The Activity-based Workspace Effect on Organisational Behaviour

A Case Study of Kognity

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Sammanfattning

Abstract

In light of contradictory findings in previous research regarding the activity-based workspaces’ effect on organisational behaviour, this study applies The Activity-based Flexible Office Model on the company Kognity, which recently implemented this office concept. The purpose is to test if this may increase understanding of consequences on organisational behaviour from implementing an activity-based workspace. Semi-structured interviews and observations at Kognity are used as methods for the collection of data for the study. As secondary data, results from web-based surveys conducted by Kognity are used. Furthermore, previous research within the field of organisational behaviour and activity-based office concepts are used to give the study credibility and to gain a deeper insight of the topic. The theoretical framework for this study is based on The Activity Based Flexible Office Model and Maslow's Hierarchy of Needs Theory. The conclusion is that the activity-based workspace does affect organisational behaviour. Applying the Activity Based Flexible Office Model increases the understanding of what the implementation of an activity-based workspace may lead to in terms of organisational behaviour. The model is a useful tool which shows that task-related moderators can determine in what extent the workspace effects organisational behaviour, depends on individual values and task requirements. Further, application of Maslow’s Hierarchy of Needs shows that the higher needs in Maslow’s hierarchy of needs may be met through the freedom of choice within an activity-based workspace.

Keywords
Organisational behaviour, Activity-based workspace, Organisations, Behaviour, Health, Efficiency, Productivity, Effectivity
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1. Introduction

In this section, the background of the chosen study will be presented and followed by explanations of the concepts used in this study. Furthermore, a description of the examined company will follow to provide clarity to the case study and its inherent problems. Thence, a problem statement and purpose will be presented.

1.1. Background

1.1.1. Organisational Behaviour

According to Miner (2005), the discipline of organisational behaviour is over two decades old. However, the indistinctness of its boundaries, occasionally causes the discipline to stretch out in different directions. To establish authenticity and validate theories within the field, organisational behaviour can be termed as a social science discipline (Miner, 2005, p. 3). Organisational behaviour is the study of human behaviour in an organisational context. Within this field, individual and group actions (i.e. what is being said, done, and acted out) are analysed under managerial processes and decision making (Brooks, 2003, p. 2).

The field of organisational behaviour aims to explain and predict human behaviour in organisations, and if applicable, control human behaviour in the desired direction (Brooks, 2003, p. 2). To understand organisational behaviour, one has to consider all aspects which organisational behaviour consists of (see figure 1). The aspects considered to impact and affect how behaviours are shaped within organisations are categorised into three levels; human behaviour in organisational settings (how the individual behaves within the organisational setting, such as the workspace). The individual-organisation interface (the correlation between the individual behaviour and the organisational setting), and the organisation (meaning the structure, as well as the physical setting of the organisation) (see figure 1).
In an attempt to understand human behaviour in organisational contexts, the individual-organisation interface and the organisation itself is what the field of organisational behaviour aims to analyse. To profoundly understand organisational behaviour, knowledge of all the three areas mentioned above is requisite.

Organisational behaviour is based on the understanding that not all people think, act and feel the same. Behaviour is, therefore, to some extent, always shaped by the individual circumstances and previous experiences (Nekoranec, 2013, p. 94). Boundaries within organisations evoke different kinds of behaviour. Behavioural patterns are shaped and conditioned by the boundaries between levels and functions within the organisation. During the 21st century, management focus has shifted from creating boundaries to dissolving boundaries in order to set ideas, talent, decisions, and actions, among other positive aspects into motion. These solutions are placed where they are most needed within the organisation (Ashkenas et al., 2015, chapter 1). Individuals within organisations are influenced by the organisational context (i.e. the physical and social environment within which the organisation operates). Thus, behavioural patterns can be shaped in the desired direction by conscious design of the organisational setting (Robertson, 1994, p. 22). Since the performance of an organisation is dependent on the behaviour of its members, it is essential to consider how the organisational setting affect individual behaviour (Robertson, 1994, p. 22).
An organisation can increase its performance and profitability by meeting the five general performance criteria; creativity, effectiveness, efficiency, flexibility and productivity. Two essential approaches to achieve increased organisational performance are reducing occupancy costs per employee and increased effectiveness. This can be achieved by improving productivity with the help of satisfactory working settings (van Ree, 2002, p. 357).

1.1.2. Motivation

To further understand organisational behaviour, one has to understand the driving forces behind individuals’ behaviours within the organisation. To make someone work more efficiently, one has to alter their motivation and motivate them into doing things. Motive can be unintentional (Madsen, 1969, p. 7).

“[Motivation] It is the degree and type of effort that an individual exhibits in a behavioural situation.” (Perry & Porter, 1982, p. 89).

According to Perry and Porter (1982), there are different motivational bases and sets of variables that are said to influence motivation. Individual characteristics, job characteristics, work environment characteristics and external environment characteristic are the four, major, variables. At least two of these variables have to be affected or altered to affect motivation.

The first variable, individual characteristics, focuses on individual characteristics brought to the work situation. The second variable, job characteristics, focuses on what the person does at work - the nature of the work or the compilation of tasks (Perry & Porter, 1982, p. 90). The third variable, work environment characteristics, is divided into two subcategories: organisational actions and immediate work environment. Furthermore, organisational actions are divided into the provision of individual rewards, the creation of an organisational climate and provision of system rewards. Peer group and supervisor are the most critical factors in an employee's immediate work environment. The fourth variable, external environment characteristics, is suggested to have a significant impact on individuals work in organisations (Perry & Porter, 1982, p. 91-92).
1.1.3. Job Satisfaction

"Job satisfaction is the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values." (Locke, 1969, p. 316).

Job satisfaction is the subject of satisfaction with the job. It suggests that for an employee to experience satisfaction at work, their values have to be added and reach sufficient levels for the individual standard to be met (Locke, 1969, pp. 316-318). Locke (1969) further describes satisfaction to be determined by the discrepancies with what one has in the job and what one wants in the job (Locke, 1969, p. 319). This explanation indicates that for an employee, on any level, to feel satisfied at work, the workplace has to measure up to the environmental values placed by an individual. According to Kamarulzaman et al. (2011), several studies show evidence of open-space offices (like an activity-based workspace) to have adverse effects on job satisfaction (Kamarulzaman et al., 2011, p. 264). Kamarulzaman et al. (2011) argue the lack of walls and doors evoke higher noise levels, lack of privacy and other distractions. The office layout may also violate employees personal space which can lead to them feeling uncomfortable and crowded and further decrease the level of comfort. These factors may result in adverse reactions and dissatisfaction for employees working in an open-plan workspace (such as activity-based workspaces) (Kamarulzaman et al., 2011, p. 264).

1.1.4. Activity-Based Workspace

This study aims to examine how the activity-based workspace affect organisational behaviour. An activity-based workspace is characterised by features such as non-assigned seating, open-plan office architecture and activity zones. The different zones are constructed for predetermined activities such as focus, collaborating and socialising (Malkoski, 2012).

According to Appel-Muilenbroek, Groenen and Janssen (2011), activities in the workplace can be systemised, in order to differentiate them, into three different categories;
(1) nature of the activity – social, physiological or job related;
(2) individual or group activities; and
(3) planned or unplanned activities.
An employee will consider these aspects when choosing their workstation. Other aspects, like frequency, duration and importance of the activity will also be considered when selecting workstation (Appel-Muelenbroek, Groenen & Janssen, 2011, p. 124).

Activity-based workspace is a strategy for workplace setting, allowing people to choose their setting, depending on their activity (i.e. their task for the time being). The office concept ensures the freedom of physically selecting a spot most suitable for the completion of the task at hand. This is not to be confused with hot-desking, which is when non-assigned seating is being used in a traditional office environment (like landscape or cell-offices). It does, however, share similarities with hot-desking, as well as other open-plan concepts. Therefore, research concerning other similar concepts is relevant for analysing the concept of activity-based workspaces as well. Activity-based workspace provides different spaces to meet different requirements. These could be focused work, which would require a quiet area, or open and talkative space to suit informal meetings and conversations (Wyllie et al., 2012, p. 3). The workplaces are non-territorial (i.e. non-assigned seating), although they might have spaces assigned to a team or group, they do not seek to fit the entire workforce. It is generally estimated to provide workstations for 70 % of the workforce, meaning that the activity-based office concept is not intended for a 100 % of the workforce to be present at the workspace at the same time (Engelen et al., 2018, p. 1).

According to Meel (2011), the concept of the activity-based workspace is not entirely new. Organisational structures, which are not commonly perceived as “traditional” (e.g. assigned-seating and cubicle offices), are frequently referred to as “new ways of working”. This then includes video conferencing, mobile work, desk sharing, and open-plan offices. It also provides for the concept of non-assigned seating, which was introduced at IBM in the 1970’s. At that time, it was considered a radical organisational change, and the idea behind it was to enable organisational members to share problems and experiences more widely than they would with assigned workplaces (Meel, 2011, pp. 358-359).

Previous research, conducted by Rolfö, Eklund and Jahncke (2018), shows that preserving space, accumulating flexibility and reducing costs are fundamental reasons to implement new office concepts. These are concepts such as activity-based and open-plan workspaces, which have increased considerably in the latter years. Considering personnel costs account for approximately 90 % of a company’s expenses (this may vary between different companies and
industries) it becomes highly relevant to determine factors which increases work satisfaction, and in the long-term, determine creativity and productivity. This is also important in order to keep sick leaves, and employee turnover at a minimum (Rolfö, Eklund & Jahncke, 2018, p. 644). On the other hand, new office concepts have been criticised for the effect it may have on the well-being of organisation members, such as health and productivity consequences, as a result of increased distraction and irritability (Pullen & Bradley, 2004, pp. 70-73). Furthermore, research by Millward, Haslam and Postmes (2007) shows that noise distraction can reduce productivity by up to 66%. Additional factors such as infection risk, stress and exhaustion are said to be the primary reasons as to why health issues are increasing within the open-plan workspaces (de Been, Beijer & den Hollander, 2015, p. 2; Millward, Haslam & Postmes, 2007 p. 554).

1.1.5. The Correlation Between Activity Based Workspace and Organisational Behaviour

In efficient teams, individuals may work together in order to complete essential tasks. They need to take responsibility and feel like a part of a team both on paper and in reality (Robbins & Judge, 2010, p. 273). Task identity, skill variety and task significance are variables addressed in the category “work design”. These components increase both team effectiveness and member motivation by giving the members a boosted sense of responsibility (Robbins & Judge, 2010, p. 273).

One of the negative aspects of the activity-based workspace is that the employees lose a part of their identity as they do not have the opportunity to personalise their workstation. Assigned workstations help employees to find their place within the organisation and reach a state of belonging, stability and continuity within their team (Millward, Haslam & Postmes, 2007, pp. 553). According to Millward, Haslam and Postmes (2007), flexible workstations help employees feel like a part of the entire organisation, broaden their network, and become more focused, productive and flexible. It does, however, also create a distance from their team, not knowing where colleagues are sitting, or whether they are on duty or not. Assigned seating encourages face-to-face communication, which in turn enhances the feeling of belonging to a team, whereas flexible seating encourages communication electronically, which increases organisational identity (Millward, Haslam & Postmes 2007, pp. 556-557).
1.1.6. About the case

This study uses case study as method. The examined company, Kognity, is a textbook publisher, focusing on providing digital, interactive and intelligent textbooks, by combining education with technology (Kognity, 2018). Kognity was chosen as a subject for this case study as the recent move and implementation of an activity-based workspace provide the researchers with an opportunity to study the effect of activity-based workspace on organisational behaviour.

