

Master's thesis – Master Sustainable Business and Innovation

Coworking the way to sustainability: Motivations and influences on the adoption of a sustainable innovation amongst different age groups

The case of Space: providing coworking spaces to corporate employees through a platform

"Some people don't like change, but you need to embrace change if the alternative is disaster". – Elon Musk



Master's Thesis: Master Sustainable Business and Innovation

Date: 11-07-2022

Name: Josephine van der Vlugt

Thesis supervisor: Dr. Ir. Alexander Peine

Student Number: 1189336

Word count: 1189336

Abstract

A common, untrue prejudice about older people is that they are slow adopters of innovations, leaving potential revenues on the table. However, research that shows that older people can indeed be an early adopter. This research investigates the case of the sustainable innovation of *Space*, a platform that provides coworking spaces (CWSs) for corporate employees, where the older age category of 47+ is significantly underrepresented. The multiple sustainability aspects of working flexibly from CWSs stresses the need for a high adoption rate, also amongst older people, to stimulate sustainable development. Consequently, this research investigates the motivations that influence the adoption of *Space* amongst the different age categories, using a combined approach of the Technology Acceptance Model (TAM) and Rogers' Diffusion of Innovation (DOI) theory. The TAM explains the individual's reasoning behind adoption, on the micro-level, and explores the Perceived Ease of Use, Perceived Usefulness and the external factors that influence the individual's motivations. The DOI is useful as it explains dynamics and the interconnectedness of the individual with time, communication channels and the social system, influencing the decision process. A total of 23 semi-structured interviews were done with the pilot participants of *Space* divided over 3 age categories of 20-35, 36-46, and 47+, which were then subdivided into categories based on the amount of CWS bookings: 0, 1-3, or 4+. The results show that the ease of use was determined by the location of the CWS in relation to the home of the participant and the booking process. On this micro-level, it was seen that the older age category lived farther away from the CWSs, resulting in a reduced actual system use. Moreover, the main motivations for adoption are: an increase of flexibility, social contact, and a proper workplace. The external factors that influenced the motivations were Corona, the sustainability awareness of the participant and external social influences, which all influenced the actual use. The DOI showed that communication and social influence of the employer stimulated the participants to use the innovation, but after trying it out, the rejection was a result of practical reasons. Altogether, this research shows that older people are indeed motivated to adopt innovations but are held back due to practical reasons. Consequently, it is advised to extensively inform potential target groups of the innovation before bringing it on the market and perform thorough research on the motivations of target groups.

Executive summary

Non-adoption of Space amongst older people of 47+ results in a lower adoption rate, affecting the revenues of both Space and the parent company. This research has shown that older people are motivated to try the innovation yet fail to do so for two main reasons. Through interviews with 23 pilot participants, it has been investigated what the motivations of adopting Space are, amongst the different age groups of 25-35, 36-46, 47+. Consequently, this has shown that particularly the older age category of 47+ has the motivation to use Space for its location independency, that they can choose from where to work, for instance from a CWS close to home. Before starting the pilot, the participants gathered information and thought that the CWSs would be close to their home. However, this same age category appeared to live farther away from (relatively) big cities, where the current connected CWSs were located. Consequently, not only did this age group live far from the office, but they also lived far from the CWS, resulting in an active rejection of the innovation. This active rejection, however, creates opportunities for Space, as this type of rejection is not a full rejection. Namely, when something changes within the innovation, the participant can reconsider their innovation decision. It is therefore recommended that Space extends its CWS network throughout the Netherlands to more remote places, to ensure that for all participants, at least one CWS is closer to them than the office. Furthermore, all participants, including the older group, found the quality of the workplace an important factor in their decision-making process. Namely, some CWSs lack a monitor, and to a certain extent also privacy. These, and the ergonomics of the workplace, were mentioned as important requirements for working at a CWS, as some participants need it to properly do their job. Consequently, when the locations are close, but the CWS workplace is not up to the standard of the corporate employee, this can lead to (active) rejection, nonetheless. Therefore, it is advised to increase the workplace standards of CWSs by solely connecting to those that have that, or if that is not possible, to well-inform participants before joining Space, on both the locations of the CWSs, and the availability of monitors, privacy, and ergonomics. Setting these expectations will increase the adoption of Space, as participants know what to expect before signing up. Altogether, to answer the company's question: *why are older people rejecting Space at present, and how can the adoption of Space amongst older employees be maximized?* Older people generally live farther away from the office, but also the CWS. Consequently, they have the motivations to use it, but do not want to put in the same effort as going to the office, as that proceeds the point of going to a CWS. Also, the quality of the workplace is of importance, and must therefore be up to standard. Notwithstanding, this research has shown that participants are overall enthusiastic about the innovation of Space and show their motivations towards using it. Consequently, with some improvements, the innovation has shown to be promising for all age categories to adopt.

List of abbreviations

CWS: Coworking space

DOI: Diffusion of Innovation

TAM: Technology Acceptance Model

PU: Perceived Usefulness

PEU: Perceived Ease of Use

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1. Introduction

Technology is evolving at a fast pace: digitalization as well as physical technologies are impacting social lives and daily structures. We are currently living in the fourth industrial revolution, where technology is integrated in every aspect of our lives (Musik & Bogner, 2019). From smartphones to online education, and electric bikes to online platforms: it is transforming the economic paradigm and changes the way that value is created and generated (Berawi, 2018). At present, innovation is steered more towards sustainability. This development is driven by necessity, as our current consuming society is severely impacting the environment, actively reinforcing climate change (Ramankutty et al., 2018). However, while human induced climate change and its related impacts are becoming more evident and severe, growth and development remain the main focal points in today's society. Consequently, technology and innovation are used as a mediating mechanism between reducing negative environmental impacts and preserving a focus on social and economic growth (Yuan & Zhang, 2020). The related concept of 'sustainable development' is gaining more attention recently and emphasizes generally the same: fairness in regard to nature must be assured intergenerationally, while growth is encouraged (Aluchna, 2016; Akbari et al., 2020). Hence, where the term growth will be difficult to terminate in the near future, and the need for reducing negative impacts on the environment is clear, sustainable innovations might provide the answer to the problem.

Nevertheless, these sustainable innovations are dependent on society to adopt them, in order to create impact on both the economic advantage as well as environmental developments. It is often assumed that population ageing has a significant influence on the way that society adopts a certain innovation. Especially older people are said to have an inhibitory effect on newly developed technologies, as they 'do not understand the way it works' (Comunello et al., 2017). Consequently, it is assumed that older people are an unattractive client group, leaving potential revenues on the table. However, assuming that older people have more difficulty accepting a new (sustainable) technology or innovation, resulting in a lower rate of adoption, is often an untrue stereotype (Peine et al., 2017). Existing research has shown that older people are not necessarily a group that adopts slowly. Depending on the factors that are included, older adults could indeed be an early adopter (Fleming, Becker & Newton, 2017; Golant, 2017; Neves, Waycott & Malta, 2018). For instance, research done by Peine et al. (2017) shows that the old age category was even a driver for the adoption of a the (sustainable) technology of e-bikes.

This research investigates the sustainable technological innovation of a large company that encounters these problems with age. Namely, the case of *Space*¹, an initiative that is financially supported by its parent company which has a focus on innovation to preserve its competitive position in the market. Space has developed a platform where employees of connected corporations can book flexible coworking spaces (CWSs). CWSs are defined as: "*flexible, shared workspace settings in an open-plan office environment where desks can be rented on a daily, weekly, monthly or yearly basis*" (Ohnmacht, Z'Rots & Dang, 2020, p.1). According to research done by Berbegal-Mirabent (2021), CWSs reduce mobility movements as well as energy usage within a company's boundaries, and the platform offering this is therefore considered a sustainable innovation. Moreover, it could make a significant difference in negative environmental impacts that is created by traffic and empty office buildings. In 2019, already 2.2 million people were working at coworking locations, and it was expected to increase to 5.1 million in 2022 (Berbegal-Mirabent, 2021). Evidently, the CWSs are promising, especially when booking is made easier and more accessible through a platform. However, the age category of 50+ is significantly underrepresented at Space, while many did get the chance to sign up. Notably, it appears that this older age category does not adopt this sustainable technology, reducing its economic and environmental impact. This is an unwanted effect, and the lack of adoption reflects the need for further research into old age adoption and explanatory factors causing the lack of this adoption, as this can potentially be increased. Hence, this research specifically investigates the adoption of the sustainable technology of the CWS platform and how age plays a role in that.

¹ *Space* is not the real name of the case, but it has been anonymised for the purpose of traceability to the parent company of the venture.

The topic of sustainable technologies has become increasingly more popular in the last years (Akbari et al., 2020). Prior research concerning the adoption of sustainable technologies, provides a basic understanding of factors influencing that and how, especially firms, adopt them (Fu et al., 2018). However, studies on the individual, micro-level, and how these fits into the meso-level, are yet to be explored. The specific topic of CWSs and its acceptance thereof has been limited to studies on the acceptance of matchmaking within CWSs, or on its current and future trends (Kopplin, 2021; Kopplin, Gantert & Maier, 2021; Knapp & Sawy, 2021; Lejoux et al., 2019; Jones & Partner, 2020). As a result, a research gap emerges, causing the need for exploring the core reasons for adopting or rejecting the sustainable innovation and the role of age in this process. Hence, the outcome of this research contributes to the field of environmental studies on the specific subject of sustainable technologies, as it provides potential barriers for adoption and new insights on the adoption of CWSs. Furthermore, within society it has also become an important topic of debate, and governments are increasingly trying to steer society towards sustainable development through legislations and regulations, taking business along with them who must comply to imposed sustainability improvements of their business activities, stimulating sustainable innovations (Strya & Satzger, 2018). Being aware that the nature of sustainable technologies differs, and therefore also the reasoning behind adoption, this research will provide guidance on how to investigate this. Moreover, the results will add to the current scientific and social debate on what personal drivers of different ages are of sustainable innovations, and especially on the reasoning behind choosing to adopt or reject these as an individual.

This is investigated through a combined approach of the Technological Acceptance Model (TAM) and Rogers' theory on the Diffusion of Innovation (DOI) (Davis et al., 1989; Rogers, 2003). The TAM provides guidance for exploring the reasoning of an individual to accept or reject the sustainable innovation of Space. The model offers a structural approach to research the attitude of the individual towards the innovation, as well as the external factors that influence these. Consequently, the TAM sets out the micro-level of adoption, as it researches the reasoning behind acceptance of solely the individual. The DOI theory complements this view and is useful as it captures dynamics on the meso-level of adoption, meaning that it includes the individual's interconnectedness time, communication channels and the social system. This structure encompasses the complete process of adoption of the participant which is not taken into account in the static TAM. As a result, the DOI theory researches where the participants now are in their decision of acceptance or rejection in relation to others, considering the influences that are paired with that.

This research addresses the following research question:

What are the motivations amongst different age groups for adopting the sustainable innovation of Space: booking coworking spaces through an online platform, on the micro-level, and how is this decision-making process influenced on the meso-level?

To answer this question, two sub-questions are constructed to guide this research. The questions are based on the existing theories as mentioned above and provide structure and guidance within this research that consists of multiple large concepts.

1. What are the main motivations and factors that influence and form the attitude of an individual towards the innovation of CWSs amongst different age groups, and how does this affect adoption on the micro-level?
2. How are the different age groups influenced in their decision-making process on the meso-level?

The research is structured as followed. First, the guiding theories are set out in section 2, where the TAM is discussed and Rogers' theory of DOI, and their integrated approach. In section 3, the methodology will be explained where the research design is defined and justified; and the data collection and the operationalisation are set out. Then, the case study of Space and the specific

sustainability relevance is discussed. After that, the results of the research are presented and both sub-questions are answered in section 5 and 6 respectively, followed by the analysis in section 7 and eventually the conclusions and recommendations.

2. Theory

2.1. The Technology Acceptance Model (TAM)

Multiple models have been developed over time to understand and explain the level of acceptance of technology. The most established, influential, and widely used theory is the Technological Acceptance Model (TAM) (Marangunic & Granic, 2015; Yang et al., 2021). This theory was first introduced by Davis in 1985 and refers to the reasoning of why consumers accept a technological innovation, and consequently adopt it. Davis derived the theory initially from two existing theories: the Theories of Reasoned Action (TRA) and Theory of Planned Behaviour (TPB). These theories were useful in explaining and predicting the actual behaviour of an individual but lacked systematic measures that could research system acceptance or rejection. As a result, a new, more advanced theory of acceptance was developed: the TAM (Marangunic & Granic, 2015).

2.1.1. The original TAM

Technology acceptance, according to Davis et al. (1989), is dependent on the attitude of the user towards the technological innovation, which eventually results in the user accepting or rejecting it. This major determinant is, in turn, influenced by two beliefs: the perceived ease of use (PEU) and the perceived usefulness (PU), where the PEU directly impacts the PU. The Perceived Ease of Use is defined as: *“the degree to which the person believes that using the particular system would be free of effort”* (Marangunic & Granic, 2015, p.85). The Perceived Usefulness, on the other hand, is defined by Marangunic & Granic (2015) as: *“the degree to which the person believes that using the particular system would enhance her/his job performance”* (p.85). These factors strongly influence the attitude towards an innovation and could therefore be seen as predictors of attitude (Yang et al., 2021). This model, as described here, is the original TAM.

