

Motivations to (not) adapt spatiotemporal work patterns as innovative entrepreneur in times of the coronavirus pandemic

A qualitative research to discover the motivations of innovative entrepreneurs based in a multi-company building to adapt their spatiotemporal work patterns in times of the coronavirus pandemic.



"Light at the end of the tunnel." One of aisles with private workplaces. Source: author.

Colophon

Title

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Subtitle

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Abstract

The societal shock created by the coronavirus pandemic from 2020 onwards caused a digitalisation leap in various sectors of the economy. People in the Netherlands were urgently advised by the government to work from home when possible. As a consequence, the working from home rate and the flexibility of the location and time of work increased. People's spatiotemporal work patterns, the repeated or regular way in which people work, which can be expressed in location of work (spatial component) and work times (temporal component), were adapted. Though, it can be questioned if innovative entrepreneurs with a private workplace in a multi-company building were able to adapt their spatiotemporal work patterns. How did they deal with the governmental advice? This research aimed to gain insight in the motivations of innovative entrepreneurs to (not) adapt their spatiotemporal work patterns in times of a life changing event and the aftermath. The research question is: *What are the motivations of innovative entrepreneurs based in a multi-company building to (not) adapt their spatiotemporal work patterns in times of the coronavirus pandemic and the aftermath?* By conducting a case study with eight semi-structured online interviews with innovative entrepreneurs based in a multi-company building on a business park in the Netherlands, motivations for their spatiotemporal adaptations were investigated. The recordings were thereafter transcribed and thematically analysed, which resulted in five themes. The innovative entrepreneurs perceive their private office as important for their professionalization and determine that their activities are place dependent (theme 1). They describe the identity of the building as a relative save and quiet working environment (theme 2). Thereafter, adaptations to the nature of work (theme 3) and adaptations to the spatiotemporal work pattern (theme 4) are summed up. Finally, their expectations and attitude towards the future of work (theme 5) is laid out. Considering the motivations it can be concluded that these innovative entrepreneurs have a low adaptive capacity of the spatial component and a low perceived necessity to adapt. Therefore, the spatiotemporal adaptations to their work pattern is limited and will make them vulnerable to possible freedom of movement measures in the future.

1. Introduction

1.1 Background

The way we work in the western world in the last couple of decades has been rapidly changing. Mainly due to technological advances, the place where we work became partly less relevant in some sectors of the economy (Felstead, 2012). But the development of this phenomenon slowed down and homeworking did not become the new standard as assumed, but remained a subordinate way of working (Ojala and Pyöriä, 2017).

Yet until one of the most impactful pandemics the world had ever faced arose in 2019, caused by a formerly unknown contagious virus that can lead to the covid-19 disease (RIVM, 2020). In an attempt to slow down the spread of the virus, governments all over the world have been searching for strategies to achieve this but harm the economy as less as possible. One of the most important strategies for most governments, including the government of the Netherlands, has been to promote homeworking when that is possible (Rijksoverheid, 2020). This advice was sharpened in the Netherlands when a second wave of corona-infections arose at the end of September 2020. The government started to urgently advise to work at home, unless it is really not possible (Rijksoverheid, 2020).

This drastic strategy more or less forces many people to change their workplace. But, of course, with so many different sectors in an advanced economy, not all people working in specific sector of economy, or have a specific way of working, could simply start working from home instead of a physical place. After all, not all work can be fully done remotely but only partly or even only at a specific location. A concept that demonstrates this issue is that of multilocal working, meaning that some work tasks are disconnected from a specific place or time and can therefore be done at home or underway for example (Felstead, 2012). But some tasks cannot be disconnected from a specific place or time. Especially work in innovative or high-tech sectors of economy is done in a spatially fragmented way (Alexander et al., 2010). Meaning that work is usually performed on more than one location.

In general, a spatiotemporal pattern can be defined as a pattern that has both a spatial dimension and a temporal dimension (Brown and O'Hara, 2003)

In other words, the spatiotemporal patterns of these entrepreneurs will probably have been changed due to the coronavirus pandemic. It could be that innovative entrepreneurs started to work from home, depending if that would be possible for them. What are the motivations of these people to decide to work from home?

1.2 Case Study



The multi-company building. Source: author.



Entrance to the multi-company building. Source: author

In order to gain insight in the motivations of innovative entrepreneurs a gateway was needed to enter the research population. The researcher knew, from his own knowledge of his living environment, that innovative entrepreneurs were based in a multi-company building on a business park in the Netherlands. The entrepreneurs were directly approached by the researcher and invited to participate in the research. The researcher purposefully sampled by firstly approaching entrepreneurs that had been based in this building for the longest period of time. This was done because of the possibly higher fruitfulness of information shared during the interview. Entrepreneurs with a longer history in this building would possibly be more able to reflect on their own work patterns before and during the coronavirus pandemic. The approached people all agreed to participate in the interview. The participants are active in various sectors of the economy (see table.). This variety of people allows for a better validation of the found motivations than if only people working in one sector of the economy would have been interviewed.

General characteristics of the multi-company building

The multi-company building where all participants are based only has had this function since 2018. The entrepreneurs have a relatively short history in this building and some of them only arrived during the coronavirus pandemic. What all entrepreneurs have in common is that they rent their personal office on the ground floor, first floor or third floor of the building. Except one of the participants, she her workplace in a building adjacent to the central building.

During the interviews, the second floor was without renters.

There is a central reception, lounge and meeting room on the ground floor. Besides, there is a co-office on the first floor. Moreover, people have access to restrooms and kitchen/coffee corner on the ground floor and first floor.

