## Reflection

During my study at TU Delft, I was exposed to many and different interesting disciplines, but I have noticed that my passion always goes to finance, real estate investment and portfolio management, and this was through different courses like: Asset Management, Finance & Economics, Real estate, Land Valuation, etc. This passion and interest were the main drivers to chose my thesis topic about real estate investment. Additionally, another interest into innovation in the data and IOT era was increasing day after day, especially after attending the BIG Data Expo in Utrecht (Sep., 2017). Accordingly, I tried to bridge both hot topics during my research which I enjoyed and was always eager to gain more knowledge and do more analysis in both areas.

This part contains my personal reflection about the graduation project in terms of process, planning and outcome for my mentors and following students who are willing to conduct their research within those areas.

At the beginning of my research, it was clear which area I wanted to research but the exact scope and topic was not that clear. Thus, I started to read the most famous books, articles, and blogs about the topic, because in the MBE master track, we did not go into depth in those topics, however, many courses like finance, economy and management were extremely helpful for making me understanding the financial dilemma of real estate and being able to absorb extra knowledge in that domain. Additionally, having Philip Koppels at the early stages as an expert mentor in the real estate investment and the academic research field was a great potential, as he proposed as well some books, previous work and theses, which gave me more insights and helped me to figure out my main research topic and related subtopics.

The held feedback sessions between me and my mentors were a good guidance for me through the whole process in terms of keeping me on track, motivated and excited to go further and further. The most interesting thing that all the feedback sessions were more like discussion sessions and my both mentors were open enough to listen and discuss my logic and argument behind each topic or phase. The combination between two different perspectives and backgrounds broadened my vision and the way of my analysis from different insights, which I hardly recommend for other researchers.

The selected methods for my research, interviews with experts and professionals, surveys, presentations, expos and the Delphi Expert Panel, were really suitable for such an explorative study. At the beginning, I thought that all my sample would be investors and advisors but lately I realized the importance of involving data companies in real estate and some companies who represent the end-user in order to be able to connect and compare supply perspective to demand perspective, as shown from the results and future trends that there is a new shift to the soft and social aspects in the real estate world.

The main challenge of the whole process was finding the right people to interview and the right materials to review. Arranging and analysing all the conducted interviews in this limited time was big challenge. Another difficulty was finding the right analytical methods to translate all these semi-structured interviews which mainly contains open questions and answers to tangible answers and conclusions that could help in improving the real estate investment domain.

Joining Royal HaskoningDHV as a graduation company was really helpful in connecting me to different cases and contacts from different companies to interview, especially that they are really interested in innovation and smart solutions in different domains in real estate. Another limitation was of course the limited time of the research. Although this research was intensive and I spent a lot of time and effort in it, I was always passionate to explore more and more. My next challenge is how to elaborate and visualize my results in a smart and attractive manner based on strong arguments, data and analysis.

Through the whole process, I gained a lot of extremely valuable information and knowledge in both areas real estate investment and big data & innovation, first through the literature review and later through the interviews, cases and reports, which helped me to draw concrete conclusions for improving the real estate investment process in the Dutch office market. The results don't only include current situations but also the future expectations within the next 10 years. To sum up, exposing to such a process answered a lot of personal questions in both area and filled up different gaps which I consider as a good preparation for my professional future as well.

Finally, this research topic is currently hot phenomenon and many companies already started working on improving the whole decision process and to be transformed into data-driven organization. Accordingly, I would recommend further academic studies and researches in order to cope with the rapid changing and complex world. Personally, I hope to continue working on the research concept within my coming professional life because I do believe that this topic is extremely important and could change the way we think in real estate in general and real estate investment in specific.