2.1.2. The extended version

Technology has quickly been developing over the last decades, and the model has adapted alongside of that. Consequently, it has been extended and improved by Davis himself, as well as other researchers (Yang et al., 2021). While the concept and basis of the theory remain the same, certain variables and important characteristics are added. This is seen in figure 1, where the extended version of the TAM as used in this research is visualized. Previous studies have made the distinction between internal and external factors that influence the technology acceptance. Namely, internal antecedents represent attitudes or values, while external factors are about norms and institutional constraints (Hu et al., 2016). In this extended version of the TAM, both values are considered, as it is useful to describe the internal values of an individual that influence the PEU and PU, but also the external factors that influence that. They are coupled under the term external factors, as they both have an external effect on the PEU and PU. These are both not primarily decided, as the aim of this research is to explore exactly that. Consequently, this research uses an adapted version of the original TAM, leaving the external factors in figure 1 yet undefined. Hence, this theory helps to answer sub-question 1: *What are the main motivations and factors that influence and form the attitude of an individual towards the innovation of CWSs amongst different age groups, and how does this affect adoption on the micro-level?*

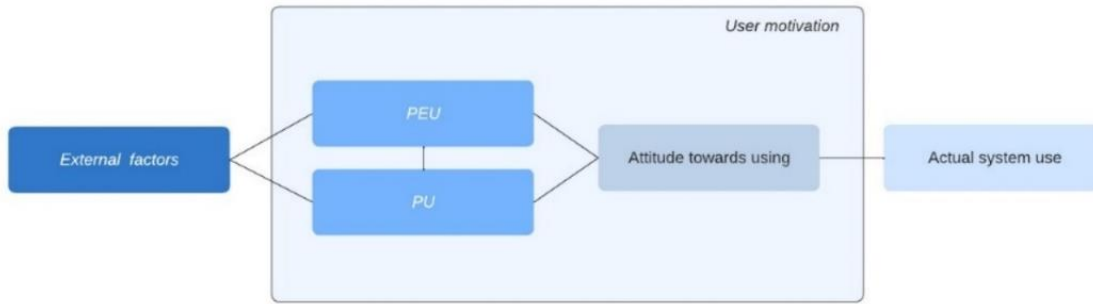


Figure 1. Technological Acceptance Model (TAM) and its extension of the external factors, derived from Marangunic & Granic (2015).

2.2. Rogers' theory of Diffusion

The theory of diffusion was developed by Rogers in 1962 and is one of the oldest studies on innovation. It is now a widely used framework and theory that is used to research the level of adoption and diffusion of an innovation amongst society (Momani & Jamous, 2017). Rogers (2003) defines diffusion as: *"the process in which an innovation is communicated thorough certain channels over time among the members of a social system"* (p.5). This theory is used to test the diffusion of Space, and the related rate of adoption amongst the participants, which is embedded in the meso-level. Where the TAM solely views the innovation from the perspective of the individual, the DOI is used to look further as it helps to investigate in which stage of adoption all participants are now, and how they are influenced through communication channels. The central concepts which serve as a foundation of the theory are set out below, and help to answer the second sub-question: *How are the different age groups influenced in their decision-making process on the meso-level?*

2.2.1. Attributes of innovation

There are five attributes that Rogers assigned to innovation, namely: (1) relative advantage, what advantage does it provide the individual with; (2) compatibility, does it fit within the existing system structure; (3) complexity, how complex is the innovation to learn or use; (4) trialability, could the individual try the innovation before adopting it; and (5) observability, is it visible within the social system. These attributes predict the rate of adoption of a technology, as it is dependent on how individuals perceive these attributes, where relative advantage is the strongest predictor (Sahin, 2006). Rogers (2003) defined the rate of adoption as: *"the relative speed with which an innovation is adopted by members of a social system"* (p. 221). The relative advantage overlaps with the TAM as it is similar to PU, and complexity is equal to PEU (Taherdoost, 2018). Both aspects are, interestingly, on the micro-level. The DOI includes these attributes to create an overview of why an individual would choose to adopt or reject on innovation, as the individual is ultimately embedded in the meso-level. Moreover, this illustrates the importance of researching the micro-level, before the meso-level can be fully understood. Hence, the relative advantage and complexity are researched and answered in the TAM and are not evaluated again in the DOI part of the results due to their similarity.

2.2.2. The five stages of innovation decision

There are a total of five stages, or a 'five-step process,' where each member of society faces its own innovation decision, as visualized in figure 2. In the first knowledge stage, the individual is introduced with the innovation and seeks the most relevant information about it: 'what,' 'how,' and 'why.' Hence, creating awareness-knowledge on its existence, how-to-knowledge on how to use it, and principles-knowledge on how and why an innovation is used. Secondly, the persuasion stage, where a person has developed a certain attitude towards the innovation but is in-between adoption or rejection. It is more feeling-centred than the first stage and is greatly influenced by close peers. Interestingly, peers rather than experts are probed for opinions on the innovation, emphasizing the importance of the social

system (Sahin, 2006). Thirdly, the individual chooses to accept or reject an innovation in the decision stage, where, in a passive rejection, adoption is not considered at all, and in an active rejection situation it is. Fourth, the implementation stage, which is the phase where the individual puts the innovation into practice, and where uncertainty plays an influential role which could lead to rejection. After that comes the last stage, the confirmation stage. Here, the decision is already made, but the individual is looking for confirmation that the innovation is indeed what is seemed, avoiding opposite opinions as that will lead to discontinuance. Throughout the decision-making process, communication channels play an important role of distributing knowledge, as well as influencing the decision (Sahin, 2006).

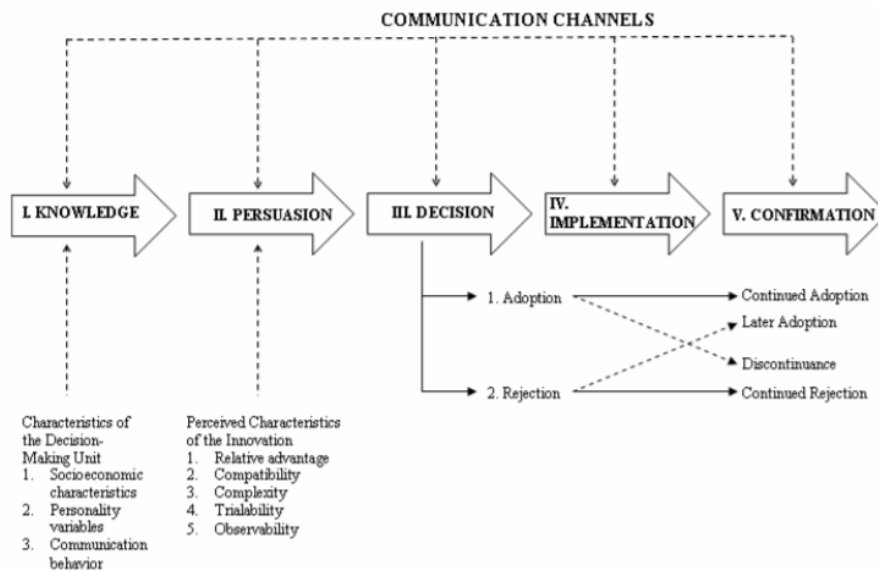


Figure 2. The five stages of innovation decisions (Sahin, 2006).

2.2.3. Innovation acceptance level

The innovation acceptance level captures the rate of adoption amongst individuals in relation to time. Rogers (2003) divides these individuals into categories depending on how fast they adopt the innovation. Innovators are those who seek risks, are often highly educated, and want to become a change agent. They are the first ones to adopt an innovation and are significant influencers for the other adopters who fall into the latter categories. Early adopters use data from the innovators and are seen as social leaders and visionaries and are considered key decision makers. They are followed by the early majority and the late majority, who are slower than the average member of the system. Lastly, the laggards, who have an aversion to change and are more focused on tradition (Akman & Kocoglu, 2017). Interestingly, older persons are often unfairly put in the category of late adopters or laggards, according to Peine et al. (2017), and this research thus critically assesses age groups and their acceptance level.

2.2.4. The rate of adoption

Thereupon, the most important variables that influence diffusion are innovation, communication channels, time, and social system. These explain the rate of diffusion and adoption amongst society. An innovation, as explained earlier, is the assumption of an individual that a certain project, idea, or practice is new (Momani & Jamous, 2017). Communication channels are a way of distributing knowledge and thus the innovation, where society plays an influential role (Akman & Kocoglu, 2017). These can be on a macro-level, like mass media, or closer to the individual through interpersonal channels, where the latter one increases the rate of adoption (Sahin, 2006). The social system is the last element that consists of interrelated units, where society is engaged to solve a problem and achieve a common goal (Sahin, 2006). All these variables influence the rate of adoption, and the

Diffusion of Innovation, where the innovation decision stages and the acceptance level play a central role, and the attributes of innovation can predict the rate of adoption (Akman & Kocoglu, 2017).

2.3. An integrated approach

Previous studies have drawn from different methods and theories, to investigate the acceptance of different sustainable technologies. For instance, the sustainable energy technology acceptance model, the Unified Theory of Acceptance and Use of Technology Model and more often the TAM (Chen, Xu & Arpan, 2017; Moon & Hwang, 2018; Kalayou, Endehabtu & Tilahun, 2020; Biswas & Roy, 2018). A review of these previous studies suggests that there is not one best way to investigate the acceptance of a sustainable technology in the context of CWSs. Therefore, an integrated approach of the TAM and DOI has been chosen to investigate the reasoning behind adoption, as well as its process and influencing factors.

The TAM is used as it proves to solely research the reasoning behind an individual, viewing the innovation from that micro-level perspective. In this way, particular barriers of adoption can be identified, and it is analysed what certain age groups find important when adopting an innovation such as Space. Thus, the reasoning of the individual is researched, and what external factors influenced that reasoning. The motivations of why people want to adopt Space is sought, which is useful for Space itself, as well as other research regarding the adoption of sustainable innovations as it provides guidance on how to approach such a case.

The DOI theory is used to seek beyond the individual, to see if there are other influences that affect the adoption of the innovation. The individual is embedded in the meso-level of society, of the group participants that have joined Space and their interconnectedness time, communication channels and the social system. These are believed to have influences on the individual that affect the adoption rate, and thus the diffusion of the innovation. By investigating the attributes of innovation, the decision level and the acceptance level, a broader view is established on the innovation, in order to see if there is a difference in age categories on the adoption throughout the decision process. Consequently, the context in which the innovation is aimed to spread is set out, and this provides Space with insights on the social influences, and it provides further research with guidance on how to approach it.

Hence, the DOI theory explains the dynamics of adoption on a meso-level, whereas the TAM solely views the adoption from the individuals' point of view on the micro-level. When combining them together, both the statics and dynamics of adoption and its related process are sought, placing the innovation into a larger perspective.

3. Methodology

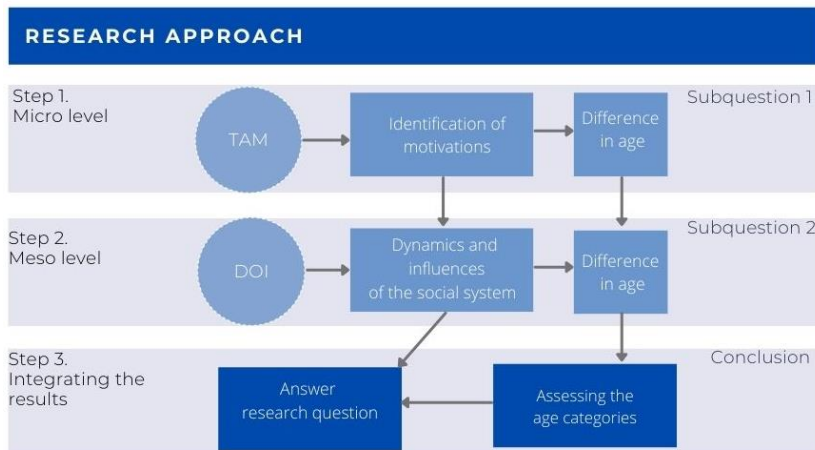


Figure 3. The approach of this research. Firstly, motivations are explored through the TAM, and potential differences in age categories are shown. Then, the DOI provides insights on the meso-level showing the dynamics of diffusion and acceptance, where also potential differences in age categories are shown. Lastly, all factors are integrated and are assessed to answer the research question.

3.1. Research design

The purpose of this study is to explore the reasoning behind accepting or rejecting the sustainable innovation of CWSs. In order to do this, the existing theories of the TAM and Rogers' theory of DOI are applied, using them both as inspiration and as guidance for the interviews and assessment of the results. This research is inductive, as I elaborate on these existing theories on adoption, specifically old age adoption (Bryman, 2021). Moreover, it is qualitative research as its aim is to find structure in the dynamic dimension of peoples reasoning, which is constantly changing and cannot be measured through numbers and statistics (Bryman, 2021). Therefore, the data is of non-numerical nature generated through interviews and desk research. It focusses on interpretivism, where an understanding is made of certain relations in the dynamic and complicated dimension of peoples reasoning (Bryman, 2021). The research design consists of a case study of Space on the sustainable innovation of CWSs, aimed at exploring which reasons lie beyond adoption, in pursuance to create awareness and find possibilities for improvements. In figure 3, a stepwise visualization shows the research approach, where first both sub-questions are answered, and then the main research question.

3.2. Data collection

One main method of data collection is used in this research. Namely, next to desk research that was done for the collection of information to set out the literature review which guides this research, the main source of data is gathered through interviews. The type of interviews and how they are set up is elaborated on below.

