Reflection

The reflection can be divided into a theoretical reflection, a reflection on the quality of the methods used, a reflection on the quality of the results of the research, and a personal reflection. The four types of reflection are discussed per paragraph.

Theoretical reflection

Some theories selected during the literature review were used as a basis for the further research. As such, the research was narrowed down to the re-imagined urban areas model based on the theory of Katz & Wagner (2014). Strijp-S and M4H are both considered re-imagined urban areas according to this theory. However, after having studied both cases there prove to be some significant differences between the areas that influence the effectiveness of strategies and means that can be used by area managers. It can therefore be concluded that in this respect the division of innovation districts into three types is too general.

In order to address potential strategies and means that can be used for the attraction and retention of users, a sub-division of areas has to be made based on the history, the location, and the demographics of the area.

About the **history** of re-imagined urban areas Katz & Wagner (2014) state that the areas are '*former industrial or waterfront areas*'. To make a more specific sub-division, history should concern the specific former and current function and owners (single or multiple) of the area, both influencing the time-span in which the area becomes available for redevelopment. The time-span has large consequences for the planning of the redevelopment, and for the effectiveness of strategies and means as well.

Therefore, a division should be made between areas becoming completely available for (re)development in a **short time-span** (less than 5 years), **medium time span** (5 to 10 years), and a **long time-span** (more than 10 years). Herein the border is set at 10 years as waves of innovation usually take about 10 to 15 years (Interviewee 8, 2017). When areas become available within a long time-span, the development will be more complicated.

About the **location** of re-imagined urban areas Katz & Wagner (2014) state that the areas are '*former industrial or waterfront areas undergoing physical and economic transformation*'. To make a more specific sub-division of area types, location should also include the size of the city (amount of inhabitants and surface), and the distance between the area and the city centre. The amount of inhabitants and the distance between the area and the city centre largely influence the degree of natural passage to the area. Therefore, a division should be made between areas located at **walking distance, cycling distance**, or **driving distance** from the city centre.

About the **demographics** of re-imagined urban areas Katz & Wagner (2014) state that the areas are located in '*high rent cities*'. To make a more specific division, demographics should specifically include the demographics of the target groups and user groups of the area itself, and the demographics of the users of surrounding neighbourhoods. The demographics of the users of surrounding neighbourhoods have significant influence on the importance of social inclusion. The bigger the difference between the users of the area itself and the users of surrounding areas, the more important social inclusion becomes. Therefore, a division should be made between areas with surrounding neighbourhoods housing **vulnerable groups**, and areas with surrounding neighbourhoods housing **middle- to high-income groups.**

With the help of table 40, innovation districts (in development) can be classified as a sub-type of one of the three models. First determine the time-span in which the whole area becomes available for development, thereafter determine the distance to the city centre, and lastly determine the demographics of surrounding areas. Following these three steps, 18 specific sub-types of re-imagined urban areas can be distinguished.

1	2	3
Time-span in which the complete area becomes available for development	Distance to city centre	Demographics surrounding areas
Short (less than 5 years) Medium (5 to 10 years) Long (more than 10 years)	Walking distance (under 1,5 km) Cycling distance (1,5-5 km) Riding distance (over 5 km)	Vulnerable groups Middle- or higher income groups

Table 40. Step-by-step plan to determine the sub-type of innovation districts.

Reflection on the research methods

This research was designed as a single case study research, which has been a good choice with regards to the time available for the research. If the focus had been on multiple cases, the level of detail of the case studies would have been lower.

Strijp-S proved to be a suitable case for the case study, as it is the Dutch UID in the most advanced developed stage so far. Therefore, a large variety of user types on which the research could focus were present in the area. It was also valuable that as a result of the advanced development stage, the first people have already moved within the area, and a new flow of people has settled in the area. Therefore, the experiences of these people could be addressed as well. In line, also the area managers of Strijp-S could already address things they would have done differently and some lessons learned. These could be effectively used in writing the advice for the development of M4H as an innovation district.

The methods used in this research are literature review, a survey, a focus group, micro cases, and interviews. Literature review was used to explain important concepts and define variables being as the basis for empirical research. The survey, focus group and micro cases were used to gain insight in user types, -preferences and -experiences at Strijp-S. By means of interviews insight could be gained in the strategies and means used by area managers at Strijp-S and M4H.

Some theories selected during the **literature review** were used as a basis for the further research. As such, the research was narrowed down to the re-imagined urban areas model based on the theory of Katz & Wagner (2014). This model however proved to be too general, therefore a suggestion for adapting the model making it more specific by including a sub-division was made in the previous paragraph.

The survey, the focus group and the micro cases proved to be effective methods to gain insight in the user types, -preferences and -experiences at Strijp-S. The combination of quantitative and qualitative data gained by means of the **survey** was effective to easily map specific factors of attraction, retention, and improvement, and get explanation about several preferences or experiences as well.

