New Ways of Working and Office Arrangements: Exploring an Activity-Based Workplace

Master's Thesis in the Master's Programme Design and Construction Project Management

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CHALMERS UNIVERSITY OF TECHNOLOGY
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Interior photos of the case company’s office.
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ABSTRACT

In the modern business climate, knowledge workers can work from anywhere at any time due to the latest innovations in ICT. Hence, the use of an office is being questioned. Instead, offices carry valuable possibilities in facilitating human interaction, and aligning employee behaviour with organisational values. This development has led to new ways of working, from where new trends in office arrangements have emerged. One of these trends is called Activity-Based Workplaces (ABW). In ABW, employees are provided with the flexibility to undertake workplace activities in a variety of settings that best suit the current task at hand. This means mobility is essential for ABW to work; hence, implementing ABW often comes with substantial investments in computer systems. Since employees are encouraged to move around more in the office, new managerial challenges are likely to arise. Therefore, there is a need of studying possible effects of group cohesiveness and individual identity when working in ABW. Literature in office research indicates potential connections between the physical office environment and how the employee satisfaction, well-being and productivity are affected. However, in-depth studies of group dynamics in an ABW are lacking. Therefore, this thesis aims to contribute to the field of office research with empirical data collected from a case study of ABW within a Swedish context. In this qualitative study, the method for obtaining data has been interviews and an observational method called shadowing. Through shadowing, several scenarios were observed which were analysed together with the interviews conducted on the case company’s employees. The findings revealed some social challenges which need attention and further investigation. It was concluded that the increased and uncertain distance created by ABW was the main cause of these challenges present in the office. Therefore, trust, responsibility, and feedback become very important.

Key words: Activity-Based Workplace, Office Arrangement, New Ways of Working, Shadowing
SAMMANFATTNING


Nyckelord: Aktivitetsbaserade kontor, Kontorsmiljö, Nya arbetssätt, Shadowing
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1 Introduction

In human history, progress has accelerated changes in how people live, work, and communicate. Societies and cities now grow faster than ever and the reality in which people live is expanding beyond the physical world. It is no longer a necessity for all organisations to provide a physical place to work. For example, friends, money, and business opportunities are now available in the digital space enabled by technical innovations such as the internet, computers, and smartphones (Wilpert, 2009). In addition, some work tasks no longer need human interaction due to progress made within robotics and automation. Hence, knowledge is now considered one of the main human resources instead of manual labour (Worthington, 1997). The shift towards a knowledge economy forces companies to rethink their way of supporting knowledge workers (Gensler, 2013). As it is a reality to most of the employed population in the western world to spend more than 40 hours per week in offices, the office plays a significant role in people’s lives (Bodin-Danielsson, 2010).

The need for an office to conduct work is a social construction derived from the industrialisation era when the tools and machines used for working had to occupy a physical space (Bodin-Danielsson, 2010). As many social constructions, the office is changing with the globalisation and digitalisation of the world. As a consequence, the borderline between private and work life is fading. Due to this development, there is an ongoing discourse about ‘New Ways of Working’, which is about challenging the ways we work to meet the requirements of the contemporary business climate. New Ways of Working has led to various trends in office arrangements and there are a few ideas that permeate most of those trends. First, the need for individually assigned seating is being questioned. Second, advanced ICT solutions facilitate work conducted at anytime from anywhere. Third, the offices are used as a strategic tool to facilitate desired behaviours aligned to organisational values. These trends are challenging the social norms of where, when, and how it is accepted to work (Schriefer, 2005). A few examples of such trends created to support the ‘New Ways of Working’ are Guerilla Office, Coffice, A2, and Activity-Based Workplace (henceforth; ABW). This thesis will focus on ABW, due to its relatively wide adoption and popularity in organisations.

ABW has yet to enter the academic world and hence the literature is scarce. However, there is a fair amount of popular science articles written by companies either selling or adopting ABW (Gensler, 2013; Property Council of Australia, 2013; Wyllie et al., 2012). The articles vary in their definition of ABW, but there are some similarities. The main goal of ABW is to design the office based on the activities that the organisation perform. Commonly, this leads to an office separated by zones supporting different work modes, e.g. focused work, collaborative work, learning, and socialising (Gensler, 2008). In addition, the popular science also seems to agree that ABW is not a ‘one-size-fits-all’ solution (Wyllie et al., 2012), which may partly explain its branched nature.
The question now remains: why invest funds in offices arrangements? Because the new technologies allow us to be dispersed from each other, the office arrangement becomes a catalyst of organisational values and human interaction. The office should therefore be a place where people want to work, and with an interior facilitating desired behaviours (Bodin-Danielsson, 2010) which ultimately impacts organisational performance.

1.1 Research background and Case Company

According to Bodin-Danielsson (2010), office research embeds a multidisciplinary problem. There are four fields of research that deal with the physical office environment and its influence on humans and organisational outcomes, namely: organisational-oriented research, environmental psychology, occupational health, and architecture. The office arrangement does not itself create the qualities strived for, but it sets the conditions for the activities performed within that space. The office arrangement forms functional and social implications for organisations and group constellations. The physical environment can have an influence on how employees in the office interact and cooperate. Consequently, the office environment carries valuable possibilities in the pursuit of creating a creative, flexible and cooperative working environment. This is where the different fields of research align; they all recognise the office setting as means to achieve higher productivity or creativity (Bodin-Danielsson, 2010).

This thesis draws upon empirical data collected in a Swedish real-estate company. The company, hereby referred to as the Company, is a dominant actor on the Swedish real-estate market with a portfolio of approximately SEK 90 billion and little over 300 employees. The Company has a matrix structure with a flat hierarchy and operates in a multidisciplinary manner focusing on commercial facilities, nationwide. The Company recently implemented ABW in one of their offices which will be studied in-depth in this thesis, hereby referred to as the Local Office. The Local Office had the advantage of drawing on previous ABW experiences within the Company, whose first ABW implementation was completed at their office in Stockholm, hereby referred to as the Headquarters.

In 2008, the Company was acquired by a large Swedish pension fund. The acquisition led to a new strategy which was intended to unite the two organisational cultures. In 2011, a customer of the Company wished to rent the office space occupied by the Headquarters. At this point, the Company saw an opportunity to try something new in order to further unite the two organisational cultures, to prove that real-estate business can be interesting, to respond to the needs of the contemporary business climate, and to increase organisational performance and creativity. The Company created a project group to form the new workplace strategy, which was to increase collaboration, enable creativity, be courageous, and become an inspiration to customers and the real-estate business. The Company made a choice to adopt ABW as their office arrangement to meet the intended strategy.
1.2 Purpose and research questions

The purpose of this thesis is to explore ABW as a supportive office arrangement of the contemporary business climate, i.e. the ‘New Ways of Working’. By using an explorative research method called shadowing and interviews, the aim is to collect data through exploring ABW in reality. The findings are intended to shed light on the actual use and social challenges of group dynamics in ABW, contributing to the academic research.

Due to the scarcity of relevant academic literature on ABW, the first research question should provide data for further research within the field:

*RQ1: What is ABW?*

Referring to our purpose, the next research question is to answer how the implementation of ABW supports the needs of the contemporary business climate.

*RQ2: How are the intentions of ABW used to support the needs of the contemporary business climate?*

To grasp the changing interpersonal environment in ABW, the last research question is posed to answer the emerging challenges:

*RQ3: What collaborative and social challenges emerge in ABW?*

1.3 Structure of the report

The report has been structured in three main parts. The first part (chapter 2, 3 & 4) presents a brief history of office arrangements and their underlying drivers; a theoretical framework is introduced to give the reader a perspective on the subject; and a description of the research approach. The second part (chapter 5) presents the empirical findings of the report in two parts while discussing and analysing the result by triangulating the different methods and theory. Lastly, the third part (chapter 6) presents the concluding remarks, and makes suggestions for further research.
2 Office arrangements: A brief history

By presenting a historical background of Swedish office development, this chapter aims to illustrate how trends in contemporary business climates influence the physical environment of offices. Most of the brief overview is informed by the work of Bodin-Danielsson (2010).

The need for a place to work with administrative tasks arose during the industrialisation era when the development of industrial production and manufacturing bloomed. It did, however, take a few years before separate office buildings were built in Sweden. In 1863, the first office building was built by the banker Wallenberg in Stockholm. In this office, clerks worked behind a counter while the bankers and the board members had their own private offices in rooms separated from the clerks and customers (Bodin-Danielsson, 2010).

At the end of the 19th century, the invention of the steel-frame construction and the fluorescent lightning made it possible to build larger, open plan offices due to the decreased need to support walls as well as a decreased dependability of natural daylight. In Sweden, the first and trendsetting office building designed in this style was The Central Palace (Swedish: Centralpalatset) in Stockholm, built in 1899 (Bodin-Danielsson, 2010).