3.2.1. Sampling strategy

Multiple interviews of 30-45 minutes were done to gather data on why people choose to adopt or reject the innovation of Space. The type of sampling that is used is called purposive sampling, where participants are selected strategically, to seek solely relevant information. It is a type of non-probability sampling whereby the large categories of age and frequency of booking are broken down, to ensure that the interviewees are evenly distributed (Bryman, 2021). In this way, there is no category that has significantly more interviewees than another, gathering the needed information of every category. Accordingly, these interviews are held with people that willingly participated in the *pilot* phase of the innovation, the form in which the innovation is currently operating. There were 3 corporations of in

total 121 people who were connected to the platform and were able to book a coworking location. In this research, only participants of the parent company were included in the research group, as these people were still active on the Space platform during the interviews, and so their memory was still fresh. Moreover, they were also the majority of the group, namely 78 people. This group was then divided into people who had never booked a Space, people who have only booked one to three times, and people who booked more often (4+ times). When divided into three groups, they were again put in a subdivision based on their age. Starters and young professionals (age 20-35), professionals (36-46) and older professionals (47+). From these people, three to four per category were emailed, with an initial response rate of 70%. Many people were enthusiastic to contribute to this research as they were positive about the initiative of Space. When people did not respond or were not available, another pilot participant was approached. In a relatively short amount of time, about 20 interviews were scheduled, where after some more emails, 3 interviews followed. However, the last category of the age of 47+ with 4+ bookings simply was a small group and thus merely one participant could be interviewed. Also, in what was initially the 50+ age category were merely a few people compared to the other age categories, and so participants with the age of 47 and over have been included, to assure an evenly distributed sample. The categories are visualized in figure 4, where per age group the frequency of bookings is considered, with the total amount of 23 interviews.

Frequency of bookings	0 (no booking)	1-3	4+
Age groups			
20-35	<ul style="list-style-type: none"> • Interviewee 1 (27) • Interviewee 2 (30) 	<ul style="list-style-type: none"> • Interviewee 9 (28) • Interviewee 10 (35) • Interviewee 11 (35) 	<ul style="list-style-type: none"> • Interviewee 18 (24) • Interviewee 19 (29) • Interviewee 20 (34)
36-46	<ul style="list-style-type: none"> • Interviewee 3 (42) • Interviewee 4 (44) • Interviewee 5 (46) 	<ul style="list-style-type: none"> • Interviewee 12 (36) • Interviewee 13 (36) 	<ul style="list-style-type: none"> • Interviewee 21 (36) • Interviewee 22 (38)
47+	<ul style="list-style-type: none"> • Interviewee 6 (47) • Interviewee 7 (48) • Interviewee 8 (52) 	<ul style="list-style-type: none"> • Interviewee 14 (47) • Interviewee 15 (52) • Interviewee 16 (58) • Interviewee 17 (61) 	<ul style="list-style-type: none"> • Interviewee 23 (51)

Figure 4. Categorization of the interviewees and their assigned categories of booking frequency and age.

3.2.2. Interview guide

The interviews were semi-structured, as that provided guidance throughout the interviews, while keeping the freedom to ask further questions when necessary (Bryman, 2021). The interview consisted of three broad parts: introduction questions; questions on the workplace, coworking, and Space specifically; and questions about sustainability. The first questions consisted of an introduction on both sides, and questions such as where they live, how far that is from the office, regular mode of transportation, and household. These provided a basic view of the participant and made them more comfortable before diving into the deeper motivations. Namely, the next section of questions was about the workplace requirements, how these have changed and influences of Corona. Moreover, questions about CWSs and their added value were discussed, asking further questions when problems or motivations arose. Then, more specific questions about Space were considered regarding the attributes of innovation that partly overlap with the TAM: the relative advantage and complexity, but also the other attributes: compatibility, trialability, and the observability, as operationalized in table 1. Here, positive as well as negative motivations arose, and deeper questions regarding the motivations were asked to understand the individuals’ reasoning behind adoption or rejection. The last section of the interviews was about sustainability in general, about their awareness and motivations. Also, the sustainability of Space and their opinion about that was discussed, to find out if that played a role in their decision making. The full interview guide is provided in the Appendix (10.2). These interviews

provided the way to systematically investigate the individual's perception on the innovation of CWSs and the adoption or rejection thereof.

3.2.3. Privacy and data protection

The participants of the interviews are approached through email and their participation is completely voluntary. Moreover, the participants are fully anonymized, their names and data are not stored on a hard drive, nor is it used or stated in the research to ensure their privacy. Hence, interview transcripts do not include participants' names, but solely numbers, as is also referred to within this research and their category is provided in figure 4 above. Furthermore, the participants are asked to sign the informed consent form, where they are informed on how is dealt with the data to increase transparency, but also to ensure honesty of the interviewee.

3.3. Data analysis

The gathered data from the interviews is analysed differently per sub-question. As seen in figure 3, the three steps guide the research to answer the main research question, and its methodology is set out below.

3.3.1. Step 1. Analysis on micro-level

In the first part of this research, sub-question 1 is answered: *What are the main motivations and factors that influence and form the attitude of an individual towards the innovation of CWSs amongst different age groups, and how does this affect adoption on the micro-level?* This is done using the TAM, where the PEU and PU are central concepts to determine the attitude of an individual. These, and the external factors that in turn influence PEU and PU, are explored through interviews with pilot participants of Space. To find the external factors, questions based on the operationalization of the attributes of innovation, from the theory of DOI, were asked (table 1). In this way, the micro-level and static view of the individual's perception on the innovation was assessed, which eventually led to rejection or acceptance. The data that was gathered from the interviews was analysed in the program NVivo. Nodes were made on certain themes that were mentioned more often which were then coded into more specific factors. For instance, flexibility (e.g., change of scenery, location independency), booking process (e.g., location, platform) and workplace (e.g., monitor, privacy). These were stored under the relevant aspect of the PEU or PU, or the external factors. These factors became apparent when they were mentioned in multiple interviews. During the coding process, multiple queries were made to see which factors had an impact on the actual usage, and whether there was a difference in the age categories. From all factors, the most important and most mentioned ones were selected as the final motivations, or influential factors, for the attitude an individual has towards CWSs of Space.

To assess if age was an influential factor on adoption, nodes on rejection and acceptance of the PEU and PU were made and through queries it was shown whether the attribute of age had an influence on the actual system use. Namely, the number of nodes that were stored under the age categories and the booking behaviour provided answers on their influence. For instance, if 8 participants of the older age group were negative about CWSs in general, compared to 2 participants in the other categories, then the older age category is seen as more negative.

Table 1. Operationalization DOI and the PEU and PU of the TAM: attributes of innovation, derived from Sahin (2006).

OPERATIONALIZATION	
ATTRIBUTES OF INNOVATION	MEASUREMENT
Relative advantage	<ul style="list-style-type: none"> Costs and social status Financial incentives (indirect/ direct payments)
Compatibility	<ul style="list-style-type: none"> Compatibility with user needs (Name of innovation (should be clear and obvious) Existing/ past experiences and values
Complexity	<ul style="list-style-type: none"> How does the innovation work? Integrated teaching methodology?
Trialability	<ul style="list-style-type: none"> Type of trialability and accessibility Importance to individual of trying it out
Observability	<ul style="list-style-type: none"> What type of results, how visible are they? Is there 'role modeling' (peer observation)

3.3.2. Step 2. Analysis on meso-level

The second part of the research focuses on sub-question 2: *How are the different age groups influenced in their decision-making process on the meso-level?* This was researched based on the central concepts of DOI, assessed through interviews. The data gathered in interviews that apply to sub-question 2 were also assessed in NVivo, by creating nodes and more specific codes. Firstly, the attributes of innovation, as operationalized in table 1, were partly derived from the first sub-question. However, they were analysed as followed. The influence of the attributes is measured through a positive or negative answer. All attributes, except complexity, are positively correlated with the adoption of the innovation. If these attributes are positively, more people would adopt the innovation. This is different for complexity, as the more difficult the innovation is, the lower the perceived ease of use, and in order to increase the rate of adoption complexity should thus be rated as negative (Sahin, 2006). The decision stage and the acceptance level were determined through nodes that were made on their central concepts, and codes that provide more specific answers. Moreover, the innovation decision type, communication channels and the social system increased the predictability of the rate of adoption (Sahin, 2006). As explained in section 2.2.4, these occur at all stages, and these were incorporated through nodes and codes in the evaluation. Altogether, these concepts decided the rate of adoption amongst an individual, and when related to other interviewees, the social system was actively sought.

To assess if age had an influence on the adoption on this meso-level, the same approach as in sub-question 1 was used. Queries were made during the process, where the factors were connected to the attribute of age. When it was seen that many codes that had a negative effect on the booking behaviour were stored under a specific age category, then it was assumed that they did not (fully) accept the innovation.

3.3.3. Step 3. Analysis

The last step of the research analyses the results, interpreting how they relate to old age adoption and motivations for adoption or rejection. This provided a basis for the answer to the final research question: *What factors are of influence on the adoption of the sustainable innovation of Space: booking coworking spaces through an online platform on the micro- and meso-level, and to what extent does age influence the adoption?* This question is answered in the final conclusion.

3.4. Research quality

The research quality and accurateness of the research was ensured through using the four criteria of trustworthiness, as described by Bryman (2021): credibility, transferability, dependability, and confirmability. Firstly, credibility, where the importance lies with if researchers' observations match with the development of theories. The investigation is built on good practice, as it is substantiated with scientific literature, or collected through interviews and afterwards connected with it. Also, this

research is reviewed throughout the process by academics to ensure that the social world is correctly understood. Secondly, the transferability of this qualitative research is guaranteed through providing a thick description of the case in the following section. Consequently, the findings of the research and its transferability to other cases was made easier. Thirdly, dependability is ensured as every step of this research is made available to peers. By auditing what the researcher is doing, dependability and therefore the trustworthiness increases. Lastly, the confirmability of this research is ensured as the researcher has no other objectives besides the aim of the investigation. No (personal) values are attached to the outcome of this research, ensuring that is as objective as possible. Furthermore, the specific case that this research investigates has no stake in the outcome, nor have they influenced the way this research has been set up and executed (Bryman, 2021).

4. Case study description: *Space*

Space is a start-up company that focusses on the provision of CWSs for corporate employees. As briefly mentioned before, Space is part of a large organization of 22.500 employees which is expanding its innovation department in order to keep up with the competitive market in which it finds itself. Innovation within a large company can help it grow and keep up with the quickly changing dynamics of the market. When a company does not invest enough resources in its innovation process, then it risks being overthrown by other companies. Innovation is thus a way of securing the market position through gaining a competitive advantage (Eidizadeh, Salehzadeh & Esfahani, 2017). In this chapter, the case of Space will be set out, discovering its business model and sustainability proposition to emphasize the importance of its acceptance.

4.1. Space

Space is a growing platform, with currently 50 independent CWSs in over 15 cities throughout the Netherlands and two connected corporations. From the beginning of 2021, Space has been developing in the innovation department from a mere idea to a running business. At present, it is mostly focused on large corporations with 500+ FTE as these firms often have people living all over the country, and a budget to potentially provide Space. When these corporations join the Space platform, they reserve a financial budget, known as 'credits', which is used when their employees reserve a spot in one of the coworking locations. Hence, employees do not pay for the spots themselves, which lowers the barrier to book a flexible desk. This financial aspect and the fact that there not yet is a platform where independent CWSs can connect to, makes the innovation unique.

There are multiple innovation stages that Space has to go through in the innovation, during the development process. For instance, prove that there is a problem, define the solution, and prove that there is demand and a willingness to pay for it. Each stage is assessed with a stage-gate, where managers from the innovation department determine whether the innovation is feasible, profitable and fits with the parent company. At present, Space is in the phase where it must prove that there is demand, and that people will pay for it. In September 2021, Space started its first pilot with a total of 121 pilot participants from 3 different corporations. In May 2022, a new pilot started with over 400 users of two different companies, with also some pending in the sales funnel. Evidently, this demand has grown during the past year, regardless of a lockdown due to COVID-19 amid the first pilot. Space has already proven that there is demand and that corporations want to pay for the proposition. Existing research even suggests that in a post-COVID world, decentralization of working locations is not only growing towards that, but also needed to lower our environmental footprint (Oswald & Zhao, 2020). Consequently, coworking trends are seemingly promising, and will possibly become the new normal in the near future.

4.2. The sustainability propositions

Offering CWSs through a platform stimulates the use of shared workplaces. Using such a flexible space, instead of going to the office, can induce a positive effect on a companies' environmental footprint. Moreover, in the aftermaths of COVID-19, where working at home has become the new standard, corporations are struggling with how to fill in the new form of hybrid working (Bouncken et al., 2022). The world has shown that it can adapt and transform fairly quickly when it must. As a result, where one first thought that working at home was not practical or suitable, it now has proven to be useful and even more efficient than working from the office. The pandemic has set things in motion: technological innovations supporting these developments and financial budgets to make it possible. Space is a fitting example of a solution that has been developed to provide a flexible way of working in a time where, yet a new regime has to settle.