Today (2018-05-22) Kognity has two office locations, one in Stockholm and a co-office in London. Kognity has 62 employees located in seven different countries. At their Stockholm office 48 employees are stationed, and in London, they have two employees. The rest of their employees work from home in countries such as Singapore, Canada, United Arab Emirates, Mexico and the United States of America. Within their team, 14 nationalities are represented, and their company language is English. They have employees from Germany, UK, France, Brazil, USA, Singapore, Canada and Sweden. Over the last two years, the company has increased their workforce by 130 %, and they keep growing from month to month (Knutsson, 2018). According to Knutsson (2018), 57% of the workforce is female, which Kognity themselves are very proud of and they see it as extraordinary for being a tech company. The average age of employees at Kognity is 29,6 years. They hire new employees every month. Kognity has eight different teams, and each team has a team leader who is responsible for their team. The various team leader titles are Head of Growth, Head of Content, Head of Customer experience, CEO/founder and Head of Platform, Head of People Operations, COO/founder, CFO and CTO. In their middle management, Kognity has eleven managers/leaders.

In February, the company moved from a smaller office space, which was 220 square meters, into their current office which is 450 square meters bigger. Moreover, all the employees moved from a more traditional “cubicle-office” into an activity-based workspace with non-assigned seating. According to the company’s Head of People Operations, Sofie Knutsson (2018), an activity-based workspace was not applied in their previous venue. Kognity wanted to move into an activity-based workspace because representatives of the management believe that the flexible and open concept would fit their company culture better than a traditional office workspace (Knutsson, 2018). The office concept is also in line with their mission to be a flat
organisation with minimal hierarchy (Knutsson, 2018). The new workspace applies a clean desk policy and contains different zones depending on activity (see attachment 2).

These zones are:
- Quiet zone (no talking allowed)
- Middle zones (hushed-toned talking)
- Active zones (unlimited talking allowed)
- Phone booths (for undisturbed phone calls)
- Library (common area serving as a relaxed lounge and working area)
- War room (for brainstorming and creative meetings)
- Common areas with chairs and sofas (used after preference)
- Kitchen (for socialising and working)
- Smaller meeting rooms (for private conversations and undisturbed work which require reservation)
- Social area (for working and social activities such as ping-pong and other games)
- Medium-sized meeting rooms (mainly for meetings)
(Knutsson, 2018).

1.2. Problem Statement

Both activity-based workspace and organisational behaviour are established concepts; however, the amount of literature and previous research on how one affects the other is limited (Kämpf-Dern & Konkol, 2017, p. 210).

The leading cause for implementing activity-based workspace is to decrease costs, by reducing office space and increase flexibility, as well as improve cost-efficiency and cost-effectiveness (Engelen et al., 2018, p. 2). According to research, open-plan workspaces have negative effect-factors, such as productivity and health (Magnusson, 2018; de Been & den Hollander, 2015, p. 2). De Been, Beijer and den Hollander (2015) further suggest decreased productivity and increased health issues, due to open-plan workspace models, such as the activity-based workspace (de Been & den Hollander, 2015, p. 2). Additionally, according to Seddigh (2015), open-plan offices and flex offices are associated with more cognitive stress and distractions than traditional cell offices. Increased need for concentration was reported in flex offices and
open-plan offices while employees in cell offices expressed a consistent level of problems, disregarding the need for concentration (Seddigh, 2015, p. 4). However, a systematic review of previous research, conducted by Engelen et al. (2018), found activity-based workspaces to positively affect employee interaction, personal control, satisfaction, and communication, and negatively affect employee concentration and privacy (Engelen et al. 2018, p. 10). Furthermore, Millward, Haslam and Postmes (2007) studied the effects of hot-desking (which is similar to activity-based workspaces with its non-assigned seating) on organisational members and found them to more strongly identify themselves with the organisation, rather than with their team (Millward, Haslam & Postmes, 2007, p. 552). Bodin Danielsson et al. (2014) suggests it is likely for group dynamics and strong group identity to develop in smaller groups (which is more common in traditional workspaces) (Bodin Danielsson, 2014, p. 145). One could thus argue that research showed limited and inconclusive results for the activity-based workspace, stressing negative effects on individual and organisational behaviour alike while at the same time having positive effects for the organisation as a whole.

In 2017, Wohlers and Hertel addressed the issue of lack of research regarding the consequences on organisational behaviour of implementing an activity-based workspace. The authors, therefore, sought to establish a theoretical framework regarding this matter, for consequences to be studied. By searching, collecting and analysing previous research, Wohlers and Hertel (2017) structured the features of an activity-based workspace into the Activity-based Flexible Office Model (see figure. 3). This model (hereafter referred to as the A-FO Model) further depicts working conditions affected by the activity-based workspace, and what consequences these may have on an individual and organisational level, both short-term and long-term (Wohlers & Hertel, 2017, pp. 467-475).

This study aims to apply the A-FO Model to observe the consequences on organisational behaviour of implementing an activity-based workspace at Kognity. Further clarity on the consequences is examined by applying Maslow’s Hierarchy of Needs to gain insight on how the activity-based workspace may affect motivation and job satisfaction.
1.3. Research Question

*Does the activity-based workspace affect organisational behaviour?*

The following three sub-questions were devised in order to answer the more general research question above:

- Can consequences to organisational behaviour, due to implementation of an activity-based workspace, be observed and explained using the A-FO model?
- Is the A-FO model a useful tool for understanding organisational behaviour in connection to an activity-based workspace?
- Does the activity-based workspace affect motivation and job satisfaction according to Maslow's Hierarchy of Needs?

1.4. Purpose

The purpose of this study is to increase our understanding and knowledge of how an activity-based workspace affects organisational behaviour and what the consequences of its implementation may be. To do so, this study applies the A-FO Model on one company, Kognity. Further, this study will apply Maslow’s Hierarchy of Needs to examine consequences on motivation and job satisfaction. Companies are currently choosing the activity-based workspace concept, and therefore, a renewed focus on organisational behaviour and the impact on how employees work within the organisation becomes imperative. More importantly, it is essential to understand how the activity-based workspace structure affects employee behaviour to increase knowledge of the possible risks and benefits of an activity-based workspace.

1.5. Previous Research

Previous research has been used to provide this paper with credibility as well as a basis to compare the results of this paper with the results of previous research. This section acknowledges scientific articles and reports, which are used in an attempt to gain perspectives on the correlation between organisational behaviour and the activity-based workspaces in pursuance to answer the research questions of this paper through analysis and discussion. The
amount of previous research regarding how the activity-based workspace affects organisational behaviour is limited, signalling how it, therefore, is highly relevant to contribute to this field of research.

1.5.1. Organisational psychology

Within the organisational psychology field, discussions about possible alignment between work environment and specific characteristics possessed by individuals may occur (Seddigh, 2015, p. 4). The presumption follows; when an employee of particular characteristics fit within their work environment, positive outcomes, such as satisfaction, performance, commitment, reduced stress, and adjustment, will be generated on an individual level (Seddigh, 2015, p. 4). The physical work environment, mainly the spatial matter, like desk space available for use and storage space, have been shown to affect employee satisfaction as well. The open space offices provide access, but employees prefer privacy in the workplace. This has an increased adverse effect on employees in more demanding positions, as they are not able to perform specific tasks without privacy (Brennan, Chugh & Kline, 2002, p. 293). Research also suggests the significant cause of a disturbance in the workplace to be the behaviour of co-workers (Brennan, Chugh & Kline, 2002, p. 294).

A report from Umeå University, written by Pettersson-Strömbäck et al. (2018), studied work environment, physical activity, health, and productivity in an activity-based workspace in Örnsköldsvik, Sweden. The study consisted of surveys, observation, interviews, and walkabouts in the workplace, as well as measuring of physical activity (Pettersson-Strömbäck et al., 2018, pp. 11-14). The result of this study showed that an activity-based workspace worked well for managers, some advisory personnel, and employees within the financial field. These employees wished to continue with this workspace concept if given the opportunity to choose, as they claimed the workspace enhanced their productivity and improved cooperation between departments. A majority of the management-representatives mentioned they anteriorly had their personnel spread out in different areas of the previous workspace which made it difficult for them to be visible. The implementation of an activity-based workspace has helped the managers to connect more frequently with their employees, due to the open office architecture (Pettersson-Strömbäck et al., 2018, p. 19). Those who expressed dissatisfaction with an activity-based workspace were people who worked as assistants and advisors. The noise levels and lack of privacy were said to be the leading cause of the dissatisfaction. Those
who had work-tasks demanding a higher level of concentration also expressed displeasure with the activity-based workspace (Pettersson-Strömbäck et al., 2018, p. 53). According to the study conducted by Pettersson-Strömbäck et al. (2018), employees expressed some disappointment in the information flow regarding the new workspace. For example, the regulations about remote work were unclear even after several months in the new office (Pettersson-Strömbäck et al., 2018, p. 30).

Ashkanasy, Ayoko and Jehn (2014) propose that features such as open-plan workspaces (used in the activity-based workspaces, among other office concepts), within the physical context of work has an aptitude to increase conflicts. Kim et al. (2016) suggest that open-plan and activity-based workspaces provide more interactions between members of the organisation (Kim et al., 2016, pp. 212-213). Ashkanasy, Ayoko and Jehn (2014) argue that such office designs have a significant absence of boundaries which can be detrimental and lead to bullying and other unproductive and harmful behaviour (Ashkanasy, Ayoko & Jehn, 2014, p.1176). Peponis et al. (2007) argue he activity-based workspace intensifies movement, leading to increased employee socialisation and exchange of ideas and information. Through the open space office layout, awareness of surrounding and opportunities for a diversified work-task approach is affected, which in turn affect behavioural responses to tasks and cooperation between employees (Peponis et al. 2007, p. 836). Furthermore, Ashkanasy, Ayoko & Jehn (2014) discuss territoriality and whether or not it is an affective-driven behaviour which is based on emotional reactions to employees physical environment (Ashkanasy, Ayoko & Jehn, 2014, p. 1176).

1.5.2. Workspace structure

Kämpf-Dern and Konkol (2017), suggest that during the implementation of a new workspace concept, the physical changes affect organisational behaviour. More precisely it affects satisfaction and productivity, as well as physiological and psychological health, on an individual level. Therefore, the individual behavioural response has to be taken into consideration. If the individual behaviour is not compliant to the new work structure, the structure itself may force it to change in accordance to the new physical environment (Kämpf-Dern & Konkol, 2017, p. 222). However, recent research conducted by Kim et al. (2016) has shown non-territorial workplace concepts (such as activity-based workspace), not to be the primary cause for decreased job satisfaction, perceived productivity and health, but instead, it enables a certain level of personal control. By allowing employees to choose their own setting
and work desk after preference, a degree of environmental control of the indoor conditions may be felt. On the other hand, when the activity-based workspace limits the opportunity for interactions between co-workers and does not reach sufficient comfort regarding furnishing and storage, it sparks a dissatisfaction (Kim et al., 2016, p. 212-213).

According to Kämpf-Dern and Konkol (2017), facilities that provide equipment and space for performing activities are required to create a well-functioning work environment. Whether the activities need silence, concentration or communication, the workplace must provide a workspace where all these activities are executable. Moreover, another important factor is the mobility of employees within activity-based workspaces (Kämpf-Dern & Konkol, 2017, p. 214).

