok apartment houses cluster
Source: www.boklok.co.uk

As far as possible, the houses are erected in a way that exposes the larger outer areas to sunny directions, hence saving energy. In general, BoKlok houses fulfil high standards concerning energy efficiency and sustainability. According to BoKlok: “The philosophy is to build as much of the home as possible in the factory

in order to reduce vehicle trips and pollution to site. The homes will be constructed of sustainable materials, whether timber from managed woodland, or by using recyclable materials. The homes will be highly insulated to reduce heating bills, and where possible we will look at providing solar panels, or groundwater pumps to provide extra heating. All properties will be excellent eco-homes.”

All basic formats are available in different smaller variations e.g. to meet certain national regulations or to reflect certain local customer preferences, for instance concerning the outer facade or balconies. The Bestseller in Sweden has an exterior of blood-red weatherboard, square white windows and a pitched roof. In Denmark the blocks are usually equipped with black cladding and steel balconies. (Figures 2.6 and 2.7) In Norway, straight blocks, as in Lerkendal Park (Figure 2.3, page 19), rather than L-shaped apartment houses are constructed usually due to the more hilly terrain.



Figure 2.6 (left): BoKlok apartment house “Älmhult” with blood-red weatherboard
Source: www.boklok.com



Figure 2.7 (right): BoKlok apartment house “Älmhult” with black cladding
Source: (Wild-Nordlund, 2006, p. 5)

For keeping costs down while simultaneously meeting the customers’ preferences of living quite and close to the countryside, BoKlok homes are erected in more remote areas with the possibility of regeneration rather than in city centres (Figure 2.8). The purchase of sites that meet these criteria is carried out through BoKlok’s licensees in the respective geographical markets.

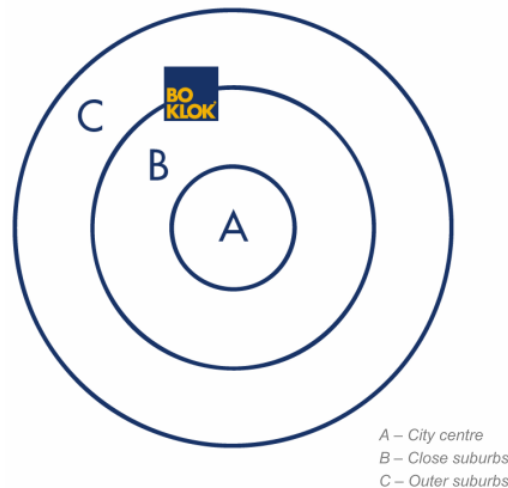


Figure 2.8: Schematic figure of suitable locations for BoKlok projects
Source: (Wild-Nordlund, 2006, p. 32)

As additional benefits when buying a BoKlok home, clients are given a SEK 3000 / £ 250 gift voucher for buying IKEA products and the assistance of an IKEA interior decorator is offered to them. Furthermore, BoKlok customers may obtain a discounted mortgage that is offered in cooperation with the financial service group Nordea. The named benefits are intended to help those people to overcome the stress that comes along with buying furnishing for a new house. Undoubtedly, IKEA also benefits from those promotions since they advertise IKEA's furniture as the ultimate accessory to the new BoKlok apartments.

■ THE DIFFERENT BOKLOK MODELS

The general interior concept is similar for all models of BoKlok homes. The houses have limited space in terms of ground floor. For still providing a feeling of space and light, all homes have ceilings that are higher than in average houses. This allows the installation of larger windows. Furthermore, the general layout is deliberately open-plan, wide and shaped in a way that is supposed to allow a functional and space efficient arrangement of furniture. Certain complete furnishing solutions, especially suitable for the layout of BoKlok homes, are provided by IKEA. Functional features like using sliding doors where possible and providing storage areas in a space saving manner are offered. Wooden materials like oak floors dominate the interior appearance of the dwellings. By default, bathrooms are fully equipped with shower, toilet and sink, are covered with tiles and allow the installation of a washing machine and a tumble dryer. A complete

modern style kitchen solution of IKEA is preinstalled in every home. The materials used are of high quality and durable. (Figure 2.9 and 2.10)



Figure 2.9 (left): 4 Pictures from the interior of a BoKlok home

Source: (Wild-Nordlund, 2006, p. 18)

Figure 2.10 (right): Example for the interior of a living room within a BoKlok home

Source: www.boklok.com

◆ APARTMENT HOUSES FOR SCANDINAVIA



Figure 2.11: Different versions of BoKlok apartment house “Älmhult”

Source: www.boklok.com, (Magnusson & BoKlok AB, 2006, p. 3)

The apartment house “Älmhult” (Figure 2.11) “features a conventional exterior with wooden panelling. The facades are painted in natural colours: Falun red, manor yellow and anthracite grey – colours that generate a sense of warmth.” (Magnusson & BoKlok AB, 2006, p. 4)



Figure 2.12: Ground plot of BoKlok apartment house “Älmhult”
Source: www.boklok.com

Within the model “Älmhult” 2-room apartments covering 50 m², 3-room versions covering 63 m² and 4-room models providing 76 m² of space are available. (Figure 2.12)

The model “**Helsingborg**” (Figure 2.13) is a variation of the model “Älmhult” according to (Magnusson & BoKlok AB, 2006, p. 4) it: “has a more city-like exterior. The houses feature a modern design style with tight lines and architecture inspired by functionalism. The facades are clad in smooth plaster and the inclined roof – known as a monopitched roof – adds a distinctive slant to the buildings.”



Figure 2.13: Different versions of BoKlok apartment house “Helsingborg”
Source: www.boklok.com

◆ APARTMENT HOUSES FOR THE UNITED KINGDOM

The apartment houses offered in the United Kingdom are based on the model “Älmhult”. Little adjustments have been made in order to meet British regulations. (Figure 2.14) The price of the houses is significantly lower than similar homes for sale or rent in the private market. Customers have the possibility to choose whether they want to rent or buy their homes. The prices are primarily directed at those people having an average household income of between £15,000 and £35,000 per annum. BoKlok offers the possibility to choose between innovative home purchase-options, such as shared ownership.



Figure 2.14: Exterior of a BoKlok apartment house in the United Kingdom
Source: www.boklok.co.uk

In Great Britain a 1-bedroom apartment covering 46 m² is offered for £99,500 (Figure 2.15)



Figure 2.15: Ground plots of 46 m² 1-bedroom flat in British apartment house
Source: www.boklok.co.uk

The corresponding 2-bedroom apartment covers 58 m² and costs £124,950 (Figure 2.16)



Figure 2.16: Ground plots of 58 m² 2-bedroom flat in British apartment house
Source: www.boklok.co.uk

♦ DETACHED HOUSES

BoKlok's model of a detached house, "Villa BoKlok", is only available in Sweden by now. It has a modern design with two variations for the facade. The so called "Villa Skåne" (Figure 2.17) has a facade of vertical wooden boarding, and a saddle roof of smooth grey roof tiles. The "Villa Värmland" (Figure 2.18) has a facade of more conventional horizontal wooden panelling and a saddle roof of rounded grey tiles. Both offer 92 m² ground level and three bedrooms (Figure 2.19). The upper level interior is unfinished.



Figure 2.17 (left): Exterior of "Villa Skåne"
Figure 2.18 (right): Exterior of "Villa Värmland"
Source: www.skanska.se



Figure 2.19: Ground plot of “Villa BoKlok”
Source: (BoKlok AB)

◆ TERRACED HOUSES

The terraced house models are quite new products of BoKlok. The first of these houses are currently under construction in the United Kingdom. They shall also be introduced in Scandinavia, starting with Sweden in 2008. Figure 2.20 and 2.21 show animated models of the terraced house version in the United Kingdom.



Figure 2.20: Animation of exterior for future British model of a terraced house
Source: www.boklok.co.uk



Figure 2.21: Animation of ground plot for future British model of a terraced house
Source: www.boklok.co.uk

The 2-bedroom version of the terraced townhouse is called “Mölna”, offers 67 m² and costs £132,500 (Figure 2.22).

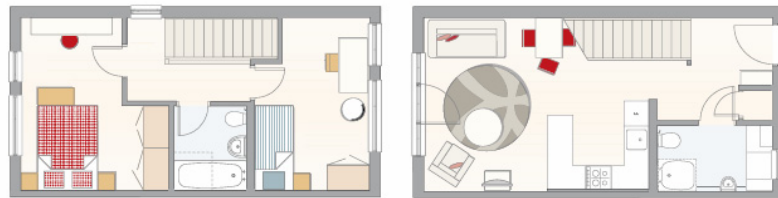


Figure 2.22: Ground plots of 67 m² 2-bedroom flat “Mölna” in British terraced house
Source: www.boklok.co.uk

The larger version of a terraced townhouse dwelling is called “Ålsten”, also offers 2 bedrooms, but provides 70 m² ground floors and costs £139,500 (Figure 2.23).

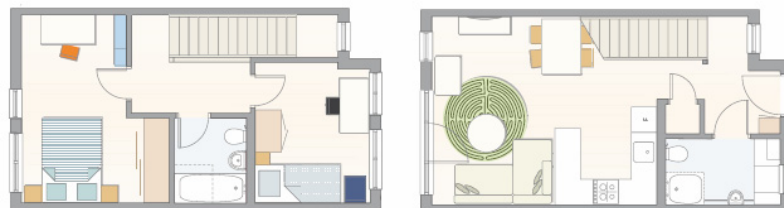


Figure 2.23: Ground plots of 70 m² 2-bedroom flat “Ålsten” in British terraced house
Source: www.boklok.co.uk

The largest version of the terraced house, the family model “Järnbro”, offers 3 bedrooms, 81 m² of ground floor and costs £149,500(Figure 2.24).

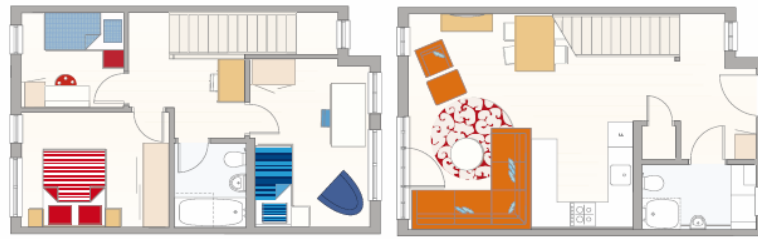


Figure 2.24: Ground plots of 81 m² 2-bedroom flat “Järnbro” in British terraced house

Source: www.boklok.co.uk

3. BUSINESS MODEL FOR BOKLOK

| PILLAR | BUILDING BLOCK OF BUSINESS MODEL | DESCRIPTION |
|----------------------------------|----------------------------------|---|
| Product | Value Proposition | A Value Proposition is an overall view of a company's bundle of products and services that are of value to the customer. |
| Customer Interface | Target Customer | The Target Customer is a segment of customers a company wants to offer value to. |
| | Distribution Channel | A Distribution Channel is a mean of getting in touch with the customer. |
| | Relationship | The Relationship describes the kind of link a company establishes between itself and the customer. |
| Infrastructure Management | Value Configuration | The Value Configuration describes the arrangement of activities and resources that are necessary to create value for the customer. |
| | Capability | A capability is the ability to execute a repeatable pattern of actions that is necessary in order to create value for the customer. |
| | Partnership | A Partnership is a voluntarily initiated cooperative agreement between two or more companies in order to create value for the customer. |
| Financial Aspects | Cost Structure | The Cost Structure is the representation in money of all the means employed in the business model. |
| | Revenue Model | The Revenue Model describes the way a company makes money through a variety of revenue flows. |

Table 3.1: The nine business model building blocks

Source: (Osterwalder, 2004)

■ VALUE PROPOSITION

The outstanding values that BoKlok houses provide to customers are:

- **Price** – BoKlok offers the best price among comparable housing products in all markets they are working in. This is one of the principal factors that guarantee the success of BoKlok.
- **Speed** – the houses are ready for selling or renting in fractions of the required time for traditional construction projects since the houses are pre-manufactured indoors and delivered to the spot. They are completely set up within one day without the need of letting walls dry etc.
- **Functional housing and decent quality** – The houses offer a well designed, functional, open-plan layout with high ceilings and large windows to three sides. The homes are made of qualitative materials (mostly wood and

metal). The houses are fully equipped with modern bathrooms and kitchens.

- Living in a peaceful surrounding with lots of green community areas around, close to the countryside as part of a small neighbourhood community.
- Ecological friendly housing – BoKlok homes consist of sustainable, recyclable materials (especially wood) and offer modern heating (e.g. groundwater pumps), isolation and electricity concepts (solar panels where possible) that meet high ecological standards.

■ TARGET CUSTOMER

- Single parents raising children
- Small families usually not having more than one child
- Young people recently having started their professional live and buying their first home
- Older persons searching for a smaller, affordable and secure home

■ CUSTOMER NEEDS

- An affordable house of their own
- Light, well-planned and functional housing, using a lot of natural materials
- Living calm, secure, having pleasant green surroundings and being close to countryside
- Good building standards and qualities
- Environmental friendly houses

■ DISTRIBUTION CHANNEL

The distribution channels are the same for all countries that BoKlok is sold in. The BoKlok AB sells franchise licenses to construction companies that were found to be capable. The licensees realise BoKlok projects and pay a franchise fee to BoKlok AB according to the amount of constructed flats and houses.

After the houses are finished, BoKlok AB organizes a sales event at the IKEA store that is closest to the construction site. Interested customers come to this

store, usually at a Saturday, and sign a ticket confirming that they want to buy a house. The tickets are used in a public lottery since in 99% of the time the demand is far higher than the supply. Tickets that are picked allow the holder to buy a BoKlok house/flat. The formal contract is often signed right away at the IKEA store between the customer and the responsible construction company.

BoKlok does only a minimum of marketing and advertisement. Most of BoKlok's customers decide to buy upon direct recommendation of other BoKlok customers. Deliberate marketing is limited to a small ad in the local newspaper of the IKEA store that will be host of a BoKlok sales event one week before the event. This has been the marketing and promotional strategy from the very beginning, because the media's attention for BoKlok has always been high. By cooperating closely and open with the media, BoKlok needs no further marketing.

■ VALUE CONFIGURATION

The major part of the actual value configuration of BoKlok products is fixed in the detailed specifications of the products and the processes how to construct them. This can also be seen as the actual intellectual property which BoKlok AB sells to its franchisees.

The construction of BoKlok properties is taken care of by franchisees. The responsible construction company decides where BoKlok houses shall be situated and which models shall be erected. Furthermore, it can influence which suppliers shall deliver the BoKlok frameworks and how to cooperate with them. Thus, the franchise licensees are given the choice to configure the houses in a way to best meet their customers' needs within the limited options and variations that are available for the pre-fabricated houses. The BoKlok AB supervises all construction projects to make sure that the concept is applied successfully.

■ CAPABILITY

In Sweden, Norway, Denmark and Finland national branches of Skanska are the franchisees of the BoKlok AB and hence responsible for executing BoKlok operations in accordance with the franchise licenses. In the United Kingdom Live Smart @ Home is the responsible constructor.