Characteristics of the multi-company building in November 2020

	Amenities	Occupancy	Flow of people
Direct environment (100m) and general	Free parking places (not for e-vehicles), gas station and shop bicycle rack.	-	Destination traffic for the multi-company building and a truck parking adjacent

	Wi-fi, running water, electricity, air-conditioning, heating		Main road with constant flow of traffic (cars and trucks) Parcel deliverer (5 times on business days) Cleaning lady (3 half-days a week on business days)
Ground floor	Entrance with reception, lounge, meeting room, restrooms, kitchen, coffee corner, elevator	5 units 3 occupied, from which 1 interviewed. 60% units occupied	2 receptionists (full working days on business days) All people working in this building use the hall and entrance to get in and out of the building Guests, clients, visitors use the lounge to wait or work
First floor	Shared office space, restrooms, kitchen, coffee corner	10 units 5 occupied 5 interviewed from 3 different organisations 50% occupied	Renters and clients
Second floor	Restrooms, meeting room	15 units 0% occupied	None
Third floor	Restrooms, meeting room	1 unit 1 interviewed 100% occupancy	Renter, clients and guests
Adjacent building	Private workplace	1 unit 1 interviewed 100% occupancy	Renter, clients, guests and visitors

1.3 Academic relevance

It would be meaningful to understand more about the motivation of the people to change or maybe not change their spatiotemporal pattern because of an external shock. So far only little scholarly attention has been given to the impact of an external shock on the spatiotemporal patterns of especially these kind of enterprises who represent many different sectors of the economy. This research builds upon the knowledge about the adaptive capacity and adaptive willingness of innovative entrepreneurs that are based in a multi-company building.

1.4 Social relevance

The new knowledge that this research will try to develop can be useful for (local) governments to improve the understanding of how and why certain type of businesses have flexible or not so flexible spatiotemporal patterns. The description of this effect addresses the knowledge gap between the coronavirus pandemic and the spatiotemporal patterns of small (partly) location dependent businesses. In the end, more insight is gained in the capability of these businesses to adapt to external shocks. New insights help (local) governments and place facilitators to better align spatial supply and demand.

1.5 Research Problem

The central question of this research is:

What are the motivations of innovative entrepreneurs based in a multi-company building to (not) adapt their spatiotemporal work patterns in times of the coronavirus pandemic and the aftermath?

2. Theoretical Framework

2.1 Concepts

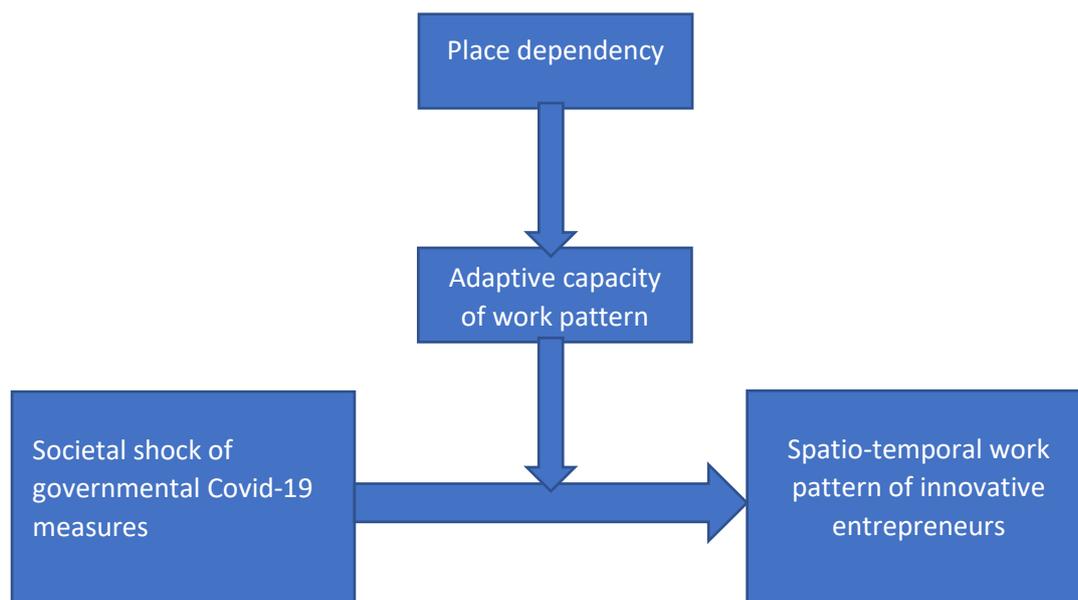
The most important central concept of this research will be 'spatiotemporal patterns of work'.

In general, a spatiotemporal pattern can be defined as a pattern that has both a spatial dimension and a temporal dimension (Brown and O'Hara, 2003)

Ojala and Pyöriä (2017) define multi-locational work as performing regular work in more than one location. The notion that work is increasingly done in more than one location logically complicated the spatiotemporal patterns of workers (Brown and O'Hara, 2003).

In order to classify small (partly) location dependent businesses a newly developed classification system from Burchell et al. (2020) and the system from Ojala and Pyöriä (2017) could be used. But this is beyond the scope of this research.

2.2 Conceptual Model



Conceptual Model. Source: Author.

The societal shock of the governmental Covid-19 measures (independent variable) will cause the Spatio-temporal work pattern of innovative entrepreneurs (dependent variable) to be effected.

It is expected that the place dependency of innovative entrepreneurs will influence the adaptive capacity of their work pattern. The higher the place dependency is, the lower the adaptive capacity of their work pattern is. This adaptive capacity moderates the causal relationship between the societal shock and the spatio-temporal work pattern.

So, when the place dependency is high this will cause a low adaptive capacity of the work pattern and will therefore negatively moderate the effect the societal shock has on the spatio-temporal work pattern. Meaning that innovative entrepreneurs with a relatively high place

dependency will be relatively less able to adapt their spatio-temporal work pattern. The causal effect of the societal shock on the spatio-temporal work pattern is relatively weak.