The **focus group** and the **micro cases** turned out to be valuable from both an academic and personal point of view. From an academic point of view, the focus group helped to verify the results of the survey, and to get more extensive explanation about the preferences and experiences. In line, the micro cases were valuable for better understanding the differences in experiences and preferences of entrepreneurs at Strijp-S. From a personal point of view, it was valuable to personally get in touch with the users of Strijp-S, and gain more understanding of the motivation behind specific experiences and preferences.

The **interviews** with area managers of Strijp-S were valuable from both academic as personal point of view as well. From an academic point view, it was interesting to gain insight in the different visions and approaches of the different parties involved. From a personal viewpoint it was nice to get some more background information, and experience the different personal opinions of the area managers as well.

At M4H, only the area manager of M4H from Stadshavens Rotterdam and a researcher focussing on the case of M4H were interviewed. Hence, most information was therefore based on these two interviews and some existing vision documents and analyses. It would however have been valuable if more interviews with area managers working at different parties were conducted, so more insight could have been gained in the different visions and approached of these parties.

With regards to the advice for M4H, the advice would have been better if the same kind of (empirical) research methods were used for the case of M4H. Hence, more specific focus points could have been distinguished, especially for the attraction and retention of specific user groups. Conducting empirical research at M4H would however have been more difficult because of the limited amount of users currently present in the area.

The research methods have thus proven to be effective for an in-depth single case study, given the degree of detail of the research. It would be valuable to compare different cases using these research methods, but it will take much effort and time to achieve the same level of detail in all cases.

Reflection on the research results

The results of the research conducted at Strijp-S are based on the review of existing documents, a survey, a focus group and micro cases conducted amongst users, and interviews conducted with area managers. The present user groups that were distinguished based on the survey are based on the composition of the respondents. When taking into account all users of Strijp-S, the ratio might be slightly different and some more user groups might be present in the area. To improve the reliability of the conclusions, more surveys, focus groups, micro cases and interviews should be conducted.

As user preferences and experiences, and strategies and means used by area managers are mostly case specific, the conclusions of the research conducted at Strijp-S are only applicable under certain conditions. These conditions are influenced by the history, location, and demographics of the area. Regarding history, Strijp-S is a quite advantageous case for redevelopment. The area was owned by only one party, and thus became available for development at once when this party sold the area. This made the (start of the) development relatively easy, as usually areas become available for redevelopment in phases.

Since the conclusions are based on a single case study in combination with literature, the conclusions cannot be generalised for all (Dutch) innovation districts. Only conclusions for the user types present in this case, and their factors of attraction and retention, could be drawn. Therefore the research does not present a complete overview of factors of attraction and retention for all possible user groups.

However, some target groups and user groups are presumably applicable to most Dutch innovation districts. These for example include one-man companies, start-ups and small companies active in synthetic, symbolic or analytical sectors, and facilitators or incubators. Besides, the factors of attraction and retention for specific user types are presumably not completely different for different cases. It is i.e. likely that one-man companies will in any case value the presence of other companies, as networking is crucial for their business.

Regarding the advice for the development of M4H as an innovation district, the challenges that were used as the basis for the advice are based on a limited amount of documents and interviews. The challenges included in the advice are thus not the only things that should be dealt with to turn M4H into a successful innovation district.

The present user groups and the ratio in which these groups are present are based on existing documents and two interviews as well, and thus not on empirical research conducted amongst users. To make the advice more specific and reliable, (more) empirical research should thus be conducted at M4H.

Personal reflection

In this research I tried to identify success factors and factors of improvements in the redevelopment of Strijp-S. In this reflection I try to identify the success factors and factors of improvement of my own research.

In my opinion it can be seen as a success factor that insight in the user side was not only gained by means of theory and a survey, but as well by speaking to people in person. This contributed to better understanding users' experiences, and a more detailed analysis.

The analysis was done for very specific user groups, which is new in theory about UIDs. The research hence contributes to literature about UIDs, which proves to be limited. This can be seen as a success factor as well.

A third success factor is that the outcomes of the analysis of Strijp-S can be useful in the further development of the area. By knowing what users see as points of improvement, area managers are able to respond to this and can hence improve user satisfaction.

Of course, also factors of improvement can be identified. The first is that it took a while before I decided which cases would be used and what would be the relation between the cases. The empirical research at Strijp-S started while it was not entirely clear how the results would be projected to another case. When this would have been clear earlier, the empirical research at Strijp-S could have been more designed for projecting it on M4H.

Another point of improvement is that the advice is based on user types present at Strijp-S, so not for all user groups of M4H points of attention could be defined. Furthermore, the validity of the lessons learned for some user groups is higher than for others, as some groups at Strijp-S were represented by only few respondents.

Lastly, the interviews were conducted within a short time, and as a result they were analysed after they were all conducted. It would have been better to have started the analysis of the first interviews earlier already, so the preliminary results could have been used in later interviews. This would have made some interviews more informative.

At the start of the graduation period I was a bit afraid that the project would turn from a challenge into a struggle. However, I think I can state that graduation has overall been better than expected. I am still very thrilled with the choice of subject, as the development of UIDs seems to be very topical and alive, and I always get enthusiastic reactions when explaining the project to others.