The BoKlok modules for the Swedish market are exclusively supplied by a factory of Skanska in Gullringen.

The Danish market is supplied by the external supplier Moelven ByggModul AB in Sandsjöfors, Sweden. In Norway, BoKlok modules are produced and supplied by Skanska Husfabrikken in Steinkjer as well as by the external company Moelven. In the United Kingdom, BoKlok modules will be produced by the company Kingspan Off Site in a factory in Milton Keynes. Currently, there are no operations in Finland.

Overall, the current BoKlok capabilities allow an output of round about 1000 units per year.

PARTNERSHIP

Potential new partners, usually from countries BoKlok does not operate in so far, apply to the BoKlok AB for receiving a franchise license. Most frequently, BoKlok receives numerous applications from Western Europe; but there are also applications from all over the world. The applicants are evaluated in respect to several criteria:

- First of all, the applying organization should share BoKlok's vision, which implicates volume and also price policies.
- It has to be ambitious - both in high volumes and low price levels.
- The organization needs to be large since it needs huge investments to start BoKlok operations in a new country.
- It needs to have access to land for building BoKlok projects.
- The potential franchisee needs to have access to production units (their own, or partnerships).
- The company should be operating nation-wide in the potential new market, hence having the power to introduce BoKlok throughout the country.
- A local IKEA organization must be present in the respective country and has to accept the launch of BoKlok. Although launching BoKlok is a more or less centralized decision; the local IKEA representatives have to be positive about the idea, because BoKlok will definitely cause a big impact on the marketing strategy of IKEA in those countries. Where BoKlok is introduced, the public attention is usually huge. Normally, this is a positive

fact. Still, it strongly impacts the marketing strategy of the local IKEA organization which therefore must approve the idea.

■ COST STRUCTURE

Keeping costs down in order to achieve the targeted low price for the consumer is one of the main objectives. The conceptual organization, BoKlok AB, the different operational organizations, local construction companies, and all suppliers and subcontractors are engaged in this endeavour. The majority of costs saving potentials are integral part of the BoKlok concept. These are:

- The products are highly standardized and specified in detail. Only very few options to choose from are offered e.g. different facades. That allows exploiting Economies of Scale when buying raw materials for the modules. Furthermore, the price of every small component was taken into consideration when the concept for a certain home was defined.
- Since high volumes of almost identical products are produced, the production processes are factory-based and optimized to be very cost efficient.
- The services and procedures that need to be performed for erecting the houses on site, e.g. by subcontractors, are highly standardized and optimized as well. All necessary indirect material for sub contractors is purchased centrally in high volumes.
- Only price reduced, semi-remote land is purchased from local authorities to erect BoKlok homes

■ REVENUE MODEL

The BoKlok AB sells franchise licenses to construction companies, allowing the erection of BoKlok homes. When BoKlok homes are finished, the respective license fees are due. Besides that, the company has no other revenue sources.

The respective construction companies realize BoKlok projects and sell the homes to customers, thus generating revenues and paying the license fee.

4. IKEA

IKEA is the world's most successful mass-market retailer, selling Scandinavian-style home furnishings and other housing goods in 265 stores within 36 countries, realizing sales of 19.8 billion Euros in 2007.



Figure 4.1: IKEA logo at IKEA warehouse
Source: www.ikea.com

IKEA is an acronym consisting of the initials of the founder Ingvar Kamprad combined with the first letters of his childhood homes, Elmtaryd and Agunnaryd. IKEA began operating in Sweden in 1943. Since then, it continues its original ethos based upon cost reduction fused with design culture. IKEA states: “no design, no matter how inspired, finds its way into the catalogue if it cannot be made affordable”.

With an aim of lowering prices across its entire offering by an average of 2% to 3% each year, its signature feature is the flat packed product that customers assemble at home, thus reducing transportation costs. That is what made IKEA a leading example of sustainable innovation and business growth, as the constant growth of IKEA's financial data confirms.

INGKA Holding B.V. is the ultimate parent company for all IKEA Group companies, including the industrial group Swedwood, which manufactures IKEA furniture, the sales companies that run IKEA stores, purchasing and supply units as well as IKEA of Sweden, which is responsible for the design and development of products in the IKEA range. INGKA Holding BV is wholly owned by Stichting INGKA Foundation, registered in Leiden, Netherlands.

| | |
|--------------------|---|
| TYPE OF COMPANY | Private |
| ESTABLISHMENT | 1943, Älmhult, Sweden |
| HEADQUARTERS | Älmhult, Sweden |
| KEY PEOPLE | Ingvar Kamprad, Founder Anders Dahlvig, President Hans Gydell, Group Vice President |
| INDUSTRY | Retail |
| MAIN PRODUCTS | Furnishings |
| EMPLOYEES | 118.000 |
| REVENUE | €19.8 billion (FY 2007) |
| WHERE IN THE WORLD | In 36 countries |

Table 4.1: IKEA's facts and figures

The company designs its own furniture, which is made by about 1,600 suppliers in more than 50 countries. The products are sold in IKEA warehouses, online and by mail order - with a print run for the 2006 catalogue hitting 160 million – “more than the Bible”, so IKEA claims.

Finding the right manufacturer for the right product is a key component of the company's success. Once, it contracted with ski makers – experts in bending wood – to manufacture its “Poang” armchairs. Another time IKEA tapped makers of supermarket carts to turn out durable sofas.

Simplicity, a tenet of Scandinavian design, also helps to keep costs down. One example of what IKEA calls “designing the price tag first”: in order to sell the “Trofé” mug at the cheapest price, IKEA's designers took the average price of a mug and cut it in half, then looked for ways to realize it. As we can read on IKEA's website: “We found the best conditions for fast and efficient production by getting out onto the factory floor. We considered the choice of glazing and handling. But most important was the shape. The shape of “Trofé” means it can pass through the machines in the shortest possible time. Its dimensions enable us to fit the maximum number into kilns, saving on the expensive firing process”. And even the colour was a matter of strategic choice: the mug was supposed to be only in blue and white since those are the least expensive pigments. This is IKEA; this is how they think about a new product in order to keep costs down, without affecting quality and functionalities.

Suppliers and designers even increase the challenge by customizing some IKEA products in order to make them sell better in certain local markets.

According to Business Week magazine, the \$120 “Billy” bookcase, \$13 “Lack” side table, and \$190 “Ivar” storage system are IKEA’s best-sellers worldwide. (Figure 4.2)



Figure 4.2: IKEA’s most popular products: “Billy”, “Lack” and “Ivar”
Source: www.ikea.com

As a result of IKEA’s analysis, the average spending per customer globally is very similar: the figure in Russia is \$85 per store visit – exactly the same as in statistically more affluent Sweden. IKEA operates 32 US stores, which account for 15% of the company’s sales. 4 additional stores will be opened in fiscal year 2008. Germany is IKEA’s biggest market, accounting for nearly one-sixth of revenue. Sales have been growing steadily each year thanks both to expansion of its store network and the ongoing price cuts. Such expansion has kept IKEA’s turnover rising. Last year, 522 million people visited the IKEA Group stores.

As it is stated by Innovation Leaders, an annual assessment of organizations that have the greatest innovation impact (www.innovationleaders.org): “IKEA maintains high profits even while it cuts prices steadily with operating margins of approximately 10% being among the best in home furnishing”. In the website of this organization,

we can also find an Innovation Scorecard (Figure 4.3) that contains some of the marks awarded to IKEA in order to judge its contribution in the field of innovation.

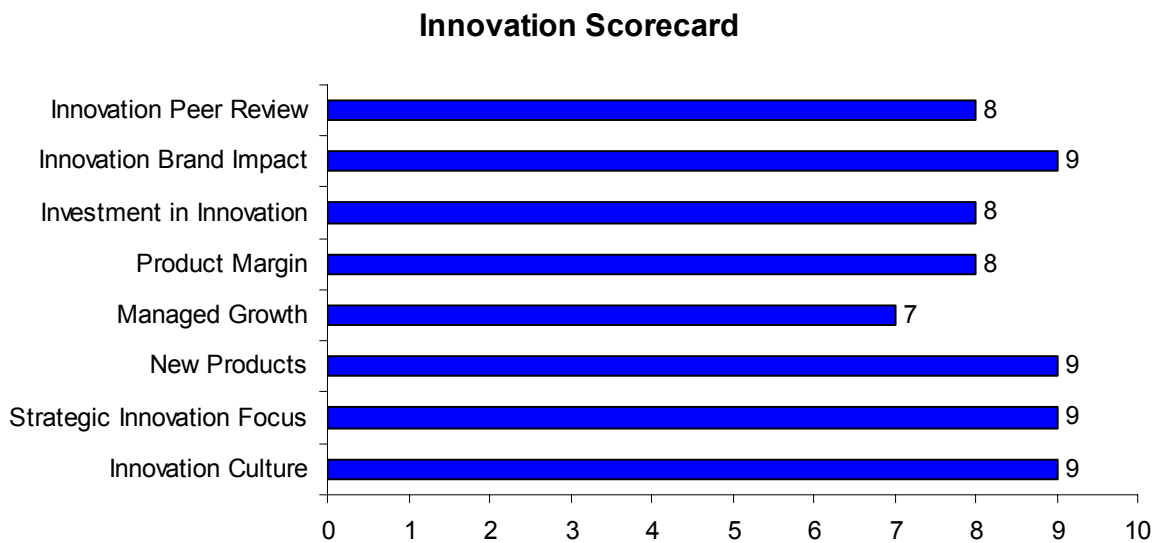


Figure 4.3: Innovation Leader's scorecard for IKEA
Source: www.innovationleaders.org

With these results IKEA demonstrates that, when underpinned by strategic partnerships with manufacturers and suppliers, providing access to affordable contemporary design in a simple format, can be a winning formula.

To keep growing, IKEA is accelerating store rollouts in both large outlet and new high-street formats. Twenty-four new large outlets are set to open worldwide in 2008, at an average cost of \$66 million per store. The firm plans to boost their profile in four of its fastest-growing markets: in Russia, where it is already a huge success in Moscow, in China and Japan, where IKEA has a strong footprint, and in the US, where the goal is to have 50 outlets by 2010.

■ HISTORY

It has been six decades since IKEA began in a small farming village in Sweden. IKEA originally sold pens, wallets, picture frames, table runners, watches, jewellery and nylon stockings - whatever Mr. Kamprad found a need for filling it with a product at a reduced price. The IKEA range focused on home furnishing products in the early 1950s. In 1953 a furniture showroom was opened in Älmhult. It was an important moment in the development of the IKEA concept, since it was possible for the customers to see and touch the furnishings before

ordering them. This came about as a solution to a problem: IKEA found itself in a price war with its main competitor and, as both companies lowered prices, quality came at risk. By opening the showroom, IKEA could present its products in three dimensions (function, quality and low price) to the clients who just had to select them according to their needs.

In the same years, IKEA began designing its own furniture, evoked by pressure from competitors that caused suppliers to boycott IKEA. This became the basis for future growth, leading the company to innovative design and improved function at lower prices. Furthermore, as we can read on the company's website: "by lucky inspiration, one early IKEA employee decided to remove a table's legs so it would fit into a car, and to avoid transport damage. From that point on, we began to think in terms of design for flat packaging". That is how IKEA began to turn problems into opportunities, what we see as the key for its success and the heart of its innovation itself.

It only took about twenty years, until the first store outside Scandinavia was opened (Zurich, 1973) and in 1985 the first IKEA store opened in the USA, which nowadays represents 15% of IKEA's sales.

Another important date is 1997. In this year, IKEA introduced Children's IKEA. Working with two groups of experts to develop products, child psychologists and professors in playing, helped the designers to develop things that are good for kids' motor skills, social development and creativity; again turning a problem into an opportunity.

We cannot forget to mention the establishment of IKEA rail AB. Railways were always an important part of the company's early transport strategy. From suppliers and central warehouses in Germany, Belgium, the Netherlands and Sweden, IKEA Rail provides door-to-door transport of IKEA materials and furnishings, with IKEA trains conveying the goods for most of the journey. This positively affected the transport costs and goods management as well as the environmental thinking, since IKEA reduced the reliance on other means of transportation, such as trucks. Here we can find another determinant for IKEA's success: not only turning problems into opportunities, but also into "lateral" advertisement.

■ VISION AND STRATEGY

“To create a better everyday-life for many people.”

Is IKEA's vision, in order to pursue it, IKEA offers a wide range of well designed, functional home furnishing products at prices so low that as many people as possible will be able to afford them.

IKEA's market positioning statement is: “Your partner in better living. We do our part, you do yours. Together we save money”. In this way, the IKEA brand can be considered to be the sum of the emotional and rational values that consumers associate with the IKEA trademarks and the reputation of the company. IKEA products are functional, appealing and intended to let many people improve their home life through practical solutions to everyday problems.

From the beginning, IKEA decided to side with the many, focusing on costs and quality, stressing on production processes and logistics. That means, responding to the home furnishing needs of people throughout the world – people with many different needs, tastes, dreams, aspirations ... and wallets. For IKEA “helping to create a better everyday life” means offering a wide range of home furnishings that combine good design, good function and good quality with prices so low that as many people as possible can afford them. It seems like the product range is developed to be extensive enough to have something that appeals to everyone and that covers all functions in the home.

◆ PRODUCT RANGE

The IKEA product range is wide in several ways. First, it is wide in function. IKEA customers shouldn't have to run from one small specialty shop to another in order to furnish their home. At IKEA stores, they will find plants, living room furnishings, toys, frying pans and whole kitchens.

Secondly, it is wide in style. “The romantic at heart will find just as much as the minimalist”, is IKEA's statement. However, IKEA admits not to offer everything – especially not the very extreme or over-decorated. The company solely offers what helps to build a home that has room for good living.

And finally, by being coordinated, the range is wide in function and style at the same time. The variety of the range increases since it is possible to combine many products in an almost infinite number of different settings.

♦ GOOD DESIGN AND FUNCTION

It is not easy to combine good design and good function with the right quality, at an affordable price. Designing a product that costs a fortune is easy. But designing something that is affordable to many is the real challenge that IKEA faces by working together with skilled manufacturers. Together IKEA and its partners find ways to get the most out of a raw material - how to produce furniture at low costs, and still keeping the original design idea. These partners help to create the unique IKEA range, which IKEA calls a “clever range”, since it focuses only on what is important and necessary in order to save money. The IKEA range is the result of the efforts to meet those needs. It is not easy. Maybe that is why IKEA is so successful in its business.

♦ LOW PRICES

A wide range with good form and function is only half the story. Affordability is still the key factor for IKEA's strategy. Price is the third most critical dimension for IKEA. Its product developers seek out for manufacturers who can produce in the most cost-effective way. IKEA designers always work towards solutions that result in a low price. IKEA buyers search high and low to find the best price, and then buy big volumes for even lower prices. IKEA's customers help, too, by choosing the furniture, getting it at the warehouse, transporting it home and assembling it themselves.

