

Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



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Studio		
Name / Theme	Management in the Built Environment (MBE) Real Estate Management (REM)	
Main mentor	Prof. dr. ir. A.C. (Alexandra) den Heijer	Management in the Built Environment (MBE)
Second mentor	Prof. dr. A.R. (Ana) Pereira Roders	Architectural Engineering and Technology (AET)
Argumentation of choice of the studio	Due to secularization, many Dutch churches are becoming vacant. The process on how to deal with this, is in my opinion in need of a complementing proposition. The DAS-frame and the four CREM perspectives are very useful in managing this type of real estate. In managing real estate, in this case churches, an issue to tackle is support the "middle man" with new information and tools in the decision making process, as a multidisciplinary field. Therefore, REM was chosen as studio.	

Graduation project	
Title of the graduation project	Managing religious real estate <i>Designing an accommodation strategy for Dutch churches</i>
Goal	
Location:	The Netherlands
The posed problem,	<p>Due to secularization, churches are becoming vacant in The Netherlands. This leads to certain initiatives that deal with this issue, for instance the <i>Church Vision</i>. However, the decision making process is not effective enough yet, which can lead to failure of projects and empty churches.</p> <p>In managing real estate, all stakeholders perspectives need to be taken into account in every step of the process. The problem is, in many cases this does not happen properly. The only way to come to the optimal solution, is to align organizational, physical, financial and functional goals (Den Heijer, 2011).</p> <p>According to Den Heijer in her inaugural speech (2019), decision makers about real estate deserve more respect for their complex task, more empathy from the other stakeholders and more support.</p> <p>In short, the posed problem is that there is not enough information available yet for and about the decision maker, the "middle man", which is graphically represented in figure 1.</p>



Fig.1: The decision maker stuck in the complexity of the demands of all stakeholders (Den Heijer, 2019).

research question and sub-questions

Research question:

'What management steps are required to make substantiated decisions on how to consider the future of churches in a certain geographical area?'

Sub-questions:

1. 'What management information is required , what management information is available and what is the demand for additional information for assessing the current situation?'
2. 'What management information is required, what management information is available and what is the demand for additional information for exploring the changing context and demand?'
3. What management information is required, what management information is available and what is the demand for additional information for generating future models for reusing churches?'
4. what management information is required, what management information is available and what is the demand for additional information for defining projects to transform the current supply.'

design assignment in which these result.

The goal of this thesis aligns with Den Heijers' mission in her inaugural speech: support the decision maker.

The framework for this research will be de DAS-frame. DAS is the acronym for Designing an Accommodation Strategy. It consists of 4 steps:

1. Assessing the current situation
2. Exploring changing demand
3. Generating future models
4. Defining projects to transform

The four steps are aligned with the four sub-questions. In every step, the four CREM perspectives (physical, functional, financial and organisational) are interwoven.

In short, step 1 is about the current building stock (amount of churches, building period, denominations etc.). Step 2 is about the changing context (trends etc.). Step 3 is about assessing projects, learn from them and creating a database. Step 4 is about gathering all useful tools and available information for the decision maker.

By following these 4 steps, and conducting this research, the available information will be mapped and suggestions for supporting the decision maker will be provided.

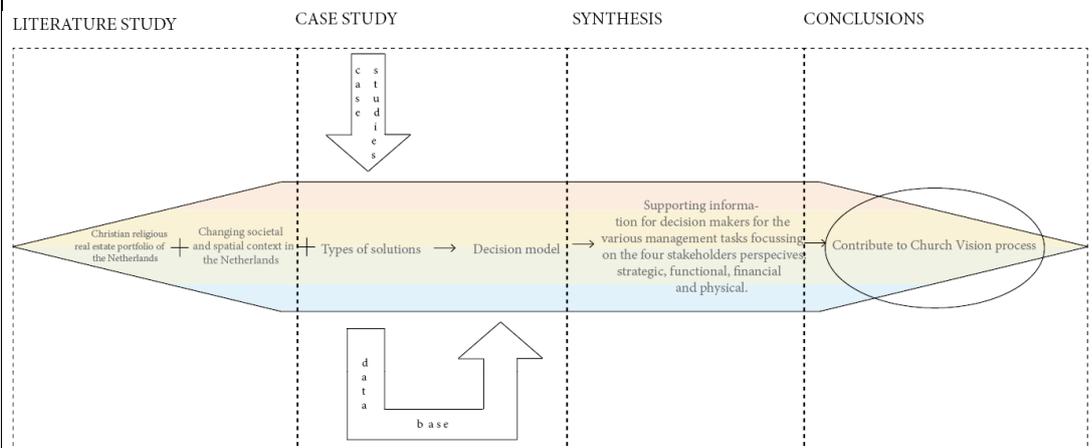


Fig. 2: Conceptual model. The colors represent the four stakeholder perspectives guiding the research (own ill.)