So, when the place dependency is low this will cause a high adaptive capacity of the work pattern and will therefore positively moderate the effect the societal shock has on the spatio-temporal work pattern. Meaning that innovative entrepreneurs with a relatively low place dependency will be relatively more able to adapt their spatio-temporal work pattern. The causal effect of the societal shock on the spatio-temporal work pattern is relatively strong

2.3 Expectations

It is expected that the societal shock of the coronavirus pandemic affects the spatiotemporal patterns of work. Precisely, enterprises that have a higher location dependency will experience that they are less able to adapt their spatiotemporal patterns of work and business that have a lower location dependency will experience that they are more able to adapt their spatiotemporal patterns of work.

3. Methodology

3.1 Design

For the purpose of this research eight semi-structured in-depth interviews were conducted with innovative entrepreneurs. The purpose of this research was to discover motivations and perceptions of entrepreneurs to adapt their spatiotemporal work patterns the paradigm was interpretive and not positivist (Hennink et al., 2020).

The semi-structured interviews allow participants to formulate their NARRATIVES in a flexible way, while a certain structure in the story helps to focus on the content (Dunn 2005, cited by Longhurst et al., 2010). This helps to further sharpen the insights that are obtained. Moreover, it can be of value to use these insight to redevelop the interview questions (Hennink et al., 2020). In this way the new insights can directly be used to help sharpen the answer to the research questions, the cyclical nature of qualitative research (Hennink et al., 2020). In this research entrepreneurs will probably come up with diverse motivations to adapt their spatio-temporal patterns. The motivations that are obtained from the first interview can be presented, when the participant does not of oneself come up with the motivations, to the second interviewee. The second interviewee gets the possibility to respond to the presented motivations. The obtained data will be enriched by making these inferences (Hennink et al., 2020).

3.2 Participant Recruitment

In this case, all potential participants were based in a multi-company building were I as a student researcher used an empty office. Before I could start approaching potential participants I asked the office manager to agree or not agree with my plans to conduct scientific research. After getting conduct, the office manager sent all tenants of the building an informal message with information about me, my planned research and an announcement that I would approach only some of the tenants. Subsequently, I approached tenants that would most likely conform my inclusion criteria that can be found in the table below. This purposeful sampling was done, because I could make use of my own knowledge about the entrepreneurs and start taking action instead of the entrepreneurs responding to my invitation. This way of sampling was deemed more efficient, without having to cancel invited participants. All entrepreneurs that were approached accepted the invitation. Only one interview with an entrepreneur was canceled, because of practical difficulties.

Inclusion criteria and reasons for inclusion

Inclusion criteria	Reasons for inclusion
Currently renting an office in the multi-company building OR Temporarily co-use an office of one of the entrepreneurs that are currently renting an office	Interested to know the motivations of people that decided to rent an office in this multi-company office building for any reason. Interested to know the motivations of people that decided to temporarily co-use an office in this multi-company building for any reason.
Started renting an office well before the first governmental coronavirus measures were taken OR	To make it possible to compare spatiotemporal work patterns before and during the coronavirus pandemic participants should have experiences with working in both era's.

Started co-using an office of one of the entrepreneurs from the start or in the course of the coronavirus pandemic	For the comparison of spatiotemporal work patterns before and during the coronavirus pandemic participants could alternatively have experiences with working elsewhere and working in this specific multi-company building.
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3.3 Research Instrument

An semi-structured interview guide was designed to help participants tell about their entrepreneurship, their experiences and motivations with their previous and current work pattern and their outlook on the future. The instrument consisted out of 26 questions, categorised in topics. This was done to help structure and feed the story of participants. The standard questions were designed to be as open as possible and allowed participants to interpret the concepts in their own way. This was especially important when the participants were asked to describe a weekly work pattern. In this way the emic point of view was respected as much as possible without interfering with the etic point of view (Hennink et al., 2020).

The research instrument can be found in Appendix C.

3.4 Data Collection

The eight interviews were conducted between November 17 and December 9. They were all done individually via an online video and audio connection, because the governmental coronavirus measures and the measures from the University of Groningen did not allow the researcher meet and conduct the interviews in real life. Before the planned interview I sent the information letter and Informed consent form. The informed consent form would be done orally, but to prepare the participants for the questions that were going to be asked I decided to priorly send this document.

During all interviews the researcher was in the same location in in the researcher's office with a neutral white wall on the background. All participants agreed with audio recording the interview. Only one participant did not agree with video recording the interview. All participants agreed that the data would be stored in a safe location until the final submission date for this thesis.

3.5 Data Analysis

All data from the interviews was transcribed manually, without making use of software. Two participants asked me to send the transcript so they could check and correct their words. All participants asked to send the final version of the thesis.

Right after each interview the audio and video recordings were replayed. All meaningful words from participants were written down. Besides, remarkable non verbal communication and atmosphere of the interview were documented. This first analysis helped to understand the red line of each interview and shape my understanding of the rough connections between themes. Moreover, this first analysis helped to understand the interconnections of content between participants. Besides, this first analysis was a starting point for memo's.

Consequently, descriptive codes were given to the data. They codes were based on topics that were designed and placed in the interview guide. Then, pattern coding was done to put the descriptive codes together on a higher level of abstraction.

In this research, the prior set topics in the interview guide turned out to be useful as prespecified codes. Especially the probes turned out to reflect factors that were indicators for adaptation of the work pattern.

Thereafter, the data was thematically analysed, using codes based on the literature.

Besides, new factors that could be indicators for a adapted work pattern were treated with a grounded theory analysis.