![Image 1 The Central Palace (Bengt A Lundberg, 2008)](image1)

![Image 2 The Central Palace (Ernst V E Stenhammar, 1897)](image2)

In the early 20th century, a lot of effort was exerted in order to find methods to rationalise the work being done in the office. Several books on new ideas of organisational theory were published during this time. Just to name a few: Taylor’s book ‘The Principles of Scientific Management’ in 1911, Leffingwell’s book ‘Scientific Office Management’ in 1917, and Galloway’s book ‘Office Management, its Principles and Practice’ in 1919. Clerks were no longer in focus when designing workplaces. Instead focus was turned to processes and productivity measures to maximise profit margins, turning employees into machines performing highly routinised working activities (Bodin-Danielsson, 2010). Office work should, similar to production and manufacturing work, be standardised, routine-based, and performed in large open office spaces with strict supervision and control by management. If clerks were performing more qualified office work, they tended to be placed separately in personal office rooms. The way of organising had a negative impact on
the status of office work due to the high degree of standardisation (Bodin-Danielsson, 2010).

In order for companies to comply with the striving for standardisation, the architecture of the offices had to be designed in a way that organised and controlled certain behaviour of the employees. Here, parallels to panopticon can be drawn. The principle of panopticon is the idea of maintaining complete order and control using architectural ideas, designing the structures so that those in power (i.e., high-positioned employees or managers sitting in cell-offices), without being visible, can observe the employees in that space, and by letting the employees believe they are under surveillance at any time (Sack, 1986). By building open plan offices, this way of exercising power and control contributed to the status of office work to decline. Still, the labour market of this time was increasing dramatically. Between 1910 and 1930, the amount of office workers grew by 300 per cent (Bedoire, 1979 in Bodin-Danielsson, 2010). A possible explanation for this is the focus on standardisation of work in the offices, leading to lower costs of human labour.

Eventually, the architects designing the large open office plans were criticised for their lack of focus on the employees work environment. Hence, in the 1930s, the architects understood they had to respond to this criticism, thereby introducing the concept of cell-offices, where individual offices were placed on both sides of a long corridor. One of the first, and probably the most famous example of this office design is The City Palace (Swedish: Citypalatset) in Stockholm, designed by the architect Ivar Tengbom in 1930-1932 (Bodin-Danielsson, 2010).

![Image 3 The City Palace, Stockholm (Lennart af Petersens, 1950).](image-url)
This was an interesting time in history since the designing trends were beginning to consider the employees’ work environments by valuing lighting, ventilation, room size and communal areas when planning offices. However, the main design focus was still to increase organisational efficiency and productivity. For example, a paper’s movement through the building was used to design the offices (Bodin-Danielsson, 2010).

For about 30 years, office work became synonymous with working in cell-offices. It was considered to be the most productive and efficient office arrangement. Also, the need to reorganise in order to minimise unnecessary work got attention in this era. However, in the mid-1960s there was a re-awakening of the open plan office, where organisations through physical accessibility of office employees sought to facilitate communication. The idea was to increase interaction and knowledge sharing among the employees, and thereby achieving a more efficient organisation (Christiansson and Eiserman, 1998 in Bodin-Danielsson, 2010). Striving for organisational efficiency was argued by Sundstrom (1986 in Bodin-Danielsson, 2010) to be a result of the Human Relation Movement. Again, it was innovations that enabled new office arrangements. The fluorescent lighting systems, central air-conditioning and acoustic ceilings made it possible to create an open plan office where more interaction and communication between the employees were possible. At this time, the superiors and managers were sitting among the rest of the employees in the office landscape, which was uncommon during the first era of open plan offices. The hierarchy of organisations was thereby visually changing. The idea was not only to democratise the organisation and to increase communication between employees, but to prepare the organisation for restructuring, driven by changes in the business climate. An open plan office is from this regard flexible since comprehensive reconstruction is not needed if the company is restructuring. This way of planning for changes within the organisation decreased restructuring costs (Bodin-Danielsson, 2010).

In the 1970s, the research on the impact of office design on employees and organisations showed that the open plan office was linked to negative results when productivity and well-being was studied. The open plan offices was believed to be more democratic, but employees felt monitored and controlled by management, which now were sitting in the same area. Hence, the open plan office was being criticised once again. The employees declared the need of privacy as well as openness, and interaction with others. Organisations now faced a complex problem. The cell-office was not space efficient and the open plan office was problematic from a noise and privacy perspective. Consequently, in the end of the 1970s, office designers came up with the idea of combi-offices which was an attempt to combine the advantages of cell-offices and open plan offices (Bodin-Danielsson, 2010).

Even though combi-offices were introduced in the 1970s, it did not have any revolutionising effect on the office market. In the 1980s, cell-offices were still the dominant office type in Sweden. The work environment and the well-being of the employees were considered more important than the economic advantages the open plan office summoned. Also, during this time, computers were changing the way employees exchanged information in the offices. As a result, researchers were focusing on studying the possible impact of computers on future office arrangements (Bodin-Danielsson, 2010).
In the 1990s, the fast development of computer systems had not only changed the way information was exchanged, but it had made it possible for organisations to change the way they were working. It was no longer a necessity for employees to have a fixed workstation to carry out work. As a result, the concept of flex-offices was born. Organisations using flex-offices created computer systems which made it possible for employees to access all their working tools and information via any workstation, even outside the office. Hence, companies needed only to dimension their offices for 60-70% of the workforce (Bodin-Danielsson, 2010). At this time, the office was also starting to be used as a strategic tool to enhance the corporate image. The office was used as a way to attract employees aligned to organisational values. Google is a famous example of this. Google has been awarded several times with the ‘best workplace’ in the US. At the Google headquarter called Googleplex, the employees have access to everything from restaurants, hair salons, gym, and a carwash. It is like a whole world of services surrounding the office, all in order to satisfy their employees. This since they want to attract the sharpest and most creative employees.

Flex-offices did however struggle with a problem from the perspective of the employees. The problem was similar to the criticism against open plan offices in the 1970s; the lack of privacy and personal workstations (Bodin-Danielsson, 2010).

2.1 Today’s business climate

Much has been learned from history when we entered the 21th century. As the office history showed, organisations continuously adapt their strategies and visions according to the contemporary business climate in order to stay competitive. Today companies stay competitive by fostering creativity to be innovative, flexibility in order to quickly adapt, and knowledge sharing in order to increase productivity (Jan van Ree, 2002). This can be done by focusing on creating an effective working environment for the employees where all of these aspects are promoted. The underlying driver of these focuses is mainly based on the globalisation and the rapid development of ICT, creating such needs. The globalisation and modern technologies has changed the way consumers behave, and the way services and products are delivered, produced and sold. This development has had many consequences in the world, not at least within the way people work. Work is no longer dependent on a static workplace, becoming much more individual and independent on space and time; hence many new office trends are arising (Bodin-Danielsson, 2010).

The offices of today have therefore gained new importance as a strategic tool for facilitating human interaction in a way that unites employees under the same organisational culture (Schriefer, 2005). By facilitating interactions between all disciplines in an organisation, the office arrangement arguably increase the chances of collective learning and innovation. Instead of focusing on economic optimisation, e.g. decreasing square meters per employee, focus is rather on enabling flexibility, creativity, and efficiency in the emerging knowledge economy.
3  Theoretical framing

This chapter serves as the theoretical framework for the thesis. The sections review different areas of interest in relation to the office environment and the people using it.

3.1  Supporting knowledge workers

The shift towards a knowledge economy has forced companies to rethink their way of supporting knowledge workers. In the past few years, developments in ICT have created new opportunities for how, when and where to work (Gensler, 2013).

Based on a survey, Gensler (2008) presented four different work modes for knowledge workers. First, there is focused work which requires the concentration and complete attention of the worker. Second, there is collaborative work which includes discussions, sharing knowledge, and brainstorming. Third, knowledge workers use some of their time to learn via problem-solving, training, reflecting and so on. Lastly, there is socialising which creates common values, identity, networks and trust. These work modes are important to address and are possible to support by adapting the physical environment of the office (Gensler, 2008). The findings of the survey showed that successful knowledge-based firms are distinguished by perceiving learning and collaborating as more critical to their success than focused work.

In a later survey, Gensler (2013) were able to show that some companies exaggerated the importance of collaboration and learning, allocating little or no actual time or space to perform focused work. The result therefore showed that “when focused work is compromised in pursuit of collaboration, neither works well” (Gensler, 2013, p. 8). Hence, the most effective workplaces seemed to be the ones that balance focused and collaborative work. Those workplaces also show indications that creativity and innovation may be enhanced. Apart from enabling a balance of different work modes, the survey showed the importance of choice. The findings suggest that both performance and innovation are enhanced by the choice of when, where and how to work. In relation, the choice also indicates increased employee satisfaction (Gensler, 2013).

