Reflection

This chapter will elaborate more on the results of the research and on the design and graduation phase that comes with it. Three main subjects will be discussed here, namely process, planning and product. The aim of this chapter is to reflect on these three subjects in order to find out if the used approached has worked. In order to do so the "how" and "why" of certain decision will be explained in more detail. The reflection will point out how and why the approach did or did not work and what the valuable lessons for future processes are.

Research context

During my years as a student at the Faculty of Architecture at Delft University of Technology (TU Delft), I became more and more interested in the world behind real estate (management) and finance. Working with figures, coping with financial issues and linking this to real estate has become my point of interest. As I continued my way throughout the Master course Corporate Real Estate Management, the issue about finance and real estate has grown rapidly. The main reason for this issue was the financial crisis that saw its light early in 2007. What started as small financial problems, quickly resulted in an economic crisis throughout several disciplines, including real estate management.

As my final year at the Faculty of Architecture approached, thus the start of my graduation process, a particular real estate problem caught my attention. The problem that was described here was the problem of an insufficient supply of student housing in the Netherlands. The demand for student housing is only being increased, as government has taken even more measures that affects students (Spiering 2013). Delft, amongst others, was one of the cities in which this problem occurred. Being a student myself, I understood the current problem and the necessity to provide sufficient student housing for both national and international students. Having sufficient student housing within close range to the university, is one of the key factors to make higher education institutions attractive as well as the city they are located in.

At the same time, due to governmental cuts TU Delft started to show signs of financial and real estate problems (i.e. vacant real estate) itself, which also caught my attention. Because students are closely related to their university, it is important for universities to keep their users satisfied. This brought me to the idea to further analyse the problem and to explore the possibility of linking these two issues together. Thus, my subject for this research was established in one way or another. My intention was to conduct a research that could be of benefit to several parties, including students and universities.

Basically this meant that I had to implement different theories on real estate management, with a main focus on real estate of universities, and vacancy of real estate (transformation). Luckily for me, at that time a study on managing the university campus was just finished. Based on the content of this study and other literature references, it became clear to me that the subject on managing

(vacant) university real estate has been floating around, but it didn't receive quite as much attention as for instance managing corporate real estate in general. Because the subject on managing (vacant) university real estate was somewhat new, I wasn't entirely sure at first whether I have chosen the proper subject for my master thesis. It became questionable for me whether I could find sufficient information on the topics I want to elaborate on.

On the other hand, I saw my Master thesis as an opportunity to further elaborate on this interesting topic and to provide possibly additional information to this subject. Thus, using this subject had both advantages and disadvantages.

Research process

To this point it was clear for me that I had to make use of different theories and incorporate several topics in order to develop a research design for my research paper. At first, I wanted to incorporate as many topics as possible both on financial and real estate management level. It was my intention to develop a research paper that could be of use for a large audience, while at the same time maintaining a certain focus.

The subject and topics that I have chosen required me to use different approaches for this research. In order to meet my intentions I had to make use of existing theory. As I wanted to help real estate managers with their decision-making process, I had to make use of different tools and frameworks on one hand. On the other hand, because the chosen subject was a current problem and my intentions were to provide relevant results, it was necessary for me to incorporate a case study and apply relevant theories.

Looking back at the research process, I can say that it was not an easy process to and not exactly a proper approach for dealing with this subject. Because I wanted to incorporate so many topics, I couldn't find a right focus on what the main problem for my thesis would be. Basically I kept going from one subject to another, back to the first subject, and so on. This resulted in a somewhat chaotic research process, which at the beginning did not have quite the meaning I intended it to have. Quickly, this problem resulted in a long and tiring research process.

Because I wanted to keep the subject, I felt it was necessary to rethink from the start and decide what the most important topics should be for my thesis in order to address the right problem. Going back and forth several times and double-checking whether certain topics were correct, I finally had a grip on the whole process. By thinking in smaller steps and by working my way from the intended end product to the main research question, I was able to develop a research process and research paper that met my requirements.

This research has showed me that even though at first it seems that there wouldn't be sufficient information to cover the subject you intend to elaborate on, it should not get in your way of addressing that particular subject. It is important to realize what the main topic(s) are for the research you are

conducting and what exactly you want to achieve with the research. I have learned that by doing so from the beginning, it saves you a lot of precious time, which you need later on in your research process.

I would advise fellow students that have similar problems, to try and work their way from end product towards the main research question. By doing so you can develop a research design in several steps, which you can use to conduct and write your research paper more easily. In addition, it can help to stay organized and develop an organized paper.