♦ IKEA STORES

IKEA stores sell the IKEA product range in self-service areas. The structure of the stores is similar all over the world: from the entrance, the signs on the floor guiding the customers through different room layouts in such a way that they could be inspired with ideas, to hints and tips for smart new home furnishing solutions.

For keeping prices low, the stores buy and transport products in bulk and are located in less expensive areas of their market region.

◆ DISTRIBUTION

For IKEA, distribution is an important part of the equation of creating home furnishing articles at prices which are as low as possible. IKEA has 28 distribution centres in 16 countries. These centres supply goods to IKEA stores, ensuring that the route from supplier to customer is as direct, cost-effective and environmentally friendly as possible. Efficient distribution plays a key role in the work of creating the low price. Today, approximately 10.000 products are manufactured by 1.600 suppliers and transported to 265 IKEA stores around the world.

◆ PURCHASING

IKEA has 46 trading service offices in 32 countries. Being close to its' 1,600 suppliers means that IKEA can develop long-term relationships with them. They can observe the production of their partners and work together with them on the shop floor in order to realize improvements and reduce costs. Sometimes, a design decision at this stage or a slight change to the process can make a difference in price that, when multiplied by millions of items, results in drastic savings.

◆ COMPETITIVE ADVANTAGE

At the beginning, the competitive advantage for IKEA was based on the marketing strategy and the store concept (exposition of all products), letting people appreciate the products' functionalities, quality and lowest price. Nowadays, their competitive advantage is based on lowering prices, thanks to the reduction of services connected to the sale and creating functional points of sale that are still conform to consumer needs.

◆ MARKETING STRATEGY

IKEA has a long tradition in marketing communication, focusing primarily on printed media which have proven their values and success to the company over the years. Other media, now being used to an increasing degree, include TV, radio and Internet based communication. All the marketing communication is used to amplify the product range. The catalogue is the cornerstone in the IKEA concept as well as the main marketing tool with around 70% of the annual marketing budget being spent on. It is produced in 38 different editions, in 17 languages for 28 countries. 160 million catalogues were circulated in 2006. The advertising, PR and other types of communication are complements to IKEA's range, stores and catalogues and are used to spearhead the penetration of the targeted market.

◆ TARGET CUSTOMERS

The target customers of IKEA are represented by:

- Young couples
- Singles
- Workers with short free time and low salary
- Offices
- Owners of holiday houses

■ INNOVATION AT IKEA

We believe that for remaining at the forefront of a changing market, IKEA needs as much research on customers, on the home furnishing sector and on its competitors, as possible. They work in many different areas of market research, and they take into consideration reports and statistics both internal and external when planning any communication or marketing campaign.

◆ DEVELOPING THE PRODUCT RANGE

The IKEA saying: "the price tag is designed first" can be seen as the principle behind all IKEA product development. IKEA of Sweden, located in

Älmhult in the south of Sweden, develops the IKEA range and gives the name to each product. There are about 10.000 products in the range; behind all of them is the same vision statement.

♦ INNOVATION DRIVER

In this highly competitive industry, innovation is rife. From introducing a new technology and broadening the product portfolio, to positioning the brand and deepening customer relationships, there are several key drivers gaining widespread attention. Today's two main technological sources of innovation for IKEA are the online provisions market and an improved supply-chain-focused technology, such as smart tags. Both are addressing improved efficiency of goods, supply and provision. There are also areas of consumer-focused innovation around convenience and traceability. In terms of broadening the product mix, the migration of food to general product supply has been followed by service development using the retailer brand as the focal point. All are usually delivered in partnership with leading existing suppliers, but are positioned around the increasing levels of trust that consumers have with their favourite retailer brand. The opportunity that IKEA should exploit now, is to take a consumer-centric innovation to a whole new level, being able to gain new information about its wider customer base in order to perform detailed segmentation analysis and opportunities for cross selling.

5. SKANSKA

Skanska is a Swedish construction company, which was founded by the engineer Rudolf Fredrik Berg in 1887. Skanska started its activity in the manufacturing of cement products, decorating churches and public buildings.

More than a century after its establishment, the company became a giant construction group – one of the world's largest – internationally well-known, with a leading position in a number markets in Europe, the United States and Latin America. Skanska also carries out project development in selected geographic markets within the fields of residential and commercial property, as well as in infrastructure by means of public-private partnerships.

The Skanska Group has 56,000 employees in more than 60 countries, and revenues of around SEK 126 billion (more than 13 billion €) in 2006. (Figure 5.1)

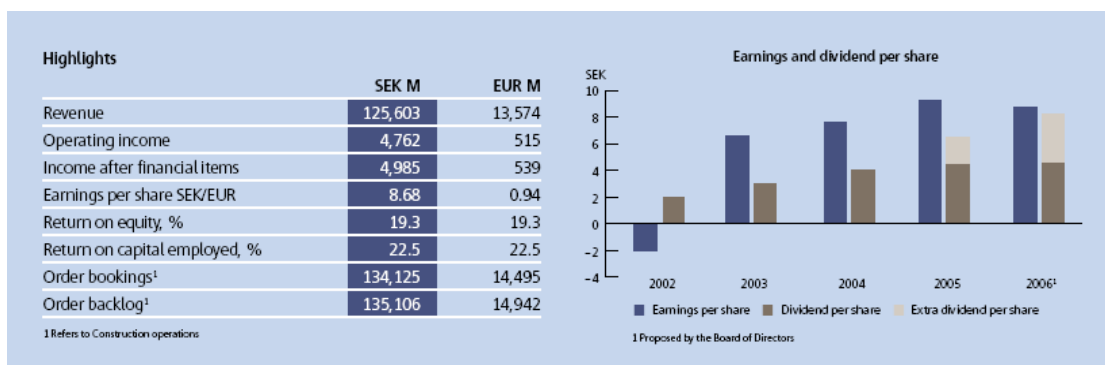


Figure 5.1: Skanska facts and figures

Source: (Skanska AB, 2006)

Skanska partially belongs to important investors, such as:

| Company | % |
|-------------------------------------|-----|
| IKEA | 2,7 |
| Nordea | 1,9 |
| SEB (Skandinaviska Enskilda Banken) | 2,1 |

Table 5.1: Skanska's minor share holders

Each year, Skanska rewards the most innovative projects, in terms of environmental protection, or health and safety with a price, the Environment, Health and Safety Award. In the same way, Skanska aims to achieve a target of zero site accidents, and zero environmental incidents. This is especially hard to achieve because each week, more than 4,000,000 hours of work are performed by employees of Skanska.

■ SKANSKA WORLDWIDE

Although its historic markets are those of Scandinavia, the group has a very strong presence in the USA, as well as in the rest of the world. Different geographical units were created to lead the development operations in specific countries. (Figure 5.2)



Figure 5.2: Skanska in the world
Source: (Skanska AB, 2006)

Skanska has recently been expanding throughout Eastern Europe - to Poland, Slovakia, Czech Republic, Hungary and Estonia. Furthermore, Skanska has a very strong presence in the United Kingdom.

Skanska is well developed in Latin America with 89% of the continent's territory hit by Skanska units. Only Colombia, Guyana, Uruguay and Paraguay are not concerned. The revenues are not considerable for the moment, but Skanska will profit from these investments in the future, when the markets will expand.

A large part of Skanskas' revenues comes from North America, in particular from the USA. There are subdivisions inside this geographical unit, such as: Services (Construction Management, General Contracting, Design Build, Pre-Construction, Pharmaceutical Validation, Public-Private Partnership) and

Business Units (Skanska USA Building Inc., Skanska USA Civil, Skanska Infrastructure Development).

Among these geographical units, the company has offices in many significant places. We can find offices in Moscow, Shanghai, Amsterdam, Delhi, Cologne, and Dublin. These offices enable Skanska to be represented in areas where the Group has no local unit, but that still represent strategic markets.

■ VISION AND STRATEGY

◆ VISION

Skanska aims to be a leader in its home markets – the customer's first choice – in construction and project development.

◆ MISSION

Skanska's mission is to develop, build and maintain the physical environment for living, travelling and working.

◆ STRATEGY

In order to achieve its operative and financial targets, the strategy for the Group is to:

- Maintain a disciplined focus on the core business carried out in four business streams – Construction, Residential Development, Commercial Development and Infrastructure Development
- Be an international company with local businesses that have leading positions in selected home markets
- Recruit, develop and retain highly competent employees while working to bring about greater diversity
- Take advantage of the collective resources and strengths of the Group – brand, employee expertise and financial strength

- Foresee and manage risks in its business with the help of well-functioning risk management systems
- Be an industry leader in sustainability, particularly in occupational health and safety, ethics and the environment;
- Take advantage of the existing potential to coordinate the Group's purchasing as well as the efficiency gains that can be achieved through greater industrialization of the construction process.

◆ GOALS

- Skanska's overall goal is to generate customer and shareholder value. Projects are the core of the Group's operations and value is generated in well-implemented and profitable projects.
- Skanska strives to be a leader, in terms of size and profitability within its segments of the home markets of its construction business units, focusing on "outperforming" margins and cash flow.
- Skanska shall be a leading project developer in local markets and in selected product areas such as residential, office, retail and selected types of infrastructure development projects.

◆ PROJECT ORIENTATION

Unlike industrial production at fixed plants, in construction and project development most projects are unique. In principle, each project is implemented in a new location, in a new environment and with a unique design. Customers are usually local and many projects are carried out for completely new customers. Market conditions also vary between both countries and regions.

As a rule, construction projects are large. It is not unusual for those projects to be the customer's largest single investment. Another distinguishing feature of construction is the large number of local players involved in each

project – public agencies, architects and engineers, financiers, consultants, suppliers and subcontractors. This is why Skanska consists of local units in a global network.

♦ CORE BUSINESS

Skanska operates in four business streams.

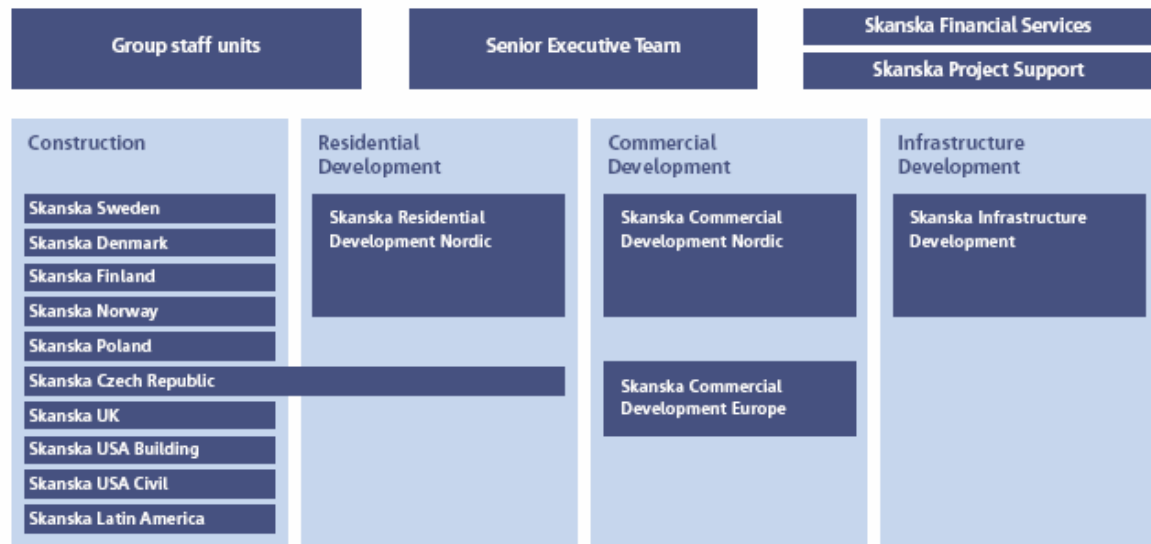


Figure 5.3: Skanska's business streams
Source: (Skanska AB, 2006)

- *Construction unit:* represents Skanska's largest business stream and is based on the construction of buildings and civil projects. This section generates 92% of the company's revenue. It is divided into several subsections, mostly representing the local units of Skanska around the world. The Construction business stream operates through ten business units in selected home markets – Sweden, Norway, Denmark, Finland and Estonia, Poland, the Czech Republic and Slovakia, the United Kingdom, the United States and Latin America.
- *Residential Development:* this business stream initiates and develops residential projects for sale. Housing units are tailored for selected customer categories. This is the unit that dealt with the development of BoKlok. It generates 5% of the overall revenue.

- *Commercial Development*: initiates, develops, leases and divests commercial property projects, with a focus on office buildings, shopping malls and logistics properties. This section represents only 3% of the Group's revenue.
- *Infrastructure Development*: develops and invests in privately financed infrastructure projects such as roads, hospitals, schools and power generating plants. Less than 1% of the total revenue comes from this section.

These business streams work in cooperation with the Support unit that is responsible for the management of Skanska's achievements. The unit is divided into two subsections:

- Project support: which belongs to the research and development function,
- Skanska Financial Services.

♦ COLLABORATION

The units of the Skanska Group collaborate in their specialized roles – as project developers, investors and builders. This strengthens the Group's customer focus and creates the prerequisites for sharing of best practices, while ensuring efficient utilization of the Group's collective competence and financial resources. Meanwhile, specialization reduces risks in the project development process, yielding a positive impact on project quality and profitability as well. Specialization and collaboration leverage both earnings potential and the ability of the Group to satisfy the needs of its customers.

Investment operations – development of commercial, residential and privately financed infrastructure projects – take place in most of the geographic markets where Skanska is engaged.

Within these projects, Skanska takes over a comprehensive responsibility, from concept and design to land purchase, construction and finally divestment of the project. The Group's local construction units are hired to build the

projects. Both construction and investment operations must yield a good economic return.

■ STRENGTHS

- The Skanska brand has been built up during more than a century of working in many different countries. One important element of the brand is the Group's Code of Conduct, which includes policies on employee relations, health and safety, the environment and business ethics.
- Skanska's highly skilled, dedicated employees, combine expertise with the Group's overall focus on sustainable development in order to successfully deliver projects to customers. The Group's ability to transfer knowledge between different geographic markets also contributes to its strength.
- Financial strength is an important factor in maintaining the confidence of customers and capital markets in Skanska. It also enables the Group to invest in project development and take over responsibility for and invest in major privately financed infrastructure projects.

◆ RISK MANAGEMENT SYSTEM

Construction work involves various technical, legal, financial and personnel-related risks. The ability to identify and manage these risks is crucial to the Group's success and is thus an important prerequisite for achieving its strategic goals. Unforeseen risks may have a substantial adverse impact on profits. For that reason, the Group's risk management system, which is continuously refined, is of key importance.

◆ STRATEGIC RISKS

The Senior Executive Team (SET) is responsible for long-term, overall management of strategic risks as those of a political, social or macroeconomic nature. By focusing on selected home markets, Skanska's local business units become thoroughly familiar with local conditions in each respective market

and can analyze them continuously. These analyses are an integral element of the SET's work.