The primary sustainability aspect of CWSs is in the category of environmental change. When working locations are decentralized, employees will have the opportunity to choose which location they want to go to. When the main office of their employer is a long drive, they can instead choose to go by bike to a coworking location. This will not only reduce the commuting time, but it will also

significantly reduce the travel footprint of the employee, as sustainable modes of transportation are encouraged, such as the bike or by foot (Oswald & Zhao, 2020). Additionally, the minimalization of travel movements will also result in a reduction of daily traffic congestions, which are responsible for a level of high GHG emissions due to the sub-optimal speed (Hopkins & McKay, 2019). During the first pilot of Space, the reduction of CO₂ emissions due to travelling was already 67%. Here, the participants were mostly localized in the big cities, and already had a relatively small distance to the main office. Hence, this percentage can increase when people living more remotely are also able to work flexibly.

Secondly, the decentralization of offices will decrease the need for a main office building. According to research done by Oswald & Zhao (2020), CWSs can be identified with the sharing economy, where resources are shared amongst its users without the need to own them. Before the pandemic in 2019, already 40% of the Dutch office buildings were unoccupied. Evidently, this number has increased due to the new standard of working from home. In the Netherlands, the build environment is responsible for 36% of all GHG emissions nation-wide (Rozenendaal et al., 2019). Reducing the amount of unoccupied office buildings by sharing the workspace using a CWS, will help to reduce this amount of GHG emissions.

Thirdly, coworking locations create a sense of community, contributing to the social dimension of sustainability. Meeting people from outside of your own company, 'working alone together', stimulates creativity and productivity. This social aspect is thus good for the wellbeing of the individual employee, which indirectly has advantages for the company itself. Moreover, research done by Oswald & Zhao (2020) suggests that a collaborative community of a CWS stimulates the sustainability thereof. Supporting each other in developing a sustainable (entrepreneurial) ecosystem induces the motivation to act in a more sustainable way.

Altogether, the use of CWSs contribute to a sustainable future, reducing CO₂ emissions and adding to the personal wellbeing of the employee. It is therefore important to stimulate this use, which is reinforced by the platform of Space, where the accessibility to the CWSs is increased.

5. Results: the TAM

The interviews have revealed that there are multiple internal and external factors that influence the PEU and PU of the innovation, and therefore the attitude and actual system use. In this chapter, the first sub-question: *What are the main motivations and factors that influence and form the attitude of an individual towards the innovation of CWSs amongst different age groups, and how does this affect adoption on the micro-level?* is assessed by presenting the results of the interviews, which are visualized in figure 5. In the section 7, the results are analyzed and their meanings in relation to age are discussed.

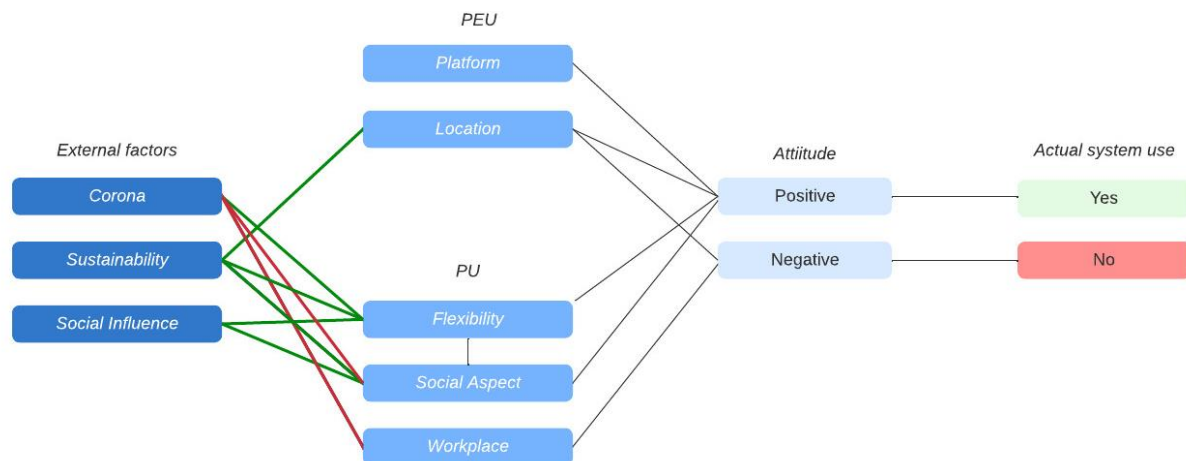


Figure 5. The TAM, with the external factors that influence the PEU and PU, which in turn influence the attitude towards the innovation resulting in an increase or decrease in the actual system use. The external factors are either indicated with a green line (positive influence) or a red line (negative influence).

5.1. Perceived Ease of Use (TAM), or Complexity (DOI)

The interviews revealed that the PEU consists of two main subjects where the whole process of booking a flexible desk is considered and which influence the perceived ease of use of the individual. First, the use of the platform, where the interviewees were asked whether it was easy to use, or not. This consists of the technological use and the process of digitally booking a CWS through the platform. Secondly, interviewees stated their experiences or expectations on how it was to physically get to the CWS and to what extent this was perceived as free of effort. This is an important factor that is taken into account in the PEU, as the use of CWSs can be perceived as more difficult when a person lives farther away from the location. Both factors can have a negative or positive effect on the actual use of the innovation.

5.1.1. Closeness of the CWS location

The most important factor that influences how people perceive the difficulty of using Space, is where the location of the CWS is, relative to their home and office. From the 23 interviewees, 10 people mentioned that the locations that were available on the Space platform, were not close to where they live. Consequently, the point of working flexibly on a location by choice is degraded. As one interviewee states:

“I hoped there would be a location between my home and the office, but the closest ones were all in Amsterdam or Utrecht. Then I can just go to the office, with better facilities. If there would be a location in Hilversum, then I would go there with my bike” (Interviewee 15)

Before being able to book the place, it was their first expectation to cycle to a closer location than the office, conveniently saving time and carbon emissions. The innovation is thus not free of effort when

the location is farther away, lowering the perceived ease of use, and creating a barrier which ultimately decreases the actual system use. On the other hand, 13 interviewees did live close to a CWS, and could thus cycle or walk to the location. Interestingly, as seen in table 2, 7 out of the 8 younger participants with the age of 20-35 lived close to a CWS in a large city. The middle age category of 36-46 was equally divided on closeness of a CWS, but the older age category of 47+ lived farther away from a location.

Table 2. Positioning of the CWS location: far or close, per age category.

Case specifics	Age = 20-35 (8)	Age = 36-46 (7)	Age = 47+ (8)	Total (23)
Close	7	4	4	15
Far	1	3	6	10
Total (unique)	8	7	8	23

Furthermore, as seen in table 3, out of the 8 people who booked 0 times, 7 people lived far away from the CWS, illustrating the importance of the location on the actual system use. Out of these 8 people, 2 stated to be far away from the location, as well as close to the location, causing an overlap in the results. This is because at the end of the pilot, multiple locations were added to the platform which were located closer to the participants, but it was too late to make use of these for them. Moreover, participants who booked 1-3 times lived mostly close to the CWS but did not book more often for another reason. At last, people who booked 4 times or more solely lived close to a CWS, which emphasizes the importance of the location on the actual system use. If a participant perceives the location as close, then the ease of use is believed to be higher, resulting in an increase in the bookings. However, when the location is farther away, the ease of use is lower, which thus negatively impacts the actual system use.

Table 3. Positioning of the CWS location: far or close, per booking category.

Case specifics	Number of bookings = 0 (8)	Number of bookings = 1-3 (9)	Number of bookings = 4+ (6)	Total (23)
Close	3	6	6	15
Far	7	3	0	10
Total (unique)	8	9	6	23

5.1.2. Use of the platform

The booking process is the first step, and the first actual contact, that the participant makes to use the innovation of Space. It is therefore important that this process is accessible and easy in use, as people otherwise reject the innovation before actually using it. Most interviewees stated that it was easy in use and had no further comments on how it could be improved. However, there were 6 people that had some difficulties with the booking process, as it is not yet automated (table 4). The booker must wait for a confirmation from the system before you are sure that there is a desk available, which can take a couple of hours or longer when the CWS itself is closed at the time. A few users were very conscious of this, and even stated that this might have been a reason why they did not use the platform more often. For instance, when thinking at the end of the day of wanting to work at a CWS the next day, one interviewee stated:

“Then I think, never mind, I will do it tomorrow. But in the end, I don’t, perhaps that is a barrier”.
(Interviewee 18)

Overall, some improvements can still be made to fasten up the booking process, but most participants agree that the system is clear and convenient in use. It thus has a positive influence on the actual system use, as it seems that it has no substantial effect on the booking behaviour of the participants. The differences in age categories are minimal, as seen in table 4. Overall, the youngest participants are most critical about the platform and its use, whereas the older people are more positive about their experiences with the platform.

Table 4. Negative or positive opinions on the booking process, sorted based on age categories.

Case specifics	Age = 20-35 (8)	Age = 36-46 (7)	Age = 47+ (8)	Total (23)
Platform Negative	4	2	0	6
Platform Positive	2	6	4	12
Total (unique)	6	7	4	17

5.1.3. Discussion

As seen in the tables above, the PEU is dependent on the location and the booking process. The location is for many older participants too far from their home and is there thus a low perceived ease of use, resulting in a lower actual system use. On the other hand, almost the whole younger category lives close to a CWS, which increases the perceived ease of use and thus the system usage. For the participants, it is a motivation to work closer to home as commuting time is saved, and when a CWS is thus located far away from the participant, then the motivations to use it lower, resulting in less adoption amongst the older category. Moreover, the booking process was overall rated as a positive experience, but there were some negative aspects mentioned by especially the younger age category. As these were also the same people that booked multiple times, this is not a motivation to not adopt the innovation in its entire, but it is something they notice.

5.2. Perceived Usefulness (TAM), or Relative Advantage (DOI)

In the PU, people consider the benefits of using the innovation and how it might enhance their job performance. It is not about how to use it, but what is gained during its use. For the case of Space, multiple factors were raised during the interviews which are set out below. Flexibility, the social aspect, and the workplace itself were acknowledged as an advantage compared to the alternatives of working at home or at the office. However, some factors did appear to have downsides, resulting in a lower actual use of the system.

5.2.1. Flexibility

In the interviews it becomes apparent that every interviewee prefers the flexibility aspect of CWSs. This is one of the main reasons for choosing to participate in the pilot and accepting the innovation. People mention multiple things when they talk about flexibility, and why they prefer it. Firstly, *the change of scenery* is a reason for 15 interviewees to choose a coworking location over working from home. Working in a different environment is good for one’s productivity, as a new surroundings trigger inspiration (Sukdeo, 2017). Moreover, as one interviewee (24) mentions:

“I live with roommates, and thus I work in my bedroom, where I sleep and work. [...] All day in that room makes me crazy”. (Interviewee 18)

Hence, the flexibility of choosing your surroundings to work in, is for some participants even a necessity to properly do your job. From the 15 participants who state that they find a change of scenery important, is about half of them in the youngest age category of 20-35. In both other age categories, 4 people find a change of scenery important, as is seen in table 5. Consequently, the people who are just at the start of their career find this aspect more important.

Secondly, 12 interviewees recognize that due to this innovation, you can work at any location. This *independency* of being able to work where one prefers is according to the interviewees a large part of the reason why they signed up. Meeting colleagues in the middle; not having to travel (far) to the office; or just wanting to work in a city center. Having the freedom of choosing to work from somewhere else, as one interviewee mentions:

“Increases your energy levels, as well as your fun in working” (Interviewee 8)

The flexibility thus directly impacts an individuals’ wellbeing as well. Interestingly, the middle and older age categories of 36-46, and 47+ find this especially a benefit as in both categories 6 and 5 interviewees mention it, whereas in the younger category solely 1 interviewee mentions it (table 5).

Moreover, choosing your workplace has a positive effect on the balance between work and private life. Having the opportunity to close your workday physically by leaving your workplace and going home can maintain this balance. Also, choosing to work in the city center while meeting a friend for lunch there, is an example of combining work and private life more flexibly than when you work at home or at the office. One interviewee mentioned specifically that he saw his family now more often than before:

“I used to always go by car to the office, that was back when I had to be there [at the office] at 7:00 in the morning. I have three little kids whom I never saw at breakfast, and then in the afternoon I would be in traffic jams...” (Interviewee 5)

Having the ability to work close to home lowers the commuting time, which can be used for more private time. This not only lowers CO₂ emissions, but also increases the wellbeing of an individual and the PEU of the innovation. In the interviews, 9 people mentioned that this was a benefit of the innovation of Space. The younger category of 20-35 found this most important, as 5 people mentioned this as an important aspect, whereas in the other categories 2 people mentioned it. Thereupon, these aspects of flexible working have a positive influence on the attitude towards Space and the eventual actual use of it (table 5).

Table 5. Aspects of flexibility mentioned per age category.