Results

Working with a case study often requires obtaining case specific data. In my case I had to obtain a variety of information on topics such as (building) costs and building characteristics. While searching for the proper data I quickly found out that in order for me to get the data required I had to approach organizations and ask for the data needed. Because I focused on TU Delft, this meant that I had to contact Facilitair Management & Vastgoed (FMVG), which is responsible for the real estate management of the university. Because such information does not come for free, I proposed to give the results of my research paper in return. This seemed like a plausible idea for me, however the practice turned out to be the opposite. I received almost no cooperation from FMVG, unless I could provide a complete thesis with results.

This left me with no real data on building characteristics or ways of how the real estate is being managed at the moment. Because of a lack of 'correct' data, I found myself exploring, analyzing and measuring different aspects of the case in order to develop some data that could be of use. Pictures were taken and map layouts of the city were measured to gain a global overview of the building characteristics. However, in a way I could understand why FMVG was not prepared to cooperate at this stage. First of all, the organization itself was most likely occupied with its own main tasks, which means having less spare time for activities outside their operation field. Secondly, the information needed for my research is valuable, very specific and also sensitive to a certain extent. Therefore, I can imagine that organizations are usually careful when providing this information to external parties, including me. As last, because the structure and the end result of my thesis was not developed to its full extent yet, it could be that FMVG did not see the added value of my thesis at that point and therefore decided not to give any valuable information away.

Reflecting on the reliability of the other data used in this research paper it is questionable whether the data found is indeed reliable and accurate, and if so to what extent. It was often the case that I found myself searching for approximate figures or different ratios in order to be able to draw any conclusions at all. To give an example, information on ground costs is a type of data that should be monitored periodically in order to reflect today's figures. As this is quite time consuming, I can imagine that organizations do not have the time to do this and thus make assumptions based on current trends. This results in data that is questionable for its reliability on how well it represents today's situation. Another example is that data on building costs is different for each building

project, especially for transformation projects. The costs mainly depend on the level of adjustments that have to be made, which results in having different figures for each project. Thus, finding data that is applicable to each transformation project is difficult as well. Therefore, the information and data found should always be analyzed thoroughly in order to say whether it is useful or not and to what extent, in order to generate credible results or any results at all.

One discipline of corporate real estate management and real estate managers is to provide a real estate strategy that can be used to cope with the real estate problem. The results of this research are intended to help real estate managers in their decision-making process, which means helping them developing a real estate strategy. Therefore I find it important to say again that the results presented in this research only serve as rough estimates and as examples of how real estate problems can be approached. In addition, the results show an exploration of transforming vacant university real estate to student housing, which is only a small part of the possibilities present. Thus, the results should not be seen as an actual real estate strategy.

Due to the fact that the results are rough estimates, it is important to keep in mind that there are additional, more detailed ways of conducting the same calculations. As these ways are often more time consuming and require more detailed input data, they haven't been used in this research. In case someone else or I decide to continue with this research in more detail, it is advisable to adjust the developed framework or use extended tools and more accurate data to provide more reliable and credible results.

Reflecting back on the developed framework for campus managers there are several things that can be said to further improve the framework. First of all it should be said that the developed framework should be seen as a solid starting point for developing a framework for campus managers that contains the most important aspects for each stakeholder. At this point, the framework is based on several tools that are applicable to vacant real estate in general or vacant office real estate. Because campus REM is different from corporate REM, the criteria used in these tools cannot be directly applied to campus management. The added value of campus real estate is measured by means of specific KPIs, which indicates the need for specific stakeholder needs and criteria. Therefore, this is one of the first aspects that should to be taken into consideration when developing and adjusting this framework further. It would be advisable to create a small workshop where the involved stakeholders come together and discuss the most important criteria to assess the added value of real estate and transformation projects.

Secondly, at this stage it cannot be said whether campus managers find the developed framework useful or not. In this thesis, the developed framework has only been applied to TU Delft and therefore has only been tested once. In addition, all steps of the framework have been elaborated without having any feedback from the stakeholders themselves. This problem has already been addressed earlier. Because no feedback was given yet on the framework and the

way in which the framework works, the framework has not been extensively adjusted to meet specific stakeholder needs. Therefore, in order to further improve the framework, multiple tests should be conducted for different options as well as different universities. Furthermore, feedback of the four stakeholders would be necessary as well in order to make the framework fully applicable to campus management. This can be achieved by either incorporating this part in the same workshop where the criteria are being discussed or creating another small workshop. Another solution could be to speak with each stakeholder individually, gather the feedback and apply the feedback to the framework.

As last, the stakeholders themselves should not necessarily conduct all parts of the framework. I can imagine that some stakeholders do not have sufficient time to develop a design proposal from scratch or to make all calculations themselves. In many cases, stakeholders can pay a small amount to an external organization, which does this job for them. However, whether these steps are indeed time consuming and whether stakeholders do not want to conduct these steps themselves cannot be said yet. Like with the other steps, feedback of the individual stakeholders is necessary to draw these conclusions.