3.6 Ethical considerations and reflection on quality of data

Since I got my own office in the multi-company building and therefore already had some knowledge about my participants, it was of importance to recognize my own positionality (Valentine 2005, cited by Longhurst 2010). The fact that most participants know me from the corridors probably worked in the favor of the research, because they were likely to have a higher trust in me than a researcher they did not know. Participants' answers are therefore likely to be more extensive and maybe even more detailed. But it could also be that participants did not want me, as a person, to know some details about their spatiotemporal patterns. To limit this possible constraint it was important to clearly state the how the data would be used and treated in the informed consent form.

The fact that this research was about motivations for changing or not changing work patterns because of governmental restrictions required a complete anonymization of the data. All participants agreed with complete anonymization of the data in the informed consent form. During the interviews names from persons, places and enterprises could be used, but were removed from the transcript. Also, descriptions that could possibly refer to a specific enterprise were removed and neutralized.

An inference was made in the last section of the interview guide about participant's reflection on adaptation of work patterns of other entrepreneurs. In the first interviews it was noticed that participants started to talk about their opinion on how other entrepreneurs behaved. So, it was decided to add this question to this section of the interview guide. This questions turned out to become a theme.

4. Results

4.1 Participant Characteristics

The eight participants of this research were interviewed in the fall of 2020 and represented various sectors of economy. In table 1 the moving in date is included, referring to the dynamic occupation rate and occupation of people in the multi-company building. Though, the results will not be linked to the characteristics because of the anonymous character of this study. Therefore, the quotes will not be linked to a participant. The analysis of the results resulted in 5 themes. At the end of each theme, one sentence coloured in blue sums it up.

Participant Characteristics. Source: author.

Participant	sector of economy	Based in Multi-Company building since	Date of interview	Length of interview (min)	Online medium	Audio / Video Recording
1	Mechatronics and education	December 2019	11-17-2020	42	Skype	Yes / Yes
2	Energy storage development	May 2018	11-18-2020	69	Skype	Yes / Yes
3	Liquor production and public benefit	January 2019	11-19-2020	59	Skype	Yes / Yes
4	Research, Development And engineering	November 2019	11-24-2020	42	Skype	Yes / No
5	Food development and education	December 2018	11-28-2020	57	Skype	Yes / Yes
6	Card design	May 2019	11-30-2020	63	Skype	Yes / Yes
7	Marketing & Communication	March 2020	12-04-2020	69	Skype	Yes / Yes
8	Marketing & Communication	March 2020	11-09-2020	50	Skype	Yes / Yes

Source: author.

4.2 Place dependency and professionalization

Reasons for working in the multi-company building as innovative entrepreneur.

Participants were asked to explain why they actually need an office to run their business or organisation. Since the organisations all have their own historic background, their own stage of development (start-up, scale-up or grown-up), their own industry they are active in and their own moment they started to work in multi-company building, the reasons for working there deviate. However, a general observed trend is that entrepreneurs wanted to professionalise their business activities and deemed it important to have their own base to operate from and collaborate as a team.

“So on a certain moment we started to look in the mirror, and yes, then you get a list. Out of this it became very clear what we needed to do on our way to professionalising. So bringing everything together on one place.”

“Yes, in principle, we could do the work that we do apart from each other, but we have always had in mind that whatever we do, that most of the time there is a hardware component connected to it, that needs building something, in this way doing something with stuff.”

Most participants mentioned that they literally needed their personal attributes or physical spaces to run their activities in a professional way.

“I got my hardware and electronics here (...), so I really need these things when I am working.”

“We welcome guests, we got two small offices and we got a spacious room in the back where we do the distribution.”

“When there would really be a lockdown with a stay at home order, we would have a problem. That would be impossible.”

Another component of this professionalization is the possibility to welcome clients, suppliers and colleagues on a fixed and representable place.

“So yes, look, we don’t want to be in a squat, uhmm, with sustainability you may earn good money. We are just a professional and serious enterprise, we want to have that appearance to our clients as well.”



Reception. Source: author.

Participants mentioned that the presence facilities like a reception, hall, meeting room, Wi-Fi, restrooms, kitchens and free coffee contributed to their own comfort and to the professional appearance of their organisation.



Central hall. Source: author.



Kitchen and coffee corner. Source: author.

Moreover, participants found it important that the multi-company building was well accessible for themselves and for others. They mentioned the strategic location of the business park

near major infrastructural junctions, both car and public transport, a pillar for their professionalization and the proximity to their homes as beneficial from a practical point of view.

“We were looking for a good location for both of us, we found it in important that it would be on cycling distance, it is a waste of time to be sitting in a car, commuting is really annoying.”

Having a professional place to run activities and welcome people on a well accessible location.

4.3 Place identity

Ambiance and characterisation of the multi-company building.

Participants mentioned next to the dependency of a physical workplace and the importance of their professionalization that favourable circumstances in the multi-company were motivations for them to work there, before and during the coronavirus pandemic.

People mentioned the calm and quiet ambiance in the building.

“It is almost deserted here. If you want, you could barely see someone here.”

The dynamic occupancy rate of the workplaces in the building increased before the coronavirus pandemic and did not show a decline during the coronavirus pandemic. Participants mentioned only a short period of extreme quietness during the ‘intelligent lockdown’, but believed that it had only become relatively busier than more quiet compared to the period before the coronavirus pandemic.

“It looks normal life has come back here.”

Though, participants mentioned that they found it relatively safe to work in the building during the coronavirus pandemic. They mentioned that they only work in small teams, isolated from others, and that the physical contact with others (mostly) comes down to chit-chatting at the coffee machine.

“We don’t have an office garden with air-conditioning, with I don’t know how many people walking around. Most of the time now we are only with the three of us here. (...)”

“Everyone is basically sitting on their own private island.”

“Contact? Yeah, just at the coffee machine or you see each other in the aisle, you just speak a little.”