Previous research has found a correlation between job satisfaction and high work control. High work control is more common in open-plan workspaces than in traditional workspaces (Bodin Danielsson et al, 2014, p. 146; Lee & Brand, 2005, p. 324). Wolf (1970) describes job satisfaction and job motivation as a subcategory of general satisfaction and motivation. General satisfaction and motivation follow Maslow’s hierarchy of needs and its principles (Wolf, 1970, p. 91). Maslow’s Hierarchy of Needs suggests that everyone has different needs which need fulfilment. Maslow further divides these needs into higher order and lower order needs. When an active need is disrupted or frightened to be disrupted the result can be frustration and dissatisfaction. On the other hand, satisfaction is achieved when any of the needs are fulfilled. When an individual identifies an opportunity to gratify an active need through job-related behaviours, job satisfaction and job motivation develops (Wolf, 1970, p. 91).
2. Theoretical Framework

In this section chosen theories will be presented. This chapter contains theories regarding organisational behaviour and how it is affected by the workspace environment. These will create the theoretical framework which is used to analyse the empiric data gathered within the study. A short description of the theories and how they will be applied to this study will be presented, followed by a more detailed description of each theory.

2.1. Synthesizing

The theories presented in this chapter are applied and adapted to the previously mentioned aspects of organisational behaviour, motivation and job satisfaction, within the environment of an activity-based workspace. They create a framework for understanding how the activity-based workspace affects organisational behaviour, further focusing on motivation and job satisfaction. The theories are purposely chosen to enhance the understanding of what motivates an individual and creates job satisfaction in the workplace. The A-FO Model (Wohlers & Hertel, 2017) describes which work conditions are affected by an activity-based workspace, and what consequences these affected conditions may lead to on an individual and an organisational level. This is a new model, which was first introduced in 2017. Its usability and applicability were tested in this study. The model was used to examine what organisational behavioural consequences that may follow the implementation of an activity-based workspace (Wohlers & Hertel, 2017, p. 470). Maslow’s Hierarchy of Needs is used to understand what motivates an individual, and how the workspace may affect the needs an individual possesses. By applying the hierarchy of needs to an office concept, an understanding of what environmental features may affect the satisfaction of needs is made possible. Carnevale (1992) argues that through Moleski and Langs interpretation of Maslow’s theory, the environment becomes paramount in order to satisfy a need (Carnevale, 1992, p. 425). Using a broader theory with implicit applications for the physical environment might provide this study with other and more specific insights which the inclusion of narrower and limiting theories of motivation (i.e. Herzberg’s Dual Factor Theory or Self-determination Theory) would have presented. Applied to the case study on Kognity, the theory creates a pathway to understanding the effects of an activity-based workspace.
2.2. The A-FO Model

In 2017, Wohlers and Hertel (2017) argued there was limited amount of research on what consequences may follow the implementation of an activity-based workspace. They presented a theoretical framework summarised into a model to explain the consequences of this particular office concept (see figure. 3) (Wohlers & Hertel, 2017, p. 469). The authors searched for keywords such as flexible office, activity-related workplace, non-territorial office, new ways of working, innovative work environments, open-plan office, among others. They searched for this in various scientific journals specialised on the subject of the physical environment in organisations. This method, alongside further sampling by hand, generated 30 papers which related to the subject of activity-based workspaces in some way. By searching, collecting, comparing and analysing, Wohlers and Hertel (2017) structured the features, conditions and consequences of an activity-based workspace into a model (Wohlers & Hertel, 2017, p. 469).

The model describes the work-related consequences of the activity-based workspace (described in the model as activity-based flexible office), both short-term and long-term on an individual level as well as an organisational level (Wohlers & Hertel, 2017, p. 470). By narrowing down the features of activity-based workspace into four categories (shown in the first box named A-FO Features (see figure. 2)), the model identifies four subcategories which outline the working conditions within the organisation. These are then applied on an individual and organisational level to reveal what the consequences of the working conditions are.

Furthermore, Wohlers and Hertel (2017) introduce task-related, person related and organisation-related moderators (see figure. 2). These moderators are thought to qualify the relationship between the features of an activity-based workspace and the individual (Wohlers & Hertel, 2017, pp. 476-478). This means that aspects related to these moderators (such as task-variety or organisational structure), will determine whether or not the activity-based workspace will lead to positive effects or negative effects.

By applying this model to organisations using activity-based workspace, management and other interested parties can identify benefits and risks on an organisational level (Wohlers & Hertel, 2017, p. 482). The A-FO Model does not only apply to activity-based workspaces, but it also applies to flexible offices in general which makes it less specific. However, since flexible
elements are a significant component of the activity-based workspace, this model is still applicable.

![Diagram showing A-FO features, working conditions, and work-related consequences.](image)

Figure 2. (Wohlers & Hertel, 2017, p. 470). The Activity-based Flexible Office Model. The model suggests that A-FO’s specific features influence working conditions of employees. These influences have an impact on work-related consequences on the long and short term for teams, the organisation and individuals.

2.2.1. Working Conditions Explained

1. Territoriality

In an attempt to describe territoriality, one could call it a behavioural expression of feelings towards ownership of physical or social objects. By personalising office environments, employees can demonstrate their feelings of ownership. To reflect their personality, employees sometimes decorate and adapt their work environments. In activity-based workspaces, there is
limited opportunity to express ownership. Having non-assigned seating and disallowing private rooms within the office and making all workspaces interchangeable, reduces the possibilities to personalise the work environments considerably (Brown, Lawrence & Robinson, 2005, p. 577). In an organisational context, a sense of belonging to social groups and simplification of social interactions have been shown to correlate with territoriality of physical space. In turn, the sense of belonging and social interaction has been shown to increase performance (Byron & Laurence, 2015, p. 315). Furthermore, ownership demonstrated by personalisation partially satisfies human needs such as the need for maintaining self-identity and the need for having a personal place (Wohlers & Hertel, 2017, p. 471).

2. Autonomy
When discussing the concept of flexible work and flexible workspaces, autonomy refers to the freedom for employees to choose when and where to work (Demeroutia et al., 2014, p. 2). Increasing employees’ autonomy at work is one of most common goals for using activity-based workspaces. Increased autonomy gives employees more freedom when it comes to planning work and choosing the working environment. An important factor which makes flexibility more accessible is technology. Well-developed communication systems and electronic equipment make it possible for employees to communicate and work almost when and wherever they want. Thanks to different activity-related areas within the office building the employees can choose different environments depending on their requirements and needs for the day (Wohlers & Hertel, 2017, pp. 472-473).

3. Privacy
The term privacy can, within this field, be divided into psychological and architectural privacy. Physical features of the environment determine the architectural privacy in an office environment. Cellular offices have the highest level of architectural privacy while open-plan offices are correlated with low architectural privacy (Bodin Danielsson & Bodin, 2008, p. 642). Noise disturbance, visual exposure and their accessibility to others are factors employees can regulate with the help of architectural privacy. Employees working in activity-based offices are assumed to sense low levels of psychological privacy due to constant visual exposure, noise disruption and distractions (Wohlers & Hertel, 2017, p. 473).

4. Proximity and visibility
The proximity and visibility aspects of activity-based workspace have a distinct impact on how communication flows between employees. Beside this, it also increases or decreases the number of spontaneous meetings (Peponis et al., 2007, p. 820). This could be viewed from both a positive and negative perspective, depending on the nature of work tasks and if they require more or less focused work, as well as the exchange of information and ideas between co-workers (Seddigh, 2015, p. 3). The open plan office layout in an activity-based workspace also increases visibility, which may affect privacy (Wyllie et al., 2012, p. 3). The nature of the office layout and the concept of activity-based workspace encourages employees to switch positions depending on the activity. Switching positions makes it increasingly difficult for employees to locate other team members (Wohlers & Hertel, 2017, p. 475), as well as keeping team members at a distance from each other considering that space in close proximity may be unavailable. On the other hand, because of the variation of co-workers in proximity, the chances of communication and spontaneous meetings, as well as sharing of information and ideas, with co-workers outside of the team are increased (Peponis et al., 2007, p. 821).

2.3. Maslow’s Hierarchy of Needs Theory

“The individual will actively seek to gratify his active need or needs, essentially ignoring both lower level needs that are already gratified and higher level needs that have not yet emerged.” (Wolf, 1970, p. 91).

2.3.1. Basic Needs

In 1943, Maslow developed a theory of human motivation, in order to describe the stages of growth an individual goes through, by categorising them into what he calls “basic needs”. The needs are defined in terms of the question they answer and the operation (the action, absence of something, or abundance of something) through which it is uncovered (Maslow, 1968, pp. 3-21). Therefore, the needs an individual have, which need satisfaction for the person to feel motivated and grow, are made clear by what triggers them in the first place. From the authors point of view, this may be applied to organisational behaviour for organisations to understand what motivates their employees. When applied to an office concept, such as the activity-based workspace, the theory enables organisations to investigate whether or not the workspace
environment sufficiently satisfies the needs an individual may have, and thereby growing the personnel on a personal level, for them to succeed in their work.

2.3.2. Hierarchy of Needs

Maslow suggested that a human's basic needs should be classified into five different categories (see figure 3):

- Physiological (e.g. thirst, hunger, shelter)
- Safety (e.g. security, protection)
- Social (e.g. belongingness, acceptance, affection)
- Esteem (e.g. self-respect, autonomy, achievement, status, attention, recognition)
- Self-actualisation (e.g. self-fulfilment, fulfil one’s potentialities)

(McRobbins & Judge, 2010, p. 141)

Maslow claims that in order to motivate someone; it is crucial to know what level of the scale that person is on. He divided the needs into two different levels, higher-order and lower-order needs. Social, esteem and self-actualisation are described as higher-order needs whereas physiological, and safety needs are defined as lower-order needs. Lower-needs are needs that are externally satisfied (e.g. pay and union contracts) while higher-order needs are internally
satisfied (i.e. within the person). Furthermore, the focus must be on satisfying the needs on the current level or the needs on levels above the current one (Robbins & Judge, 2010, pp. 141-142). An individual may achieve better psychological health by satisfying these basic needs (Lester, 2013, p. 15). Maslow has been criticised for generalising the needs of people, as well as generalising the order of how the needs are organised for individuals (Mitchell, 1982, p. 84). However, the theory indicates that individuals have basic needs which they wish to satisfy. This is also applicable to their work life, to reach further stages in the hierarchy. If needs go unsatisfied in the workplace, it may lead to decreased motivation and decreased job satisfaction (Lee & Brand, 2005, p. 323).

Deriving from Maslow’s Hierarchy of Needs Theory, Frederick Herzberg developed the Herzberg Dual Factor Theory. The theory was developed in order to understand motivation from a working perspective (Bloisi, Cook & Hunsaker, 2006, p. 202). The Dual Factor Theory is based on human needs and aims to categorise the sources of job-related satisfaction and dissatisfaction into motivator factors and hygiene factors. Hygiene factors are working conditions that may create discontent if they are inadequate, and motivator factors are about the job itself and may create satisfaction. Satisfaction at the workplace is thought to increase productivity (Bloisi, Cook & Hunsaker, 2006, p. 202-204).

Another theory used to study motivation is the self-determination theory. It was developed by Richard M. Ryans and Edward L. Deci and evolves from Lawlers and Porters instinct and extrinsic motivational factors. Instinct motivational factors are, e.g. autonomous motivation and extrinsic factors are, e.g. controlled motivation. (Gagné & Deci, 2005, p. 334). Both Herzberg’s Dual Factor Theory and Self-determination Theory are well-developed theories describing motivation. However, they incorporate individual internal factors which are not examined in this study. As this study focuses on the interplay of the physical space (i.e. the workspace) with organisational behaviour and thus the individual behavioural responses to changes in said space, a broader theory than purely motivational theories were needed. In that regard, Maslow’s Hierarchy of Needs Theory gives an extensive view of motivation and therefore it is applicable to the physical environment.
2.3.3. The Workspace

Carnevale (1992) cites Moleski and Lang:

"Physiological needs could include the need for shelter, sensory stimulation and special accommodation for the disabled. Safety needs include personal territory, defensible and personal space, and privacy for solitude. Belongingness needs, when taken in an environmental context, refer to such needs as privacy for intimacy, maintaining social interaction, and establishing group identity and community. Esteem needs are the expression of self-identity and status through symbols. Self-actualisation needs involve personalisation and freedom of choice in determining behaviour and environment. Aesthetic and cognitive needs refer to the intellectual understanding of environmental structure and beauty." (Carnevale, 1992, p. 425).