3.2  Space and place

Ropo et al. (2013) investigated how leadership is related to material places. The scholars discuss how material places produce symbolic meanings, inherent power issues and sensuous experiences by exploring leadership through an aesthetic and embodied approach. In each room, i.e. material place, each individual also construct an own subjective experience, called space. The space has no clear boundaries and is constructed by feelings, experiences, and imagination. In contrast, the place, defined by Ropo et al. (2013), has material qualities such as shape, colour and mass. As an example, a place is creative first when the users of that place have constructed their experience of that space as creative.

Ropo et al. (2013) posed an example of how a place affects behaviour by picturing a middle-school classroom environment. The static desks constraining movement, the alignment of desks towards the blackboard, the interior, and perhaps even a small platform to elevate the teacher, in this case the leader. The way a place and space can lead us is what Ropo et al. (2013) calls ‘materiality in leadership’.
The place sets the boundaries and the space creates experiences, all shaped by architectural features and material qualities - forming a sense of hierarchy. In addition, Ropo et al. (2013) explain that “material places lead people through embodied experiences, such as feelings, emotions and memories of the place” (Ropo et al., 2013, p. 381). The place and space therefore have different effects on an individual’s judgement, interpretation and action.

3.3 Offices as organisational resources

Since the office accommodation is part of the resources of an organisation, it contributes to organisational performance (Jan van Ree, 2002). Organisational performance is calculated based on how organisations meet the generic performance criteria of effectiveness, efficiency, productivity, flexibility, and creativity. As illustrated in the office history chapter, the criteria have emerged through the historical changes in the business climate. According to Jan van Ree (2002) there are two approaches to increase organisational performance by using the office as a catalyst. The first approach is to achieve greater efficiency by reducing the occupancy costs. This can be done through reducing the amount of square meters per employee. The second approach is to focus on creating an effective working environment for the employees since the labour cost is the largest expense for most organisations (Pole and Mackay, 2009). Hence, an effective working environment should encompass a comfortable and satisfying climate where creativity, flexibility and knowledge sharing are advocated by the office arrangement in order to generate most value, i.e. to maximise organisational performance.

3.4 ABW

The academic literature concerning ABW is scarce, and thus much of the theories reviewed are from surveys or reports conducted by various office strategy companies.

The concept of ABW as a office arrangement is a hot trend in the global commercial real-estate market (Wyllie et al., 2012, Appel-Meulenbroek et al., 2011). The main idea of ABW is that the office should provide people with the flexibility to undertake workplace activities in a variety of settings that best suit the current task being carried out (Property Council of Australia, 2013). Mobility is essential for ABW to work. This is made possible due to wireless technology and mobile devices. Therefore, the implementation process often includes a substantial IT investment program.

Depending on the type of activity or the type of work performed, the physical environment requires different tailored needs. Therefore, ABW is usually divided into three different zones; quiet, middle and active zones (Månsson and Nyberg, 2014). In the quiet zones concentrated and focused work are carried out. No disturbance is allowed. Typical activities in quiet zones involve reading and report writing. The middle zones reflect the activities of an open plan office, where dialogue and overhearing are enabled to increase knowledge sharing between employees. The active zones facilitate virtual or physical meetings. It is of importance to note that different businesses call for different needs, and hence there is no standardised way of organising these zones. For example, a high degree of concentrated work requires more quiet zones and vice versa, there is no one-size-fits-all (Wyllie et al., 2012). The different zones can be overlapping, loosely interconnected, or strictly separated and defined by physical artefacts (i.e. furniture). The furniture in the office is an important part of the design to create the environments required to contribute to the execution of
the work. The furniture can help the user understand what kind of zone it is, and what type of activity that is to be carried out (Månsson and Nyberg, 2014). This is what Ropo et al. (2013) refers to as ‘materiality in leadership’. To sum up, the different office zones are designed to create the most efficient work setting for the tasks at hand.

A typical feature of ABW is the unassigned seating; it is although not a defining feature. It is not to be mistaken for an open plan office or other office arrangements (Wyllie et al., 2012). The idea of having an unassigned seating policy is to enhance and encourage knowledge sharing and spontaneous interactions between employees. This is believed to increase organisational performance and space efficiency (Wyllie et al., 2012).

3.4.1 Benefits and drawbacks of ABW

One of the main challenges of adopting ABW is to engage the employees in the new way of working, as change is commonly faced with some degree of resistance. The unassigned seating policy could be a huge cultural change for some individuals (Kuan and Black, 2011). Due to the amount of hours spent in the office, some employees feel the need of personalising their workstation as a way of establishing their identity. Since ABW does not offer this opportunity of personalisation, it could have a negative effect on morale (Kuan and Black, 2011). It is important that the employees believe that the new office is adding value to their business and not perceive ABW as a way for the company to reduce costs. Hence, it is important for management to communicate the value adding aspects of ABW. This could otherwise create resistance towards ABW. Employees who are used to routines and does not like the idea of having to find a new workstation each day might start to establish territories through personalisation, which is counteracting the purpose of ABW (Kuan and Black, 2011). It could be frustrating having to readjust the workstation to meet ergonomic preferences every time the employees change workstation. Also, there could be competition to secure the best workstation, and employees might choose to sit close to their friends rather than other colleagues that would add more value for the task at hand.

Kuan and Black (2011) mention the managers reduced possibility of monitoring and controlling the employees as a potential problem with ABW. This can be a large change for managers in ABW. The level of trust towards employees must be great for this concept to work.

The collaboration between functions in the company is probable to increase. But since the team will be more disconnected from each other there might be a need of scheduling team meetings to discuss issues which is normally not the case in other office arrangements where the team can solve problems sitting closely together. Duplication of work or unhealthy competition among team members might therefore arise since the communication between them will change (Kuan and Black, 2011). Hence, group and team dynamics are expected to shift.
However, ABW is argued to have the potential of reducing costs up to 30% (Harris, 1992 in Kuan and Black, 2011). This is due to many reasons, but mainly the reduced need of total floor space. As the history showed regarding flex-offices, today’s offices are rarely fully occupied due to holidays, sickness or offsite business. Adding to this, ABW enables staff flexibility, which makes it easier for organisations to expand and restructure (Wyllie et al., 2012).

Further on, mobility is essential for ABW to work and is enabled by digitising all work material, e.g. papers and documents. This contributes to the reduced costs, by for example reducing printing and recycling costs, and at the same time contributing to a lower carbon footprint (Kuan and Black, 2011). And since the employees are not bound to an assigned seating in ABW, the freedom of choosing workplace empowers the staff and increases trust and communication across functions. This means knowledge sharing and collaboration is likely to increase, which would have a positive effect on employee satisfaction and loyalty (Kuan and Black, 2011). However, the freedom of choosing workplace does not have to be positive for all employees. Some employees are more satisfied and work more productively when sitting next to the same colleagues every day (Van der Voordt, 2003).
4 Research approach

This chapter presents a detailed description of the methods used to gather empirical data. Also, limitations and reflections on the chosen methods is given.

A qualitative research approach was chosen due to the nature of the research questions. The advantage of undertaking a qualitative approach to social reality is its interpretive and explorative characteristics. A qualitative approach enables researchers to study people’s behaviours, perspectives, feelings and experiences in a given context (Bryman, 2012). Adding to this, the context of the case study is influenced by local and cultural aspects, situated in the organisation of the Local Office. Hence, empirical data were collected in three phases. In parallel, internal documents provided by the Company have been a part of the empirical data. The different methods of collecting empirical data are explained below, and an overview is given in Table 1 at the end of this chapter.

The analysis of the findings has been a constant process during the thesis work. Because of that, the supportive literature and theory have changed continuously. Hence, the study has used abductive reasoning. Abductive reasoning can be defined as the process of forming an explanatory hypothesis (Peirce, 1965 in Walton, 2013). By using abduction, an hypothesis can be formed and thereby tested through deductive or inductive reasoning (Walton, 2013). Therefore, the process of writing this thesis has been a constant iteration of data in which to find and connect key areas.

4.1 Explorative interviews

In the first phase, explorative interviews were conducted on four people with comprehensive knowledge of the ABW implementation and the organisational structure of the Local Office. Three interviews were of a semi-structured character to enable follow-up questions addressing key areas (Bryman, 2012), and one interview was of an unstructured character. All interviews of approximately one hour were recorded with the interviewees’ consent. The questionnaire (see appendix 1) was used with all of the interviewees, and were not sent in advance in order to get spontaneous answers. The purpose of these explorative interviews was to find the Company’s description of ABW and their underlying intentions of implementing ABW to answer our first research question and to pinpoint what to look for in the next phase of the study.