Case specifics	Age = 20-35 (8)	Age = 36-46 (7)	Age = 47+ (8)	Total (23)
Change of scenery	7	4	4	15
Location independent	1	6	5	12
Balance work_private	5	2	2	9
Total (unique)	7	7	8	22

5.2.2. Social aspect

Working from home often lacks the possibility of social connection, the feeling of community, and spontaneous social communication. Coworking locations on the other hand offer creative, open spaces where community is large part of the identity (Bouncken et al., 2022). This was also recognized by the interviewees, as the benefit of meeting people was often mentioned. All participants had the opportunity to book for other colleagues at the same coworking location. Working together stimulates the booking behavior and has a positive effect on the wellbeing of an individual (Bouncken et al., 2022). Moreover, CWSs allow participants to meet new people outside of their own company, for they are open to all people, not only people from one company. This part of coworking stimulated multiple participants to book a location:

“There is a whole world outside your own company. If you’re in such an environment [CWS] with different people and start-ups that are ‘hustling’ as the next deal needs to be closed. It puts your work into perspective. I really enjoy that” (Interviewee 19)

In this quote, the motivation to choose a coworking location specifically because of the atmosphere and the people is evident. Considering the age categories, these are equally distributed, as seen in table 6. Around 4 people per category mentioned they liked the social aspect of CWS and stated it as a reason to book. The internal social aspect of Space reinforces a positive attitude towards the innovation but is limited in the effects on the actual usage. Namely, as shown in table 7, people who find the social aspect of Space important, do not necessarily book more CWSs. Even more so, only 2

people who found the social aspect important have booked 4 times or more, while the other 11 participants booked 0 times, or merely 1-3 times. Consequently, this factor does not significantly influence the actual booking behavior of the participants

Table 6. Importance of social interaction at a CWS divided per age category.

Case specifics	Age = 20-35 (8)	Age = 36-46 (7)	Age = 47+ (8)	Total (23)
Social aspect	4	4	5	13
Total (unique)	4	4	5	13

Table 7. Importance of social interaction at a CWS per booking category.

Case specifics	Number of bookings = 0 (8)	Number of bookings = 1-3 (9)	Number of bookings = 4+ (6)	Total (23)
Social aspect	5	6	2	13
Total (unique)	5	6	2	13

5.2.3. Workplace

The workplace is part of the PU, as it is an active part of the innovation, and participants are motivated to use CWS with a proper workplace. The physical requirements for a proper workplace for corporate employees are relatively high, as became apparent in the interviews. 12 interviewees agreed that an *ergonomic* workstation is preferred, but it was not a large decisive factor, as almost all CWSs complied with the corporate ergonomic standards. Interestingly, as shown in table 8, the older age categories find an ergonomic workplace slightly more important than the younger category.

Even more important is the presence of an external *monitor*, according to 14 participants. This second screen is for some essential to properly do their job, and for others it is more a luxury. Nevertheless, these monitors are available at the office, as well as at home, and thus it has become a habit to work with these. Many coworking locations that are connected to Space, do not provide these monitors yet. For at least 4 interviewees this was a 'showstopper', as they cannot reach their weekly targets without the use of a second screen. Furthermore, as seen in table 9, more participants mentioned a monitor as a requirement, but still booked a CWS. However, it appears that the bookings of the CWSs is then lower, as out of the 10 participants that booked a Space, 8 of them only booked 1-3 times. The younger age category appears to find a monitor slightly more important than the other age categories.

Another important requirement that had an influence on the booking behavior is *privacy*. Similar to the monitors, there were participants that are obliged to work in a secluded space, as they work with sensitive data, or other classified information. Therefore, they are not allowed to work in an open space where multiple people are working. This holds the participants back when booking a space where privacy cannot be guaranteed. Moreover, when in doubt, participants stated to choose for a safe option and choose an alternative instead of going to a CWS, as they were not certain of the privacy level. Some participants did not book at all, partly due to the privacy issue, 6 out of the 12 people who found this an important aspect only booked 1-3 times, as seen in table 9. Regarding age, this is relatively evenly distributed, but the younger and middle age category a bit more focused on privacy.

Table 8. Workplace requirements according to different age categories.

Case specifics	Age = 20-35 (8)	Age = 36-46 (7)	Age = 47+ (8)	Total (23)
Monitor	6	4	4	14
Privacy	5	4	3	12
Ergonomic	3	4	5	12
Total (unique)	7	7	7	21

Table 9. Workplace requirements per booking category.

Case specifics	Number of bookings = 0 (8)	Number of bookings = 1-3 (9)	Number of bookings = 4+ (6)	Total (23)
Ergonomic	3	6	3	12
Monitor	4	8	2	14
Privacy	3	6	3	12
Total (unique)	8	9	4	21

5.2.4. Discussion

Interestingly, in the flexibility aspect it is seen that especially the youngest category finds the change of scenery the most important benefit of using Space. After that, the work/private life balance is seen as an added value, whereas the middle and older categories state that less often. Consequently, it seems that the younger category especially prefers to work more flexibly to be home more often, whilst working on different location to improve the productivity and wellbeing. Moreover, the older age category finds the related location independency of great relevance, whereas the middle age category does not have a considerable preference, only that they do not find the work/private life that important. The location independency is of importance to the older category, as the distance to the big cities, and thus the main office, is longer. In the social aspect, all age categories find this equally important, and it does not significantly affect the actual usage. However, for the workplace element there is a large difference. Namely, the older category is mostly focused on the ergonomics of the workplace. Consequently, having an ergonomic place to work is an important aspect as it contributes to the physical wellbeing. This motivation is linked to the adoption, as it could result in lower acceptance when the ergonomics of a workplace are not up to standard. The younger age category finds both a monitor and privacy important, because of both habit and need to reach targets. The middle category is again in between both categories and finds all aspects equally important. Consequently, besides the added values of social interaction and flexibility, a proper workplace, and thus a practical motivation, is of importance for adoption.

5.3. The external factors

The external factors that influence the PEU and the PU have been recognized in the interviews as these were mentioned often. These external factors either have a positive effect on the PU and PEU, or a negative effect. If the external factor plays an important role in the decision-making part of the participant and it is negative, then the participant inherently and antecedently shows to not choose to use the innovation of CWS. However, if the external factor positively influences the PEU and the PU, then it reinforces the actual system use.

5.3.1. Corona

One of the most mentioned, and most influential external factor of the PU, is COVID-19, as it both directly and indirectly impacts the actual system use. It influenced the flexibility, the workplace, and the social aspect of Space, as the pandemic significantly changed the way of working, where the norm of social distancing resulted in working from home as the new standard.

Firstly, Corona emerged abruptly, causing dramatic changes in the way of working and bringing along unforeseen circumstances, as becomes apparent in this quote:

“I work at a desk in the living room, while my sister works in our kitchen. This is definitely not the ideal situation. We chose the house because it was nice, not knowing we had to use it as an office as well” (Interviewee 1)

In this situation, COVID-19 plays a positive role for the innovation of Space, as many wanted to get out of their house, and have a change of scenery or an improved workplace. Consequently, it influences both the flexibility of working and the workplace. Regarding the flexibility aspect of Space, this was positively influenced as the independence of choosing your workplace is stimulated, for the employer provides the employee with options and the freedom to choose to work from wherever they want. This results in a better work- private life balance. Age does not play a significant role in this overall flexibility aspect, as was seen in table 5, where the aspects are relatively equally distributed.

When solely considering the workplace aspect of the PU, it is not as positive as flexibility. Participants were eager to book a CWS as they did not have a proper home office, but the employer was facilitating the home office at the same time. Ultimately, Corona negatively influenced the workplace aspect of the PU, as the employer provided an ergonomic workplace for every employee at

home, as well as an external monitor, fairly quickly. It appeared that participants that signed up for the pilot with the reason of the workplace, did not book consistently to that. The interviews reveal that out of the 5 people that mention that they did not have a proper home office, only 2 participants booked a CWS 4 times or more (table 10).

Table 10. People that have/ had no proper home office, and their number of bookings

Case specifics	Number of bookings = 0 (8)	Number of bookings = 1-3 (9)	Number of bookings = 4+ (6)	Total (23)
No proper home office	2	1	2	5
Total (unique)	2	1	2	5

Furthermore, as Corona influenced the shift in how we work, remote working and digital meetings have become the new standard. On the one hand, this creates the possibility of working at a CWS entirely, as this was not an option before Corona, when the culture was to work full time at the office. On the other hand, it comes with new workplace requirements such as a phone booth to do your daily meetings in. This is not always provided in every CWS, or the boots have a high occupancy rate. Moreover, as one interviewee stated:

“I have gotten used to a bit more privacy. You are home so often in your own space, that whenever you go to a place [like a CWS] with many people, it is a lot. Before, that was just normal” (Interviewee 10)

This negatively influenced the PU, as people are not used to sharing a workplace anymore and find it difficult when they return to an open workspace as they are accustomed to the silence of their home office. Hence, this influences the attitude towards Space, negatively impacting the actual system use.

Lastly, the social aspect of Space was influenced by Corona, both positively and negatively. On the one hand, social distancing induced a feeling of loneliness and urge to reach out and meet people. There were 8 participants that specifically mentioned this as a reason to book a CWS, as they were not allowed to go to the office and meet their colleagues there. As seen in table 11, these people booked more often. On the other hand, 5 participants were also strictly obeying the rules that were imposed by the government regarding Corona. This latter appearance had a negative influence on the social aspect of Space, as people actively stayed away from other people. This is reflected in table 11, where people that obeyed the rules regarding Corona, booked less often. In addition, there was no clear division regarding age, and how people handled and acted upon the Corona restrictions, as is seen in table 12.

Table 11. Influence of Corona on bookings.

Case specifics	Number of bookings = 0 (8)	Number of bookings = 1-3 (9)	Number of bookings = 4+ (6)	Total (23)
Escape isolation	0	5	3	8
Obey rules	3	1	1	5
Total (unique)	3	6	3	12

Table 12. Influence of Corona on the age categories.

Case specifics	Age = 20-35 (8)	Age = 36-46 (7)	Age = 47+ (8)	Total (23)
Escape isolation	2	3	3	8
Obey rules	2	1	2	5
Total (unique)	3	4	5	12

The last influence of Corona on the social aspect is that 7 interviewees stated that either themselves or their colleagues had to cancel a reservation due to a positive Corona case, or related quarantines (Appendix 10.2). This effects the social aspect of Space, since there were many people that wanted to book a Space location with their colleague, but not alone, as becomes clear in this quote:

“For a period of time I wanted to book weekly for our team, 5/6 people. But then I got Corona, or someone else got Corona, and then you just get out of it, out of booking a Space” (Interviewee 19)

All in all, COVID-19 influences the PU on multiple fronts. It positively influences the flexibility aspect of Space, as well as its social aspect (on the one hand). The negative impact is mostly on the social aspect (on the other hand), as social distancing refrains people from meeting each other at locations. Moreover, due to Corona, the workplace at home has been improved significantly over the past few years and as a result, the alternative of working from home has become more appealing. This negatively influences the PEU, as people perceive the use of CWS as less easy, as the alternative of working from home is easier

5.3.2. Sustainability

Sustainability has an important internal stake in the proposition of Space, as it contributes to a reduction in carbon emissions from commuting and energy usage, and has various positive influences on the social sustainability, as is explained in section 4.2. However, sustainability also has an internal value for the users of the innovation, influencing the PU and the PEU of Space externally. Whereas the interviews reveal that the sustainability aspect itself of the innovation of Space was not a primary reason to join the pilot, many participants did indicate to actively want to reduce their environmental footprint by booking a Space location, but this had no direct impact on the bookings (Appendix 10.3). Consequently, the interviews have sketched a picture of the sustainability awareness of the participants, and how that awareness specifically influences the PEU and the PU of the innovation. This influence is thus not necessarily related to the sustainability proposition of Space, but to the aspects that the users perceive as advantageous. This specific external factor requires an extended assessment of the awareness, as it is the underlying cause for the influence it has on the PEU and PU.

Most interviewees stated to be aware of sustainability in general and their impact on the environment. Namely, 21 participants out of the 23 stated to be aware of their consumption and the related impacts, most of whom are actively trying to reduce this impact. For instance, trying to eat less meat or reduce their clothing consumption and plastic use. Interestingly, 9 participants mentioned that this active reducing of their environment footprint was caused by the influence of a direct family member or close friend. For instance, when asked whether they are aware of the impact of their consumption, one participant states:

“Yes, especially because my wife is very conscious about that, that is the reason that I am also more aware” (Interviewee 14)

Hence, the social influence that direct family and close friends have on an individual becomes clear in this quote, and as seen in table 13, this is especially influential for the middle and older age category.

Table 13. Influence of other people on sustainability awareness, based on the age categories.

Case specifics	Age = 20-35 (8)	Age = 36-46 (7)	Age = 47+ (8)	Total (23)
In relation to others	1	4	4	9
Total (unique)	1	4	4	9

Going deeper into the sustainability awareness of the participants, questions were asked on what drives them to be more sustainable, as well as where that limit is, and one starts to make compromises. For both the drivers and compromises, three aspects were detected that the participants mentioned more often. Namely, the feeling they have towards being more sustainable; the financial aspect, which considers to what extent the individual wants to pay money or get it back in the form of investment returns; and the time the participants win or loses by being sustainable. As seen in table 14 and table 15, it is seen that the younger age category of 20-35 is especially sensitive for their feelings regarding

sustainability, followed relatively close by the older age category of 47+. It is seen that 6 participants act more sustainably because they feel better when they do. At the same time, 6 people in that age category let another feeling win from being more sustainable. For instance, they state that they could go through more effort to achieve sustainability, but nevertheless choose the easy, effortless way, as becomes clear in this case:

“We placed solar panels on our entire roof, but we removed them later because we wanted a roof terrace. So, the enjoyment of life was in this regard more important for us” (Interviewee 20)

Here, the participant chose for the feeling that had a direct, visible impact, which sustainability does not necessarily have. Moreover, there is also a difference in the financial aspect, as it appears that the ages of 20-35, and 36-46, are both more attentive to this, than the age category of 47+. The drivers, where money can be earned in the form of returns is considered by 5, 4 and 3 people respectively of the age categories. Notwithstanding, it appears that the participants are in general even more concerned with the financial compromises and rather not spend more money when they do not get anything back in the form of returns. For instance, buying biological products is more expensive, and there is not direct visible effect when consuming that. At last, the time aspect is relatively equally divided amongst the age categories. Where 2-3 participants per age category see it as a driver to win time through sustainability, and 4-5 people per age category see it as a compromise and rather not lose time to be sustainable. Consequently, time is not something the participants are keen on losing.