◆ OPERATIONAL RISKS

In the construction business, operational risks are substantially higher than financial risks. The company's ability to foresee and manage business risks is crucial in achieving good earnings. Projects are accounted, using the percentage of completion method. Each project is evaluated on a quarterly basis, with adjustments in the percentage of completion being made for any changes in the estimated project completion cost. Estimated losses in ongoing projects are recognized in their entirety on the date they are discovered.

Skanska uses its Operational Risk Assessment (ORA) system to identify and manage potential risks throughout the Group. The potential projects are analyzed in order to estimate legal, financial and technical risks. Then, those potential projects are compared to the current local strategy. If they are not aligned, the SET tries to modify the projects in order to meet local core strengths. If this has been successful, the projects will be submitted to the business units. If not, they will be dismissed. The final approval comes from the Senior Executive Team, with feedback from the business unit.

The Figure 5.4 explains the Operational Risk Assessment process more in detail.

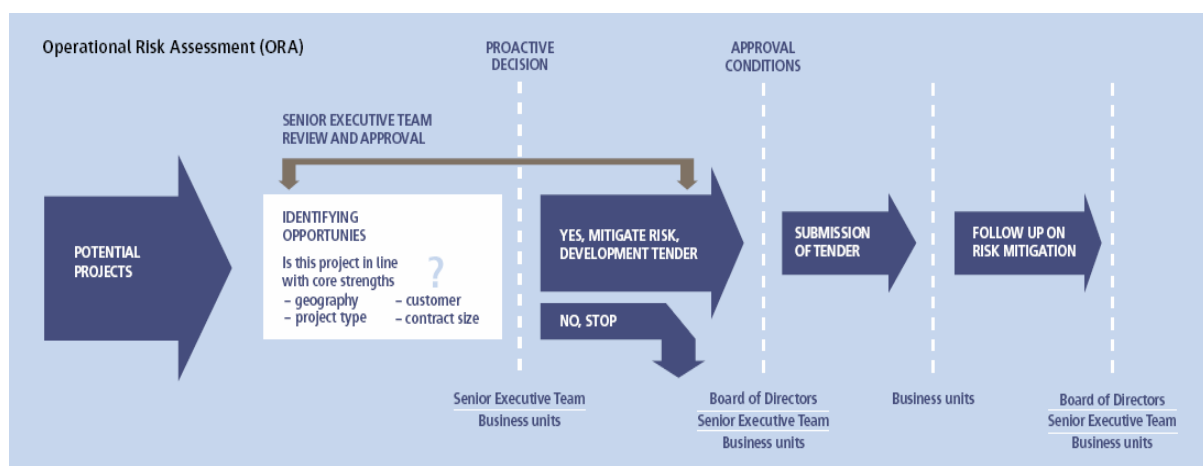


Figure 5.4: The Operational Risk Assessment Process
Source: (Skanska AB, 2006)

♦ FINANCIAL RISKS

The main financial risks are:

- Foreign exchange risks
- Interest rate risks
- Refinancing risks and liquidity

♦ SUSTAINABILITY

In every project that is undertaken, Skanska strives for being socially responsible and considering the environment, while maintaining good economic performance. Examples of sustainable development in action can be found in every of Skanska's business units and in all markets the company operates in. Skanska is focusing its attention on a number of areas of improvement. The firm believes that long-term visions can become reality if small day to day issues are managed properly. Health and safety has been a particular priority across all business units, and business ethics also feature high on the agenda. Work has begun on improving supply chain partnering; as purchasing becomes more centralized, hence global, with all ethical, social and environmental challenges that accompany that. Elsewhere at Skanska, some of the largest construction projects are being delivered with careful regard for the protection of the landscape, biodiversity and impact on local communities.

♦ SAFETY

The safety of Skanska's workforce, its subcontractors, suppliers and the general public around the projects is of paramount importance. Accidents are always avoidable, and preventive training plays an important part in helping Skanska to achieve its goal of zero workplace accidents. In addition to training, major company-wide initiatives have been undertaken. This year's Skanska Safety Week saw over 56,000 employees and thousands of subcontractors taking part.

♦ ETHICS

Skanska's efforts to improve ethical performance in the construction industry are well documented. Skanska was influential in developing the first set of industry principles for combating bribery and corruption for the World Economic Forum (WEF).

♦ ENVIRONMENT

Eco-efficient design, new construction techniques and life-cycle analysis help Skanska's customers and their stakeholders to mitigate their contribution to climate change and adapt to the inevitable consequences it will bring if actions are not meaningful and immediate. The intelligent selection and use of raw materials has initiated important improvements in Skanska's supply chain – from the way the company cooperates with Non-Governmental Organisations to avoid the use of illegally logged timber and potentially dangerous chemicals, to maximizing recycling targets through more efficient design, logistics, waste segregation and management.

Energy is consumed at every stage of any construction project: from the manufacturing of the cement used for foundations through to the heating and ventilation of a finished apartment or office building. Skanska has developed its own model by which office developments can be undertaken, resulting in lower operating and maintenance costs. The basic strategy is one of low environmental impact, careful examination of life-cycle costs, flexible office design and simplicity. This has resulted in radical new thinking about the way in which air handling systems are designed, installed and operated. Not only do offices built to this concept cost the tenant less to run and provide a better financial return to the owners, they also have a smaller total carbon footprint.

■ MAIN PROJECTS OVERVIEW

Skanska is a project-oriented company whose main goal is “zero loss-making projects” and “zero ethical breaches”. That is why we find it interesting to describe some remarkable projects the Group worked on.



Figure 5.5: The Oresund Bridge

Source: www.wikipedia.org, author: H.C. Steensen, license: Creative Commons 3.0 by-sa

As a symbol for Scandinavian countries, Skanska was chosen for the construction of the Oresund Bridge tunnel (Figure 5.6), between Denmark and Sweden. The construction costs were 1 billion USD. The total length is 7,845 m and almost 17 million people crossed the link in 2004.

◆ SOME FUTURE PROJECTS:

- The Heron Tower in London: the management company Heron Tower Property Unit Trust has asked for the construction of a tower, which will reach 242 meters, in the city district of London. It will be one of the highest towers of the city.

- World Trade Center Transportation Hub: Skanska is included in the consortium of companies chosen to build a transportation hub for the Port Authority Trans-Hudson traffic lines on the spot of the former World Trade Center station. This market of 358 million USD will become the second largest for Skanska in the USA. The project is expected to be finished by 2009. (Figure 5.6)



Figure 5.6: The World Trade Center Transportation Hub

Source: www.wikipedia.org, author: Lower Manhattan Development Corporation, licence: public domain

- Renovation of the United Nations' Headquarters. The UN seeks to replace damaged systems, eliminate asbestos and to make their Headquarters comply with modern standards of construction, safety and accessibility. The Headquarters consists of six buildings with an area of over 240,000 square meters. The budget approved by the General Assembly is 1.9 billion USD. (Figure 5.7)



Figure 5.7 United Nations HeadQuarters in New York, view from the East River

Source: www.wikipedia.org, author: user:Djmutex, licence: GNU FDL

6. DEVELOPMENT OF THE BOKLOK CONCEPT

■ EMERGENCE OF THE IDEA

The very origin of BoKlok's history lies in Sweden and seems to date back to the year 1993. Due to the long time span in between and significant changes regarding the organization and the people that were responsible for BoKlok, it wasn't possible for us to reconstruct the events, actions and information about the early phases of the development process in the level of detail we would have liked to. Since very less details of BoKlok's history are documented, we depend on the information that our two main contact persons, Mrs. Inger Olsson from Skanska and Mr. Lars Wild-Nordlund from the BoKlok AB, were able to provide us. In the following we combine their two perspectives in order to present the process as complete as it is possible for us.

Mr. Wild-Nordlund told us that, to his knowledge, the idea for BoKlok was born during a fair for private homes in Karlskrona, Sweden, in August 1993. At that fair a regional Manager of Skanska's housing section "South-East Sweden" and a senior marketing director of IKEA met because Skanska had constructed some of the houses that should be shown to the public at this occasion and asked IKEA to furnish the interior of these exemplary domiciles. Maybe influenced by the actual event, those two managers started talking about the market situation within the sector of constructing private houses.

At that time, the number of small-sized private construction projects, which are typically projects for building private homes, decreased drastically in Sweden. Figure 6.1 depicts this development which was caused by several factors. First of all, the general economic conditions were tense in Sweden at that time. Especially on the side of consumers, an increase in the general level of living costs that exceeded the growth of the average personal income, hence resulting in a notable inflation, characterized the situation. This trend is illustrated in Figure 6.2 which depicts the development of the Consumer Price Index (CPI) in Sweden between 1990 and 1995. The percent change in the CPI is a measure of inflation. In Sweden the index increased by 28.61% during those 5 years.

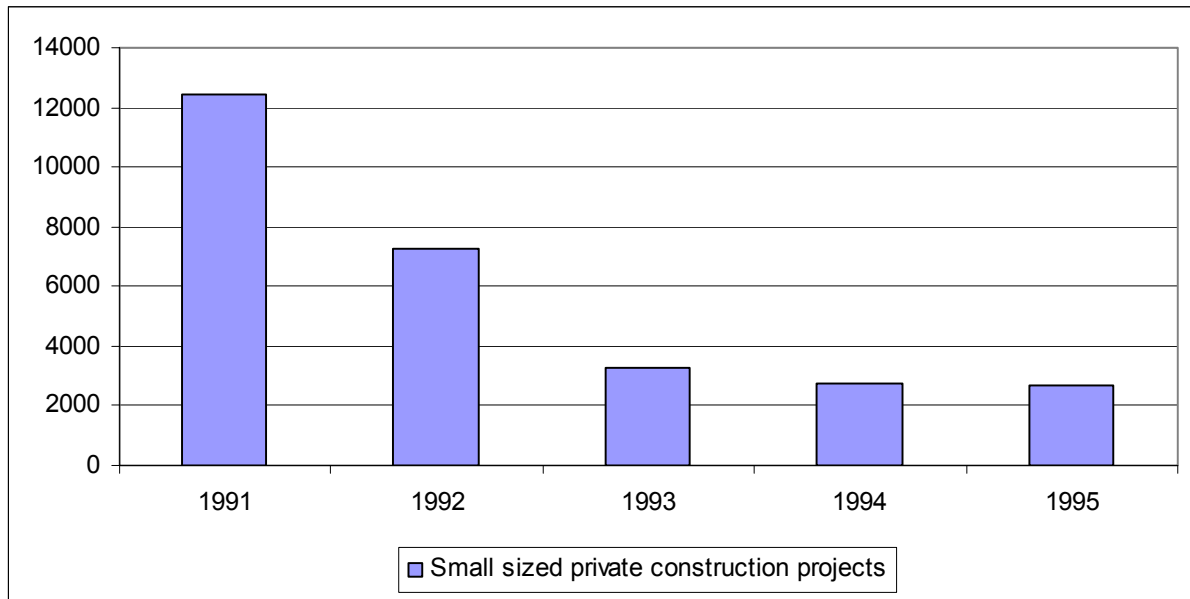


Figure 6.1: Completed dwellings in newly constructed, owner-occupied one- or two-dwelling buildings owned by private bodies, 1990-1995

Source: Online Database of Statistics Sweden

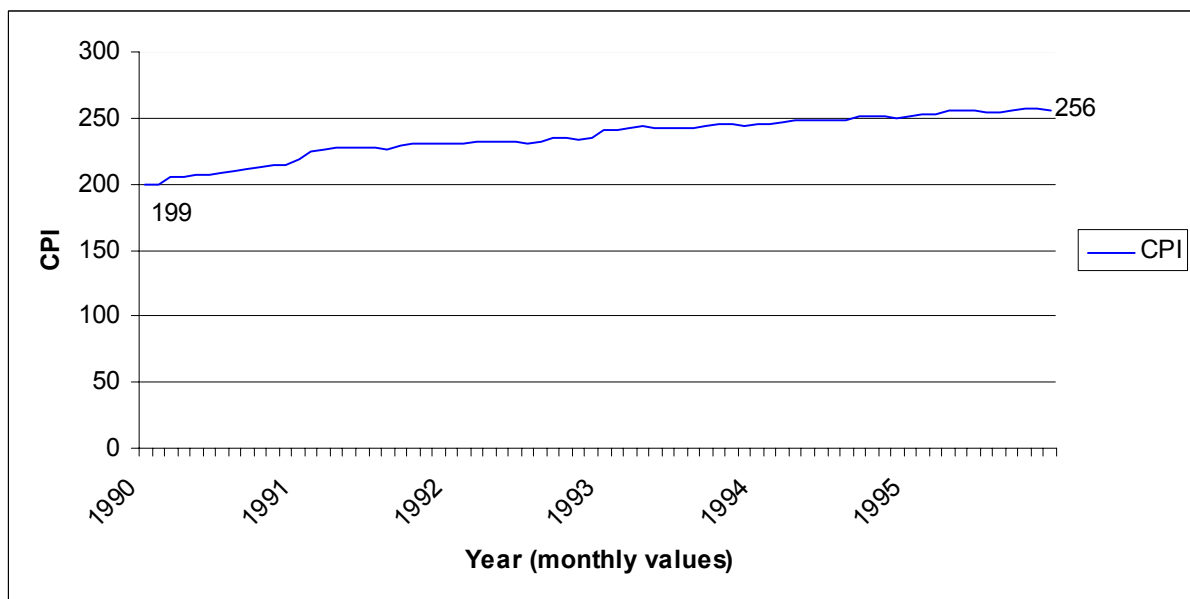


Figure 6.2: Consumer Price Index (CPI) of Sweden, total, fixed Index numbers 1980=100

Source: Online Database of Statistics Sweden

Furthermore, an increasing number of divorces, single parents and other types of small households, mostly having only one source of income, became observable in Sweden. (Figure 6.3 and 6.4)