Through Moleski and Langs’ interpretation of Maslow’s hierarchy of needs, the importance of the organisational environment becomes clear in order to understand how employees are motivated and stay satisfied within an organisational context. This will be applied to the data gathered through interviews and observations, as well as the secondary data provided by Kognity, by analysing whether or not the workspace environment sufficiently satisfies the individual needs within the organisation.
3. Method

In this section, the methods used in this study will be presented, explained, and motivated. They will also be linked to how they will answer the research questions.

This study has been conducted on a qualitative basis through semi-structured interviews and observations. The research approach of this study is deductive. The deductive approach seeks to confirm or reject theories, in this specific case; the A-FO Model and Maslow’s Hierarchy of Needs Theory (Denscombe, 2010, p. 55).

3.1. Research Design

The research design applied in this study is a case study. This means that the study was made solitary on one company, Kognity. The observations (see 3.4.2. Observations) included the entire office space, and every staff member present during the study. The interviews (see 3.4.1. Interviews) were done with four respondents. By executing a case study, the researchers aim to touch the complexity shown by the specific case (Bryman & Bell, 2014, p. 84; Denscombe, 2010, p. 5). For this study, primary data was collected through conducted interviews and observations at Kognity. Secondary data was gathered from research from the fields of organisational behaviour, activity-based workspace and the research combining both fields. Furthermore, surveys compiled by Kognity themselves on a fortnightly basis was used to complement other data used in this study.

3.2. Population

The method chosen for this thesis is a case study; therefore, the population of the case refers to the examined company, Kognity (Denscombe, 2010, p.23). In this study, an investigation of the activity-based workspaces’ effect on organisational behaviour is made at the company Kognity. The interviews and observations were held at Kognity's headquarter in Stockholm, as only that office implemented the activity-based workspace.
3.3. Sample

The sample for the observations consists of employees present at Kognity’s headquarter, in Stockholm. The researchers formerly had specific knowledge about the phenomena the study would examine and therefore, it is called a subjective selection (Denscombe, 2009, p. 37). The sample for the interviews consists of two employees and two managers. This was an exploratory sample, chosen to gain insight and information specifically for the purpose of this study since the subject of an activity-based workspace effect on organisational behaviour lack a greater depth of research (Denscombe, 2010, p. 24). It was also a convenience sample, as the respondents were asked to participate and chose to do so (Denscombe, 2010, pp. 37-38). The research team were first in contact with Sofie Knutsson (Head of People Operations) via email and in person, who later introduced the rest of the respondents to the research team.

Kognity was chosen as a research object because they recently moved from a traditional workspace into an activity-based workspace. To get in contact with respondents at Kognity, a subjective selection was made once more since the researchers knew people working at the company. Four interviews were conducted, two with employees and two with representatives from the management.

By interviewing representatives with management perspective, the researchers wished to gain deeper insight into the effect of an activity-based workspace on organisational behaviour. Managers are also members of staff with work tasks, and therefore, they are also affected by organisational changes. This enabled a greater perspective, from more than one angle. Furthermore, these interviews also gave answers to the management's view of the psychosocial and physical working environment. At Kognity the Head of Growth and the Head of People Operations were interviewed. An employee from the Business Operations team and the office manager (who is a member of the People Operations team, and whose primary responsibility is to maintain the employee environment by ensuring the office is well-kept and in condition to meet the needs of the employees) were interviewed as representatives of staff.
Table 1. Kognity Interview Schedule

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Title</th>
<th>Department</th>
<th>Company</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Head of Growth</td>
<td>Management*</td>
<td>Kognity</td>
<td>09:30-10:10am</td>
</tr>
<tr>
<td>2</td>
<td>Business Operations Team</td>
<td>Employee</td>
<td>Kognity</td>
<td>10:15-10:59am</td>
</tr>
<tr>
<td>3</td>
<td>Head of People Operations</td>
<td>Management*</td>
<td>Kognity</td>
<td>11:00-11:45am</td>
</tr>
<tr>
<td>4</td>
<td>Office Manager</td>
<td>Employee</td>
<td>Kognity</td>
<td>05:30-06:05pm</td>
</tr>
</tbody>
</table>

Table. 1 Kognity Interview Schedule (Färm Grußman & Roth de Albuquerque)

*Kognity themselves do not claim to have a management team, simply heads of different teams. For clarification reasons, these respondents have been placed under the category management to show their role in leadership.

3.4. Approach

For this study, data was gathered through semi-structured interviews and observations. The interviews were conducted with four different people at Kognity’s headquarter in Stockholm. The focus of this study was to observe the implications activity based workspace has on organisational behaviour. Therefore, a qualitative method was chosen. A qualitative method desires to emphasise words in an interpretive purpose instead of statistics to describe the analysis. (Bryman & Bell 2014, s. 419).

In order to reach a deeper understanding of behaviours in the workplace, observations were made at Kognity. This enabled the research team to collect data first hand from the research object (Denscombe, 2010, p. 196). Since the research team members are not members of staff at Kognity, it was deemed most appropriate to use participant observation openly (Denscombe, 2010, p. 206). However, Fangen (2005) mentions that no social environment is fully accessible solely through observation. To make rational interpretations, participation in communication processes is required (Fangen, 2005, p. 145). Because of this, all members of staff at the Kognity Headquarter in Stockholm were aware of the observation taking place. This enabled the research team to further engage in communication processes, as the communication took place in all areas of the office. To keep record the researchers took field notes, and later compared these with each other, in accordance to what Denscombe (2016) describes as taking field notes.
(Denscombe, 2016, p. 281). This was to rely on more than the memory from the observations when compiling data, which increased the study's reliability (Fangen, 2005, p. 91).

Sharan (1994) expresses critique towards observations, as well as regarding the method of a case study by the openness of the method, which leaves the researcher with room for interpretation (Sharan, 1994, p. 53). The research team were aware of these problematic aspects during the observations. In order to check the validity of the gathered data, the researchers sent the observation table to the participants. By sending the information, the participants were able to confirm the researcher’s impressions and check the factual accuracy of the impressions (Denscombe, 2010, p. 299).

Semi-structured interviews were chosen to stick to the selected topic but still give room for questions to be made so that misunderstandings could be avoided. Additionally, semi-structured interviews resemble more a conversation than an interview. According to Bryman & Bell (2014), it is an essential factor while conducting case studies, because it allows the interviewees to form their answers and explain how they experience and perceive the workspace and its effect on organisational behaviour, based on what they deem essential (Bryman & Bell, 2014, pp. 475-476). In semi-structured interviews the answers are open-ended, and therefore, the interviewees' elaboration of points of interest is more emphasised (Denscombe, 2010, p. 175). The critique of personal interviews is that differences in the interviewer's characteristics or technique could affect the respondent's answers. Furthermore, the presence of interviewers may make the respondent feel intimidated (Frankfort-Nachmias, Nachmias & DeWaard, 2015, p. 200). To avoid this, the researchers were mindful of wearing clothes similar to what employees at the office wear, which could be described as casual. Furthermore, the interviews were conducted in a relaxed, informal way, to generate a feeling of normal conversation. They were held in English since two of the respondents did not speak Swedish. The other interviews were also conducted in English, as the respondents deemed it more comfortable to have a conversation about their work in English since they use English every day at work, as it is their company language (Knutsson, 2018).

3.4.1. Interviews

The first contact with Kognity was with Sofie Knutsson, Head of People Operations, with a request to do a case study of Kognity. Once Sofie confirmed and accepted the request, three
interviews were scheduled. The first three interviews took place at Kognity’s Head Quarter in Stockholm, Sweden, on February 23rd, 2018 between 9:30 am and 12 pm. A few days before the interviews were conducted, an email was sent to Sofie Knutsson. The email contained information about the planned structure of the interviews such as topics, proposed choice of language and a request to record the interviews. The fourth interview took place after the first observation (2018-04-12) at Kognity, also at Kognity’s Head Quarter. This was because this respondent was not available for an interview at the same time as the other interviews were conducted. All four interviews were semi-structured interviews where only a topic or a loose question was in order to generate conversation (Denscombe, 2016, p. 267). The questions were based on the research questions (see attachment 1). The questions and concepts were further explained to the respondents when necessary.

In order to get a broad perspective on the matter, three of the interviewees work in different departments/teams. The four interviewees were representatives from the following departments; People Operations, Growth and the Business Operations Team.

3.4.2. Observations

Both observations took place at Kognity’s new headquarter in Stockholm. The first observation took place on Thursday, 12th of April 2018, from 8:30 am until 6:30 pm. The second observation took place on Wednesday, 18th of April 2018, from 8 am to 4 pm. During both observations, approximately 30 employees were present at the office. The observers alternated between sitting in the lobby, stationing themselves in different zones (see 1.1.5. About the Case; attachment 2) and walking around within the office. The purpose of changing locations within the office was for the observers to blend in with the rest of the employees. By doing so, it enabled observation of where employees chose to station themselves, the interaction between employees, the possible adaptation to the different activity zones as well as the possible adaptation to changing location depending on the work task. Due to the many windows in the lobby and the open-plan office architecture, the observers had a good overview of where employees were located. In the different zones, closer observations were made to desk areas, seating and interaction among employees. The point of reference for the observations was behaviour in the workplace, in relation to the office layout. Particular attention was paid to desk areas, employees choice of workstation, and interaction among employees.
3.4.3. Secondary data - Surveys

Kognity asks their employees to fill out a survey, called Officevibe, once every other week (Knutsson, 2018). Officevibe is an online tool to measure and improve employee engagement through regular surveys, which provide information anonymously from the employees to management. Through these Officevibe-surveys, ten different employee engagement metrics (see attachment 4) are measured. The measuring of metrics creates an understanding of how well-engaged employees are with the organisational goals and vision. Each survey consists of five questions targeting a sub-metric (which is an aspect relating to the theme of the metric, see attachment 4). The answers are compiled and statistically arranged in graphs, letting the head of departments know how their employees are organisationally engaged, through the display of scores in the graphs. The ratings go from 0-10, where 10 is the highest score, indicating that employee engagement is as high as it can be. Further on, when displaying scores, colours depict if the score is high, medium or low, by using green for high, yellow for medium, and red for low (Knutsson, 2018). The authors critique against the use of Kognity's owns compiled data from the surveys is that it was not produced and assembled for the purpose of this study, in accordance to what Denscombe (2010) suggest as critique against secondary data (Denscombe, 2010, p. 233). However, Officevibe measures aspects of organisational behaviour such as personal growth, relationship with peers, ambassadorship, satisfaction, happiness, wellness and alignment (Knutsson, 2018). Therefore, it was used to complement primary data.