Table 14. Drivers for sustainability based on age category.

Case specifics	Age = 20-35 (8)	Age = 36-46 (7)	Age = 47+ (8)	Total (23)
Feeling	6	3	5	14
Financial	5	4	3	12
Time	2	2	3	7
Total (unique)	8	5	6	19

Table 15. Compromises regarding sustainability based on age category.

Case specifics	Age = 20-35 (8)	Age = 36-46 (7)	Age = 47+ (8)	Total (23)
Feeling	6	3	4	13
Financial	6	7	3	16
Time	5	5	4	14
Total (unique)	8	7	6	21

Altogether, the interviews have revealed that almost all participants are aware of their environmental footprint and state that they want to reduce this. However, the participants differ what drives and compromises them when considering being more sustainable, especially when looking at the different age categories.

This sustainability awareness has an influence on the location factor of the PEU. When the location was farther away from the participant, they could not use a sustainable mode of transportation, such as the bike or by foot. As mentioned above, some participants felt better when they act sustainably, knowing that they actively reduce their footprint, whilst not putting in much effort. Moreover, it is related to certain practicalities as becomes apparent in this quote:

“I could go to a CWS by car, but that would defeat the whole point of going to a CWS instead of the office” (Interviewee 6)

Consequently, it appears that sustainability has an influence on the location aspect, as people want to contribute to the sustainability proposition of Space by using a sustainable mode of transportation to get to a CWS. When they cannot go there sustainably, as is evident in the quote above, participants refrain from booking a coworking location, influencing the PEU and the related attitude towards Space, and eventually the actual system use.

The other aspect that sustainability has an external influence on, is the flexibility that is part of the PU of the participants. The sustainability awareness of the participants appeared to be skewed towards feeling and acting sustainably without the financial costs, whilst not losing time. Working on a flexible coworking location satisfies all these needs, as commuting time is reduced along with its related carbon emissions, and it does not cost the employee anything. Consequently, using a CWS will increase their positive feelings, as they can act sustainably without compromises. As a result, the sustainability awareness of the participants stimulates the use of CWSs, and thus the innovation of Space.

5.3.3. Social influence

Social influence is another external factor that mostly affects the participants and their attitude towards the innovation (Singh et al., 2020). From the interviews it became apparent that within 12 participants' social circle, most colleagues were interested in using Space as well. Some even emailed Space, asking if they could join the pilot. Because many close peers liked the innovation, it positively influenced the participants' attitude towards Space. As one interviewee mentioned:

"We [the team] all send a message asking if we could join the pilot, but it was full. Later on, I got a message saying there was a spot available for me. This made me feel extra special"
(Interviewee 1)

Both the younger age category of 20-35 and the older age category of 47+ had more conversations with colleagues who were also interested in Space than the middle category, as seen in table 16. The middle age category of 36-46 had more negative conversations about Space, as the colleagues were overall not interested. This is clearly visible in table 16, as the middle age category has more conversations with people that are not interested, and less with people that are interested, compared to the other age categories.

Table 16. The social influence per age category.

Case specifics	Age = 20-35 (8)	Age = 36-46 (7)	Age = 47+ (8)	Total (23)
Not interested	1	3	1	5
Interested	6	2	5	13
Total (unique)	6	5	6	17

Moreover, it appears that for at least some participants, this positive attention of other colleagues towards Space, makes them feel privileged. One interviewee even states:

"Especially during Corona people were, well 'jealous' is a big word but... they were like 'why can you go somewhere?', because we weren't allowed in the office" (Interviewee 18)

This remark has an indirect effect on the booking behavior of the participant, as it influences the PU of the innovation, and therefore the attitude towards it. The factor of the PU that is especially affected by the social influence, is the flexibility. The recognition of other people on the participants' opportunity to work flexibly, wherever and whenever they want. Hence, this stimulates the acknowledgement and reasoning of why working flexibly is preferred. Also, it influences the social aspect of Space, as colleagues that want to participate as well, could stimulate the social bookings. People were able to bring their colleagues to a Space location and did that actively. However, it does not make them book a coworking location solely for these purposes, as is seen in table 17.

Table 17. The social influence per booking category.

Case specifics	Number of bookings = 0 (8)	Number of bookings = 1-3 (9)	Number of bookings = 4+ (6)	Total (23)
Not interested	2	0	3	5
Interested	3	7	3	13
Total (unique)	5	7	5	17

5.3.4. Discussion

The external factors showed a difference in how the age categories and how influential they were for them. First, the external factor of Corona was influential for all the participants, but there was no significant difference in how the age categories approached this, as it impacted them all evenly. The second external factor of the sustainability awareness did show a large difference in the age categories. The middle and older category stated to be more influenced by their close peers. Reason for this could be that these categories are often settled and have a partner and/or children. The close contact a person has with these people could influence the sustainability awareness of these categories. Moreover, the younger category is more feeling centered, and tries to act accordingly. Also, the younger and middle category are more focused on the financial aspects of sustainability. They do not like to spend money when there is no financial return, unlike the older category. The time aspect was equally important to all age categories, especially the aspect of losing time when acting sustainably did not appeal to all categories. Lastly, the external social influence on the participants differed in age categories, as the middle category stands out in the positive conversations they had about Space, namely 7 opposed to a mere 3 conversations in the other categories. This age group of 36-46 had 0 negative conversations, unlike the other categories who had at least 2 negative conversations. Thus, the middle age group had a higher motivation to talk with other people about Space, especially in a positive way. Altogether, the external motivations reinforced certain motivations, and are important to consider in the reasoning behind the adoption, as they influenced the actual system use.

6. Results: DOI

In the second part of the results, the sub-question: *How are the different age groups influenced in their decision-making process on the meso-level?* is assessed. In this section, the DOI theory is used to provide a broader perspective on the adoption of innovation. Namely, in the group of participants and their interconnectedness with the parent company, their colleagues, and close friends. This meso-level analysis consists of the central concepts of DOI, as explained in section 2.2. The attributes of innovation will partly decide the rate of adoption, adding to the aspects that are already given in the results of the TAM. The added attributes reflect the easiness of adopting the innovation, and thus affecting the rate of adoption within society. Then, the decision stage of the participants is sought, investigating at which stage participants are and why. After that, the acceptance level is set out where the communication between both levels is of great importance for the adoption rate. Throughout this section, the social system, time, and communication channels that influence the rate of adoption, are sought. These were identified by Rogers (2003) as important factors. As a result, the meso-level is set out and dynamics of adoption are assessed, adding to the static dimension of the TAM.

6.1. Attributes of innovation

The attributes of innovation as aforementioned consist of (1) the relative advantage, what advantage does it provide the individual with; (2) compatibility, does it fit within the existing system structure; (3) complexity, how complex is the innovation to learn or use; (4) trialability, could the individual try the innovation before adopting it; and (5) observability, is it visible within the social system. These attributes predict the rate of adoption. When all attributes except complexity are positive, then the rate of adoption increases, which is thus beneficial for the future adoption rate of Space. Both the complexity and the relative advantage have been set out in section 5, as they are similar to the PEU and PU respectively and will therefore not be repeated in this section.

6.1.1. Compatibility

The compatibility of Space with the current system is assessed through investigating the current system structure. The structure regarding (hybrid) working has recently been disrupted by COVID-19 and has not yet settled to either working from home, or 'as usual' from the office (Bouncken et al., 2022). When the pandemic started in 2020, companies had to discover new ways of working as social distancing was the norm. It has disrupted the current regime and companies are still grappling with how to construct this new way of working. The pandemic has shown that working remotely can be more efficient, and people have gotten used to it (Wethal et al., 2022). Many participants mention that before the pandemic, the culture within the parent company was working from 9:00-17:00 at the office. Working from home was allowed in theory but was not appreciated. As one participant stated:

"It [the workplace] has absolutely changed. Before [Corona], working from home was a no-go"
(Interviewee 5)

As described by Wethal et al. (2022), we are now in an in-between phase: working at home, working at the office, or from somewhere else entirely. Thereupon, this is a time where an innovation can surface and settle a new regime. Ultimately, the existing system structure is open to adaption. Moreover, as is seen in section 5.1.2., the PEU of the platform is positive, meaning that the platform is accessible. Furthermore, the CWSs that are on the platform of Space are independent coworking locations and exist separately of Space. Consequently, the existing structure is compatible with the new structure, as no infrastructural change is required. The physical compatibility aspect, considering the transportation to the CWS, is also positive. Having a coworking location near your home where you can go to by foot or by bike, reinforces the use of CWSs. Going to work by bike, does not only contribute to the physical wellbeing of an individual, but it also means that the distance is shorter and thus the commuting time, making it easier to travel to a CWS than to the office. The age categories are equally positive about the physical compatibility of Space (table 18).

Table 18. Participants who like to travel by bike or by foot for their (physical) sustainability, based on the age categories.

Case specifics	Age = 20-35 (8)	Age = 36-46 (7)	Age = 47+ (8)	Total (23)
Like to travel sustainably	3	3	4	10
Total (unique)	3	3	4	10

They recognize that they do not have to go by car to the office and be stuck in a traffic jam, but also that it positively influences their wellbeing, as one interviewee states:

“Then I can combine it [physical exercise and work], by going on my bike to my workplace. I find that rather sporty and energetic!” (Interviewee 2)

However, as mentioned in section 5.1, where the PEU and Complexity of the innovation is discussed, not all participants can go by bike or foot, as they live too far from the CWS. Altogether, all age categories are positive about the compatibility with the system, and prefer the physical exercise over the car, when they have the opportunity to do so. This positively impacts Space, as it can secure its position in a currently unstable market considering workplaces in combination with the motivations of the participants.

6.1.2. Trialability

Space is an innovation that is made available for the employees of corporations, and is open and free for them to use, lowering the barrier for trying the platform of Space. Only the complexity of the system makes the trialability for participants more difficult, as is discussed in section 5.1.1. Whilst this research does not consider the employer as the primary user of Space, also for them it has high trialability standard. Space is still in a pilot phase, and corporations that participate can cancel their subscription monthly and they decide the financial budget for employees booking CWSs. The company makes it thus easier for employees to book a location whenever, and wherever they prefer without feeling uncomfortable. As one interviewee mentioned:

“I could also go to another office which is not my main office, but then I have no idea of how, when, and where. This [Space] makes it more accessible and easier to work from somewhere else instead of at home” (Interviewee 11)

Here, it becomes clear that not only the distance and the financial aspect are relevant, but also just the fact that a CWS is more accessible, as it is open to all people. Consequently, it is easier for a person to try out a coworking location, which positively influences the trialability. All in all, the trialability of the innovation is positive and thus contributes to a higher rate of adoption. The importance of trialability of Space regarding the different age categories has not become evident from the interviews, as the interviewees did not specifically mention trialability of Space. This is due to the fact that the innovation is a combination of multiple existing concepts (CWSs and platform), and people already had the knowledge of how to use it.

6.1.3. Observability

Lastly, the observability of using the innovation of Space is considered. The observability of using Space is limited, as it is more difficult to see when someone is working at a CWS, than it is to see a person ride a new bike, for instance. Yet, one interviewee does mention:

“...of course, they see that I am sitting somewhere else, so they ask...”. (Interviewee 18)

So, during digital meetings, colleagues do notice a different environment and ask about it. Moreover, some participants mentioned that they talked about using Space to other colleagues. This is also a type

of observability, as the participant lets someone know of the use. Talking about CWSs and particularly the use of Space, differs slightly regarding the age categories (table 19).

Table 19. Interviewees who talked about Space with other people, based on the age categories

Case specifics	Age = 20-35 (8)	Age = 36-46 (7)	Age = 47+ (8)	Total (23)
Talk about CWS	8	6	5	19
Total (unique)	8	6	5	19

In de youngest age category, everyone discussed Space with their close friends or colleagues, and almost everyone in the middle category was active. However, in the older age category, 5 out of the 8 participants discussed it. The difference is minimal, yet noteworthy, as in the other age categories everyone discussed it. However, considering that the observability is bounded to solely the people the participant works closely with, the observability of this innovation is marked as negative.

6.1.4. Discussion

The compatibility of Space with the current system is positive, and this is perceived accordingly by all age categories. They enjoy going to work by bike or foot, as it is easy and fast. This contributes to the rate of adoption but is limited to the participants that live close to the CWS. Consequently, older people live farther and thus perceive a lower compatibility. Therefore, younger participants are in this case more motivated to use Space than the older category. Moreover, the trialability of the innovation is high, as the participants do not pay themselves and are not bound to the innovation. Again, the location has a negative influence on the trialability, as it is more difficult for the older category to try Space when it is located far away from their home. However, participants are overall more motivated to use Space as it is compatible, lowering the effort and increasing the use. At last, the observability is limited to the direct colleagues but when looking at the conversations a participant has had about Space, it is seen that almost all participants discussed the innovation, letting other people know they can use it. Especially the younger and middle age category discussed this, whereas the older category was a bit less active. Thus, the direct observability is limited, but the indirect visibility through conversations is larger. Nonetheless, the observability is rated negatively, as participants are not motivated to use the innovation more for the reason of direct visibility to other people. An overview is given in table 20, where it is seen that complexity is rated positively, which has thus a negative effect on adoption, and observability is rated negative, also with a negative impact on the adoption. All the other attributes increase the rate of adoption.