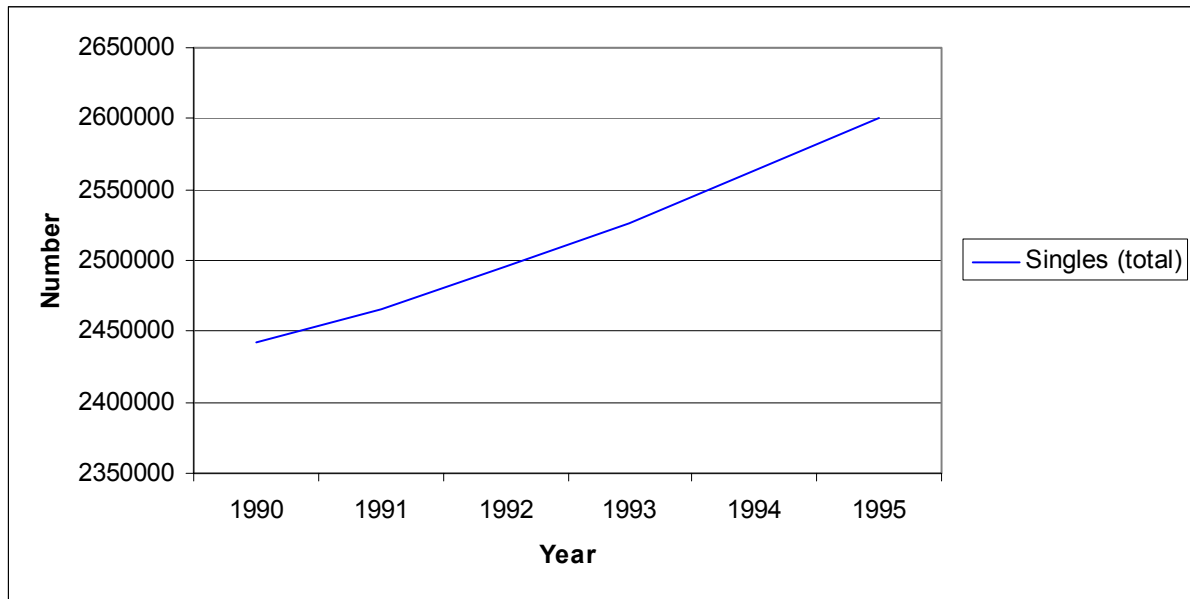


Figure 6.3: Total number of single persons in Sweden, ages 14-99+, all sexes, 1990-1995

Source: Online Database of Statistics Sweden

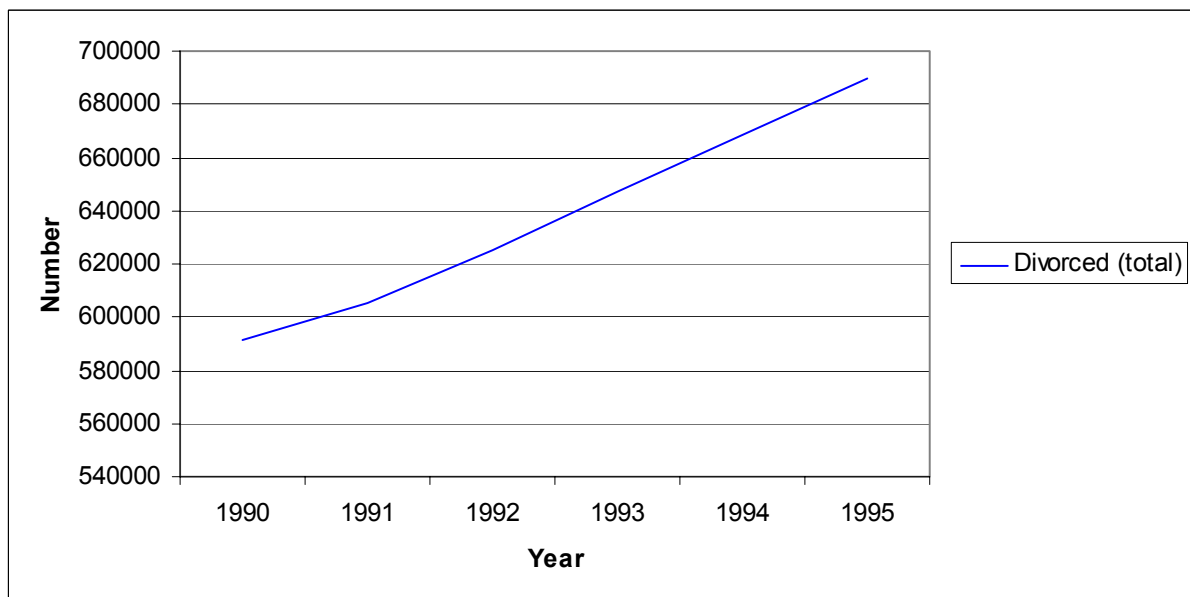


Figure 6.4: Total number of divorced persons in Sweden, ages 14-99+, all sexes, 1990-1995

Source: Online Database of Statistics Sweden

Besides that, the construction industry faced an increase of general building costs (Figure 6.5) and focused its products on a high-price segment. Due to all these factors, constructing private homes got unaffordable to huge parts of the Swedish society.

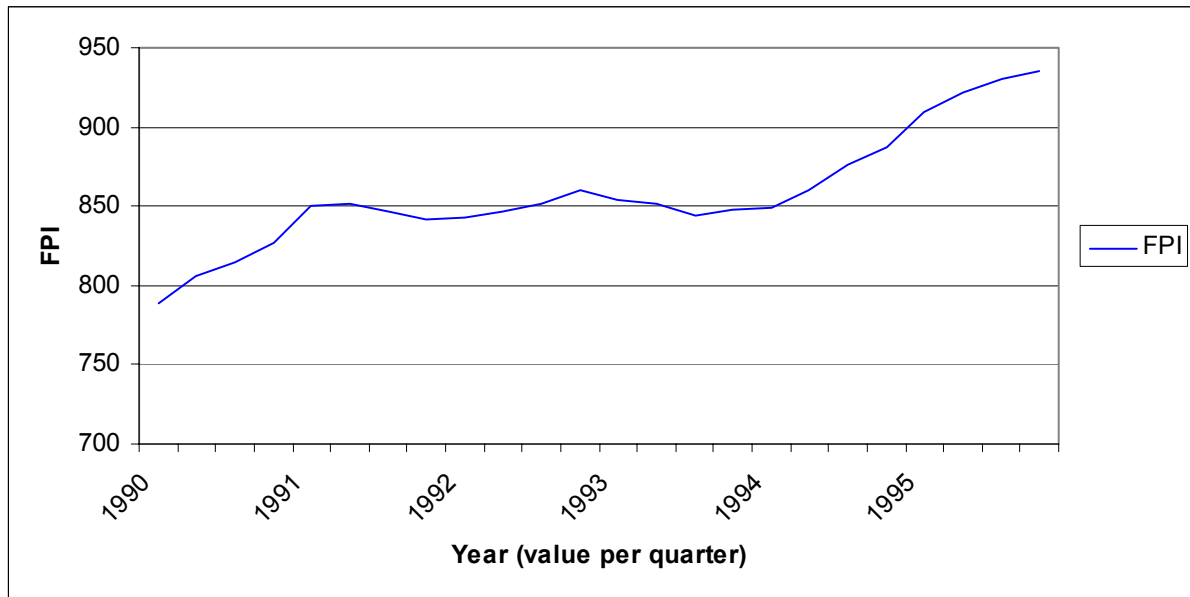


Figure 6.5: Factor Price index (FPI) for buildings (total expenditure, including wage drift) for collectively build one- or two-dwelling buildings, 1990-1995

Source: Online Database of Statistics Sweden

Given this background, the idea of combining IKEA's and Skanska's experiences and competences in order to provide some kind of low priced product that targets these customer segments and provides them an alternative to expensive rented apartments seemed to be a promising business idea to these two managers. Unfortunately, neither Mr. Wild-Nordlund, nor other sources enabled us to reconstruct the exact evolution of that initial idea in the two years after that meeting. However, thanks to Mrs. Inger Olsson, who is our main source for information regarding the development of BoKlok between 1995 and 1999, we managed to reconstruct the events during that period quite in detail.

According to Mrs. Olsson, Skanska must have experienced the ongoing trend of a decreasing number of small-scale private construction projects very clearly by 1995. At that time, Skanska used to cooperate with IKEA, in the sense of selling Skanska's homes and flats at IKEA warehouses, for several years already. Partially in consequence of the feedback the company got from potential customers at IKEA stores and from discussions they had with IKEA representatives, Skanska got aware of the fact that their products were too expensive and only affordable to quite wealthy people. The idea of a joint project tackling this problem emerged. Mrs. Olsson remembered that especially the

managers CG Friström, a Sales Director of IKEA at that time, and Lennart Hallberg, Information Officer of Skanska AB strongly supported it.

In addition to Mrs. Olsson's memories, Mr. Wild-Nordlund was able to tell us about the involvement of the top level management during that time. In fact, the proposal was raised to the top executive level of both IKEA and Skanska very soon. IKEA founder and CEO Ingvar Kamprad had already thought about the idea of providing complete, affordable, but still qualitative homes in order to realize his vision of "providing a better living to the people" for many years. According to Mr. Wild-Nordlund, Mr. Kamprad had long been looking for a partner in the building industry helping to accomplish this aim. He was therefore very pleased and enthusiastic about the idea and the willingness of a major and well-known company like Skanska to cooperate in this respect. Besides that, IKEA had a financial interest in creating this product as well. People who change flats are more likely to buy furniture, hence increasing IKEA's potential customer base.

Skanska and its CEO, Melker Schörling, was positive about joining forces with IKEA in order to foster its aim of becoming the first construction company in Sweden that creates a broad product on the basis of an entirely new approach. So far, Skanska's business was mainly shaped by a large number of local business units engaging in a wide variance of different, usually unique construction projects, but not in ongoing, long-lasting concepts and products. Skanska wanted to transform its business to some extent towards becoming a clearly defined brand, being consistent throughout Sweden and perceived positively by the public. They believed that a housing concept like BoKlok could have a positive impact on the general perception of Skanska.

■ JOINT DEVELOPMENT PROJECT

Mrs. Olsson informed us that Skanska and IKEA agreed on setting up a joint product development project at the end of the year 1995. The venture was officially established during a meeting on December 19th 1995.

The participants of this meeting were:

- Inger Olsson – Until that time, product developer and contractor at Skanska; from that time on, project manager of the development project

- Madeleine Nobs – Interior decorator of IKEA
- Lennart Hallberg – Information Officer of Skanska AB
- CG Friström – Sales Director of IKEA
- Olof Ericsson – Newly employed marketing manager of Skanska Residential Development

Since she was involved in the meeting, Mrs. Olsson was able to report first hand about the decisions that were taken. During the meeting, the scope and general goals for the project, the project team and the name “BoKlok” were defined. The concept to be developed should focus on small, cheap houses that were intended to be rolled out to those 13 locations throughout Sweden at which IKEA had warehouses. All representatives of IKEA and Skanska agreed that producing “just” a cheap product wouldn’t be enough to be successful. Having a good design for the product was an important criterion since the very beginning. Especially IKEA has been aware of this fact since it is one of IKEA’s success factors and incorporated within all its products.

It was agreed on that the project should mainly be an activity of Skanska Sverige AB. Skanska Sverige should appoint (and pay) the project manager, provide the project budget and receive the Intellectual Property Rights (IPR) for the developed concept. IKEA would contribute to the project by assigning its interior decorator Madeleine Nobs to work part time for the project (without charging Skanska for this work). Besides that, there should not be other financial contributions or similar obligations on the side of IKEA.

The three core members of the project team responsible for the development of the BoKlok concept were Mrs. Inger Olsson, Mrs. Madeleine Nobs and Mrs. Gun Ahlström.

Mrs. Olsson was appointed to become the project manager of the joint development project by the responsible manager of Skanska Sverige AB at this time, Mr. Claas Gustavson. She was intended to be the only person employed full-time in the project. Mrs. Olsson had valuable experiences as a developer and manager of Skanska. The years before the BoKlok project, she had worked as a

change manager for implementing Skanska's internal development and changing process called 3T. For that reason, designing and realizing innovative concepts was already familiar to her. Mrs. Olsson was responsible for defining and framing the different steps of the project and the tasks, which had to be done. She should also choose and obtain additional workforce, expertise, consultancy or similar services for the project when needed and in accordance with the project budget. She was furthermore responsible for marketing the product internally within Skanska as well as externally towards the public, the media etc. "Marketing internally" means, once the housing concept would have been developed, it should be the task of Mrs. Olson to talk to different local business units of Skanska in Sweden, present the concept to them and find partners for realizing the first BoKlok projects.

Mrs. Madeleine Nobs was assigned by the IKEA Sales Director Mr. CG Friström to contribute to the project part-time during the creation of the actual concept. Mrs. Nobs is an experienced interior designer of IKEA and was supposed to contribute to the project by providing the special insights to customer needs and marketing knowledge of IKEA. By focusing the development team on the customers, their needs as well as on cost-effectiveness she should help to realize IKEA's attitude of "good design and quality at an affordable price" within this project.

Mrs. Gun Ahlström was chosen and asked to be part of the project team by the project manager, Mrs. Olsson. Mrs. Ahlström is a renowned, independent architect (Ahlström Arkitektbyrå AB, Stockholm) that Mrs. Olsson had successfully worked with previous to the BoKlok project. Mrs. Ahlström should be responsible for designing the different BoKlok projects throughout Sweden.

Since only Mrs. Olsson was appointed to work full-time for the project, the team wasn't stationed at one place. All project team members stayed at their usual places of work in their respective companies and met when it was necessary.

At the beginning of the BoKlok project, no formally defined steering board was formed. A more or less informal way of working was present. Mr. Claas Gustavson, by that time responsible manager of Skanska Sverige AB, together with a manager from Skanska Residential Development where the persons that Mrs. Olsson reported to.

The top management, both of Skanska and IKEA, clearly supported the project. Mr. Ingvar Kamprad, CEO of IKEA, as well as the CEO of Skanska, Mr. Melker Schörling, knew and were positive about the project. For instance, both attended the opening ceremonies when the first BoKlok projects were shown to the public after completion in Helsingborg, Sweden.

■ ANALYSIS

In order to understand the market segment and its needs the project team decided that conducting detailed analyses would be the first step to take. According to (Magnusson & BoKlok AB, 2006, p. 2): “At the very beginning, Statistics Sweden was contacted and asked: “What is the current composition of households in Sweden?” Back in 1996, 75% of households in large towns and cities were 1, 2 or 3-person households. The corresponding figure for the other parts of Sweden was 65%.

These figures have since increased and today more than 85% of households in Stockholm are classed as “small”. The corresponding figure for the rest of the country is 75%.

Behind these figures we find the constantly increasing share of single mothers and fathers, students, young people looking to leave home, pensioners and other people who choose to live alone. Unfortunately, city planners have not focused on these broad target groups when laying out residential areas. These households very often have just a single income. Small households also have different requirements for functions in the home to those of others on the “second-hand” house market.”