For this research paper, all relevant data was provided by Kognity to the research team, in the time interval between 1st January 2018 and 23rd April 2018. The metrics used for this study were:

- Personal growth
- Relationship with peers
- Ambassadorship
- Satisfaction
- Happiness
- Wellness
- Alignment
3.4.4. Operationalising

Based on the deductive approach of this study, as well as the interpretative nature of the subject of organisational behaviour in the activity-based workspace, observations were chosen for the gathering of data. This enabled the research team to investigate the activity-based workspace environment’s possible effect on organisational behaviour, more specifically, job satisfaction and motivation. Since the study examines organisational behaviour, the observation data was used to confirm and complement interview data to achieve greater credibility to further generate a high degree of conformity between observations and concept (Bryman & Bell, 2014, p. 401). In the office environment, the researchers were able to observe interaction and communication between employees, use of office space and its activity-based workspace features. Furthermore, observations allowed the researchers to gain further information and knowledge about working strategies, practical processes and other observed behaviours. During the observations, field notes were documented. Based on the field notes, two observation tables were compiled (see attachment 3). Staff present at Kognity Headquarter were observed (approximately 30 staff members during each observation), as well as the entire workspace. During the observations, particular attention was paid to factors regarding job satisfaction and motivation, related to the research questions and the theories of this study (Bryman & Bell, 2014, p. 163). These were concrete actions, like roaming in the hallways, looking for co-workers and spontaneous meetings. This made the observation more precise and, thereby, more relevant data was gathered.

The semi-structured interviews were conducted in order to gain further insight into how organisational behaviour might be affected by an activity-based workspace. The questions were formulated with regards to the research questions, chosen theoretical framework and on the basis of an interview framework (see attachment 1) (Bryman & Bell, 2014, p. 163). They revolve around the concept of an activity-based workspace, Kognity’s implementation of the concept, and the respondent's perception of organisational behavioural aspects, such as motivation and job satisfaction. Further questions regarding the features of an activity-based workspace, and the conditions affected by an activity-based workspace according to the A-FO Model, as well as possible effects on organisational behaviour were added to provide clarification when needed. The interview framework consists of several open questions based on topics, inspired by the theoretical framework of this paper, with the purpose to answer the research question of this study. In order to provide the researcher with greater ability to analyse
and interpret the material, the interviews were recorded. Each interview was circa 45 minutes long.

The interview data was compared with the data collected from the observations to provide credibility to this paper. All data was thereafter structured after the premise of the previous office and the new office, to provide clarity in what differences the employees experienced. The combination of interviews and observations gave the researchers a nuanced perspective of the examined phenomena. The interviewees were introduced to the theories and concepts applied to the research-study.
4. Empirical Data

In this section, the collected primary data will be presented. Semi-structured interviews, as well as observations, were conducted at Kognity’s Headquarter. Presented phenomenon and findings will follow, with the purpose of analysing empirical data in light of chosen theories.

4.1. Compilation of Interviews

4.1.1. Overview of Interviews

The interviews were conducted at Kognity’s Headquarter in Stockholm, Sweden, to gather information on how the activity-based workspace affect organisational behaviour. The interviews further focused on motivation and job satisfaction, in contrast to their previous office. Questions regarding both offices were asked (see attachment 1). Follow-up questions were asked when needed, to further elaborate on opinions, thoughts and experiences. Based on these interviews, data is structured and presented below.

To summarise, the data shows that the previous office was considered too crowded. Employees had their own desks in shared rooms with other team members. The team culture and the sense of belonging was strong. The new office is considered to increase socialising and cross-team communication. The workspace design allows employees to choose where to sit which gives employees a higher sense of control.

4.1.2. Previous Office

The previous office was 220 square metres and provided workspace for 48 employees. It had a more traditional layout than an activity-based workspace, with several small rooms where employees had assigned desks. All respondents described the previous office as being too crowded in each room, as well as common areas. Every team had assigned rooms, hosting three to seven employees each. Respondent 2 claimed there was never a confidentiality issue and was positive towards the team allocated rooms, as she and her team have work tasks which require some confidentiality. Respondent 1 thought the previous office was unsuitable for his work tasks, but he also claimed he spent over 100 days last year travelling and therefore, he does not reflect much over the office environment. Respondent 4 concurred with respondent 1.
Respondent 4 claimed that the previous office was not suitable for her work tasks, and she experienced more work-related stress before moving to the new office.

At the previous office, some of the routines were similar. For example, Kognity used to meet in the kitchen for breakfast on Thursday mornings; unfortunately, the kitchen space was too small for everyone to fit. Respondent 4 claimed employees who joined the breakfast mostly just went in to get a sandwich and then returned to their desk to work. Respondent 2 and 3 said that the previous office had limited space for common areas and spontaneous socialisation and interaction was less frequent. Respondent 1 claimed that since Kognity advocates transparency, phone calls used to be taken in the presence of others in the old office but the new office allows employees to choose to receive phone calls in zones where talking is allowed, and therefore disturbance is not as explicit. The other respondents expressed similar opinions.

All respondents said that the wellbeing was poorer in the previous office. There was dissatisfaction because of the crowded space and the lack of possibility to install more workstations. When questioned about the previous office, respondent 4 expressed a prior worry about where to place new employees, as there was no space left in the rooms where their teams were stationed.

All respondents expressed that privacy was not an issue in the old office due to the assigned seating and sharing rooms with their other team members. Respondent 3 also said that since every team had assigned rooms in the previous office, there was rarely a confidentiality issue. Respondent 3 experienced more privacy in the previous office but claims that her work tasks require mobility which makes privacy less of an issue.

Proximity and visibility were attainable for respondent 2, 3, and 4 in the previous office. Employees were closer to each other, and everyone knew where to find other colleagues. According to respondent 1, proximity and visibility was not an issue either. However, he claimed some previous dissatisfaction with his team being stationed in two different rooms, as he was head of both. Respondent 2, 3, and 4 thought it used to be easy to find other colleagues, as they knew where they would sit when they were in the office. Respondent 4 also claimed that her work tasks require some easy access. She, however, felt a strain from this at the previous office. She used to be interrupted in her tasks a lot. Respondent 1 values transparency and a diversified flow of communication in the workplace. He wants information in the
workplace to spread across the teams, as he believes this increases creativity and eases the way for new solutions to problems because employees interact more and with more people. Respondent 3 claimed that the company had a good culture and that employees felt a sense of belonging previously, but that they used to identify themselves with their team more than with the company. Respondent 2, 3 and 4 said that the room allocation in the previous office created a strong sense of belonging in the teams. Respondent 1 concurred with this and further elaborated how there was an attachment to the desks and employees placed personal belongings on them. According to respondent 2 and 3, territoriality and personalisation was openly expressed in the previous office by leaving personal belongings and decorating desks.

All respondents agree that autonomy was not available to a great extent in the previous office. Employees could work remotely, but the office did not offer an opportunity to change workstations. Respondent 3 and 4 values a workplace which enables them to vary their workday by changing locations and choosing their surroundings. The freedom of choice was not as available to them in their previous office.

4.1.3. New Office

The new office is thought to encourage communication with employees other than team members. Respondent 1 expresses how the activity-based workspace enables a flow of communication, through the movement of employees, which is of great value to him. With non-assigned seating, employees interact more and the exchange of information increase between teams. Further on, he also said that employees socialise more, as they meet more people. His opinion is that transparency and clarity, which are core values for Kognity, will benefit from an activity-based workspace. According to him, this office concept is in line with the flat and decentralised organisation Kognity desire to be. Respondent 2, 3, and 4 share this opinion. They think people move around more and that they more often sit next to non-team members in the new office. They also believe people socialise more.

Respondent 4 argues that the activity-based workspace increases her focus at work. The focus is crucial to perform well, and respondent 4 claims that it has improved her motivation to work.

“Now when you don’t know where someone is sitting you send them a message. Before people would always stop me in the hallways, asking me questions.” (Respondent 4)
When asked about whether or not the communication has increased, and if it is now easier to communicate with co-workers than at their previous office, respondent 4 mentions how she thinks communication is more efficient now that an activity-based workspace has been implemented. She values a workspace which makes it easy to structure her work. Anteriorly, she always got stopped in the hallways by other employees who needed help with different things. Being stopped in the hallways was a disturbing factor to respondent 4’s workday. It was also difficult to remember which employee that had asked her for what. She argues that employees are now, to a greater extent, forced to communicate electronically since locating co-workers is more difficult and more time-consuming than before. Respondent 4 claims that she receives more emails in the new office than in the previous, the difference is that she can decide when to read emails and when not to. Being able to plan her workday is motivating and of value to respondent 4.

Regarding privacy, respondent 2 says that it is time-consuming to continually think about what is on her desk or what is on her screen. The new office layout has given respondent 2 a bit of a privacy concern. Previously, she had her own desk and drawers where she could leave her things visible at all times, which was valuable to her. In the new office, she has to pack up her things when she leaves for a meeting, lunch or goes home for the day. In the new office, everyone has their own locker, into which they can lock their things when needed. The frequent “packing up” is not only time-consuming but also tiring and even frustrating, especially when respondent 2 is in a hurry. She expresses a specific strain from the effort put in to maintain confidentiality and privacy in her work. Since every team had assigned rooms in the previous office, there was never a confidentiality issue. The remaining respondents did not consider this an issue.

“I have to think more than before. If I want to grab a cup of coffee I have to look at my computer to see what’s on my screen and if I can leave it open.” (Respondent 2)

All respondents have noticed that territoriality is being expressed through the leaving of personal belonging and devices, like laptops and chargers, by workstations. None of them sees this as an issue, but merely a habit left from being able to do so in the previous office. Not everyone does this, but a few, as far as they have been able to see. Respondent 1 and 3 expressed
that marking territory was not something the company desired from their employees, but that employees would still do it, though not overnight.

Regarding autonomy, all respondents think the new office applies a more flexible work environment which encourages employees to be more autonomous. Employees are more in control over their environment because they can choose where to sit in the office or even work remotely in greater occurrence. Respondent 1, 3, and 4 express great satisfaction since moving to the new office. They place value on being able to move and the freedom to choose their workstation. Respondent 2 did not mention an opinion or experience about this.

All respondents argue that proximity and visibility, has decreased in the new office. People are harder to find due to the non-assigned seating. Again respondent 4 sees this as something positive since electronic communication has increased. Respondent 2 sometime feel the lack of team membership. In the old office, she always sat next to her team members and got a daily reminder of that she was a part of a particular team. Now she does not always know where they are and does not communicate with them as easily as she used to. Respondent 3 mentions that one of the desired outcomes with the new office layout was to achieve “one team, one dream” mindset. She clarifies this as wanting employees to feel connected to the entire body of staff instead of solely with their team. Respondent 3 says the switch to an activity-based workspace is based on their perception that, though the team culture was exceptional, the company culture as a whole was not as good as desired. By working together towards joint goals, respondent 3 believes that the feeling of belongingness could increase and create a sense of company membership. She sees this to a greater extent in the new office than in the previous office. According to her, people communicate more with people from other teams. For respondent 3, whose work tasks include staff liability, the open office layout makes it easier for her to see more and meet more employees from different teams. She claims that it now comes more naturally. All other respondents also claim that they and other colleagues now communicate more with people from other teams.

4.2. Observed Behaviour

The observations were conducted with the intention to observe employees at the workplace and to search for information regarding how the employees utilise the activity-based workspace,
and how this may affect their motivation and job satisfaction. These aspects were observed through their use of office features, signs of relief or strain, conversations, and mobilisation within the workspace.

Observation Day 1
Place: Kognity Headquarter
Date: 12th April 2018
Time: 8:30am 6:30pm
Present at the office: Circa 30 employees, including managers

Observation Day 2
Place: Kognity Headquarter
Date: 18th April 2018
Time: 8:00am 4:00pm
Present at the office: Circa 30 employees, including managers

During the first observation, Sofie Knutsson showed the researchers around the office. A description of the different zones was given. The same information had been given to employees via email when moving to the new office. Based on the field notes documented during the observation, two observation tables were compiled (see attachment 3). Below, a short summary of the extensive observation tables is given.