4.2 Shadowing

In the second phase, shadowing was used to objectively study the organisational reality of the Local Office. Due to the nature of ABW, i.e. people are constantly on the move, shadowing was deemed an appropriate method. Shadowing is described by Czarniawska (2014, p. 92) as “a way of studying the work and life of people who move often and quickly from place to place”. The individual performing the shadowing is called an ‘observer’ and the subject of the observer is called an ‘actor’. Further, Czarniawska (2007) explain the concept of outsideness, which fundamentally implies that the value of using shadowing as a research technique reside in the differences between the ‘observer’ and the ‘actor’. This means that the ‘observer’ is not coloured by the prevailing culture, and therefore can create a new picture and find new things which the ‘actors’ may not see.
It was decided that the property teams operating in the Local Office were appropriate to shadow due to many daily encounters and the knowledge of how their work differentiated in comparison to their previous office. Of the existing seven property managers at the Local Office, two property managers were chosen to participate in the study. The choice of property manager were based on the criteria of; willingness to participate in the study, how long they have been working at the Local Office, their availability, and experience with working as a team leader.

4.2.1 Procedure

Two actors were shadowed for three days each. A protocol (see appendix 2) was created to be able to take field notes in a systematic and comparable manner. The purpose of the protocol was to create subjective data from the observer's point of view, i.e. ‘picture of the reality out there’ (Czarniawska, 2014, p. 91). Every day started with a short meeting with the actor, going through the actor’s agenda for the day and taking notes if any job-related activities occurred since the last meeting. During the day, notes were taken of the events unfolding without engaging in conversation with the actor. If any direct questions emerged, the actors were asked during the lunch break or at the end-of-day meeting.

In addition to the shadowing data, notes on spontaneous observations were collected during the approximately three months of daily presence at the Local Office.

4.3 Individual interviews

The third phase consisted of individual interviews. Much like the first phase, these interviews were semi-structured and recorded with consent of the interviewees. Five employees operating in the Local Office’s property teams were interviewed. All of the interviewees were members of one of the two teams led by the property managers shadowed in the previous phase. The questionnaire (see appendix 3) was formed based on the result from the explorative interviews and the findings from shadowing. The findings were to show how the actors perceive the daily operations and the intentions of ABW.

Table 1 Compilation of empirical data collected.

<table>
<thead>
<tr>
<th>Interviews</th>
<th>Shadowing</th>
<th>Documentation</th>
<th>Miscellaneous</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 interviews in total</td>
<td>2 property managers, each in charge of one team</td>
<td>Internal strategy documents</td>
<td>3 months of presence at the Local Office</td>
</tr>
<tr>
<td>Explorative (4):</td>
<td>3 days each</td>
<td>Planning documents</td>
<td>2 visits to the Headquarters</td>
</tr>
<tr>
<td>1 regional manager</td>
<td>Notes and protocol</td>
<td>Intranet</td>
<td>Informal conversations</td>
</tr>
<tr>
<td>1 business unit manager</td>
<td></td>
<td></td>
<td>Notes</td>
</tr>
<tr>
<td>2 workplace strategists</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual (5):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 property managers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 team members</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approximately 1 hour per interview</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio recorded and transcribed</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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4.4 Limitations and possible biases

This thesis has been conducted in a company exclusively operating in Sweden. The implementation of ABW was already done when the study began, and the cost of the new office was of lesser concern because of a greater agenda. Furthermore, by not having the opportunity to compare their working habits between the old and the new office, this thesis relies on the stories told by the employees. Also, the Local Office had only been operating in ABW for three months before the study was initiated which may affect the result.

Since the Company partly sells and implements office solutions their new office is a showcase for customers which justify a higher budget which might not be justified by other companies. The result of this study is therefore put in a context where cost is not a concern, which may be the case for other companies. Also, the fact that the Company is marketing ABW to their tenants may also embellish the interviewees’ answers. Also, since the shadowing was conducted over three days, it may not fully represent a typical day in their organisational reality. In addition, the actor knew that the observer were following them and hence, might act differently in a given situation.
5 Findings and discussion

This chapter is divided into two parts. Each part is divided into different sub-sections with empirical findings, analysis and discussion. All quotations are translated from Swedish to English by the authors of this thesis.

5.1 Part I: Intentions and arrangement of ABW

5.1.1 Management’s view of ABW

The explorative interviews with the implementation team gave insight in how the Company describe ABW.

The Company’s inspiration to implement ABW came from a study trip to a few offices using ABW in the Netherlands. When the implementation was initiated, the Company used an external consultant, known for having extensive knowledge and experience of office arrangements, and especially so with ABW.

When the interviewees were asked to describe their view of ABW, there were two rather different views presented, see table 2. One interviewee talked about the idealistic idea of resource sharing and change in human behaviour while the other three were more pragmatic in their descriptions.

Table 2 Idealistic versus pragmatic view on ABW.

<table>
<thead>
<tr>
<th>Idealistic view</th>
<th>Pragmatic view</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharing economy</td>
<td>IT Project</td>
</tr>
<tr>
<td>Serendipity</td>
<td>Office arrangement</td>
</tr>
<tr>
<td>Human basic needs;</td>
<td>Active choices;</td>
</tr>
<tr>
<td><em>empowerment, predictability, need of being seen</em></td>
<td>choosing the optimal zone for the activity</td>
</tr>
<tr>
<td>Community;</td>
<td>(toolbox)</td>
</tr>
<tr>
<td><em>authenticity, integrity, equivalence, responsibility</em></td>
<td>Employee influence</td>
</tr>
<tr>
<td>Motivating employees</td>
<td>Collaboration</td>
</tr>
<tr>
<td>Changing behaviour</td>
<td></td>
</tr>
</tbody>
</table>

Quoting one of the more pragmatic views of the concept;

“ABW is a working method where every individual has the possibility to choose how, when and where to work. […] This is an IT-project, not a construction, nor an interior design project.”

The cornerstone of ABW is, according to the practical view, individual responsibility by actively choosing the best time and place for the task at hand. This enables each employee to influence their time at the office, e.g. by utilising all different types of zones. The ability to choose is further enhanced through the mobility provided by the IT solutions. As a metaphor, one of the interviewees compared ABW with a toolbox, in which one can choose the best tool to perform the task. In contrast, the old office was compared to a Swiss army knife, decent for all tasks but never optimal.
According to the idealistic interviewee;

“It is dangerous to try to label something because one pulls a word out of a context that have an iceberg of content below. ABW is about sharing resources, what and why people can and should share. ABW is about motivating people. If the employees come to work for the sake of their wages or if they go there because they want to work, then you have two completely different managerial issues.”

The idealistic view does not perceive ABW as an office arrangement to the same extent. It is about balancing the five following factors; shared resources, variability, mobility, experience and confidence. It is a mixture of interdisciplinary fields. Also, ABW is about facilitating serendipity, i.e. unintended positive effects obtained while conducting other activities. The interviewee even stretches so far to say that the new office arrangement is a monument of human basic needs, represented by empowerment, predictability, and the need of being seen. It is about having trust to one another; “it is a sharing economy in action. [...] We are all human, we want different things, and we think differently”. Due to this, ABW is, according to the idealistic view, about changing behaviour. It is about moving focus from cost to value adding processes. The interviewee continued the argument with a simile to the family as the smallest common denominator of a community; “in a family, members share everything. Families have shared values, common behaviours, and common consequence systems”. The same goes for ABW, it is about authenticity, to be genuine; integrity, be who you are and accepting each other's differences; equivalence, equivalent unit weight of willingness to cooperate; and responsibility, every individual takes responsibility for his own actions.

“If a community is to be created in a company, how can anyone defend that one has an office where there is no equivalence, where certain people are more entitled to different things depending on what position you have? In ABW, no one has more right to something than anyone else.”

The theoretical framework describes ABW as an office arrangement which provides people with the flexibility to undertake workplace activities in a variety of settings that best suit the current task at hand (Property Council of Australia, 2013). Three out of four interviewees in the implementation team do have, in accordance with the theory, a more pragmatic view of ABW. Hence, the pragmatic view is the most common based on the results of this study. However, the reason to why there are two rather different views of ABW in the empirical findings might be due to individual factors and the different roles of the interviewees. This is although rather difficult to make any conclusion about, due to the amount of interviewees in this study. Either way, as Bodin-Danielsson (2010) argues, office research embeds a multidisciplinary problem. There are several fields of research that deal with the physical office environment, and therefore different views of ABW are conceivable. Depending on the perspective of the person trying to define it, ABW can be defined as a working method, an office arrangement, or even both. Although the interviewees are divided in their description of ABW, they are still talking about similar things. The difference is that the pragmatic side is talking about the office arrangement, whilst the idealistic side is talking more about the working methods in such an environment. Arguably, the office arrangement and the working methods go hand-in-hand since they are dependent on each other in order to function.
The findings of the interviews also revealed ABW is about motivating people. Because the available ICT render offices as optional to some organisations, especially those trading with knowledge instead of physical products, ABW need to add other values than just a place to work (Jan van Ree, 2002). As Bodin-Danielsson (2010) mentions, the office arrangement creates functional and social implications for companies and group constellations. The physical environment can have an influence on how employees behave and interact in the office. This is implicitly indicating that the physical environment can be used to motivate the employees. By creating a creative, vibrant, and motivating environment that employees want to work in, rather than feel forced to work in, is therefore arguably a part of the ABW concept. As a consequence, ABW generates an environment that fosters new relationships between the different functions in an organisation, creating a sense of community in the office which further adds to the motivation.