From the very beginning of the project, it was clear to the project team that the price of the final product would probably be the most important buying factor for BoKlok customers. It was vital for the success of the concept that a broad range of customers can afford to buy those homes. After having analysed and clarified the market segment by the mentioned analyses of Statistics Sweden, Mrs. Olsson decided to continue with further analyses trying to answer the question what the actual maximum price for BoKlok homes could be. To find the answer on this, “the next step was to ask about the disposable income of small households. The question was put to Pia Nilsson, the well known Swedish family economist. She

was asked how much single parents could afford to pay for a house without having to compromise on other payment obligations such as food, day-care, bus travel, clothes, insurance and so on. The answer came back: SEK 3,400. So this was the figure chosen for the rent. Since then, much has happened to improve disposable income. In fact, a single mother today can afford to pay around SEK 5,200 a month for her home.” (Magnusson & BoKlok AB, 2006, p. 2)

Given these results, the project team decided that the respective numbers must be the maximal net price for a BoKlok home per month. In consequence, the next action was to determine which features the homes can and should offer to the customers within that strict cost frame. In order to decide about those issues, it was important to get to know about the preferences of the potential customers. For this purpose a “third survey was conducted at IKEA’s stores all over Sweden. IKEA customers were asked to state what they wanted in their homes. The received answers were very similar among men and women, young and old, in all parts of the country. Top of the list was a desire to live in secure, small-scale surroundings. Other wishes included a desire to live close to the countryside, with good relations to one’s neighbours, ideally with a little garden and a gate to close. It was also important to have a home that was light, well planned, functional and furnished with natural materials.” (Magnusson & BoKlok AB, 2006, p. 2)

■ DEFINING THE CONCEPT

The collected data, especially the user preferences and the budget restrictions, helped the core project team to develop a clear vision of the product’s characteristics. With these characteristics in mind, the team started to develop and discuss a design (shape, layout, size, exterior etc.) for the BoKlok homes during several meetings. Once a promising design concept has been developed, standard calculation templates for Skanska construction projects were taken and filled with maximum prices for the certain sections of the scheme. These sections are for example the costs for land, for contracting, for materials, for services, for financing, for obtaining necessary permits and so on. The aim was to achieve an overall cost reduction of approximately 30% compared to a normal construction project.

During this phase of actually defining the features of the homes and designing the houses, Mrs. Olsson expanded the project team beyond its 3 core members. One mechanical and one electrical engineer of Skanska as well as the landscape architect Pia Krensler from the Swedish consultancy Tyrens, which is specialized on construction and infrastructure consultancy services, were integrated to the team. All those persons were chosen because Mrs. Olsson had worked successfully with them before and considered them to be very competent experts within their respective domains. The named persons were responsible for developing the blueprints, sketches and other relevant specifications of the BoKlok homes. The process of doing so mainly matched common procedures of Skanska when executing a construction project. The significant difference was that cost estimations for every piece and part that was planned were done in parallel to the normal routines and have been compared to the cost target continuously.

■ REFINING THE CONCEPT

Having defined a draft for the BoKlok concept that was concrete enough to discuss about how it could be realized in practice, Mrs. Olsson started to visit the various local business units of Skanska in Sweden. She presented the concept and preliminary calculations that she had prepared for the product idea to local representatives like product and project managers. Her aim was to find partners that were interested in realizing BoKlok projects. After several meetings and negotiations Mr. Olsson had found the first partners within certain local business units that agreed to try realizing the first projects.

Together with those local partners Mrs. Olsson arranged meetings and negotiations with the public bodies of the designated regions in which the first BoKlok projects should be created. The public authorities were asked to sell construction land that must not cost more than the calculated maximal price. In order to convince the local authorities of selling significantly price-reduced land Skanska assured that the savings would be vital for successfully building the designated cheap dwellings. Furthermore, Skanska obligated itself to not using the reduction of costs for increasing its profits from the projects, but to transfer the

benefits to the final customers. In consequence, more people would be able to buy homes in the specific region.

Once the first land could be purchased for the specified price, a complex and, according to Mrs. Olsson, long and difficult process of numerous meetings and negotiations with suppliers and subcontractors of the local Skanska business units as well as with the units itself was initiated. The goal was to figure out and agree on procedures that allowed achieving the planned cost reductions necessary for successfully realizing BoKlok projects.

The partners of the local Skanska units like plumbers, carpenters, electricians but also material suppliers were invited, told about the new project and challenged with the problem of not exceeding the specified maximum prices for their products and services. The discussions that emerged from this challenge became a very important factor for refining the preliminary concept of BoKlok in a way that actually allowed implementing it. In an iterative manner, the feedback and ideas of the certain parties involved in those meetings were collected, evaluated, extended and considered for adjusting the concept, which then became the input for follow-up meetings. Unfortunately, there are not enough information preserved to present this interesting phase of negotiating with the certain stakeholders and adjusting the concept in much detail. Because more than 10 years have elapsed since that time, even Mrs. Olsson, who was the leading person throughout this process, could not provide us many detailed facts about it anymore. Albeit, it turned out that for meeting the price limit new ways of cooperation between Skanska and its partners had to be established.

■ A NEW WAY OF CONSTRUCTION

As a first novelty the concept of a pre-fabricated house has been formed during and as a result of those gatherings. In order to build huge volumes of houses in an efficient way on different locations, pre-fabricated parts have been a good solution. These parts are produced within a highly standardized production process, in a warm and dry environment, hence reducing the risk of losses due to bad climatic conditions as well as reducing construction time. Skanska developed the idea of sending huge packages to the actual construction site, just as IKEA

does with its furniture. Those packages should be “simply assembled” by the local partners within Skanska and their subcontractors.

The Swedish company Myresjöhus, situated in the small town Myresjö in Småland, Sweden, was chosen to be the supplier for the prefabricated wooden frameworks for the first BoKlok projects. The company was founded in the 1920's, ever since producing wooden houses and in more recent history modular wooden houses. In the first years of BoKlok, Myresjöhus was the most important, nation-wide supplier for BoKlok frameworks. The company was actively involved in the discussions and strongly influenced the specifications for the product. It was their task to transform the intended concept into cost effective production processes.

Until late 1999, there was only one type of a BoKlok house, the model “Älmhult”. Except 3 different colours for the outside facade, no substantial variations like different plumbing, window or heating options, which customers can choose from in normal construction projects, were offered for this model. That helped to reduce costs, too. Besides the substantial framework of the house (walls, ceilings, roof etc.) a standardized bathroom and kitchen interior was included in the BoKlok package. In 1999 a second model, “Helsingborg”, was introduced. It was hugely identical to “Älmhult”. Only the outside carpeting – wooden planks for “Älmhult” vs. plaster for “Helsingborg” – differed. Not until 2005, the first considerably different BoKlok model, the “Villa BoKlok”, was launched.

Resulting from the idea of pre-fabricated modules, Skanska did the effort and specified the work that has to be done by craftsmen on the site much more in detail than for usual construction projects. The work itself and the order in which certain different tasks e.g. plumbing, electricity, carpeting etc. are to be done were standardized just like the houses were standardized, since these tasks are almost identical for all BoKlok projects. Resulting from this standardization of work, subcontractors, who wanted to be part of a BoKlok construction project, were expected to deliver standardized service “packages” just in time to an arbitrary BoKlok site. That differs a lot to traditional construction projects where subcontractors are usually given more freedom to decide when and in which order to execute certain tasks.

Furthermore, for the sake of reducing costs Skanska insisted on buying all necessary materials themselves. Skanska supplies the material to the subcontractors just in time, who use it to fulfil their “service packages”. This was another radical novelty. Usually, subcontractors supply and of course charge their material themselves.

The material suppliers and subcontractors could be convinced to cooperate in the named way and to cut back their own prices for different reasons. The successful realisation of BoKlok was likely to stimulate the so far low-performing market of private construction projects, probably resulting in a significant demand for the BoKlok homes. Skanska estimated to erect about 250 BoKlok flats in the first, about 300 in the second and approximately 500 flats in the third year. If the partners agreed to cooperate, given the named conditions, Skanska guaranteed to buy the respective materials and services exclusively from those suppliers and subcontractors. Delivering their materials and services in a standardized manner and in high quantities should enable Skanska’s partners to improve their processes, hence reducing their actual costs. This way, initially lower earnings of the partners, resulting from cutting their prices, could be amortized in a longer perspective. Eventually the cooperation was supposed to increase their business.

■ BOKLOK, THE PUBLIC AND THE MEDIA

Besides defining the concept for the BoKlok homes, marketing and communication was very important and a significant part of the work during the development phase of BoKlok. As soon as the media got to know about the project, it got huge national and international media attention. Especially the fact that IKEA engaged in this joint venture, something the company hadn’t done in this form ever before, caused an interest of the media that exceeded all expectations Skanska and IKEA had had. Having a broad product with a distinctive name was a novelty for Skanska and contributed to the huge public interest. Mrs. Olsson, the project manager, actively fostered this attention by cooperating intensively and very open with the media. Though this engagement caused notable overhead work, the tremendous publicity of the project also had valuable benefits.

On one hand, the elaborate press reports superseded the necessity of doing marketing for the new product. When the first BoKlok homes were finished, a small ad about the sales event in the local newspaper was sufficient to attract a huge amount of people willing to buy BoKlok homes. Due to the ongoing high media attention, BoKlok doesn't engage in other marketing efforts even until today. Still, the demand for BoKlok homes is far exceeding the possible supply.

Furthermore, Mrs. Olsson reported to us that an increased positive publicity induced by the BoKlok projects turned out to be a valuable argument when negotiating with certain local authorities or other partners.

■ COMMERCIALISATION OF THE CONCEPT

The first BoKlok homes were successfully finished in Helsingborg by 1997 - only 1 year after the start of the BoKlok development project. The BoKlok concept was taken over as a regular product of Skanska Sverige AB and Mrs. Olsson was appointed to become the responsible product manager. She stayed in this position for two more years until February 1999. During those two years, BoKlok projects were finished in additional 9 locations throughout Sweden.

In 1999, Mrs. Olsson decided to switch positions within Skanska. Hence, a new responsible product manager, Mr. Anders Larsson, was appointed. Assigning a new responsible that brings new perspectives and ideas for the product was considered to be very positive for BoKlok at that time. Under the lead of Mr. Larsson, certain modifications were done to the concept. Additional variations were introduced and BoKlok continued its growth. Unfortunately, we couldn't interview Mr. Larsson and ask him about the development of BoKlok during the years when he used to be the responsible product manager. In the following we sketch the evolution of the BoKlok concept presenting the information that we were able to reconstruct given the interviews with the current Managing Director of BoKlok, Mr. Wild-Nordlund.

After two more years of building further BoKlok projects in Sweden, it was decided to engage in an expansion of the product to the Norwegian and Finish market by 2001. Due to these expansions and the ongoing growth of BoKlok within Sweden, Skanska decided to establish their own production facilities for BoKlok frameworks. For this purpose, Skanska built an own factory for producing

BoKlok modules in the town Gullringen in Småland, Sweden. This factory should become the new main production facility for BoKlok frameworks serving the major market Sweden. In Norway, Skanska started to produce BoKlok modules in its factory called Skanska Husfabrikken in Steinkjer. Skanska owns this factory since the early 1980s and used to produce parts for other types of wooden houses there. Furthermore, the Norwegian company Moelven was chosen as a supplier of certain BoKlok modules for the Norwegian market. The first BoKlok houses in Norway were finished in 2002 and in Finland by 2003.

■ THE BoKLOK AB

Especially the international expansion to Norway and Finland caused the business operations for building BoKlok homes to become much more complex. The local builders in those countries were also part of Skanska, but belonged to different Skanska business units. Those new business relations needed to be handled. Furthermore, the concept needed to be taken care of e.g. for adopting it to certain specifics and regulations of the different countries. For managing this increasing complexity, it was decided to split the organization. One unit should be responsible for the ongoing development of the concept and another one for taking care of the necessary operations in order to build BoKlok homes. It was decided to set up a new shareholder company, the BoKlok AB, which should be solely responsible for managing and improving the concept. The certain Skanska business units in the different countries should be in charge of the actual operations for building BoKlok homes.

The BoKlok AB was founded on June 16th, 2004. IKEA and Skanska split the costs of the foundation. In return, each of the two companies received 50% of the shares issued. The product manager of BoKlok at that time became Managing Director of the new company. Other employees that had been responsible for certain operations concerning BoKlok so far were appointed to the new enterprise also. The newly founded BoKlok AB should own the concept for BoKlok and sell licenses for realizing BoKlok projects to interested and capable construction companies. It would for example decide what the product should look like, how the brand should be used for marketing and communication, what the sales pitch

should be, how the processes to cooperate with the licensees shall be organized and so on.

The new setup enabled further successful expansions of BoKlok. In 2004, the concept was successfully introduced in Denmark. The local Skanska branch of Denmark became responsible for organizing the operations in this market. The frameworks for BoKlok projects in Denmark, however, are not produced by Skanska, but supplied by the company Moelven ByggModul AB in Sandsjöfors, Sweden. By 2006, BoKlok was introduced in the United Kingdom. The construction company Live Smart @Home is the first company taking care of BoKlok operations and not being part of the Skanska Group. The BoKlok modules for the United Kingdom will be produced by the company Kingspan Off Site in a factory in Milton Keynes.

Besides the expansions to other markets, the new organizational setup also allowed to broaden the BoKlok product range. In 2005, the new model of a detached house, the “Villa BoKlok”, was first introduced in Sweden and in 2007 the first projects of terraced houses started in the United Kingdom.

7. ANALYSIS OF THE BoKLOK DEVELOPMENT PROCESS

■ NATURE OF THE INNOVATION

In this chapter we want to analyse which circumstances, events, actions and decisions were the most important factors influencing the BoKlok concept. We want to present why the innovation can be seen as a success and what enabled this success to our opinion. Furthermore, we want to draw connections to certain issues that relevant academic theory points out to be potential success factors and check whether these factors can be found in relation to BoKlok as well.

For answering these questions, we start with clarifying what, in our opinion, the new, hence innovative aspects concerning the BoKlok concept actually are. Solely supplying a prefabricated wooden house that can be erected within a day wasn't an innovation in the mid-1990s. At that time, a lot of companies, especially in Scandinavia, offered prefabricated, modular, wooden houses sometimes for decades already. Even for Skanska this kind of product wasn't completely new since they had certain business units, e.g. their subsidiary Flexator in Sweden or Skanska Husfabrikken in Norway, that have been acting in this business sector already.

The very basic innovation about BoKlok is, to our opinion, its clear customer-centric and market-oriented approach. We are aware of the fact that this might sound even less like an innovation compared to the product of a prefabricated house, taking into consideration that the concept of focusing a company's business activities on its' customers is common sense since round about 70 years. Nevertheless, we believe that the "core" of the innovation BoKlok is the fact that a clear customer segment has been identified and its' demands have been analysed in a way that enabled Skanska and IKEA to react on those. The challenge for both firms was to align a huge multiplicity of capabilities and processes in a way that allowed creating a suitable value proposition. We believe that the genuine innovation about BoKlok is a conglomerate of many diversified process innovations, each of them having a clear customer and market focus. From our point of view, the most important process innovations are those that helped to reduce costs, like for example the cost calculations that were done in

parallel with designing, the standardization of the product, its components and the services needed to realize it, purchasing price reduced, semi-remote construction sites, cost effective marketing due to high media involvement and so on. We judge those process innovations as the most crucial ones for BoKlok because the final price is the most important and restricting buying criteria for BoKlok customers. Another important process innovation can be found in focusing the development project that strictly on the consumer, which was kind of new for Skanska. Conducting analyses on the disposable income of customers and surveys about their preferences as well as cooperating with IKEA was a radical process innovation for Skanska. The same can be said about developing a product centrally within the Skanska Sverige AB and deploying it to certain local business units after completion. For sure, the distinctive characteristics of the product like the modern Scandinavian (IKEA like) design, availability of suitable furnishing solutions, living in a peaceful community, close to nature are important success factors for BoKlok as well. Following, we will point out some factors that enabled or might have stimulated these innovations.