The observations showed that territoriality was expressed at workstations by leaving of personal and work-related belongings by the desks. Even when employees left for an hour for lunch, laptops, chargers and mugs were left at the workstations. Employees utilised all areas to varying extent. Some employees were seen sitting in the same spot during the entire observation, but other were seen moving around various times, depending on the tasks they were performing. Multiple employees were observed using one zone for phone calls, one zone for smaller meetings another zone for focused work, such as filling in an excel-file or going through piles of papers. Employees socialised in all areas, with both team members as well as with non-team members. People sitting by their computers seemed to be left undisturbed, but employees who were standing up or moving around were frequently socialising.

Meetings and phone calls occur in meeting rooms and common areas. Some people seemed to talk in a respectively, lower tone of voice without feeling pressured to whisper. Spontaneous meetings occur in common areas as colleagues pass by each other. Some employees were careful not to leave any papers on the workstation that they were using, and there was not much
privacy in the office. People were seen waiting outside meeting rooms waiting for the rooms to be free, or to talk to the people inside.

4.3. Secondary Data - Officevibe Surveys and Compiled Data from Kognity

The Officevibe tool provides Kognity with surveys to measure ten metrics regarding employee engagement (see 3.4.3. Secondary Data; Surveys). The results are presented in tables with scores beneath each metric (see table 2). It is important to know that what Officevibe principally measures work engagement, since this is what the metrics are intended for, and also what the questions in the surveys are measuring. Since this paper studies how the activity-based workspace affects organisational behaviour, focusing on job satisfaction and motivation, the Officevibe metrics are valuable secondary data. The data was used to complement primary data and provide insight into how these two aspects may have changed since Kognity switched to an activity-based workspace.

Scores: April 23rd

Table 2 (Knutsson, 2018)

Table 2 shows scores on 23rd of April 2018, depict participation rate being at 96 %, which means that 96 % of all Kognity employees stationed at Kognity’s Headquarter participate in the survey. The score for engagement is 8 out of 10. The metrics showing the lowest scores are; wellness, satisfaction, and happiness. Wellness shows a score of 6.6 out of 10 and is the
lowest scoring metric. The highest scoring metrics are; relation with managers, relation with peers, feedback and ambassadorship.

**Comparison: 1st of January - 23rd of April**

Table 3 (Knutsson, 2018)

Table 3 depicts the variation in scores for each metric between 1st of January and 23rd of April. Since 1st of January, the participation rate has gone down by 4 %. Wellness has increased by 0.6 units. Satisfaction has decreased by 0.9 units, and happiness has decreased by 0.5 units.
5. Analysis

Below, an analysis of the study’s gathered data is presented in the light of the theoretical framework and in relation to previous research. Through this, possible correlations, phenomenon’s, and consequences are displayed.

5.1. The A-FO Model applied to Kognity

The A-FO Model depicts the features of an activity-based workspace, followed by the working conditions it affects. The consequences of these working conditions are thereafter presented (see figure 2). This model is applied to the gathered data in this analysis to examine conditions and possible consequences the activity-based workspace may have on organisational behaviour. Through this analysis, the models’ usability will be tested.

5.1.1. Territoriality

Territoriality is a working condition affected by the activity-based workspace (see figure 2), which is expressed by personalisation and marking territory in the workplace. This expression is considered to affect an individuals’ sense of ownership and may be linked to the need of personal territory. Personal territory is a safety need, as well as an esteem need. The model depicts well-being to be a long-term consequence of expressed territoriality (Wohlers & Hertel, 2017, p. 471). The researchers on several occasions observed territoriality. Wohlers and Hertel (2017) argue that the absence of expressed territoriality may be the cause for the decreased feeling of belongingness to a team and that a possible consequence could be an increased feeling of organisational belongingness, which in turn affects organisational identification (Wohlers & Hertel, 2017, p. 472). According to Officevibe, relationship with peer is unchanged since moving into an activity-based workspace (Knutsson, 2018). This may indicate that team belongingness has not been impacted by the move. On the other hand, it may also indicate that though team belongingness has decreased, belongingness with the entire organisation has increased. Furthermore, the scores from the Officevibe surveys show the wellness metric to have increased by 0.6 units since Kognity moved to an activity-based workspace (see table. 5). Further, if the increased score has to do with the implementation of an activity-based workspace, or with the move to a bigger office, is unclear.
5.1.2. Autonomy

Autonomy is another working condition affected by the activity-based workspace (see figure 2). Autonomy refers to employees’ control over when and where to work (Wohlers & Hertel, 2017, p. 472). Employees were seen utilising the different zones in the new workspace. During the interviews, all respondents expressed increased autonomy since moving into the activity-based workspace. In compiled data from the Officevibe, the metric personal growth (which measures the level of autonomy employees feel) has a score of 8.1 (see table. 4). This score has increased by 0.3 units since the move to the new office (see table. 5). According to Lee and Brand (2005), there is a correlation between high work control and job satisfaction (Lee & Brand, 2005, p. 324). This would thereby support the A-FO Models’ theory of an activity-based workspaces’ correlation to increased autonomy. Furthermore, concerning the employees' expression of how they enjoyed the freedom of choosing their workstation, this may indicate increased job satisfaction. However, the novelty of the freedom might wear off in the long-term which may affect employees' perception of the workspace and whether or not it provides freedom.

5.1.3. Privacy

Personal space and privacy are needs which are not entirely satisfied within the activity-based workspace due to its open architecture and impersonal desks (Wohlers & Hertel, 2017 p. 473). During the observations, people were seen sitting close to each other for most of the day. Brennan, Chugh and Kline argue that open-plan offices provide access, however, employees prefer privacy (Brennan, Chugh & Kline, 2002, p. 293). The compiled data from the Officevibe surveys show that the satisfaction metric has gone down by 0.9 units since Kognity switched to an activity-based workspace (see table. 5). Respondent 2 said that it is time-consuming to always think about what she leaves on her desk or computer screen when she goes to get a cup of coffee or for a quick visit to the bathroom. According to the A-FO Model, strain is a consequence from the lack of privacy, which is what may be indicated by respondent 2, as she describes having to think about what she leaves on her desk, and the Officevibe Survey data. In accordance with respondent 2's answer, the model further suggests that privacy may affect employee well-being, job satisfaction and motivation. According to the model, lack of privacy in the form of noise distractions, interruptions and other unwanted distractions such as visual
exposure may lead to dissatisfaction. In the long-term, the lack of privacy may therefore decrease job satisfaction and motivation (Wohlers & Hertel, 2017 p. 473).

5.1.4. Proximity and Visibility
Peponis et al. (2007) argue that the activity-based workspace intensifies movement which in turn increases exchange of ideas and socialisation. Proximity and visibility in an activity-based workspace may facilitate spontaneous meetings (Peponis et al., 2007, p. 820). The observation showed results in line with this research, as employees were walking around looking for co-workers, as well as exchanging information in common areas (see attachment 3). Employees were observed working in different zones. Furthermore, one respondent claimed that since moving to the new office, electronic communication has increased, and she experiences less disturbance from being approached in person. The utilisation of all office areas, as well as open exchange of information, may indicate an adaption to the office concept, and an increase in overall communication. However, it may also indicate a lack of focus among employees. The moving around may cause disturbance and decrease overall focus, which in turn may lead to decreased productivity.

5.2. Maslow’s Hierarchy applied to Kognity
Maslow’s Hierarchy of Needs Theory depicts basic needs an individual has which require satisfaction in order for the individual to be motivated and thereby attain job satisfaction (Locke, 1969, p. 320). For this study, this means that job satisfaction and motivation should vary directly depending on to which extent the satisfaction of needs is being met. The more needs being fulfilled, the more job satisfaction and motivation should increase (Locke, 1969, p. 320).

5.2.1. Physiological
Physiological needs are biological needs, which require shelter and aliment (Robbins & Judge, 2010, p. 141). These needs are not entirely relevant for this study, as they are met by the office
environment by merely providing a roof over employees’ heads and the opportunity for them to eat.

5.2.2. Safety

Security and protection are safety needs (Robbins & Judge, 2010, p. 141). Safety needs put into an environmental context are personal territory, defensible and personal space and privacy for solitude (Carnevale, 1992, p. 425). The activity-based workspace does not entirely allow fulfilment of some of the safety needs, as it does not provide a defensible and personal space. According to Brennan, Clugh and Kline (2002), employees prefer privacy in the workspace. Open workspaces, such as the activity-based workspace, provides access, not privacy (Brennan, Chugh & Kline, 2002, p. 293). In Kognity’s new office, the personal territory was observed but mostly in the form of a locker where employees could lock their work-related belongings in (such as pencils, notebooks, chargers etc.) and laptops (mainly carried around) (see attachment 3). The lack of personal territory and personal space does therefore not sufficiently meet the safety needs, which may indicate that an activity-based workspace is not able to motivate and increase job satisfaction based on Maslow’s safety need.

5.2.3. Social

For the social needs to be met and satisfied, the individual requires a social belonging and a feeling of acceptance and affection (Robbins & Judge, 2010, p. 141). The physical environment may affect this by providing space for social interaction and establishing group identity and community (Carnevale, 1992, p. 425). All the interviewed respondents agreed on increased socialising in the activity-based workspace due to people moving around more. Peponis et al. (2007) claim that the office intensifies movement and increases socialising (Peponis et al., 2007, p. 820). Social interactions were observed in the workplace (see attachment 3). Respondent 2 also claimed that the feeling of belonging to a team has gone down. In the previous office, they were seated in rooms allocated to teams which created a sensation of team membership which they now lack in their everyday environment. Respondent 1 and 3 said they wanted to create a sense of belonging to the entire company, not just specific teams. None of the respondents could, at that point, say that this was the case in the new office. The alignment metric, which measures how much employees feel aligned to the company values and mission (Knutsson, 2018) has gone down by 0.7 units since the move to the new office (see table. 5).
This score in alignment may disprove Kognity’s initial argument for implementing an activity-based workspace, as it does not support an increase in organisational identity. The latter would support the statement of less team belonging, thus simultaneously decrease and increase the social aspects and connectedness. General non-specific socialising has increased whereas the more specific team socialising has decreased.

5.2.4. Esteem

The esteem need includes the ability to express oneself as an individual (Robbins & Judge, 2010, p. 141). Esteem needs are the expressions of self-identity and status through symbols (Carnevale, 1992, p. 425). The office-concept itself does not allow for this since the seating is non-assigned and there is a clean desk policy. However, all respondents have noticed territoriality being expressed to some extent by employees leaving personal belongings and work devices by the station they are currently using. The research team observed this during both observations (see attachment 3). The respondents regard this, in the new office, as a force of habit. In the previous office, territoriality would be expressed more, for example by having pictures on their desks. Territoriality may be a force of habit; however, it may also indicate dissatisfaction, as it may be employees' effort to apply the same work structure as they had at their previous office.

5.2.5. Self-actualisation

The final need, self-actualisation needs, involve personalisation and freedom of choice in determining behaviour and environment (Carnevale, 1992, p. 425). The observation showed that employees used all areas in the office space to a varying extent. All respondents also said that they enjoyed the freedom of choosing their workstation. Kim et al. (2016) argue that the opportunity to select a setting, such as a desk and a zone, can create a sense of freedom due to the control of the indoor environment. However, when the increased sense of freedom and control inhibits communication and interaction, it creates dissatisfaction (Kim et al., 2016, p. 212-213). Lee and Brand (2005) also argue that having control at work increases job satisfaction (Lee & Brand, 2005, 324). Respondent 2 and 3 said that personalisation was made in the previous office, employees decorated and personalised their desks with photos and other personal belongings. The respondents still expressed they enjoy the freedom that the activity-based workspace provides. This may indicate job satisfaction.
6. Discussion

In this section, a discussion regarding the research questions will be presented. The discussion creates a base on which relevant conclusions will be made.