5.1.2 The Local Office’s intentions for ABW

The explorative interviews with the implementation team gave further insight in what the intentions of implementing ABW were.

Much like in the previous section, the interviewees had different views on what intentions the Local Office had by implementing ABW. Some interviewees focused on the strategic keywords while others focused on the practical intentions that they intended to accomplish. The strategic view is connected to the actions or choices taken in ABW, e.g. to be courageous. Being courageous was decided as a guiding keyword for making decisions when planning the new office. In contrast, the practical view is related to the employee’s perception of their own ability and capability in the office arrangement, e.g. increased performance.

The strategic view was initially formed by the project team created to implement ABW in the Local Office. The project team designed a framework document for the new workplace strategy. The Company’s core values were merged with the new office in order to align the organisational culture with the physical environment. The interviewees highlighted courage, sustainability, collaboration, and being an inspiration to others as examples of strategic keywords included in the framework. According to one of the interviewees those keywords could create prolonged processes in otherwise simple tasks. For example, when purchasing any type of furniture or interior decoration there was still a need for the product to be sustainable and courageous; this prolonged the purchasing process.

When the strategic framework was formed, the employees were invited to participate in workshops. One of the interviewees mentioned that the leaders of the company did not believe they had all the answers, therefore it was important to facilitate value creating networks where knowledge exchange is promoted. This was important to the Company, as consulting the employees was believed to generate an office arrangement where everyone would feel included. The framework was used in every decision made during the planning of the new office, which were to result in a courageous office that employees wanted to come to, rather than feeling forced to. One interviewee argued that it is ideologies that allow people to move forward together, and therefore companies have to make people want to come to the office. Hence, an important intention was to motivate employees.
“It is only when people understand why they do things that things happen. People who work because they want to, performs better than people who work because they have to.”

Seen from the practical perspective, the intentions were for the employees to experience increased collaboration, creativity, productivity, well-being, and knowledge sharing. For example, by offering office areas for spontaneous encounters the Company intended to increase knowledge sharing between the employees meeting in these areas. Another example is the intention of increasing productivity by offering isolated areas where concentrated work can be done. In the office, there should be areas allowing the employees to isolate themselves and focus on the task at hand. Increased productivity can also derive from an increase in collaboration. Hence, there was an intention of creating areas in the office designed in a way that enabled employees to quickly conduct a meeting, fostering collaboration.

Additionally, the Local Office was to offer a dynamic environment for the property teams, allowing them to rapidly construct, deconstruct and reconstruct when needed. Allowing this flexibility through ABW moves the process of change from a physical environment to a mental environment. Since the property teams are in daily contact with clients, the organisation is mirrored through them. One interviewee stated that there is often a connection between the client surveys and the team performance, which is not that surprising. Therefore, the property teams were important to function in the new office, as well as increasing collaboration and knowledge sharing between them by adapting the interior in such a way that internal communication is efficient. Although the office arrangement was planned in detail before it was built, the interviewees stress the importance of monitoring and allowing the office environment to change organically, advocating continuous change. For instance, individuals use furniture differently and not always as intended. The different areas and furniture should therefore change over time, based on employees’ reactions and emerging needs.

*Before the findings of the intentions are discussed, the next section will describe how the intentions was realised at The Local Office in order to set the scenery.*
5.1.3 The Local Office arrangement

This section presents the organisation operating in the Local Office as well as providing a visual description of how the new office was realised.

There are 50 employees spread over approximately ten different roles working at the Local Office. There is a good spread over generations and gender. The majority of the employees are working in property teams constellated by one property manager, one property assistant, one technician, and one technical manager. These teams were one of the main focuses for the implementation team when planning the new office arrangement. The members of these teams have two group identities; the property teams and the function groups. The property teams are considered having a flat hierarchy although the property manager seemed to be the leader. Decisions are made, to the extent possible, in mutual understanding where the most competent person’s opinion is valued higher. However, all functions have different levels of capability in investment decisions. For the Local Office, the new office arrangement was seen as a solution to increase communication in both groupings.

For the new office arrangement to work, the Local Office established policies and support tools. Management at the Local Office claimed they use common sense as a guiding keyword for how the office environment is to be used by the employees. For example, it is said to be common sense that no personal belongings should be left to pre book or retain workstations. If employees need to leave the office for an hour or two, it is common sense to clean the workstation from all of one’s belonging and tools. If the employee, however, is having lunch or fifteen minutes break, it is okay to leave belongings at the workstation. Also, to fully make use of all that ABW offers, the employees can access their working material from anywhere via ICT, with the exception of old blueprints that have yet to be digitised.

The Local Office is at the time of this thesis operational and divided into different zones, see figure 1. These zones will be presented in detail, in order to give greater insight in the different features they hold.

![Figure 1 Plan layout of the Local Office (Picture from The Company, 2015). Coloured circles are added by the authors to show the different zones.](image-url)
There are quiet zones dedicated to concentrated work. In these zones, nobody is allowed to disturb colleagues working there. The zones are strategically placed separately in the office so that employees feel they move away from the active and middle zones when going there. In addition, there are two types of quiet zones; one zone for collective concentration, and one for private concentration. The quiet zones offer a workstation which has a computer with remote access to the personal desktop. The architects had an idea of naming the collective quiet zone the library, to make the employees associate the space to silence and concentration. The library is a quiet zone configured as an open plan office area where eight workstations are located. Mobile phones are to be shut off. In this area, employees can sit beside each other and work, but they are not allowed to speak. Here, employees can read or write reports, or carry out other relevant activities that needs concentration, all under silence and no disturbance. In this zone, it is explicitly forbidden to fetch colleagues. There are also small private rooms enabling concentrated work. Employees are expected to work in these rooms if they need to be alone, talk on the phone or write reports. As of today, there are three rooms of this character in the Local Office. It should be noted that the quiet zones are not strictly separated. In some places in the office the zones overlap. For example, certain custom-made furniture, offering a private quiet zone, is placed both in the middle zones, and in the active zones. This furniture is designed in such way that it closes out noise, creating a local sphere of concentration. If needed, employees can quickly escape the middle or active zone to seek concentration for a short time, maybe answering their phone or writing an email.

In the middle zones there are 38 workstations, consisting of height-adjustable desks and ergonomic, adjustable chairs. Each workstation has a computer with access to a personal desktop, and the possibility to charge devices such as tablets, smartphones and other electronic working tools. Also, many of these workstations offer two screens to simplify work. The middle zones are configured as an open plan office where employees are encouraged to communicate and collaborate with each other. The lighting of these zones is also the most optimal in the facility, due to that most of the employees spend 40 hours per week in the office and hence need the best comfort.
There is a workshop area in one of the middle zones, mainly for technicians. This zone is quite different compared to other zones in the office since the tools and special equipment used by technicians are located here.

The active zones are intended for internal and external meetings. The meeting rooms have a capacity of up to eighteen people, with all necessary accessories such as projector, white board, TV screens, audio speakers and virtual meeting equipment (webcam, microphone and shared screens). One meeting room is solely intended for standing meetings, which is beneficial from an ergonomic perspective. Either the employee's book a meeting room using their online based booking system, or they can easily book a room on a small screen conveniently placed on the wall outside the meeting room. The dining area and coffee station are also considered active zones, where the Local Office favour spontaneous encounters. The coffee station is seen as a place for interacting with colleagues, which also gives a chance to socialise. Every Friday morning, a weekly breakfast meeting with all employees in the office is held. Also, a few times a year, all employees gather in the dining area to participate in a virtual meeting (using webcams and projectors), with all regional offices within the Company.

In the active zones, several types of seating are offered. For example, there are meeting areas inspired by pergolas, hanging chairs made of bamboo, and lounges. All these different kinds of seating types are to offer the employees, and especially the property teams, a satisfying and creative working environment where teamwork is promoted.
At the Local Office, the choice of ABW as an office arrangement was considered a viable solution for their new office based on collective workshops and their long-term business plan. As the interviews showed, the Company wanted the core values of the organisation to be embodied in the physical environment of the new Local Office. This is a way of guiding behaviour in accordance with the organisational culture (Jan van Ree, 2002). Our interviews and review of internal documentation revealed that the intentions of ABW in the Local Office were to increase collaboration, productivity, knowledge sharing, well-being and creativity. This is highly in line with the needs and focuses of contemporary businesses. This shows that the Company was aligned with contemporary trends and pressures, but how did these intentions, strategies, and visions play out once the office arrangement had been implemented? Table 3 shows how each intention is facilitated through the office arrangement.