■ MARKET ORIENTATION

As we already pointed out, the concept of market orientation as such is everything but new or even radical innovative. Although being around for decades and the topic of many academic (especially marketing related) publications, the concept is still quite fuzzy, at least in our perception. It appears to us as a kind of general business philosophy that is hard to attach precisely to certain characteristics of a company, product or process in order to conclude that the respective entity is market oriented or not. In order to use the concept as structured as possible we will relate to (Kohli & Jaworski, 1990). Those two authors address the fuzzy nature of this doubtlessly important philosophy and try to frame it in a way that shall allow for explicating what actually makes up market orientation and how to identify and influence it. The authors relate their research and the resulting framework to complete companies. Hence, we won't use it entirely because it would be far exceeding the scope of our paper to analyse e.g. Skanska's general market orientation. We will use some of the parts of the framework and relate it to the development of BoKlok. From their elaborate

literature review as well as from their own field research, Kohli and Jaworski extract three main pillars of market orientation. The first pillar is “Intelligence Generation”, saying that as many organizational units of a company as possible should be engaged in getting to know about user needs and preferences as well as about exogenous factors that influence those needs. The second pillar is referred to as “Intelligence Dissemination”, meaning that the generated information about important market needs and conditions must be distributed throughout the enterprise in order to enable the company to react effectively on them. In consequence the 3rd pillar is “Responsiveness”, which articulates that for being effective huge parts of a company’s organizational units must react cooperatively to the market insights gained. In the further course of the article the authors use their research to identify certain influencing factors regarding the top management level of a company, the company’s organizational structure and interdepartmental dynamics that might foster or hinder market orientation. We will outline some of them that can be seen as relevant for the BoKlok development.

The degree of centralization and formalization are two organizational characteristics of a company that Kohli and Jaworski point out as influencing for its market orientation. They argue: “the greater centralization, the lower intelligence generation, dissemination and response design” but also “the higher response implementation”. This means, a less centralized organization is more likely to get to know about relevant market tendencies and disseminate this knowledge better since usually the certain business units are situated “closer” to the market. On the other hand, a centralized organisation might outperform a decentralized organization in designing and implementing an effective corporate response to the changing market conditions. Related to the BoKlok project, both patterns can be recognized. Skanska was a heavily decentralized company in the mid-1990s, characterized by a huge number of different business units spread over large parts of Sweden, not to mention Skanskas’ international business units. In consequence, the drastic decrease in business from small-sized private construction projects must have become obvious to wide parts of the organization.

In the context of one of the multiple business relations, which usually characterize a decentralized organisation, this issue was discussed and an idea to tackle it emerged. In other words, we suppose that by being decentralized,

having an immense number of diverse business relations and getting in contact to very different persons and perspectives, Skanska was inherently more likely to encounter a promising idea to solve the problem. In fact, the idea came up while discussing with employees of IKEA. Being a home furnishing company, not a constructor, IKEA and its employees can be supposed to have a very different perspective on the market, on the business and on the customer.

By setting up the actual development project centrally within the Skanska AB, Skanska partially managed to avoid the down-sides of a decentralized organisation what concerns the lower quality when designing a corporate response. It wasn't possible to eliminate these effects completely because eventually a lot of Skanska business units had to be involved to finally implement the concept. As we will point out later on, the necessary involvement of these additional stakeholders had definitely positive affects on the product, however, the process of negotiating and adjusting the BoKlok concept with all the suppliers, subcontractors, local partners, public authorities etc. was definitely more complex and elaborate than it might have been in a very centralized setting.

Another aspect proposed by the two authors is that a low formalization of procedures and structures within a company results in a higher market orientation. This fact can be observed quite well during the BoKlok development project. According to Mrs. Olsson, a very informal way of working was present at that time within Skanska. There wasn't a formal NPD process that had to be followed while developing BoKlok. There hasn't been a formal steering board. The CEO of Skanska Sverige, Mr. Claas Gustavson, provided Mrs. Olsson the authority to frame and organize the project in the way she believed it to be best suitable. She reported, also in an informal way, directly to him and another high level manager of Skanska Residential.

These facts also illustrate some of the factors related to the top management that Kohli and Jaworski point out to foster market orientation. First of all, the top management needs to support the project and the market oriented approach. They need to do so, not only by saying, but by acting in a way that ensures inferior managers of the fact that the senior management truly strives for a market orientation. Furthermore, the high level management should accept a certain risk, which is unavoidable when doing new things. We think all these factors can be found in the case of BoKlok. Mrs. Olsson pointed out that there is a culture of

innovation within Skanska. All employees have the responsibility but also possibility to come up with new ideas. The top management is truly open for those ideas and strongly supports evolving projects. The top management also supported the BoKlok concept and assigned huge responsibility and competence to Mrs. Olsson in order to develop it. She was encouraged to use new ways of doing things. We believe this open minded culture helped to actually coming up with the innovative approaches that shaped BoKlok.

■ THE PROJECT TEAM

Another important success factor, from our point of view, is the project team for BoKlok. The formation of a team consisting of 3 interdisciplinary, experienced experts was a good prerequisite for developing an innovative concept. The project leader, Mrs. Olsson, combined extensive project-leading experience with a very energetic and positive personal attitude towards the new idea. Having worked with implementing Skanska's internal development and changing process before her time with BoKlok, probably made her familiar with pursuing new ways of doing things and overcoming certain resistances on the way. This experience got especially valuable while marketing and refining the concept internally within Skanska.

Besides her professional knowledge and experience Mrs. Nobs, the interior decorator of IKEA, contributed the unique IKEA attitude of "always focusing on the customers and their demands" to the project, as Mrs. Olsson reported to us. Especially the designs that Mrs. Nobs and Mrs. Ahlström, the renowned Swedish architect, came up with caused BoKlok to become widely known as "The IKEA House", although this isn't really correct. The ideas and designs of the project team stayed, at least for the traditional model of a 2-story apartment house, almost unaltered until today.

■ NETWORKING

The last very important success factor that we would like to point out is the influence which the various stakeholders involved in the project had. Not only did Skanska and IKEA incorporate their perspectives and knowledge in this new product, but a lot of additional parties did as well. The process of negotiating with

suppliers, local subcontractors and different Skanska business units was time consuming and elaborate, but to our opinion crucial for the success of BoKlok. The refinement of the concept during the sequences of meetings was vital for realizing the cost reductions that were necessary in order to stay inside the tight budget restrictions. We believe that the agreements which resulted from those meetings induced a good base for long term business relations between Skanska and the respective other companies. To us, it seems like that by cutting their prices Skanskas' partners clearly signalized their interest for an ongoing partnership since they could only amortize the initial profit reductions over a longer period of time.

The most important partner for Skanska was for sure IKEA. The characteristics of IKEA's unique way of developing new products, as we illustrate it in chapter five, can be clearly found in the development process of BoKlok as well. Besides that, the pure presence of IKEA in this project boosted the media attention tremendously. A lot of the early success of the project lies rooted in exactly this circumstance, as we will outline in the following.

■ SUCCESS

Although the project had not realized significant positive earnings by 1999 when Mrs. Olsson changed to another position, we agree to her judgement that the project can be seen as a clear success for certain non-financial criteria.

Since its introduction until today, BoKlok generates a demand that is far exceeding the actual supply. The request for BoKlok is that strong that the right for buying a BoKlok home needs to be assigned to the potential customers through lotteries.

BoKlok was the first Swedish housing project that got an immense national and international media attention. In consequence, the project had a considerable positive affect on Skanskas' and IKEAs' image, reputation and public relations. BoKlok demonstrated that Skanska is capable and willing to offer affordable housing products for persons with less income in addition to their traditional products, which were mostly affordable to more wealthy people only.

By successfully building BoKlok homes in several locations throughout Sweden, Skanska could fortify their relations with the respective local authorities

and underpin its good reputation. That helped to realize certain future benefits for Skanska like follow-up orders for further construction projects and/or discounts on land purchased for other projects.

Developing the BoKlok concept in a centralized fashion within the main organization of Skanska Sverige was quite a new approach of product development for Skanska. Before BoKlok, most new products were developed in a decentralized manner within certain local business units of Skanska. The more centralized process of product development became kind of a role model for future projects of Skanska e.g. “Moderna Hus”. After BoKlok, an increasing number of products were developed centrally and “rolled out” to the whole organization after completion.

Today, around 200 people, including the factory personnel of the production facility in Gullringen, are working full-time related to BoKlok.

8. ONGOING DEVELOPMENT OF THE BOKLOK CONCEPT

Having presented how the concept for BoKlok has been developed up to its current state, we would like to continue with presenting how the BoKlok AB is continuously developing the concept further, adjusting and broadening it in order to keep track of the changing demands of their customers as well as other requirements.

■ ANALYSIS OF CUSTOMER NEEDS

As pointed out throughout chapters 6 and 7, the customer has clearly been in focus when developing the concept for BoKlok houses. The whole idea is based on fulfilling the needs of a clearly defined customer segment what concerns affordable, decent housing. Keeping track of changes in customers' preferences and adjusting the own value proposition accordingly is vital for the success of almost every company. The BoKlok AB tries to measure customer needs and customer satisfaction in an ongoing process. Every customer that is moving into a BoKlok flat receives a survey (questionnaire). It contains questions about how customers judge the process of moving in, the product itself, the process of buying, etc. In addition to this initial questionnaire, BoKlok also performs surveys on older sites, asking questions to people living in a BoKlok home for more than two years. The customers are asked whether they are still satisfied, whether they have complaints or suggestions and so on. That information can provide hints on possible improvements to the concept. The surveys are evaluated continuously and considered to be very valuable. So far, the results are very positive. 98% of those people living in a BoKlok home for 2 years are very satisfied and would like to recommend the product to someone else.

■ NEW PRODUCT DEVELOPMENT

In 1996, during the initial development of BoKlok, the process to follow was mostly determined by the project manager. Besides the project budget only few limitations or guidelines regarding "what had to be done" and "when" were given to her. This has changed significantly within the BoKlok AB. Today, a more

formally defined and expanded new product development process (NPD) exists. Due to the increased production volume, a product failure would result in much higher losses today than back in 1996. In return, even broader and more detailed analyses and evaluations are conducted during development projects for new BoKlok products today.

The process has been developed as a mixture of multiple influences. A long and strong history of product development and project management processes exists in Sweden. Ericsson, for instance, developed a project management process, PROPS, which is widely used in many countries and can be seen as one of the leading project management processes in the world. Ericsson has an own academy that trains people in working according to PROPS procedures. PROPS also influenced BoKlok while creating their process. Lars Wild-Nordlund describes the BoKlok process as a kind of mixture of the IKEA process and the Ericsson PROPS process for developing new products. Mr. Wild-Nordlund used to work for Ericsson and contributed some of his experiences from that time when creating the process for the BoKlok AB. IKEA of Sweden (IOS) has a very advanced, good working product development and innovation process as well. BoKlok somehow tries to apply the IKEA way of product development to the construction industry. Figure 8.1 illustrates the BoKlok new product development process roughly. The general concept of a Stage-Gate-Model becomes immediately obvious.



Figure 8.1: New Product Development Process of the BoKlok AB

Source: (Wild-Nordlund, 2007)

Since the focus of this paper is on the initial product development process of the BoKlok concept, we do not analyse the current process very detailed. We limit

ourselves to pointing out the main enhancements to the procedure as it was performed in 1996.

In the Pre Study phase, elaborate specialized studies and analyses among consumers are conducted in addition to the continuous surveys among existing customers. For instance in 2006 when the new model of a terraced house was planned, four surveys about terraced house living were conducted, one in the UK, in Norway, Sweden and in Denmark. People were asked what they would like about living in a terraced house, what they would like to find there, etc. Those surveys were the same in all countries and were run at the same time in order to compare the customers' needs between different locations. Since the terraced house is a new product that hasn't been launched yet, it was not possible to interview existing customers. Potential clients of BoKlok, e.g. IKEA customers on the outside of IKEA stores as well as people living in existing terraced house areas produced by other companies, were asked. All those surveys were carried out by independent, specialized companies since it is a very cumbersome process. The companies performing those surveys needed to have special expertise in the respective issue and country that were the targeted markets for the product. Another novelty is the clear definition of deliverables and the reviews by a board of BoKlok representatives.

During the initial development of BoKlok there has not been a prototype or mock-up to conduct experimental evaluations. Skanska more or less relied on the experience of the project team and the many persons involved in the definition of the concept. The evaluation process for customer needs, as we described it above, was initiated after the product has been launched.

For developing the new product of a terraced house, however, the BoKlok AB built a mock-up during the execution phase. It was used to collect feedback from a focus group and for testing whether the innovative ideas of the engineers can be realized.

■ PROCESS IMPROVEMENTS

Currently, BoKlok doesn't have a formalized procedure for process innovations and improvements like the one for NPD projects. Nevertheless, process innovations are important and done continuously. Any improvement e.g.

of a certain production process starts with a business analysis in order to determine whether the change will reduce costs for the company. This is the most important goal that a process improvement must result in.

Possible improvements are discussed on a quarterly basis during meetings that suppliers, the responsible persons for the operations in the respective country, BoKlok and IKEA representatives attend (overall about 6 people).

Improvements to the products and improvements to the production processes are usually highly interdependent. In consequence, BoKlok cooperates with Skanska in those respects. If, for example, a certain unit of Skanska comes up with a new, more effective way of production, this will usually require changes to certain parts of the product which are taken care of by BoKlok. BoKlok can furthermore promote these changes and knowledge to production facilities in other countries as well. Usually there is an equal 50:50 relation between product and process improvements related to BoKlok.

9. THE FUTURE OF BOKLOK

Having discussed a lot about the doubtlessly very interesting past of BoKlok, we will try to shed some light on what the future for BoKlok might look like.

When we posed this question to Mr. Wild-Nordlund, he explained to us that, right now, BoKlok is in a necessary consolidating phase what concerns the number of products and markets. Starting from “one product – one country”, the concept has grown to “five countries – a lot of products”. It isn’t sure yet, if this speed of expansion should be kept or if another strategy would be more appropriate for not endangering the unique cost advantage of the products.

According to the current Managing Director, the challenge in relation to further market expansions will be to provide the desired level of quality and at the same time keeping a low price profile. In particular, if we imagine a delivery of this product in many different countries all over the world, it would be very challenging for the company to combine “Swedish quality” with competitive prices, due to the many differences that characterise each country (style of the houses, customer needs, local construction market, ...). Furthermore, BoKlok finds it reasonable to continue choosing countries with comparable levels of income, living and housing etc. as potential candidates for an expansion because otherwise it could be hard and expensive to adapt the concept to every peculiarity.