This study focuses on how an activity-based workspace may affect organisational behaviour and what consequences this may have on an individual and organisational level. Further, the study considers how the activity-based workspace may affect motivation and job satisfaction. There has been a limited amount of research on this specific subject. The research found, has shown contradictory results. Some sources claim that activity-based workspaces are concepts that increase work-related problems such as stress and distraction, other sources claimed that no correlation between the workspace concept itself, and work-related issues could be detected.

The application of the A-FO Model did increase the understanding of what consequences may follow the implementation of an activity-based workspace. The model would require extensive testing since it depicts long-term consequences which was not possible to examine in this study. The lack of research of long-term consequences affects the models’ usability. The result showed that the activity-based workspace does not comply with Maslow’s Hierarchy of Needs, which indicates that the long-term consequences of motivation and satisfaction, depicted in the model, may not follow the implementation of an activity-based workspace. Furthermore, Maslow’s theory may only show indications of consequences on motivation and job satisfaction. Therefore, the remaining long-term consequences may only be indicated by the secondary data which is compiled over four months. The model is also unclear as to what time span “long-term” refers to. This may vary depending on which company it is applied to. Since Kognity hires new employees every month, long-term may refer to a shorter time span than if the model would be applied to a company with slow growth.

6.1. A-FO Model Consequences

According to the A-FO Model, the work conditions affected by an activity-based workspace are territoriality, autonomy, privacy, and proximity and visibility. Our study shows that these have all been affected by the activity-based workspace. Due to a small sample, it is difficult to generalise the results. Further, 50% of the respondents, were management representatives who
also might have affected the study's results. The average age of employees is 29.6 years, which is relatively low. According to the A-FO Model, age is a personal-moderator (see figure 2). Even though task-moderators might have a significant influence, one could argue there is a possible alignment between age and satisfaction with the new workspace. There may have been a shift in how to perform work tasks, just as technology has changed, work tasks have changed with it. Younger employees might be more adapted to new ways of working. It could be suggested that younger people, in general, might more easily adapt to an activity-based workspace.

Territoriality is being expressed to some extent in Kognity’s new office, through employees leaving personal and work-related belongings by the workstations. The A-FO Model suggests that the short-term consequences affected are ownership and identity. The expressed territoriality could be a force of habit left from their previous office. It may also be due to person-related moderators (such as laziness) or it may be an expression for desired control. Further, it could be a way to reserve a workstation for later use. The A-FO Model further derives organisational identity as a consequence of an activity-based workspace. However, the data from the Officevibe surveys show the alignment metric to have decreased since Kognity implemented the office concept, by 0.7 units. This may indicate that though team belongingness has decreased according to the respondents, organisational identity has not increased, which in turn questions the consequences of the A-FO Model. This result may also have to do with moderators not associated with the physical workspace. Furthermore, individual traits may act as person-related moderators and thereby affect consequences. Some employees would never personalise a work environment, while others would if given the opportunity, while still others might lose a sense of belonging if they are not able to personalise their office space. Organisations contemplating a switch to an activity-based workspace might benefit from pre-decision surveys aimed at increasing their knowledge of their employees' individual traits and gaining insights by conducting such aggregated overviews.

According to the findings in this study, autonomy has increased. The freedom of choice allows for employees to exert control over their environment which, according to Lee and Brand (2005), is associated with job satisfaction. Based on previous research and the results of this study, one could argue that the activity-based workspace is an attempt to meet both organisational values and individual values and needs. The concept itself is presented as a middle ground which may provide the physical space and features for a broad variety of tasks.
However, one could question the concept of freedom even in an activity-based workspace, as the office structure is already determined. It does not take individual ergonomic factors, such as physical requirements, into considerations. Therefore, it might be better suited for the work tasks than the individual performing them.

The A-FO Model depicts privacy as a condition affected by the activity-based workspace, and lack of privacy may lead to strain. In line with the results from Pettersson-Strömbäck et al. report from 2018, the results from this study differ depending on the complexity of tasks performed. The A-FO Model describes this as a task-related moderator. The model further suggests that people with tasks requiring high concentration are less pleased with the activity-based workspace. The concept sometimes lacks possibilities to achieve maximum focus due to its open architecture. Lack of focus, privacy and noise disturbance might eventually lead to decreased wellness and health issues. The activity-based workspace might never completely satisfy the need for privacy since it cannot guarantee the employee to utilise the private/silent zones at all times. The office concept is generally implemented to accommodate 70% of the workforce, indicating that it might be crowded. This would further delimit employees opportunity to use a private zone within the workspace.

Proximity and visibility has decreased, while at the same time socialising and information sharing has increased. One respondent claims this to be positive as she is now less disturbed in terms of being approached in person. Another respondent claims the lack of proximity and visibility has decreased her sense of belonging to her team. The moderator, in this case, may be person-related, as the second employee may have a greater need for belonging than the first one, or she may still identify herself with her team more than with the organisation.

6.2. Satisfied and Unsatisfied Needs

This study shows that activity-based workspace features, such as open space architecture, non-assigned seating and zones designed for specific work-related activities, do not comply with all of Maslow’s basic needs in the Hierarchy of Needs. Further displaying this, the compiled data from Officevibe showed the metric for satisfaction to have decreased slightly since Kognity switched to their new office. This may have to do with other, non-physical environment-related aspects, but may also be an indication that not all employees feel like they
get their needs satisfied in the workspace. Applying Maslow’s Hierarchy of Needs to this study indicates that an activity-based workspace may meet the higher needs an individual may have. This is because the office concept provides the freedom of choice. However, employees may not attain privacy and personalisation in the activity-workspace. The lack of this may therefore question whether freedom of choice is fully attainable.

Maslow’s basic needs include the need for privacy. Transparency, which is a core value for Kognity, does not go hand-in-hand with privacy and solitude. One employee mentions a privacy concern as her work tasks require certain confidentiality and focus to perform. However, other respondents who do not have the same type of work tasks argue that privacy, in terms of confidentiality, is not an issue. They value the transparency more than the privacy. Thus, it is a value judgment rooted in respective individual traits. As privacy is a safety need, the lack of it this may cause dissatisfaction which in turn may lead to decreased motivation and decreased job satisfaction. Not entirely examined in this study, is the privacy concerning solitude. Therefore, any conclusion on whether or not this is an issue, cannot be made.

One possible disadvantage, from an organisational behavioural point of view, with an activity-based workspace, is that it does not allow for expressions of territoriality, which according to Maslow’s Hierarchy of Needs, in an environmental context, is necessary in order for an individual to satisfy their need for esteem. Our results show that territoriality is being expressed to some extent in Kognity’s new office. This may, however, be a force of habit left from their previous office. None of the respondents claimed for this to be a value for them, and thereby not an issue. However, one could argue that personalisation does not require the physical space in order to be fulfilled. It may suffice to personalise work-related devices, for example by changing the desktop background image on computers, or by changing ringtones on mobiles. Thereby, personalisation may be satisfied even though the physical space does not encourage it.

The advantages of an activity-based workspace are that it increases cross-team communication and transparency, which is highly valuable to two of the respondents. These two respondents are managers and express this as valuable for the company as they strive for creative solutions and want the entire company to work towards common goals. The remaining respondents did not disagree with this. All of them valued the freedom of choice, which this concept allows and encourages. The activity-based workspace has allowed for more cross-team socialising which
is considered a positive consequence of the new office concept. However, as team members do not have the same proximity as they did before, socialising within teams has decreased. The observation also showed employees socialising in most areas of the office. It is unclear what that means for the social need overall, but an interesting finding, which could affect motivation and job satisfaction either way. It remains an open question for the company as a whole if the ambivalent outcomes lead – over time – to better or worse organisational output.
7. Conclusions

In this section, the study’s conclusions, which have been made from analysis and discussion regarding primary and secondary data presented in the study, will be given. These conclusions provide an answer to the research questions.

Research questions

Does the activity-based workspace affect organisational behaviour?

- Can consequences to organisational behaviour, due to implementation of an activity-based workspace, be observed and explained using the A-FO model?
- Is the A-FO model a useful tool for understanding organisational behaviour in connection to an activity-based workspace?
- Does the activity-based workspace affect motivation and job satisfaction according to Maslow's Hierarchy of Needs?

From this study, the conclusions are that the activity-based workspace does affect organisational behaviour. The A-FO Model was tested in this study and applied to Kognity’s workspace. The results show that the A-FO Model does increase understanding of what the implementation of an activity-based workspace may lead to. The model is a useful tool to understand how the activity-based workspace may affect organisational behaviour. It creates a framework within which underlying environmental features in the activity-based workspace are depicted. The model further explains what conditions are affected of these features and what the consequences might be. The short-term consequences examined in this study are in line with what the model suggests. The long-term consequences could not be fully examined in this study. Indications, so far, show that according to Maslow, the long-term consequences depicted in the A-FO Model may not follow from the activity-based workspace, as it fails to sufficiently meet all the basic needs which motivate an individual and leads to increased job satisfaction. Individual values and task requirements will determine whether or not an activity-based workspace will affect motivation and job satisfaction. Employees working within an activity-based workspace might experience some struggle to fulfil the need for privacy, solitude, personalisation and territoriality. The higher needs in Maslow’s hierarchy of needs may be met through the freedom of choice.
8. Critique

This section presents the critique the research team have on their sources and towards the study, to bring light to possible flaws which may have to be taken into consideration while reviewing this study.

8.1. Critique towards sources

The majority of sources used are scientific articles, which have been peer reviewed. Therefore, the sources used for this study attain a high level of quality. Unfortunately, many sources were contradictory. Some sources used may be criticised for being relatively outdated; therefore, more recent sources have been used to complement them. Another issue is that many of the sources used are not strictly applicable to the purpose of examining similar research questions, like the ones this study asks.

A few sources are not scientifically based, but relies on case studies, websites (such as Kognity’s own, to describe the company), and journalism. These are therefore used in moderation, and connected to scientifically related sources.

8.2. Critique of own study

Since we chose to do a case study, the result is hard to generalise and might not be applicable to other companies. Kognity is a relatively small company with few employees which makes the authenticity questionable. Only four interviews were made which also decreases the study’s authenticity. All four interviewees were informed in advance about time and date for the interviews which gave them time to prepare themselves. The interviews were conducted in English, which is not the mother tongue of the interviewers nor the interviewees. The choice of language may have affected the answers, since wording may differ between respondents and the research team. This choice was made as two of the respondents do not speak Swedish. We also choose to do the other interviews in English, as Kognity use English as their company language, and employees speak it on a daily basis. Therefore, both respondents and interviewers choose to do the interviews in English, as it would be easier to express themselves in English. Furthermore, the interviews contained open questions, making the interviews hard
to replicate. The study’s stability is low since the office concept is new for the respondents. Over time one could imagine that the perception of the workspace might differ from the perception the respondents have today. Maslow’s physiological needs, such as hunger, shelter and thirst were not seen as relevant to examine in this study. They are not applicable since they are already satisfied. Therefore, the entire theory was not entirely used.

8.3. Ethical aspects

For this study, Vetenskapsrådet’s (2017) ethical principles for research have been used, in order to obtain a high research quality. These consist of four requirements:

- **The information requirement**
  The involved individuals are informed about the purpose of the research.

- **The consent requirement**
  The involved individuals can, at any time, interrupt their participation.

- **The confidentiality requirement**
  Information about the involved individuals in the study cannot be published, and they can choose to be anonymous.

- **The utilisation requirement**
  All the collected data will solely be used for research purposes, nothing else.

(Vetenskapsrådet, 2017)

The researchers conducted participant observations, openly, everyone observed had attained information about the observations in advance. The researcher’s identities were openly recognised (Denscombe, 2010, p. 222).
9. Future Research

This section mentions suggestions to further research, using this study as a base.