“There are new entrepreneurs, but I don’t know that so well. I just say ‘hello’ to them, but I haven’t really talked to them yet.”

Though, some participants acknowledged that they (unintendedly) started to collaborate with other entrepreneurs in the multi-company building while they had not expected this to happen per se. Participants believe that the clustering of innovative start-ups in the Mul-Com building has contributed to this happening.

A spacious, quiet, 'empty' and 'corona safe' building with a handful of people, (mostly) working on their own 'island' and having limited physical contact.

4.4 Adaptive capacity and adaptive willingness of nature of work

Adaptations innovative entrepreneurs could and wanted to make to the tasks they would normally do, on a daily to weekly scale.

Participants were all sure that the coronavirus pandemic has been impacting their organisation. But, most entrepreneurs found that the coronavirus measures has mostly impacted them indirectly and not directly. The participants could still come to the Mul-Com building, meaning that the measures did not directly impacted their spatiotemporal work patterns much. Though, the measures did affect the nature of work, meaning that the day to day activities could be a lot different as usual.

"I had to change to course of the company more rapidly than I had planned, a lot of adjustments had to be made."

Others had it busier than ever before and did not (have to) adapt their nature of work.

"For us, it sounds ridiculous, every measure that was taken meant for us that there was more work to do."

Participants found it important to continue doing business as much as possible from the multi-company building and found it a relatively save place, reasoning that entrepreneurs work mostly on their own 'islands' and do only have limited direct contact with each other.

"Actually, so to speak, it is more that we lost some clients indirectly than that the measures had a direct impact on us."

The entrepreneurs typically like to welcome their customers, partners, students or interns in their private workplaces. Some participants would typically welcome customers or partners multiple times a week, while others would typically have one or more interns working with them during a couple of months. All the entrepreneurs of course do have their own activities that belong to their field of work, but the people that were interviewed agreed that their work patterns were dynamic and that there was not really a 'typical workweek' or 'typical workday' regarding their activities.

They usually spend 4 to 5 days a week there and usually spend most time of the day inside the Mul-Com during office hours. Participants said that they were reluctant with working from home. Some said that they would normally work one day a week from home, while others said that they would spend some hours in the evening to do some overdue work in busy times. They all admitted that they prefer working in the Mul-Com building over working from home.

Some entrepreneurs would normally visit customers or clients spread out over the Netherlands, some typically a couple of times a week and others typically once or twice a month. Despite the dynamic working weeks, that could also be different depending on the

season of the year, the participants characterise their workplace in the Mul-Com as their 'base'.

The most important change the nature of work was that they hardly received any more clients or guests in their office and they would hardly go abroad to visit people. Instead, they would make phone or video calls. Though, participants found it useful for less important meetings, but thought it was not so convenient for the more important or first meetings with clients or partners.

4.5 Adaptive capacity and adaptive willingness of spatiotemporal work pattern

Adaptations innovative entrepreneurs could and wanted to make to their spatiotemporal work pattern.

So, some entrepreneurs did change a lot to their nature of work and other did not. Depending on the necessity to do so. Entrepreneurs showed that by adapting their nature of work they could avoid turning their spatiotemporal work pattern upside down. Participants acknowledged that adapting their nature of work was necessary because they could not really operate their business from another place as the multi-company building.

Some entrepreneurs adapted the spatial component of their work pattern. They used to work on more than one locations but decided to only work in the multi-company building.

So I thought, you know what, instead of working there I am going to lock myself up here, because I got a lot less contact with other people here".

Some entrepreneurs admitted that they had the possibility to do some of their activities from home for example. But they were unwilling to do so, because of the favourable circumstances in the building.

"I think that every entrepreneur can decide for their own what is safe and what is not safe. I think that people who made the conclusion that it would not be save here would have cut their losses and would have done things in another way.