Table 20. Overview of the attributes of innovation and how they are answered, where green is positive, and red is negative.

Attributes of innovation	Positive/ Negative	Key words
Relative advantage		<i>Flexibility, Social</i>
Complexity		<i>Location</i>
Compatibility		<i>Disrupted, Opportunity</i>
Trialability		<i>Accessible, financial</i>
Observability		<i>Limited, Indirect visibility</i>

6.2. Decision stages

In the innovation decision stages, the participants decide whether to adopt the innovation through a process. As aforementioned, there are multiple stages an individual goes through before the final adoption takes place (figure 2). In the first stage, participant get acquainted with the innovation. Accordingly, they have all gathered knowledge on the innovation of Space, yet the most important reasons for signing up differ per age group, as is seen in table 21.

Table 21. The beneficial knowledge regarding the innovation of Space that is gathered by the different age categories.

Case specifics	Age = 20-35 (8)	Age = 36-46 (7)	Age = 47+ (8)	Total (23)
Workplace	1	1	0	2
Social	2	1	2	5
Location independency	3	1	5	9
Change of scenery	4	5	3	12
Total (unique)	8	7	8	23

Participants in the youngest age category perceived the change of scenery and the location independency as the most important benefits of using Space. The middle category mostly signed for Space solely that change of scenery, whereas the older age category found it most important that the Space locations were closer to their homes than the office. Notwithstanding, they all signed up for the pilot with these expectations. The availability of Space was communicated and distributed through the corporation’s internal website, as an interviewee mentioned:

“I saw a message on the internal online network, and I thought I’d sign up” (Interviewee 1)

Information on the innovation of CWSs was thus distributed on a meso-level through the parent company of Space, which has a legitimate reputation as their employer. All participants that are interviewed signed up for the pilot, and thus perceived the knowledge they had gathered on the innovation as positive, with the specific reasons as mentioned above.

In the next stage, the persuasion stage, the individual does more research and develops a final favourable, or unfavourable opinion towards the innovation. Namely, when the aspects as mentioned in the knowledge stage are not of relevance in their particular situation, then an unfavourable opinion is created. As seen in table 22, 9 participants had various decisive reasons for why their opinion changed into an unfavourable one about the innovation. These reasons, such as that the locations were too far, or there was no monitor or privacy, are divided over the age categories and no significant difference is seen. The other 14 participants developed a favourable opinion towards Space.

Table 22. Reasons for unfavourable opinions towards the innovation of Space based on the age categories.

Case specifics	Age = 20-35 (8)	Age = 36-46 (7)	Age = 47+ (8)	Total (23)
Corona	0	0	1	1
Monitor	1	0	1	2
No time	0	1	1	2
Privacy	1	0	1	2
Too far	1	1	0	2
Work from home	0	1	0	1
Total (unique)	3	3	3	9

In this stage, the interpersonal communication channels are of great importance, as the participants are sensitive to the opinion of their close peers and seek them out to remove uncertainties. The interviews revealed that 17 participants spoke with their colleagues about the innovation, in which 13 conversations other people were also interested in using Space, as is set out in section 5.3.3. This external factor is of influence on the decision stage, as positive opinions about Space could reinforce its use and ultimately its final adoption. However, it seemed in this case that it the practical reasons surpassed the views of close friends or colleagues, as most conversations were positive on Space, and the ones that were not, did not necessarily result in a rejection.

In the next decision stage, they make the first choice of acceptance or rejection. In the previous stage, the participants formed a favourable, or unfavourable, opinion on the innovation, which is reflected in the first decisions. All participants had the opportunity to book a CWS, but not all people did. Consequently, participants with 0 bookings in the total pilot instantly rejected the innovation, as their expectations gathered in the knowledge did not meet their expectations when doing further research in the persuasion stage. This group consisted of the 9 participants who had developed an unfavourable opinion due to reasons as mentioned in the previous stage, and table 22. As seen in table 23, solely 1 person in this group passively rejected the innovation, meaning that he had no interest in

using it anymore. The specific reason for this was that he had a nice home office and did not feel the need to go somewhere else, other than the office or home. On the other hand, there were 8 people that actively rejected the innovation, meaning that if their practical reason would be solved, they would reconsider adopting it. The practical reasons that were mentioned were mostly the lack of monitors, privacy, time, or there were not any coworking locations close to their homes.

Table 23. All participants who made 0 bookings and thus actively or passively rejected the innovation, even though they were aware of the knowledge of the benefits that was gathered in the knowledge stage, based on their age.

Case specifics	Age = 20-35 (8)	Age = 36-46 (7)	Age = 47+ (8)	Total (23)
Active rejection	3	2	3	8
Passive rejection	0	1	0	1
Total (unique)	3	3	3	9

The other 14 participants that did choose to adopt the innovation in the decision stage, moved on to the next, implementation stage. Here, they were able to try Space and potentially reconsider their choice. The interviews revealed that another 5 people actively rejected the innovation after trying it out for the first few times, for the same reasons as the people who actively rejected in the decision stage: monitors, privacy, and location. These were mostly people from the 47+ category, as seen in table 24. Notwithstanding, there were 9 people who, after trying, accepted the innovation and want to continue using it in the future. Most of these people have even booked 4+ times, reflecting their decision and motivation to use the innovation of Space. These participants were mostly in the younger category, namely 4, and 3 and 2 participants were in the middle and older category respectively.

Table 24. Participants based on their age that are in the implementation stage and have decided to actively reject the innovation or adopt the innovation and proceed to the final stage.

Case specifics	Age = 20-35 (8)	Age = 36-46 (7)	Age = 47+ (8)	Total (23)
Active rejection	1	1	3	5
Adoption	4	3	2	9
Total (unique)	5	4	5	14

Hence, the participants accepted the innovation and want to continue using it find themselves in the final confirmation stage, where they integrate the innovation into their routines and daily structures. They consistently book a Space location with the primary reason of a change of scenery, and then the distance, as is seen in table 25. After this stage, the innovation is accepted, but during this stage the individual can still decide to discontinuously reject the innovation, instead of accepting it.

Table 25. Reasons for the participants in the confirmation stage to adopt Space.

Case specifics	Age = 20-35 (8)	Age = 36-46 (7)	Age = 47+ (8)	Total (23)
Change of scenery	4	2	1	7
Closer	0	1	1	2
Total (unique)	4	3	2	9

In the last stages, the interpersonal communication channels are most important for an individual to adopt the innovation. Whilst macro-level communication channels are a good advertisement where people get the chance to get familiar with the innovation, meso- and micro-level communication channels often result in a greater adoption rate of the product. Talking with colleagues and close friends will thus become more important in these stages. These conversations have mostly been of positive nature, as is set out in section 5.3.3. All in all, the innovation of Space is slowly but surely spreading amongst the corporate employees, resulting in a higher adoption rate.

6.2.1. Discussion

The results have shown that the participants in different age categories differ in their innovation adoption process. In the first stages, the age groups behave relatively the same and in all categories 3 people reject it in the decision stage. However, in the implementation stage, more older people reject

the innovation than the younger groups. Interestingly, the older category wanted to try the innovation, but it did not meet their expectations. The older participants are largely influenced by practical reasons, namely that the location of the CWS was too far away, instead of the social interactions. However, communication did play a significant role in the persuasion stage for the older people, as only 3 people rejected it in the stage after is, but there were another 3 participants that did try out the innovation in the implementation stage due to the positive communication in the social system. Altogether, the older age group in relation to the other age groups, has a lower adoption rate, affecting the diffusion of Space. Namely, the participants that made it to the final confirmation stage are mostly the younger category, as half of them are still adopting Space, whereas the middle category less than half is adopting, and in the older category merely 2 out of 8 people are adopting Space. Consequently, the older participants are less motivated to adopt the innovation, and currently reside in the active rejection stage. Consequently, it is shown that many participants already rejected the innovation prior to using it. It is therefore important to communicate the specifics of the innovations with potential users to avoid this. Moreover, practical reasons, after trying the innovation, also seemed to be the main reason for rejection. This process was largely influenced by the acceptance level and the related communication, as is set out below.

6.3. Influences regarding the acceptance level

The acceptance level of the innovation of Space shows the dynamics between different levels, and the relevance of this communication on the adoption of the innovation. Currently, adopters are in an early stage, for Space is relatively new and still in the start-up phase. It only just ran its first pilot and is currently amid a new pilot, improving the platform technically and trying to scale up the connected corporations and CWSs. The companies that participate can therefore be seen as the *innovators*. These like to try out new ideas and have the financial resources to do this (Sahin, 2006). The corporate employees can be seen as the *early adopters*, as illustrated in figure 6. Their employer has already approved of the innovation and made it available to them. This social system, or top-down structure has the participants believe that the innovation is valuable and worthwhile to try out, as the employer has a credible authority (Sahin, 2006).

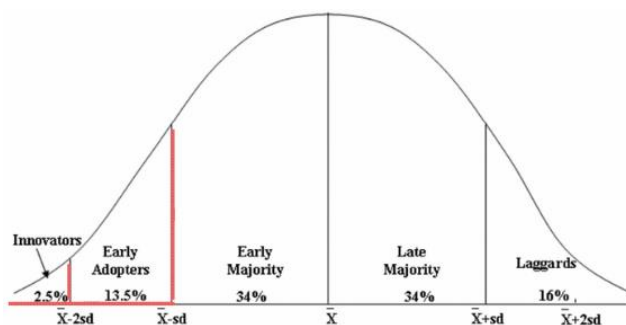


Figure 6. The acceptance level of Space, indicated in red: innovators (parent company) and early adopters (employees/participants of Space). Derived from Sahin (2006)

Consequently, the communication between these two is of great relevance for the diffusion of the innovation, especially how the innovators transfer the innovations' value to the early adopters. The interviews revealed that 13 participants stated that the provision of Space by the parent company is something good, and some even say it is a valuable benefit of working there. This contributes to diffusion of Space, as the early adopters, the participants, believe in its value. As is stated by one interviewee:

"It's an extra benefit and it feels like that as well, it is a real luxury to be able to sit there [at a Space location]. It gives me extra motivation and I appreciate that we have the possibility to do this, so my perception of the employer is also more positive" (Interviewee 10)

Interestingly, the participants that specifically mention that they perceive the use of Space as a benefit, or even a luxury, are mostly 20-35 years old. Namely, 6 out of the 13 people are in this age category (table 26). Moreover, also the middle category 4 out of 7 participants mention is, as opposed to 3 out of the 8 participants in the older age group.

Table 26. People who are positive on the provision of Space by the parent company, divided by age categories

Case specifics	Age = 20-35 (8)	Age = 36-46 (7)	Age = 47+ (8)	Total (23)
Positive on provision of Space	6	4	3	13
Total (unique)	6	4	3	13

Moreover, 14 people state that they would not have chosen to work at a coworking location if they had to pay for themselves. This financial barrier is too high, and above that, they feel it is the employers’ responsibility to provide them with a proper workplace. There were 7 people that did consider paying for a CWS, but under specific conditions. For instance, the price should not be too high, or the workplace should be of corporate standards. All age categories are relatively equally divided regarding this subject, as seen in table 27. Notwithstanding, these financial barriers are removed as Space collaborates with the employer, which steers the barrier into reinforcement of the use of CWSs. In this way, the parent company also stimulates the use of Space, and thus the diffusion thereof.

Table 27. Participants that would pay for Space depending on factors, or who would not pay themselves, based on the age categories.

Case specifics	Age = 20-35 (8)	Age = 36-46 (7)	Age = 47+ (8)	Total (23)
Depended on.. to pay for CWS	2	3	2	7
Not pay for CWS	6	3	5	14
Total (unique)	8	6	7	21

6.3.1 Discussion

The communication between the parent company and the participant has proven to be of large influence on the adoption of Space. Namely, the parent company made the innovation available in the first place, and pays for it, increasing the trialability. Especially the younger age groups seem to recognize this and appreciates the effort of their employer in providing Space for them. The older age group does not seem as impressed, as only 3 participants mentioned it out of the 8, opposed to 6 and 4 out of the younger and middle category. Interestingly, the younger category is also the largest adopter currently, and they are more grateful with the employer for providing it. However, this communication also influences the older age category, as it stimulates the trialability and thus in their process of adoption. As seen in the decision stages, 9 people reject in the decision stage and another 5 in the implementation stage. These 5 people rejected for the same reasons, but tried Space regardless of that, due to the close communication with the employer. Consequently, communication through an authority can reinforce the rate of adoption, if not temporarily.

7. Analysis

As seen in the previous sections, there are interesting results regarding age and the adoption of Space. In this section, the various motivations for the adoption of Space are discussed, and it is evaluated how the age categories influence this.

The TAM has revealed that within the PEU, there are two factors of importance to maximize the actual system use. Primarily the location of the CWS relative to the participants' home is of relevance, as it must be a cycle or walk distance. Otherwise, the participant perceives this as a high effort of using and does not accept Space. This was the case for many older participants, who lived farther away from the CWS and consequently did not adopt it. The booking process did not seem to have an impact on the actual system use, as it was overall rated positively. Solely some younger participants had points of critique, but that did not lead to rejection. Thus, the PEU is an important factor that influence the adoption, especially for the older group. The practicalities of the PEU are thus of great importance to the adoption of innovations.