Using this study as a base, this field may benefit from research with the purpose to further develop the understanding of the adaptation of organisational behaviour, and profound research of the activity-based office concept and its long-term effect on behavioural factors. More in-depth research could be conducted on other companies’ active in other branches of industry or a comparison between companies within the same branch. Evaluating whom, within an organisation, has the most to gain out of this office concept could be suggested for more research. Future research may also benefit from examining the process of changing office layout, and how it is received by the employees. Questioning whether there is a correlation between age and previous job experiences and the perception of working in an activity-based workspace could also be proposed as topics for future research. Articles often mention the cost-efficiency factor as the main reason for implementing new office concepts; therefore, future research could be made in order to determine if cost-efficiency is achieved in companies who implement flexible offices.
References

Articles


**Printed Sources**


**Websites**


**Other**


• de Been, I., Beijer, M., den Hollander, D., (2015) How to Cope with Dilemmas in Activity Based Work Environments results from user-centered research. 14th Euro FM Research Symposium Available at: https://www.researchgate.net/publication/278952410_How_to_cope_with_dilemmas_in_activity_based_work_environments_results_from_user-centred_research?enrichId=rqreq-35c182a3db896ff5b215fc6ba2a84044-XXX&enrichSource=Y292ZXJQYWdOzI3ODk1MjQxMDtBUzoyNDMwODEzNzUxMjE0MTBAMTQzNDk2NjUyNDY4NA%3D%3D&el=1_x_2&_esc=publicationCoverPdf (Assessed 2018-04-08)

Rotterdam. Available at:

- Knutsson, S. (2018) Introducing Officevibe [e-mail]


Figure Index

- **Figure 1:** Griffin, R. W., Moorhead G. (2007) *Organizational behavior: managing people and organizations.* Boston, MA: Houghton Mifflin

- **Figure 2:** Wohlers, C., Hertel, G., (2017) *Choosing where to work at work – towards a theoretical model of benefits and risks of activity-based flexible offices.* Taylor & Francis Online: Ergonomics, Vol. 60, Issue: 4, pp. 467-486.

- **Figure 3:** McLeod, S., (2018) *Maslow's Hierarchy of Needs.* Simply Psychology Official Website [online]. Available at: https://www.simplypsychology.org/maslow.html (Assesed 2018-05-23)
Attachment 1: Framework Questions for Semi-Structured Interviews

1. What is your general impression of the activity-based workspace since implementation?
2. What is the staff/employees general impression of the activity-based workspace since implementation?
3. How would you describe your previous office?
4. How was the well-being at your previous office?
5. Have you noticed any differences in behaviour, yours or colleagues?
6. How were you informed about the change of office location and layout?
7. Do you feel like you received sufficient information about the change of office location and layout?
8. How did you experience other people’s reaction towards the change?
9. How did you perceive staff wellbeing at the previous office?
10. Has your way of working changed?
   a. more/less efficient
   b. more/less happy
   c. more/less stressed
11. Do you have any perception of how your colleagues feel and behave. Have you noticed any difference since moving here?
12. Have you noticed any changes in privacy?
13. Have you noticed any changes in proximity and visibility?
14. Have you noticed any changes in territoriality?
15. Have you noticed any changes in autonomy?
16. Do you think that this office could affect efficiency?
17. What are the advantages and disadvantages of an activity-based workspace?
18. What do you think would have happened if you changed the old location into an activity-based office?
19. Does it feel like a natural transition to go from a traditional workspace into an activity-based workspace?
Attachment 2: Blueprint of Kognity’s office

(Knutsson, S. (2018) *Info om Kognity* [e-mail])
## Attachment 3. Observation Table

<table>
<thead>
<tr>
<th>Zone</th>
<th>Action/activity/behaviour</th>
<th>Frequency</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiet zone (no talking allowed)</td>
<td>Occasional socialising Employees close their laptops and remove papers from the desk</td>
<td>Three times</td>
<td>Member of staff did not follow directions of being quiet in the quiet zone. Removing devices and papers was more common for employees in the finance team and the People Operations Team. Managers also carried their laptops with them more frequently.</td>
</tr>
<tr>
<td>Middle zones (hushed-toned talking)</td>
<td>Personal belongings were left by desks Work related devices are closed and papers are put away</td>
<td>Three times</td>
<td>When leaving workstations, employees left personal belongings by desks. After a couple of minutes, up to two hours later, they returned to previously used workstation. This was the case for about 2 thirds of the members of staff present at the office. Some employees are careful to not leave any screens on or any paper on their desks</td>
</tr>
<tr>
<td>Active zones (unlimited talking allowed)</td>
<td>Phone call Socialising</td>
<td>twelve times</td>
<td>Many employees were observed sitting in this zone. A radio was playing and people were chit chatting with each other while performing tasks. Very common to take calls with Kognity staff not present at the office, and external parties in the active zone</td>
</tr>
<tr>
<td>Phone booths (for undisturbed phone calls)</td>
<td>Phone meeting</td>
<td>Once</td>
<td>An employee had Skype calls in one of the phone booths.</td>
</tr>
<tr>
<td>Library (common area serving as a relaxed lounge and working area)</td>
<td>Conversation</td>
<td>Once</td>
<td>Two employees were observed talking to each other in hushed tones in the Library.</td>
</tr>
<tr>
<td>War room (for brainstorming and creative meetings)</td>
<td>Not used</td>
<td></td>
<td>Empty during the entire observation</td>
</tr>
<tr>
<td>Common areas with chairs and sofas (used after preference)</td>
<td>Meetings between employee and manager</td>
<td>Circa five times</td>
<td>Conversations and meetings were held in common areas</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
<td>--------------------------------------</td>
<td>-----------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>Employee looking for co-worker</td>
<td>Phone call</td>
<td>Six times</td>
<td>Different employees were observed to look for co-workers in the office, not being able to find them. They usually spent 2.5-3 minutes on foot while trying to locate them. Several failed to do so.</td>
</tr>
<tr>
<td>Exchange of information</td>
<td>Looking for co-workers</td>
<td>Frequently</td>
<td>People catch each other while on their way to another location, to exchange information as they pass by. By using common areas, seems to be effective, as most common areas are fairly empty. People wait outside of meeting rooms, either to get in touch with co-workers inside, or to use the meeting room.</td>
</tr>
<tr>
<td>People waiting outside meeting rooms</td>
<td></td>
<td>Circa five times</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kitchen (for socialising and working)</th>
<th>Breakfast</th>
<th>Once a week</th>
<th>Casual. A few employees chose not to participate/were too late to participate. Music was playing during breakfast.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone call</td>
<td></td>
<td>Three times</td>
<td>Employees were seen making coffee, emptying and filling the dishwasher. Employees were unable to locate co-workers</td>
</tr>
<tr>
<td>Looking for co-workers</td>
<td></td>
<td>Circa four times</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Smaller meeting rooms (for private conversations and undisturbed work which require reservation)</th>
<th>Ping Pong</th>
<th>three times</th>
<th>Individuals were observed sitting in the meeting rooms, having smaller meetings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>In conjunction with breakfast, lunch and other social breaks from work activities. Both managers and employees participated.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>On a few occasions employees were observed waiting outside of the meeting rooms</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social area (for working and social activities such as ping-pong and other games)</th>
<th>Meetings</th>
<th>Frequently</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium-sized meeting rooms (mainly for meetings)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### SOCIALISING

An employee is shown around the office. Employees walk around the office to find a colleague. People say hi and acknowledge other people, even though they don’t seem to know each other. Those who work with tasks which may require privacy seem to carry more things around. Struggle to find spaces to have private conversations seem to cause frustration people do not use filter to hide their screens.

### OBSERVATION

**Day 2**

<table>
<thead>
<tr>
<th>Zone</th>
<th>Action/activity/behaviour</th>
<th>Frequency</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiet zone (no talking allowed)</td>
<td>Occasional socialising</td>
<td>Two-three times per day</td>
<td>Member of staff did not follow directions of being quiet in the quiet zone. Inform</td>
</tr>
<tr>
<td>Middle zones (hushed-toned talking)</td>
<td>Personal belongings left by desk some work devices left by desks</td>
<td></td>
<td>Co-workers small talked over their computer screens. Both work related conversations and private conversations occurred.</td>
</tr>
<tr>
<td>Active zones (unlimited talking allowed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone booths (for undisturbed phone calls)</td>
<td>Phone meeting</td>
<td>Once</td>
<td>An employee had Skype calls in one of the phone booths.</td>
</tr>
<tr>
<td>Library (common area serving as a relaxed lounge and working area)</td>
<td>Conversation</td>
<td>Once</td>
<td>Three employees were observed talking to each other in the library</td>
</tr>
<tr>
<td>War room (for brainstorming and creative meetings)</td>
<td>Meetings between employees</td>
<td></td>
<td>A group of people were seen entering the room and afterwards the walls were full of post-its with ideas and mind-maps.</td>
</tr>
<tr>
<td>Common areas with chairs and sofas (used after preference)</td>
<td>&quot;Meetings between employee and manager Employee looking for co-worker Exchange of information People waiting outside meeting rooms&quot; Phone call</td>
<td>Circa five times per day Twice Frequently Twice Six times</td>
<td>Conversations and meetings were held in common areas</td>
</tr>
<tr>
<td>Kitchen (for socialising and working)</td>
<td>Phone call</td>
<td>Meeting between four employees</td>
<td>Once</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>------------</td>
<td>---------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Smaller meeting rooms (for private conversations and undisturbed work which require reservation)</td>
<td>Phone call</td>
<td>Meeting between four employees</td>
<td>Once</td>
</tr>
<tr>
<td>Social area (for working and social activities such as ping-pong and other games)</td>
<td>Ping Pong</td>
<td>Meeting between four employees</td>
<td>Several times per day</td>
</tr>
<tr>
<td>Medium-sized meeting rooms (mainly for meetings)</td>
<td>Meetings between employees</td>
<td>Meeting between employees</td>
<td>Frequently</td>
</tr>
<tr>
<td>ALL AREAS</td>
<td>Socialising</td>
<td>Meeting between employees</td>
<td>Socialising</td>
</tr>
</tbody>
</table>

*(Färm Grußman & Roth de Albuquerque)*
Attachment 4: Officevibe 10 metrics

Here are our 10 Employee Engagement Metrics:

👉 Feedback
The Feedback Metric represents both the quality and the frequency of feedback that employees receive, as well as the consideration of their opinions and suggestions by the organization.

👉 Personal Growth
The Personal Growth Metric represents the level of autonomy employees have, whether or not they’re improving their skills and if they believe in the bigger purpose of their role.

👉 Relationship with Manager
The Relationship with Manager Metric represents trust, communication and collaboration between employees and their direct manager.

👉 Relationship with Peers
The Relationship with Peers Metric represents trust, communication and collaboration between peers.

👉 Recognition
The Recognition Metric represents both the quality and the frequency of recognition employees receive.

👉 Ambassadorship
The Ambassadorship Metric represents the level of pride employees have towards the organization and if they would recommend their place of work to other people.

👉 Satisfaction
The Satisfaction Metric represents how satisfied employees are with their compensation and benefits, their role inside the organization, as well as their overall work environment.

👉 Happiness
The Happiness Metric represents the employees’ level of happiness and their satisfaction with their work-life balance.

👉 Wellness
The Wellness Metric represents the level of stress employees feel at work and how they perceive the organization’s efforts towards promoting healthy life habits.

👉 Alignment
The Alignment Metric represents how employees align themselves within the organization’s vision, mission and values, as well as what they think about the organization’s commitment towards Ethics & Social Responsibility.

(Knutsson, S. (2018) *Introducing Officevibe* [e-mail])