4.6 Outlook on the future

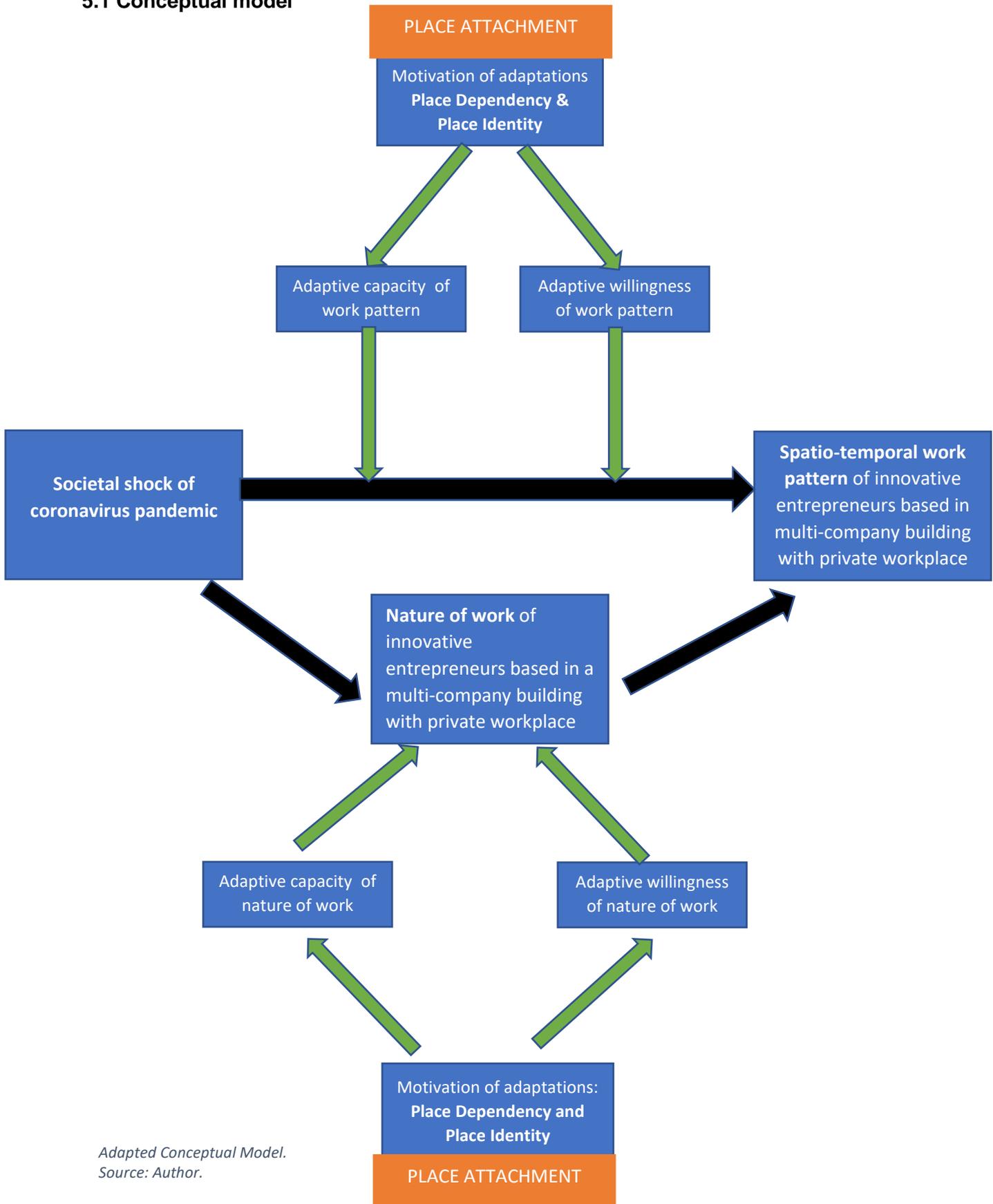
Expectations and attitude towards the future of the nature of work and spatiotemporal work patterns.

Some entrepreneurs expect business as it usually was. Physical contact will make a strong comeback. Online will not become the new normal. Some meetings could be online for efficiency

Other entrepreneurs think differently and experience that doing business online has made a leap forward. Physical contact remains necessary sometimes. Video-calling and professional online appearance is perceived as vital for the business of the future

All entrepreneurs will still prefer to work in the building over working from home. Therefore they do not expect to start working from home a lot more than they do now.

5. Discussion
5.1 Conceptual model



*Adapted Conceptual Model.
 Source: Author.*

The expected causal relationship between the societal shock and the spatio-temporal work pattern turned out to be moderated and mediated differently than expected, according to the results of the case study. The causal relationship seems to be modified by both the adaptive capacity of the work pattern and the adaptive willingness of the work pattern. Moreover, results indicate that place dependency depends on the adaptive capacity of the nature of work. In other words, when innovative entrepreneurs are relatively well able to adapt their nature of work this will lead to a higher place dependency. This high place dependency will lead to a lower adaptive capacity of the work pattern. The lower adaptive capacity will lead to a relatively strong relationship between the societal shock and the spatio-temporal work pattern. Thus, the results indicate that innovative entrepreneurs who are relatively well able to adapt their nature of work show a relatively low adaptive capacity of the work pattern. This would mean that the societal shock would have a relatively weak impact on their spatio-temporal work pattern.

But, results suggests that not only the adaptive capacity but also the adaptive willingness seems to be a moderating variable. When entrepreneurs show a relative high willingness to adapt their nature of work, this suggests that the value of the identity of the place is relatively strong for them. Consequently, this leads to a relatively low willingness to adapt the work pattern. Both the variables adaptive capacity and adaptive willingness of work pattern moderate the causal relationship between societal shock and spatio-temporal work pattern.

Scenario 1

So, the results indicate that a relative high positive place attachment depends on a relatively high adaptive capacity and adaptive willingness of the work pattern. This high place attachment causes a low adaptive capacity of the work pattern and a low adaptive willingness of the work pattern. Both variables will negatively effect the causal relationship between the societal shock and the spatio-temporal work pattern. This means that innovative entrepreneurs who are highly attached to the multi-company building will be relatively unable and unwilling to adapt their spatio-temporal work pattern. There is a relative weak causal relationship between the societal shock of the Covid-19 pandemic and the spatio-temporal work pattern when innovative entrepreneurs have a relatively high attachment to the place. These innovative entrepreneurs are relatively less able and willing to adapt their spatio-temporal work patterns.

Scenario 2

Another scenario that came out of the results was that some innovative entrepreneurs were relatively less able to adapt their nature of work, because they had a relatively low place dependency. This caused the adaptive capacity of the work pattern to be relatively high. This would mean that the Covid-19 measures would cause the work pattern to be adapted. But, some of these entrepreneurs mentioned that even though they were able to adapt their work pattern, e.g. they could work from home, they did not want to adapt their nature of work.

5.2 Discussion of results

This research aimed to enhance the understanding about the motivations of innovative entrepreneurs that did (not) adapt their spatiotemporal work pattern in times of a life changing event, the coronavirus pandemic. The results indicate that innovative entrepreneurs that are based in a multi-company building in this case study do find a physical workplace important for their professionalization. Their nature of work requires a workplace in the multi-company building and they perceive the multi-company building as a safe place to be. In line with the expectations, innovative entrepreneurs who depend on their

workplace are less likely to adapt their spatiotemporal work pattern, since they cannot spatially adapt their activities. Though, results indicate that homeworking/ teleworking/ remote working did not take off during the pandemic. This challenges the expectations that innovative entrepreneurs would adapt to a more spatially and temporarily fragmented work pattern (Alexander et al., 2010). This research provides a new insight into the relationship between location dependency and the general observed trend of a more fragmented multi-locational work pattern.