**Table 3 Actions to achieve the intentions.**

<table>
<thead>
<tr>
<th>Intention</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased collaboration</td>
<td>Enable swift constructions of teams and groups by offering active and middle zones facilitating teamwork</td>
</tr>
<tr>
<td>Increased productivity</td>
<td>Offer quiet zones for concentrating on work without disturbance</td>
</tr>
<tr>
<td>Increased knowledge sharing</td>
<td>Creating possibilities of interaction by planning the middle and active zones in central locations at the office</td>
</tr>
<tr>
<td>Increased well-being</td>
<td>Create an ergonomic environment with an inspiring office interior design</td>
</tr>
<tr>
<td>Increased creativity</td>
<td>Foster interactions between disciplines and create an inspiring environment</td>
</tr>
</tbody>
</table>

As the theory explains and our empirical data showed, the different zones are a vital part of ABW. The different zones described by Månsson and Nyberg (2014) should support the different work modes described by Gensler (2008). Since the zones are designed to suit different types of activities respectively, unassigned seating is clearly coupled with ABW. The placement and design of the zones are not important for defining ABW; rather it is important to understand that different organisations require different configurations (Lindahl, 2004). The zones should therefore be balanced depending on what type of work the organisation is conducting, e.g. lots of concentrated work requires many quiet zones.

Thus, the placement and design of the zones can help organisations achieve their goals. For example, as the Local Office decided to locate the dining area and the coffee station at the centre of the facility, employees on the move naturally pass by these zones. Hence, the chance of spontaneous encounters and interaction is increased. Another example of how the zones and physical environment of the Local Office responded to the intentions of ABW is the location of the quiet zones. Due to the placement and the names of the zones, e.g., the library, the employees associated the space to certain memories and hence understood how the space is to be used (Ropo et al, 2003). Also, these zones may lead to higher productivity since they are quiet zones. When concentrated work is needed, the employees can easily withdraw from the more interactive zones.
Also, the furniture in the Local Office can be used to enable employees to understand how they are expected to behave in certain zones (Månsson and Nyberg, 2014). For example, there is furniture on wheels, e.g. TV screens with touch pads or white boards. These are planned to make the employees understand they can move them wherever they want, whatever suits them for their current task at hand.

However, there is no perfect solution for decorating and zoning to foster certain behaviour. As one interviewee in the implementation team mentioned, it is important to allow the office environment to change organically since furniture may not always be used as intended. The risk is that employees have different associations to the space and different assumptions of how the furniture is to be used and hence, misunderstandings and misrepresentations could arise.

5.2 Part II: ABW as it is lived

In this chapter, the findings of the shadowing and the individual interviews are presented. Further, by triangulating the findings with the previous results and the theory, this chapter will discuss the emerging challenges of working in ABW.

5.2.1 Unassigned seating

The unassigned seating forced the employees to actively choose where to work. During the shadowing, it was observed that all the different zones in the office were used, but to different extents. All zones were used as intended and aligned to the definitions in the theory by Månsson and Nyberg (2014). The policies set by the implementation team were respected and the activities carried out in the different zones seemed to be appropriate. The active and middle zones were used to a higher degree than the quiet zones. The quiet zones were never used by the two property managers during the three days of the shadowing, but it was used by other employees.

The property managers rarely used the quiet zones since they felt the responsibility of being available to their team members, as the new office does not automatically bring people together. However, they appreciated the existence of the quiet zones when they really sought focus (Gensler, 2008) and felt more productive utilising the quiet zone due to the ‘no disturbance’-policy, see figure 2.

It was observed that whenever the property managers did not require any special room or tool to perform a task, they had a favourite spot in the office. When interviewing the team members individually, they were asked about each other’s typical whereabouts and their own favourite spot. When the result was collated, they showed to be quite accurate in knowing where their colleagues tend to sit. However, as some activities have requirements, the choices available and the intention of utilising the different zones creates movement. The actors move around the office for several reasons, e.g. changing task, appointments, meetings, coffee, lunch, or locating a colleague. Almost every time the property managers moved from one place to another within the office, they stopped at least one time to talk to the colleagues. These interactions can happen anywhere in the office, e.g. in the hallway, the dining area, or at the workstations. It is triggered by movement from one person, creating a web of possible interactions within the office. The interactions often involved some social aspect, but it was not rare that they included some kind of work related discussion ending up in a decision being made.
Figure 2 Illustration of the quiet zones with the 'no-disturbance' policy.

Since many decisions are made in such random encounters, it is arguably coincidences that often pave the way for team performance. With that said, those gatherings are not said to make or break performance, rather creating conditions for better team performance is imperative. If the right persons bump into each other several times during a day, they arguably become very time efficient as no time is spent on planning the meeting or waiting. However, the encounters are still to be questioned quality-wise as the decisions are verbal and not on record. Hence, different interpretations can occur; details may get lost, or decisions forgotten. These spontaneous encounters seemed efficient in the sense that no set-up time was needed, and movement was only required by one individual. In addition, the purpose of the movement was often to change workstation or task, which could render the encounter as added value to the movement.

The interviewees felt that the new office has created a distance towards their superior. It has become difficult to receive feedback because their superior is not always around nor aware of the details in the work performed. This arguably changes the way feedback is communicated. This puts more responsibility on both the superior and the employees to communicate and provide relevant and timely feedback. This is also a matter of personality, as some might crave feedback to increase performance, while others do not want to receive feedback in front of their colleagues, and some would like to have public appreciation. Ultimately, this is a management issue which has to be dealt with in ABW.

The distance has also created some small, unintended, changes in team dynamics. For instance, some lesser tasks, which previously would have been delegated to the right function, ends up finalised by team member receiving the task. The receiver felt that it was tiresome to locate the right team member and instead completed the task. The interviewees believe that this may cause feelings of exclusion for some team members. The individual excluded from the task may feel inadequate. But in reality, the one receiving the task simply did not have the stamina to locate or may have forgotten to notify the right person since the person was out of sight. Also, as this may cause unhealthy competition and duplication of work according to Kuan and Black
(2011), the importance of notifying and communicating with the team members should be highlighted.

Also due to mobility and distance, locating colleagues has been mentioned in the interviews as a problem. The observations during the shadowing also confirm this is the case. The interviewees had different opinions regarding how big of a problem this actually is. Most of the interviewees felt that the most appropriate way to locate a colleague is to walk around the office and look for the person, even though it might take some time. The fact that the employees opted out calling their colleagues was interesting, they felt less intrusive locating them in person. This seemed quite odd, given the possibility to accept, decline, or return the call when deemed appropriate. Clearly, the employees saw both benefits and drawbacks with locating colleagues, which gave rise to discussions. On the one hand, it was problematic due to external factors, such as customers entering the office, in which the individual acting as host is pressured to locate a specific person in a short period of time, causing a stressful situation. This is seen as unprofessional by some interviewees, and probably also so by some visitors. On the other hand, one interviewee argued that taking a short walk is healthy from a well-being perspective, meaning that the stroll was an energy boost and a social event giving added value to the environment.

The Local Office was aware of the phenomenon and a solution, a mobile application, is about to be implemented. In the application, the employees can find their colleagues by interacting with a map of the office, showing the employee's current whereabouts at the office by using wireless techniques. The same application had a positive impact in the Headquarter office, which makes it likely to be successful in the Local Office as well.

As the task should be performed in the zone best suited for the task (Property Council of Australia, 2013), the individuals have a responsibility and need to create an awareness of where the task is best performed. Individuals have different preferences of their most suitable zone for focused work, and hence all employees need to respect the decisions of others, which require trust (Kuan and Black, 2011). Adding to this discussion, if a property manager ranks the quiet zone as most productive, there follows a balance between productivity and availability. Hence, the property managers tended to avoid quiet zone to the extent possible. The team members, who did not feel the responsibility to be available to the same extent, could utilise the quiet zones more often. In addition, since the ABW concept is focused on enhancing the various types of activities performed in an office milieu, it seems a viable method of enabling change in ways of thinking and performing work. It also allows the freedom of working in sets of activities, empowering the employees to responsibly work whenever, however, and from anywhere preferred. Therefore, lots of choices are given to the individuals, which further close the gap between private and work life. Although not in the scope of this study, further research concerning work-life balance in an ABW environment would be warranted.

ABW seemingly creates several new challenges for teams, groups or other social constellations within an office. Many of the challenges seem to be created by the unassigned seating policy, which gave rise to distances that have to be navigated. The unpredictability of the distance causes unrest in the environment, and a sense of uncertainty emerges.
5.2.2 Collaboration

Since the employees are able to choose workstation based on task, they are also able to sit together when collaborating on a certain task. When moving on to the next task they are able to change workstation and collaborate with another employee. Hence, the office environment generates a flexible setting where the change process is moved from the physical arena to a mental state of mind since all work related material is in the digital space.

While shadowing, the teams did not sit together physically. In fact, they spent quite little time together. This was rather surprising, because one of the intentions of the new office was to increase collaboration within the property teams. However, extensive communication within the teams was observed, especially between the property manager and the property assistant. For example, short interactions occurred either when the property manager moved between places, e.g. naturally passing by the assistant’s usual workstation in the reception area; see figure 3, or when team members met in the kitchen to grab a coffee. It was not uncommon that these meetings partly involved social exchange.