Although BoKlok has intentions for expanding its business to further countries in the long term, the company declared that there is no fixed strategy or time plan to pursue this scope yet. Mr. Wild-Nordlund found it hard to name any potential future expansion or any future new business that BoKlok could enter in relation to the concept, since the company’s attention, right now, is very much centred on the daily business. The main focus is more on the work efficiency, product development and on the near-future market expansion in the United Kingdom.

However, to our personal opinion, it might be very possible that BoKlok will develop a new strategy to enter other markets once the BoKlok concept will be consolidated and the knowledge to produce the houses and the necessary amount of variations in a good, still efficient manor will be acquired.

For the immediate future, our contact told us that the company is continuously focusing on smaller innovations in order to improve the concept, increase its

performance and to design it as close as possible to customer needs. Together with the product, BoKlok is stressing on improving the process of delivering the houses and all the activities that are included in that (procurement, production, logistics, etc...), since those do strongly affect the concept itself (costs, quality, performance, time of delivery, image of the company ...).

Another issue, which BoKlok is continuously working on, is to become even more cost effective. One possibility that Mr. Wild-Nordlund named for achieving this goal is the creation of synergy effects within the concept. For example, BoKlok is currently working on establishing a uniform procurement process for all products and countries. Furthermore, the company works on standardizing the interiors like kitchens, furniture etc. in different products. Using the same components in many different houses is seen as one possible lever to go on with reducing costs.

As we discussed before, BoKlok launched the new concept of a terraced house in the United Kingdom. The main goal for 2007, as the company stated, is to successfully finish these projects and to launch the model in Scandinavia by 2008.

Another aim that BoKlok is thinking about might be the creation of a community concept for BoKlok homes within the next few years. For example, this could be realized by providing a web-based portal for all BoKlok tenants where they could get to know other like-minded people, compare different BoKlok houses, exchange ideas on the product, its style, interior decoration etc. It is meant to be an informal, volunteer community, which BoKlok would provide the web platform for.

When we, the authors, dream about how BoKlok could look like in a distant future, we can imagine many services that could be added to the house, as well as different scopes that could be pursued in order to improve the marketing strategy. All the ideas named hereafter are nothing but pure imagination and are not related to any concrete future plans or goals of BoKlok. To our opinion, selling service products like insurance, gardening, or services related to the community, such as swimming pools or gyms could be an opportunity for the company. One day, the concept might also be extended to domotic (intelligent houses), e.g. through a partnership with home appliances manufacturers. Broadening the product range towards business offices could be an interesting opportunity for the future development of BoKlok. Nowadays, a tendency that big companies centralise their offices can be observed. Formerly distributed offices located in different buildings across the city centres are moved to huge buildings in less crowded areas. Producing such buildings might be a promising

perspective for BoKlok. Introducing models for holiday houses might also be a possible enhancement of BoKlok's business.

It is hard to foresee how the concept will be developed in many years from now. But we are sure that, whatever the future will be like for BoKlok, the company will still "stand on the side of the many people... with big dreams and small wallets", as they do today. The concept will probably be improved further on, but we believe that the key factors and core values for its success will not be affected by the change.

| KEY FACTORS | CORE VALUES |
|---|--|
| Sustainable living | Being the customer's friend – customer focus |
| Light, well-planned and functional spaces | More for less – high quality, low prices |
| Using a lot of natural materials | Pleasant |
| Green, safe and pleasant surroundings | A good home |
| Good building standards | Low housing costs |
| Defined products and low flexibility | |
| Smart production – Modern Methods of Construction (MMC) | |

Table 9.1: The key factors and core values of BoKlok.

VI LIST OF FIGURES

| | |
|--|----|
| COVER PICTURE: BOKLOK HOME, MODEL "ÄLMHULT" | 2 |
| FIGURE 1.1: MAP AND CAP | 10 |
| FIGURE 1.2: A TYPE OF CO-OPERATION: THE JOINT VENTURE | 12 |
| FIGURE 1.3: CO-OPERATION ONE-TO-ONE | 12 |
| FIGURE 1.4: ANALYSIS OF INNOVATIVE CO-OPERATION | 13 |
| FIGURE 1.5: THE PROJECT AS AN IMPULSE PROCESS | 14 |
| FIGURE 1.6: THE PROJECT LIFECYCLE | 14 |
| FIGURE 1.7: THE PROJECT KEY PRINCIPLES | 15 |
| FIGURE 1.8: THE WEIGHT OF THE PROJECT MANAGER | 16 |
| FIGURE 1.9: PROJECT ORGANISATION FORMS | 16 |
| FIGURE 2.1 (LEFT): LOCATION OF BOKLOK CONSTRUCTION SITE "LERKENDAL PARK" IN TRONDHEIM | 20 |
| FIGURE 2.2 (RIGHT): OVERVIEW OF LERKENDAL PARK CONSTRUCTION SITE | 20 |
| FIGURE 2.3: ANIMATION OF BOKLOK MODELS TO BE BUILD E.G. WITHIN LERKENDAL PARK | 20 |
| FIGURE 2.4: OVERVIEW OF BOKLOK CONSTRUCTION SITES AND PRODUCTION FACILITIES | 21 |
| FIGURE 2.5: LAYOUT OF A TYPICAL BOKLOK APARTMENT HOUSES CLUSTER | 22 |
| FIGURE 2.6 (LEFT): BOKLOK APARTMENT HOUSE "ÄLMHULT" WITH BLOOD-RED WEATHERBOARD | 23 |
| FIGURE 2.7 (RIGHT): BOKLOK APARTMENT HOUSE "ÄLMHULT" WITH BLACK CLADDING | 23 |
| FIGURE 2.8: SCHEMATIC FIGURE OF SUITABLE LOCATIONS FOR BOKLOK PROJECTS | 24 |
| FIGURE 2.9 (LEFT): 4 PICTURES FROM THE INTERIOR OF A BOKLOK HOME | 25 |
| FIGURE 2.10 (RIGHT): EXAMPLE FOR THE INTERIOR OF A LIVING ROOM WITHIN A BOKLOK HOME | 25 |
| FIGURE 2.11: DIFFERENT VERSIONS OF BOKLOK APARTMENT HOUSE "ÄLMHULT" | 25 |
| FIGURE 2.12: GROUND PLOT OF BOKLOK APARTMENT HOUSE "ÄLMHULT" | 26 |
| FIGURE 2.13: DIFFERENT VERSIONS OF BOKLOK APARTMENT HOUSE "HELSINGBORG" | 26 |
| FIGURE 2.14: EXTERIOR OF A BOKLOK APARTMENT HOUSE IN THE UNITED KINGDOM | 27 |
| FIGURE 2.15: GROUND PLOTS OF 46 M² 1-BEDROOM FLAT IN BRITISH APARTMENT HOUSE | 27 |
| FIGURE 2.16: GROUND PLOTS OF 58 M² 2-BEDROOM FLAT IN BRITISH APARTMENT HOUSE | 28 |
| FIGURE 2.17 (LEFT): EXTERIOR OF "VILLA SKÅNE" | 28 |
| FIGURE 2.18 (RIGHT): EXTERIOR OF "VILLA VÄRMLAND" | 28 |
| FIGURE 2.19: GROUND PLOT OF "VILLA BOKLOK" | 29 |
| FIGURE 2.20: ANIMATION OF EXTERIOR FOR FUTURE BRITISH MODEL OF A TERRACED HOUSE | 29 |
| FIGURE 2.21: ANIMATION OF GROUND PLOT FOR FUTURE BRITISH MODEL OF A TERRACED HOUSE | 30 |
| FIGURE 2.22: GROUND PLOTS OF 67 M² 2-BEDROOM FLAT "MÖLNA" IN BRITISH TERRACED HOUSE | 30 |
| FIGURE 2.23: GROUND PLOTS OF 70 M² 2-BEDROOM FLAT "ÄLSTEN" IN BRITISH TERRACED HOUSE | 30 |
| FIGURE 2.24: GROUND PLOTS OF 81 M² 2-BEDROOM FLAT "JÄRNBRO" IN BRITISH TERRACED HOUSE | 31 |
| FIGURE 4.1: IKEA LOGO AT IKEA WAREHOUSE | 37 |
| FIGURE 4.2: IKEA'S MOST POPULAR PRODUCTS: "BILLY", "LACK" AND "IVAR" | 39 |
| FIGURE 4.3: INNOVATION LEADER'S SCORECARD FOR IKEA | 40 |
| FIGURE 5.1: SKANSKA FACTS AND FIGURES | 47 |
| FIGURE 5.2: SKANSKA IN THE WORLD | 48 |
| FIGURE 5.3: SKANSKA'S BUSINESS STREAMS | 51 |
| FIGURE 5.4: THE OPERATIONAL RISK ASSESSMENT PROCESS | 54 |
| FIGURE 5.5: THE ORESUND BRIDGE | 57 |
| FIGURE 5.6: THE WORLD TRADE CENTER TRANSPORTATION HUB | 58 |
| FIGURE 5.7: UNITED NATIONS HEADQUARTERS IN NEW YORK, VIEW FROM THE EAST RIVER | 58 |
| FIGURE 6.1: COMPLETED DWELLINGS IN NEWLY CONSTRUCTED, OWNER-OCCUPIED ONE- OR TWO-DWELLING BUILDINGS OWNED BY PRIVATE BODIES, 1990-1995 | 60 |
| FIGURE 6.2: CONSUMER PRICE INDEX (CPI) OF SWEDEN, TOTAL, FIXED INDEX NUMBERS 1980=100 | 60 |
| FIGURE 6.3: TOTAL NUMBER OF SINGLE PERSONS IN SWEDEN, AGES 14-99+, ALL SEXES, 1990-1995 | 61 |
| FIGURE 6.4: TOTAL NUMBER OF DIVORCED PERSONS IN SWEDEN, AGES 14-99+, ALL SEXES, 1990-1995 | 61 |
| FIGURE 6.5: FACTOR PRICE INDEX (FPI) FOR BUILDINGS (TOTAL EXPENDITURE, INCLUDING WAGE DRIFT) FOR COLLECTIVELY BUILD ONE- OR TWO-DWELLING BUILDINGS, 1990-1995 | 62 |
| FIGURE 8.1: NEW PRODUCT DEVELOPMENT PROCESS OF THE BOKLOK AB | 83 |

VII LIST OF TABLES

TABLE 1.1: THE NINE BUSINESS MODEL BUILDING BLOCKS 17

TABLE 3.1: THE NINE BUSINESS MODEL BUILDING BLOCKS 32

TABLE 4.1: IKEA’S FACTS AND FIGURES 38

TABLE 5.1: SKANSKA’S MINOR SHARE HOLDERS 47

TABLE 9.1: THE KEY FACTORS AND CORE VALUES OF BOKLOK. 88

VIII LIST OF REFERENCES

Bartezzaghi, E. (2005). Slides from the course “Sistemi organizzativi”. Politecnico di Milano. Spring Semester 2005.

Hippel, E. (1978). Successful Industrial Products From Customer Ideas. Journal of Marketing, vol.42. January 1978.

Holmen, E. (2007). Lecture Notes on Course TIØ4180 Innovation and Information Management. NTNU Trondheim. Autumn Semester 2007

Kalchschmidt, M. (2006). Slides from lecture on “Project Management”, part of the course “Sistemi organizzativi” held by Professor Emilio Bartezzaghi. Politecnico di Milano. Spring Semester 2005. Based on: Bartezzaghi, E., Spina, G., Verganti, R. (1999). Organizzare le PMI per la crescita. Ed. Il Sole 24 Ore. Milan. Slides translated in 2006.

Kohli, A., & Jaworski, J. (1990). Market Orientation: The Construct, Research Propositions, and Managerial Implications. Journal of Marketing, vol.54, April 1990.

Magnusson, E., & BoKlok AB (2007). The BoKlok Concept: Fact Sheet November 2006. [Electronic version]. Received by email November 5th, 2007, from Lars Wild-Nordlund, BoKlok AB

Nesse, P. (2007). Lecture Notes on Course TIØ4180 Innovation and Information Management. NTNU Trondheim. Autumn Semester 2007

Osterwalder, A. (2004). The Business Model Ontology: A Proposition In A Design Science Approach. [Electronic version]. Retrieved November 26, 2007, from <http://www.businessmodeldesign.com/publications/The%20Business%20Model%20Ontology%20a%20proposition%20in%20a%20design%20science%20approach.pdf>

Skanska AB (2006). Skanska Annual Report 2006. [Electronic version]. Retrieved November 29, 2007, from http://www.skanska.com/files/documents/investor_relations/2006/Skanska_Annual_Report_2006.pdf

Skanska Bolig AS (2007). Lerkendal Park: En blomstrende bydel. [Electronic version]. Retrieved November 29, 2007, from www.bolig.skanska.no/rdn_files/projects/Lerkendal/Prosjektet/last_ned_materiale/Lerkendal_prospekt.pdf

Wild-Nordlund, L. (2006). BoKlok: Swedish for LiveSmart. Presentation during Swedish Models of Sustainability Seminar, 16th November 2006. [Electronic version]. Retrieved November 29, 2007, from http://www.constructingexcellence.org.uk/pdf/hforum/prefabs_sweden_161106/lars_wild_nordlund_bo_klok_161106.pdf

Wild-Nordlund, L. (2007). BoKlok is smart housing: With housing costs that leaves you money to spend [Presentation]. Received by email November 8th, 2007, from Lars Wild-Nordlund, BoKlok AB

IX LEGAL INFORMATION

This work contains copyright-protected material from different parties. Especially texts, figures and other materials of BoKlok AB, Skanska AB and the IKEA Group are used with kind permission of the respective companies. The usage of such material within this paper does by no mean affect the existence and validity of individual copyrights and/or other legal protections which the BoKlok AB, Skanska AB and the IKEA Group hold for the respective material.

Further third-party material is used within this paper in a solely academic context and in accordance with academic conventions concerning citing and referencing to the best of knowledge of the individually responsible author. The usage of such material within this paper does by no mean affect the existence and validity of individual copyrights and/or other legal protections which belong to their respective holders.

Trademarked names may appear in this paper. Rather than use a trademark symbol with every occurrence of a trademarked name, the names are used in a solely editorial fashion and to the benefit of the trademark owner, with no intention of infringement of the trademark. The use of trademarked names, registered names, general descriptive names etc. in this paper does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

Material within this paper that is used under the conditions of the GNU Free Documentation License (GFDL) is permitted by the original author to be copied, distributed and/or modified under the terms of the GNU Free Documentation License, Version 1.2 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A detailed copy of the respective license can be found at: http://commons.wikimedia.org/wiki/Commons:GNU_Free_Documentation_License

Material within this paper which is used under the conditions of the Creative Commons 3.0 Attribution-ShareAlike (by-sa) licence is permitted by the original author to be used according to the licence terms which can be found at: <http://creativecommons.org/licenses/by-sa/3.0/legalcode>