5.3 Limitations

It is beyond the scope of this study to see what was the most important motivation that entrepreneurs did not adapt their spatiotemporal work pattern. A combination of motivations lead adaptations or no adaptations, but the relation between them and the dominance of them was not researched. Besides, the temporal component of the spatiotemporal work patterns did not show major differences, but from the interviews it remained unclear why innovative entrepreneurs did not adapt the temporal component of their work pattern. Also, the anonymous character of the study made it impossible to analyse the relation between the specific nature of work and the motivations to adapt activities and how these changing activities lead to a changing work pattern.

It can be recommended to explore the relationship between adaptive capacity and willingness to adapt. Furthermore, qualitative studies could shed new light on what type of work pattern is less or more likely to be adapted, which could be based on the classification systems from Burchell et al. (2020) and the system from Ojala and Pyöriä (2017). Also researching other work forms that might not follow the trend of hybrid working could build upon the existing knowledge about spatiotemporal work patterns.

5.4 Policy Recommendations

Policy makers and professionals should take into account that the location dependency of people who have a certain nature of work can be less flexible than white-collar workers, for example. Promoting physical places, instead of closing them, could help innovative entrepreneurs to professionalise entrepreneurship and be more successful. Also, possible freedom of movement measures or advises regarding work should try to spare people that might not be able to work from home. Besides, this case study provides insight in how offices with low occupancy rates and private workplaces could give a glimpse of the office of the future that people would perceive as pleasant and safe.

6. Conclusion

The main questions of this research was: *What are the motivations of innovative entrepreneurs based in a multi-company building to (not) adapt their spatiotemporal work patterns in times of the coronavirus pandemic and the aftermath?*

It can be concluded that innovative entrepreneurs in this case study are attached to their physical workplace. The societal shock of the coronavirus pandemic has not lead to a major shift from the physical workplace to the online workplace. Adapting the nature of work lead to less physical contact with people. So, entrepreneurs proved to be highly capable and willing to adapt their nature of work.

The place dependency and perceived save working environment were the main motivations for entrepreneurs to not adapt their spatiotemporal work pattern. So, the spatiotemporal work pattern did not show major adaptations. Location and time of work proved to be not so adaptable.

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8. Appendix

Appendix A – Informed Consent Form

Beste participant,

Met dit formulier voor geïnformeerde toestemming wordt aangegeven dat u, als participant aan dit onderzoek, voldoende op de hoogte bent gesteld door de onderzoeker.

Graag zou ik u willen verzoeken antwoord te geven op de volgende vragen:

- Heeft u de informatiebrief over mijn onderzoek gelezen?
- Heeft u de gelegenheid gehad om vragen te stellen? Zo ja, zijn deze naar tevredenheid beantwoord?
- Heeft u genoeg tijd gehad om te bedenken of u wilt participeren in dit onderzoek?
- Doet u op vrijwillige basis mee aan dit onderzoek?

Het is belangrijk dat u geïnformeerd bent over het volgende:

- De data die wordt verkregen uit het interview zal worden geanonimiseerd.
- De verkregen data zal alleen voor educatieve doeleinden worden gebruikt en er zal betrouwbaar, eerlijk, verantwoord en respectvol worden omgegaan met de data.
- De verkregen data zal in een beveiligde omgeving worden opgeslagen tot uiterlijk de definitieve inleverdatum van deze scriptie. In dit geval zal dat 12 februari 2021 zijn, om 17:00uur.
- Het interview zal ongeveer 45 minuten in beslag nemen.
- Het interview zal via beeldbellen worden gedaan.
- Als u geen antwoord wilt geven op een bepaalde vraag tijdens het interview kunt u dat aan geven, dan wordt de vraag overgeslagen.
- U kunt te allen tijde besluiten om te stoppen met het interview, ook kunt u na het interview besluiten u uit het onderzoek terug te trekken zonder opgave van reden.

Daarnaast zou ik u willen verzoeken antwoord te geven op de volgende vragen:

- Mag er een video-opname en audio-opname worden gemaakt van het interview, om vervolgens te worden getranscribeerd en geanalyseerd? U heeft het recht om wijzigingen aan te brengen in het transcript.

JA, BEIDEN JA, ALLEEN AUDIO NEE, GEEN VAN BEIDEN

- Wilt u het transcript van het interview en de eindversie van het onderzoek ontvangen?

JA, BEIDEN JA, ALLEEN TRANSCRIPT JA, ALLEEN EINDVERSIE NEE, GEEN VAN BEIDEN

Afsluitend verzoek ik u om antwoord te geven op de volgende vraag:

- Gaat u akkoord met de participatie in dit interview?

Datum:

Ik bevestig dat ik de participant heb geïnformeerd over het onderzoek. Ik zal de participant op de hoogte brengen als er zaken zijn die de participatie in dit onderzoek beïnvloeden.

Datum:

APPENDIX B – INFORMATION LETTER (Dutch)

Beste ondernemer,

U bent van harte uitgenodigd om mee te doen aan mijn onderzoek over veranderende werkpatronen van mensen ten tijde van de coronapandemie.

Dit onderzoek is ten behoeve van mijn bachelorscriptie van de studie Spatial Planning & Design (voorheen Technische Planologie) aan de faculteit Ruimtelijke Wetenschappen van de Rijksuniversiteit Groningen.

Voor deze scriptie doe ik, onder begeleiding, een praktijkonderzoek naar de percepties en motivaties van locatieafhankelijke ondernemers en werknemers om hun manier van werken te veranderen door de invloed van de coronapandemie.