![Diagram showing office layout and interactions](image)

**Figure 3** Illustration of the encounters as a consequence of movement.

After the shadowing, the team’s communication patterns were discussed with the property managers while showing the notes and protocols. The property managers were surprised of how much they actually communicated with their team members. Their perception had been that the amount of work conducted in teams had decreased in the new office compared with the old office. But as they became aware of their interactions, they began reflecting if this was really the case.

The individual interviews with the team members later revealed that most of the interviewees perceive that the new office has increased their collaboration and creativity. However, there has been a shift in how and with whom the employees collaborate. Even though the new office facilitate teamwork by offering vast amount of areas for the teams to work together, the interviewees felt that collaboration in their teams has decreased. Instead, collaboration was perceived to have increased between
functions in the organisation. Also, they felt that the new ways of collaborating has improved their overall performance. Adding to this, the interviewees felt that the changes in collaboration has resulted in both positive and negative effects, e.g. increased creativity, increased performance, feelings of exclusion, and less team cohesiveness. Due to the spread of the team, a team member cannot take part in a conversation between other team members to the same extent, which was the case in the old office due to the assigned seating arrangements. This is mainly of concern for the property assistants, which also was recognised by the other team members. The effect of this is a feeling of exclusion from the team, not always aware of what is going on within the team.

Based on these findings, the intention of increasing collaboration may create individual drawbacks, leading to lower well-being and satisfaction? With the freedom of choosing workplace for the task at hand in ABW, the team members no longer sit in close proximity to each other, which they did in the old office. Maybe this is the reason why the team members feel collaboration within the team has decreased rather than increased. Maybe their perception of collaboration is limited to the physical activities while the digital collaboration is excluded from their perception? Is it an old habit, a psychological concept of how collaboration is done that fosters this idea? In relation to creating an efficient working environment (Jan van Ree, 2002), that the amount of time spent together has decreased without affecting the end result due to efficient interactions, ultimately triggering a feeling of reduced collaboration.

Maybe three days of shadowing were not representative enough of the property managers’ typical working life or the respondents’ perceptions of collaboration is not aligned to the ways they are collaborating in the new office. However, with the implementation of ABW, collaboration happens through short interactions and digital applications, which is different than being seated beside each other as they were in the old office. Increased number of encounters and relationships enable knowledge to transfer between the employees. The fact that the interactions occur more frequently across different functions in the organisation may also create better conditions for learning from each other as well as utilising all disciplines in order to find creative solutions. The sense of community present in the office also facilitates communication, and in turn knowledge sharing, between the employees as everyone seemed comfortable engaging in a conversation with each other.

5.2.3 Group identity

The office seemingly created new professional and social relationships between colleagues, but the new relationships are generally not as close in comparison to the old office as they had small groups always seated together. However, it has enabled knowledge to flow through the organisation since the amount of interactions is significantly higher. Consequently, this has increased the sense of community at the Local Office, which had a clear positive effect on all of the interviewees.

In the new office, the group constellations have changed and new groupings have emerged. The new groupings were based on personal interests and functions in the company, rather than connected to which business area one belongs to. However, one functional grouping, the technicians, was still present as they often spend their office time in the workshop area dedicated for their tools and documents.
The shift in groupings has further affected the feeling of belonging. In the old office, the interviewees identified themselves with the business area unit as they were seated together. The new office had changed their feeling of identity, and some now felt as pieces in a larger puzzle, implying personal identification to the organisation rather than to the group. As a consequence of this, some interviewees felt lonely at times, even though they often worked together with someone else in the office. One interviewee even expressed a higher feeling of loneliness working in ABW than in a cell office. The explanation given by the interviewee was the decoupling from the team in the new office. However, connected to this in a way, is a quote by one interviewee saying: “you do not get anything for free in this office”. What is meant by that is that all information, social exchanges, creation of identity, and feelings of belonging need to be claimed actively. One’s personality might create limitations of what kind of identity and cohesion that can be obtained in ABW. Having a laid back personality, e.g. introvert, and not probe the environment to find one’s identity may therefore lead to feelings of loneliness.

One interviewee talked about the challenges of working in such an environment as an introvert person. The interviewee continued that an extrovert person is more likely to find social activities, but stressed that extroverts also have new challenges. For example, some extroverts may have difficulties performing their tasks because there are so many social opportunities existent in their surroundings. In contrast, introverts may have a hard time engaging people because there are no longer natural events for social exchange, such as the business area unit spontaneously taking a coffee break together.

The new office seemingly puts higher responsibility on each individual to engage in social encounters, receive feedback, and join different groups. The feeling of belonging is no longer connected to an employee’s business unit and property team, but more to the Company as a whole. This is likely due to the distance created by the unassigned seating as well as the lack of a natural grouping, i.e. people sitting in the same location. The example of introverts and extroverts show how ABW creates new social challenges. Since there is no dedicated place for any one employee, there is no natural safety zone. Depending on one’s personality, this may have different effects on each individual.

The new groupings were shown to assemble through personal interests, which corresponds to Kuan and Black (2011), stating that ABW tends to make people sit close to friends rather than colleagues. As one of the cornerstones of ABW is trust, relying on the employees to choose their most productive workstation seems to be fundamental. Choosing to sit next to a friend, does not necessarily decrease productivity, but rather enhances the work climate and appreciation of working under responsibility.
But everything about the new dynamic of groupings is not positive. It was interesting that one interviewee felt lonelier in the new office. This seems rather odd, since colleagues are constantly present. On the one hand, this can be due to the lack of the usual grouping, e.g. business unit sitting together in the old office. On the other hand, it can be due to the expectations of communication. As there are constantly people around, feelings of uncertainty may arise if people are not engaging with you. In the old office, communication was not expected in the same sense due to the assigned seating. This also relates back to introverts and extroverts, who further recognise the importance of integrity as explained by one interviewee of the implementation team: “[...] be who you are and accepting each other’s differences [...]”.

5.2.4 Space and place

The employees’ personalities are more exposed in the new office due to the vast amount of choices available. Each personality is expressed partly through choice of seating, habits, and actions which were not available to the same extent in the old office. One interviewee explained that some colleagues choose to sit in areas with much communication and interaction while others avoid such areas, preferring quiet work environments. It was also observed how some people seemed to prefer moving around while others tended to sit at the same workstation every day. However, most of the interviewees had a place where they felt extra comfortable working. Their preferences were very individual and depended on factors such as lighting, indoor climate, furniture, volume, view, mood, and people. The span of preferred seats varied a lot between the employees, as some were quite adamant about their preferred place, whereas others felt they could sit anywhere and still be comfortable.

In addition, it was observed how the space was influenced by the people using that place. For example, if a group of people tended to sit in the same area, often engaging each other in conversation, people outside that group may perceive that area as noisy restricted to people outside the group, or a welcoming space for social exchange, see figure 4.

![Figure 4 Illustration of the groups affecting space.](image-url)
Adding to the observation of space, some individuals present in the office seemed to influence certain spaces. One interviewee claimed that a manager's choice of workstation affects the behaviour of employees in their proximity. In that sense, managers could be considered walking symbols, affecting the space they occupy, although having equal privileges to all actors, see figure 5. One effect could be that the employees became more formal and professional in their conversations. The symbols could change the behaviour of other employees in that space by just being present.

![Figure 5 Illustration of a superior affecting space.](image)

This may imply that although the Company is trying to flatten the organisation, there is still an implicit hierarchy. Therefore, the managers in the office should pay attention to their choice of workstation, and be aware of their favourite workstation, as that space is influenced by their presence. In relation to groupings, it may affect the space even more if managers would be grouping up and unconsciously claiming space in the office. This was not observed, but should be in mind for those implementing ABW.

As all of the interviewees had one or several favourite workstations, it can be discussed what causes certain places to be preferable. Some seemed to value physical artefacts such as lighting and the view whereas others picked their favourite spot based on people. What might be important in this case is to find the right balance of differentworkstations, not causing the employees to totally avoid one zone completely. What might be the success factor for the Company is the early involvement of employees in the implementation process, as all workstations have quite a balanced use as far as we observed.

The tendency of using the same workstation every day may create tensions between individuals. For example, those choosing to sit almost exclusively in the library were seen by some as resistant to the new office and way of working. In relation to space, using the library may then be associated with resisting ABW, and thus result in much less usage than intended. Although, it could also be that the Local Office does not have the need for such a quiet zone since their working task may not require as much
focus as the library facilitates. Either way, as the experiences and feelings affect the perception of a room (Ropo et al., 2013), it is notable that the library might be perceived by some as having a negative aura due to the association of people using the room is resistant to ABW.

It is, however, important to remember that everyone creates their own perception of space (Ropo et al., 2013). Still using the library as an example, some might not have a negative view of this zone since they do not associate the room with resistance to ABW. One reason for this may be because they understand the people using it hence seeing the library as their responsible choice for more effective work. As employees seemed to pay attention to others’ placement, it is important to communicate one’s preferences and ways of using the office space, as some unconventional choices of workstation may create tension and problematic constructions of space.
6 Conclusions

In this study, we have been able to answer all the research questions. We have found collaborative and social challenges and we also made an attempt to add to research by discussing how the concept of ABW could be described and conceptualised.