The PU consists of three main motivations in choosing to adopt Space. Flexibility, the social aspect, and the workplace were all important considerations when choosing to accept the innovation. Interestingly, the older age category was especially motivated to use Space for its location independency, meaning that the ability to work from wherever they want, appealed to them. Logically, this location independency meant for them that they did not have to travel a long way to the office but could instead work closely from a CWS. However, as mentioned above, this was not the case which led for almost all older participants to (active) rejection of the innovation. Another impactful consideration was the workplace of the CWS, which sometimes lacked monitors and privacy, leading to rejection. This was mostly important to the younger category, whereas the older category found ergonomics important. Nevertheless, the workplace standards are thus of importance for all age groups in relation to adoption. The PEU and PU thus proved to be influential to the actual system use, where the older age category served as an inhibitor of adoption, as the practical motivations did not meet their expectations. As a result, the motivations of the PU are relevant, but again the practicalities that are related to that seem to have decisive values.

For the external factors, Corona had a similar effect over all categories, as the regulations applied to everyone. However, it did impact the actual usage as there were regulations upon social distancing. The sustainability awareness did differ amongst the age groups. The older participants were for instance more influenced by other people in their awareness and were more focused on their feeling regarding acting sustainably and liked to act accordingly. The younger category was also focussed on feeling, and in addition the financial aspect, which the middle category was also attentive to. Consequently, all age groups were stimulated in their use of CWSs, to ensure feeling like they contribute to sustainability while working flexibly and close to home on a CWS location.

The added attributes of innovation in the DOI show that there is no significant difference between the age groups within the observability, compatibility and trialability of Space, other than that the location factor negatively impacts compatibility and trialability in the older age category. Consequently, the 47+ category decreases the rate of adoption.

The decision stages show that in the first stages of the process, the age groups do not differ from each other in adoption. They do, however, in their reasoning, as is seen in the PEU and PU. Notwithstanding, they all gather knowledge in the first stage, developing expectations on Space, and then in the persuasion stage dive deeper into the innovation. In the decision stage, in all age categories 3 participants reject the innovation preceding the trial phase. The implementation phase, where participants can try out the innovation, is the stage where the age groups do differ. Namely, in this stage, the older age category rejects the innovation more often than the other participants. In the last confirmation stage, merely 2 out of the 8 older people of 47+ are adopting the innovation, whereas the younger and middle category of 25-35 and 36-46, 4 out of 8, and 3 out of 7 people are adopting Space. As seen over time, the participants become less motivated to use Space, due to mostly practical reasons. The social system does not influence the rejection, but did have an influence on the process, as without the communication, the older people would reject the innovation sooner. The acceptance

level reflected the importance of the communication between the innovators as the employers, and the early adopters as the pilot participants. The employer gave the participants the opportunity to use Space, and this is seen as valuable to especially the younger category. These participants state to appreciate this from their employer and see it as a benefit, which increases the use of the Space. Only 3 participants of the older participants on the other hand stated that they were grateful for this innovation, which is in line with their adoption rate, which is relatively low compared to the other categories.

Altogether, older people are willing to introduce an innovation into their lives, but it must meet specific terms. The effort they must put into using the innovation must deliver a significant return. This is the most important condition, as for Space this appeared to be a dealbreaker. Participants of the older age category that lived farther away from a CWS did not use the innovation, and thus rejected it. The effort they had to put in to use it, namely driving to the CWS, was too high, as the alternative of working from home without any commuting time appeals more. Another condition is that the innovation should be at least of the same, if not of higher quality than the previous system. The innovation should overshoot the alternative, otherwise there is more rejection. This was also the case for Space, as people had the alternative of working from home where the workplace was well facilitated, including a monitor and (often) the privacy of sitting at home. The CWSs did sometimes not meet these standards, resulting in a lower adoption rate as people chose the alternative of working from home. It appears then, that also the quality of the workplace, especially the monitor and privacy, are of significant importance for some people to use the innovation.

8. Conclusion

This research has investigated the influence of different age groups on the adoption of Space, a platform that provides CWSs for corporate employees. As old age is often seen as an inhibitor on the adoption of innovations, this paper has investigated what the main motivations are for the age groups 20-36, 36-46, and 47+, in order to understand the reasoning behind adoption or rejection, and to see whether the older category is indeed a late adopter. This was done with the guidance of two theories, that served as an inspiration for the research method and analysis of the results. The TAM was used to answer the first sub-question: *What are the main motivations and factors that influence and form the attitude of an individual towards the innovation of CWSs amongst different age groups, and how does this affect adoption on the micro-level?* The PEU of Space consisted of the booking process, which was rated positively overall, and the location of the CWS, which was rated negatively by especially the older age category. The PU consisted of flexibility, the social aspect, and the workplace. Flexibility was an important motivation for all age groups to use Space as well as the social aspect of Space, as meeting new people gave them energy. The motivation of working at a proper workplace was for all participants a requirement, yet older people appeared to focus more on the ergonomics whereas the younger and middle age group found a monitor and privacy a must. Consequently, the practicalities of both the PEU and PU seemed of great relevance on the adoption of Space. The external factors of Corona reinforced the motivations of social interaction and flexibility but had a negative influence on the workplace motivations of CWSs, as the well-facilitated home office was of high standards in comparison the CWSs. The sustainability awareness of the participants also had an influence on the motivations, as the younger and older participants both feel better when acting sustainably, and thus traveling by bike or foot to a CWS stimulates that. The external social impact especially had an impact on social interaction within CWSs, as you can bring colleagues, and on the flexibility, as people saw that as a benefit. This aspect did not significantly differ within the age categories.

The DOI was used to answer the second sub-question: *How are the different age groups influenced in their decision-making process on the meso-level?* As mentioned above, the most influential attribute, relative advantage (or PU), was rated positively amongst all age groups, increasing the rate of adoption. Moreover, it revealed that the compatibility and the trialability were also rated positive by all age groups and thus also contribute to a higher rate of adoption. However, the complexity, as stated in the PEU, is rated positively amongst the older age group, which ultimately negatively influences the adoption. The last attribute of observability also had a negative influence on the adoption rate, as the nature of the innovation is not as visible as other physical innovations. Moreover, the decision stages have shown that the older category is the first group to reject the innovation due to practical reasons as mentioned in the PEU and PU. However, the acceptance level, and specifically the relation between the employer and the participant, influenced the decision making, and stimulated its use.

In conclusion, as the answer the main research question:

What are the motivations amongst different age groups for adopting the sustainable innovation of Space: booking coworking spaces through an online platform, on the micro-level, and how is this decision-making process influenced on the meso-level?

The factors that are of influence on the adoption of Space, are mainly the motivations the participants have regarding the innovation: increase of flexibility and social contact, and a proper workplace. Moreover, the booking process and the location also influenced the adoption. These all positively influenced the adoption, except for the location and the workplace, where the location was too far for the older participants and the workplace sometimes lacked a monitor or privacy. Consequently, the influencing factors on the micro-level are mainly practical. The decision-making process on the meso-level was influenced time, communication channels and the social system. It was seen that the communication was an important influencing factor which stimulated the adoption process, as

participants were urged to at least try out the innovation before rejecting it. Nevertheless, the older age groups appeared to reject the innovation nonetheless in a later stage due to practical reasons.

8.1. Recommendations:

The results of this research show that older people are indeed motivated to use a sustainable innovation, such as Space, but put higher demands to it than younger people. Therefore, when looking at the results, it is recommended to lower the PEU as much as possible in order to include the older age category in the adoption of the (sustainable) innovation. It has appeared that they want to use it, but do not want to put more effort into it than that they get back from using the innovation. Moreover, innovations should be of at least the same, if not higher, quality than the previous system that people used. Otherwise, using the alternative can be more appealing than the innovation, regardless of the other characteristics and motivations to use it. Thus, it is advisable to research the target group and their motivations thoroughly first, to ensure that the innovation suffices their needs to maximize the adoption rate.

Further research is suggested on multiple fronts. Firstly, this research has solely researched the micro-level and meso-level, as the macro-level of CWSs in general was less relevant. However, for further research it is suggested to also include this perspective, as it shows the diffusion of CWSs itself, and their adopters in different geographical dimensions in a larger perspective than one case. Secondly, Space was in an early stage of development. This has resulted in the fact that there were some teething problems, such as a non-automated booking process, that participants noticed. The most important fault was that the platform did not have many remote CWS locations over the Netherlands, which resulted in a significantly lower usage amongst older people. Space is a fast-growing start-up and is actively growing the amount of connected CWSs. Consequently, it is suggested that under different circumstances, thus within the second pilot, perhaps different reasons for rejection come up, especially for older people as their main reason was the location of the CWSs.

All in all, this research has shown that older people are actively trying to adopt innovations, but sometimes practical factors inhibit them from proceeding the adoption. Consequently, assessing the motivations of older people beforehand will provide clarification for both the older people and the innovator, and will result in a higher adoption rate.

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10. Appendix

10.1. Interview guide

1. *Is it okay if this interview is recorded? Privacy statement*

Introduction

2. What is your age?
3. Where do you live?
 - a. Big city/ rural area
 - b. How many kilometres is your office from your home?
 - i. How long is it to travel to the office?
4. Which mode of transportation do you use to go to the office?
 - a. Do you travel consciously (are you aware of your emissions, do you do anything to minimize this)?
5. What is your household like?
 - a. Single/partner/children

Flexible workplaces

6. What do you consider important aspects of a workplace?
 - a. Why?
 - b. Which are so important that without those aspects you would not want to work somewhere?
7. Before corona: how important did you think these aspects were at then?
8. Do you feel that corona has influenced your way of working (apart from online meetings/ working at home?) physical aspects?
 7. What is a flex workplace, can you describe it in your own words?
 8. What do you think is the **added value** of a flex workplace?
→ Ask further questions when certain problems arise!
 - b. What do you get out of a flex workplace that you don't get out of the office/home?
 9. Why would you use a flex workplace?
 - a. What is your primary reason?
 - b. What is holding you back?
→ why?
 - c. When you tell people about having the opportunity to go to a coworking space, how does that make you feel? How do you think other people view that?
 - d. Social status?
 - e. Is the ability to book a workspace like this through your work something "cool"?

Complexity

10. Can you explain in your own words how the Space platform works?
 - a. What is its usefulness? What is the purpose of it?
 - b. Was it immediately clear how it works?

11. How does it differ from other flex workspace providers? For example, WeWork?
12. (How often) do you use Space?
 - a. IF NOT: Why have you never tried it?
13. With what regularity do you use Space?
 - a. Especially in the first phase a lot?
 - b. Why less after that?
14. Was the first time you used Space an easy experience?

OR: Did you ever open the platform/why did you sign up in the first place?

 - a. Does it get easier to use the more you use it?
 - b. Did you need instructions on how to use it the first time?
 - c. What things were unclear at the beginning/ still are?

Relative advantage

15. If you had to pay for a flex workplace, would you still go there?
16. Do you feel burdened when you book a flex workplace? (Are you aware that it costs money)
 - a. Or if you book it more often each week?
 - b. Or if you cancel last minute?
 - c. Is that a reason not to go?
17. Would you book more often if you could go with outside people?

Compatibility

18. Do you know people who do work at a flex workplace?
19. Had you worked at a CWS before?
 - a. If so, how did you experience that?
 - b. If so: why did you go there more often/not anymore?
 - c. If not: what kept you from going there?

Triability

21. Is it an accessible platform?
22. Is it an approachable platform to try out
 - a. Why yes/no?
23. Was it important to you that you could easily try out the platform?
 - a. Did you find the preregistration to be approachable?
 - b. What feelings did you have about it?

Observability

24. Do you ever talk about using flex workspaces?
 - a. In what way? Positively/ negatively/ neutrally?
25. What do other people think about it?
 - a. Would they like to make use of it as well?

Sustainability

26. Are you aware of your consumption behaviour in the context of sustainability? Are you aware that some products are more harmful to the environment than others (e.g.: palm oil, avocado, meat)?
27. Are you doing anything to reduce your impact?
 - a. What are you doing to reduce your impact?
 - b. Why?
28. Would you try new innovations to reduce your impact? (e.g., solar panels)
29. Would you sacrifice your time/money/feeling, to reduce your impact? / The extra mile

30. In your opinion, is using a coworking space sustainable?
 - a. In what respect?
31. Is sustainability a reason for you to use flex workspaces?
32. *Is there anything else I did not ask but you would like to add?*

10.2. Corona external factor

Reference to section 5.3.1. regarding the External factor of Corona.

Table 28. Number of people who had to cancel their reservation due to Corona, which influenced the bookings, as is shown in this table, where in both categories of 0 bookings or 1-3 bookings, 3 people had to make a cancellation or could not reserve anything due to the insecurity of Corona.

Case specifics	Number of bookings = 0 (8)	Number of bookings = 1-3 (9)	Number of bookings = 4+ (6)	Total (23)
Corona	3	3	1	7
Total (unique)	3	3	1	7

10.3. Sustainability external factor

Reference to section 5.3.2. regarding the External factor of Sustainability awareness

Table 29. sustainability awareness regarding consumption, based on the bookings. It is seen that people did not necessarily book more often when they are concerned for the environment

Case specifics	Number of bookings = 0 (8)	Number of bookings = 1-3 (9)	Number of bookings = 4+ (6)	Total (23)
Consumption	8	8	5	21
Total (unique)	8	8	5	21