Tijdens een interview zal aan u worden gevraagd om uw gemiddelde werkweek, werkdag en werkdagdeel te schetsen, zowel vóór als tijdens de coronapandemie. Daarna zal ik u vragen hoe en waarom er veranderingen hebben plaatsgevonden in uw werkpatronen in de loop der tijd. Vanuit maatschappelijk en academisch oogpunt is het immers interessant om beter te begrijpen hoe mensen met een 'life-changing event' omgaan, maar ook hoe ze het ervaren.

Naast u, zal ik dus meerdere mensen vragen om te participeren in mijn onderzoek. Deze mensen werken in hetzelfde gebouw en zijn hier al gevestigd voor de uitbraak van de coronapandemie.

De verkregen data zal worden getranscribeerd en geanalyseerd om vervolgens antwoord te kunnen geven op de vraag:

“What are the perceptions and motivations of location dependent entrepreneurs and employees to adapt their spatiotemporal work patterns in times of the coronavirus pandemic?”

Om ervoor te zorgen dat het onderzoek op een ethisch verantwoorde manier verloopt en om er zeker van te zijn dat u daadwerkelijk graag mee wilt doen met mijn onderzoek zal ik voorafgaand aan het interview mondeling met u het formulier voor geïnformeerde toestemming doornemen.

Bijsluitend kunt u alvast dit formulier vinden. U hoeft dus nog niets in te vullen.

Mocht u nog vragen hebben naar aanleiding van deze brief, schroom dan niet om contact met mij op te nemen op een van de volgende manieren:

E-mail: k.s.brinkman@student.rug.nl

Telefoon: 0628388836

Alvast hartelijk dank voor uw tijd en energie.

Met vriendelijke groet,

Kjeld Brinkman

APPENDIX C – INTERVIEW GUIDE (translation from Dutch to English)

BEFORE

CALL ON SKYPE

WELCOME

TEST AUDIO RECORDING

START RECORDING

INTRODUCE MYSELF

GOAL OF THE RESEARCH

ORAL INFORMED CONSENT

STRUCTURE OF INTERVIEW

QUESTIONS BEFOREHAND?

A. INTRODUCTION

- 1) Could you please, apart for the business section, introduce yourself?

B. DESCRIPTION OF THE COMPANY

- 2) How are you associated with the company?
- 3) Are you an entrepreneur or do you work together with others in your company?
- 4) Could you describe what kind of company it is?
- 5) Which activities are performed in the company?
- 6) When did you start working in this building?
- 7) Why did you decide to work in this building?
 - 7a. On which way do you need space for your company?
 - 7b. On which way do you need services for your company?
 - 7c. How is the location of the company of importance?

C. WORK PATTERNS BEFORE CORONAVIRUS PANDEMIC

NOW WE ARE GOING TO MAP OUT HOW YOUR AVERAGE WORK PATTERNS LOOKED LIKE BEFORE THE CORONAVIRUS PANDEMIC.

8. Could you please describe how your average working week looked like? What was normal for you and what was not normal for you?
9. And how did your average working day looked like? What was normal for you and what was not normal for you?
10. Why did you work in this way?
11. How were your experiences with this way of working?
12. What were the benefits? And what were the disadvantages?

SUPPORTING QUESTIONS

- a. On which locations did you work in this building? Could it change? Example?
- b. When did you work independently and when did you work with other people? Example?
- c. Who visited you? How often and for how long? Where? Example?
- d. On which locations in this building did you spend time? Example?
- e. When did you leave this building for activities? How often and for how long? Example?

- f. How would you, then, describe the physical contact with other people in the building?
Example?

D. WORK PATTERNS DURING THE CORONAVIRUS PANDEMIC

WE JUST MAPPED OUT YOUR WORK PATTERNS BEFORE THE CORONAVIRUS PANDEMIC AND HOW YOUR EXPERIENCES WERE WITH THESE PATTERNS.

NOW WE ARE GOING TO TALK ABOUT:

- ➔ WHICH CHANGES YOU MADE IN YOUR WORK PATTERNS AND
- ➔ HOW AND WHY YOU MADE THESE CHANGES AND
- ➔ HOW YOU EXPERIENCE(D) THESE CHANGE

13) Could you please describe which work-related coronavirus measures the government has been taking during the course of the coronavirus pandemic?

14) On which way did these coronavirus measures led to changing work patterns over time? Examples of changes during the course of time? Drastic or mild?

15) Which work patterns did not change during the course of time? Examples of reversed changes to your work patterns?

16) How did you change you work patterns over the course of time?

17) Why did you change your work patterns or why did you not change them over the course of time?

SUPPORTING QUESTIONS

- a. Did the motivations of housing the company in this building effect your work pattern?
(connection between motivations of housing and motivation of (not)changing work pattern)
- b. On which way did the changes have to do with the nature of your working activities? And maybe also with the changing nature of your working activities?
- c. How did the changes have to do with the environment you are working in?
- d. And how did it have to do with the people you work together with?
- e. How did it have to do with the contact you have with other people in this building?
- f. And how did it have to do with people that came to visit you or who you visited?
- g. How did it have to do with the services that you need to run your business?
- h. On which way does it have to do with other people that work in this building?
- i. On which way does it have to do with a changing situation at home?

18) How did you experience the changes to you work patterns? What are the benefits and what are the disadvantages? Examples?

19) Which changes do you think will stay after the coronavirus pandemic has ended? What would be the benefits and what would be the disadvantages? Examples!

20) How do you think your work patterns will change in the future?

21) On which way do you think that other entrepreneurs changed their work patterns?

22) How do you think they changed their work patterns?

23) And why do you think they changed their work patterns?

E. CLOSING

24) Do you have any remarks or questions regarding this interview?

25) Are there any important issues that were not discussed yet and that you would like to bring up and that may be relevant for my research?

THANK YOU

Point out to participant that he or she has the right to make changes to the transcript.

STOP RECORDING