The interviews with the implementation team of the Local Office gave us insights in how the choice of ABW was aligned to organisational intentions. Also, the collected empirical data from our shadowing made us further understand how ABW functioned in reality. Finally, the individual interviews with the employees working at the Local Office revealed interesting social and interpersonal challenges in everyday working life.

As the purpose of this study was to explore ABW as a supportive office arrangement of today’s business climate, the findings of this study contribute to the on-going debate of ‘New Ways of Working’. The underlying drivers of modern business climates have been shown to be about organisational qualities enabling flexibility, creativity, and collaboration in the emerging knowledge economy; which ABW supports. The focus of the report has been on how aspiring to these qualities may influence group dynamics, and create new social challenges. The findings not only changed our own preconceptions of ABW, but ABW was also perceived quite differently by the different users at the Local Office. It was, however, obvious that using an ABW office requires a different way of working; hence, it is not productive to define ABW simply as an office arrangement. It is a matter of how one thinks of the concept, relating back to the idealistic and pragmatic views. And the diffuse nature of ABW may create difficulties in introducing new people to the concept.

All social challenges identified in this thesis are derived from the unassigned seating which created a distance for the employees to navigate. As the employees are free to choose wherever they would like to work, it seems like people have a tendency of finding their favourite spots. This could in the long run lead to places in the office being associated with the people usually sitting there. Hence, those places become a subject of an individual interpretation regarding the association of that space (Ropo et al., 2013). For example, if the superiors or managers are present in some space, the employees might change their behaviour. And if people affecting other employee’s behaviour are associated with certain spaces in the office, that area of the facility could become identified with undesirable constructions of space. This and the new way of grouping have created negative effects such as exclusion and possible feelings of loneliness. By not having a set group of people that is constantly working in the same area, such feelings emerge. This is a problem that seems to be related to the property teams, as it is the most acknowledged feeling of belonging according to the interviewees. It is likely to be a matter of personality whether someone requires close and frequent interactions with the group to feel included and maintain one’s identification. To overcome these challenges, there is a need for increased individual responsibility not only coupled to where to work, but also in how to behave and act in the office. In addition, the need of understanding the challenges and other people’s perception of the situations unfolding creates a necessary discourse about each other’s preferences and actions.
The unassigned seating did not only create challenges, the random encounters in the office created by movement were very efficient and an appreciated social event by the employees. The shadowing refuted the perception of the employees as they felt that the collaboration in the team had decreased in the new office. As they were presented with our result of the observations it was evident that they had either had a distorted view of collaboration, or did not take the same notice of their collaboration as before. This poses a viable question: what is collaboration, and what activities do people working in ABW define as collaborative?

ABW does not only trigger new challenges for knowledge workers. It also comes with several benefits, but due to the scope of this thesis they have not been given their proper attention. All the interviewees and the people observed in this study has showed a positive attitude towards the office arrangement and the new way of working, but highlighting the challenges are important to further improve the environment and people’s satisfaction of the concept.

6.1 Future research

In terms of leadership, one of the most important aspects to investigate is the communication of feedback in this kind of working environment. In terms of well-being it is the feelings of exclusion and loneliness that need attention. In terms of productivity, it could be interesting to investigate whether invisibility and increased individual responsibility is exploited to avoid or decrease one’s workload. Also, the challenges of extroverts and introverts need to be highlighted and further investigated.
References


Appendices

Appendix 1 – Explorative interviews

Bakgrund & Ledarskap
Berätta kort om dig själv, din roll, och om er som företag.
Vad är er vision?
Vilka strategier och mål finns?
Hur ser du på ledarskap, nämn de tre viktigaste orden du associerar med ledarskap?

Kontorsmiljö

Allmänt
Hur skulle du definiera ABW?
Nämn tre ord som du associerar med ABW.
Vad hade du för roll i införandet av ABW?
Hur kom du i kontakt med konceptet?
Hur skulle en SWOT på en förändring till ABW se ut? Prioritera kopplingar till ledarskap och team.

Intentioner (Strategi, mål och visioner)
Vilka drivkrafter ligger bakom valet av ABW?
Vilka är de viktigaste egenskaperna hos en ledare i ABW?
Hur förväntas ABW bidra till att nå era strategier, mål och visioner?
Har er vision, era strategier och mål förändrats eller utvecklats sedan ni valde att införa ABW? Isäfall på vilket sätt?

Team

Hur tänkte ni kring fastighetsteamen och yrkesgrupperna när ni valde ABW?

Allmänt
Beskriv ett fastighetsteam och samspelet mellan aktörerna. Rita gärna!
Rita upp den tänkta hierarkin i ett fastighetsteam.
Rita upp kommunikations- och beslutsvägar i ett fastighetsteam.

Intentioner (Strategi, mål och visioner)
Hur ville ni att ABW skulle påverka det dagliga lagarbetet?
Vilka förbättringar i nuläget skulle du kunna/vilja föreslå och varför? Har du några idéer om hur dessa skulle kunna implementeras?
Med tanke på vårt syfte och mål med denna intervjum (intentioner med lagarbete och ledarskap), vad har du att tillägga om era baktankar med införandet av ABW?
Appendix 2 – Shadowing protocol

Date: ____________
Subject pos.: ____________
Protocol #: ____________

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity nature</th>
<th>Collab.</th>
<th>Scheduling</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start</td>
<td>End</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 3 – Individual interviews

Bakgrund
Berätta kort om din roll i företaget.

Strategi
Vad vet du om vilka strategier som är framtagna för det lokala kontoret?
Hur tycker du att du och ditt team arbetar efter de strategierna?

Ledarskap & team
Vilka tre ord associerar du med ledarskap i en sådan här miljö?
Hur skulle du beskriva skillnaden i samarbetet inom teamet nu, jämfört med det tidigare kontoret?
Hur ser du på de olika rollerna och ansvarsfördelning i teamet?
Ledarskapsfördelning?
Vilka tycker du är de 3 viktigaste lagaktiviteterna? Varför är de viktiga?
Vilka tycker du är de 3 minst viktiga lagaktivitetera? Varför är de mindre viktiga?
Vad gör ni i teamet för att skapa bra sammanhållning?

Arbetsmiljö & arbetssätt
Hur hjälper arbetsmiljön er att jobba i team?
Vilka för/nackdelar ser du med detta arbetssätt? Nämnr 3 vardera.

Från shadowing: Scenarion och frågor

I det gamla kontoret ringdes personen upp om den inte var på sin plats. På det nya kontoret så väljer flera att springa runt och leta innan telefonen plockas fram.
Varför tror du att det är så?
Har du någon idé om hur det kan göras annorlunda?

Det har visat sig ske många spontana möten och avstämningar.
På vilket sätt tycker du det skiljer sig gentemot förra kontoret?

Under tiden vi skuggade var det ovanligt med bokade möten inom teamet.
Hur tycker du planeringen skiljer sig gentemot tidigare kontoret?

Det har också visat sig vara mycket mejlkontakt internt i teamet.
På vilket sätt tycker du att det skiljer sig gentemot förra kontoret?
På vilket sätt har mejlens utformning/formalitet ändrats?

Hur ser du på mejlkontakt, tolkningar och behov av uppföljning?

Skuggningen visade att en stor del av arbetet utförs i grupp.

Hur tycker du det skiljer sig gentemot det tidigare kontoret?

Det verkar som att ni har en fin gemenskap mellan alla på kontoret. På ett personligt plan verkar många veta vad som händer i varandras liv.

På vilket sätt tycker du det skiljer sig gentemot förra kontoret?

Hur påverkar det dig, din inställning och ditt arbete?

Det finns olika grupper på kontoret; yrkesgrupp, fastighetsgrupp, lokala kontoret, företaget som helhet, ”externa gänget”, ”interna gänget” med flera.

Vilka grupperingar skulle du säga finns på kontoret?

Till vilken/vilka grupper känner du dig tillhörig? Hur har det förändrats med det nya kontoret?

Vi har observerat att flera personer väljer att sitta på ungefär samma ställe en stor del av tiden.

Finns det någon plats på kontoret som du känner dig extra hemma på?

Reflektera över ditt val av plats.

Vilka signaler tror du att du sänder till dina kollegor i och med valet av arbetsplats?

Ett ord som ofta hörs i sambandet mellan ledarskap och aktivitetsbaserat kontor är tillgänglighet.

Vad betyder det för dig?

Vi har själva skapat egna uppfattningar om flera anställdas personlighet, dels på grund av deras fysiska val av arbetsplats.

Hur har din uppfattning om dina kollegors personlighet förändrats i det nya kontoret?

Om du ska söka upp dina teammedlemmar (varje enskild person), vart skulle du “leta” först?