Process

Method description & literature and general practical preference

Type of study

This study will include literature study and case studies combined with several interviews. The type of research will be qualitative, since there has not been conducted much research yet on this specific topic (Bryman, 2015). Qualitative research intends to generate knowledge grounded in human experiences (Nowell et al., 2017). The field of research is relatively new, since real estate management theories will be applied to reusing Dutch empty churches, and by this improving the Church Vision process. This research will be explorative, since it intends to improve the final research design for the strategy for reusing churches.

Literature study

First, a literature study will be conducted to see what current literature already is available concerning this field. Such a literature review shows the credibility as an expert of the chosen research area (Bryman, 2015). For this study Google Scholar, books of the library of TU Delft and Architecture and the TU Delft Repository were consulted, as well as websites of certain heritage organisations in order to obtain information for this research.

The framework used for the literature study will be the DAS-frame and the CREM-perspectives, and a combination of both. The first two steps of the DAS-frame are based on literature studies.

Case studies

Case study methodology is a form of qualitative research. This kind of study is useful when researching organizational and managerial processes (Yin, 2013). For this research, already reused churches will be studied in order to find out what went positive or negative in this process and why, and what can be learned from this. This will be used to compile a database in step 3 that can be used in step 4.

This research will consist of 7 interviews:

1. Two process managers of the Church Vision, since he or she has to deal with all CREM perspectives combined;
2. One stakeholder per CREM perspective, to dive into the interests of this perspective;
3. One campus manager, to make a comparison with another real estate sector.

Sampling

The sampling method in these cases will be purposeful; the interviewees should be able to provide answers on certain topics. Purposeful sampling is used for the identification and selection of an information-rich case. The aim is to find the most effective use of a limited resource (Patton, 2002). Individuals will be selected and identified because of their knowledge on the certain topic (Cresswell & Plano Clark, 2011). Of course, the willingness to participate in such an interview is of great importance, as well as the ability to communicate experiences and opinions (Bernard, 2002; Spradley, 1979). An exclusion criterium in this research is living abroad, since it is focussed on Dutch Christian churches.

Data collection & analysis

The DAS-frame in combination with the CREM-perspectives will be used as a framework for this research. To ensure more churches of a future, a new accommodation strategy has to be designed in order to effectively manage Dutch churches. In her book, Den Heijer (2011) designed such a strategy for managing the university campus. By using the DAS-Frame (fig. 3) and the four CREM-perspectives (fig. 4) a step-by-step plan is developed. The aim is to support real estate decisions. The framework of the combination of these two can be found in fig. 5.

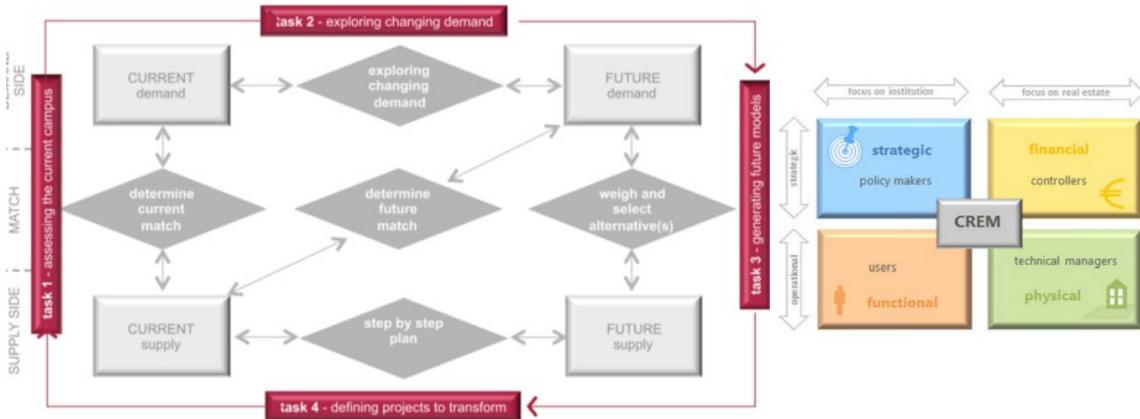


Fig. 3&4: In small the DAS-frame and the four CREM-perspectives (Den Heijer, 2011, p. xiv-xv).

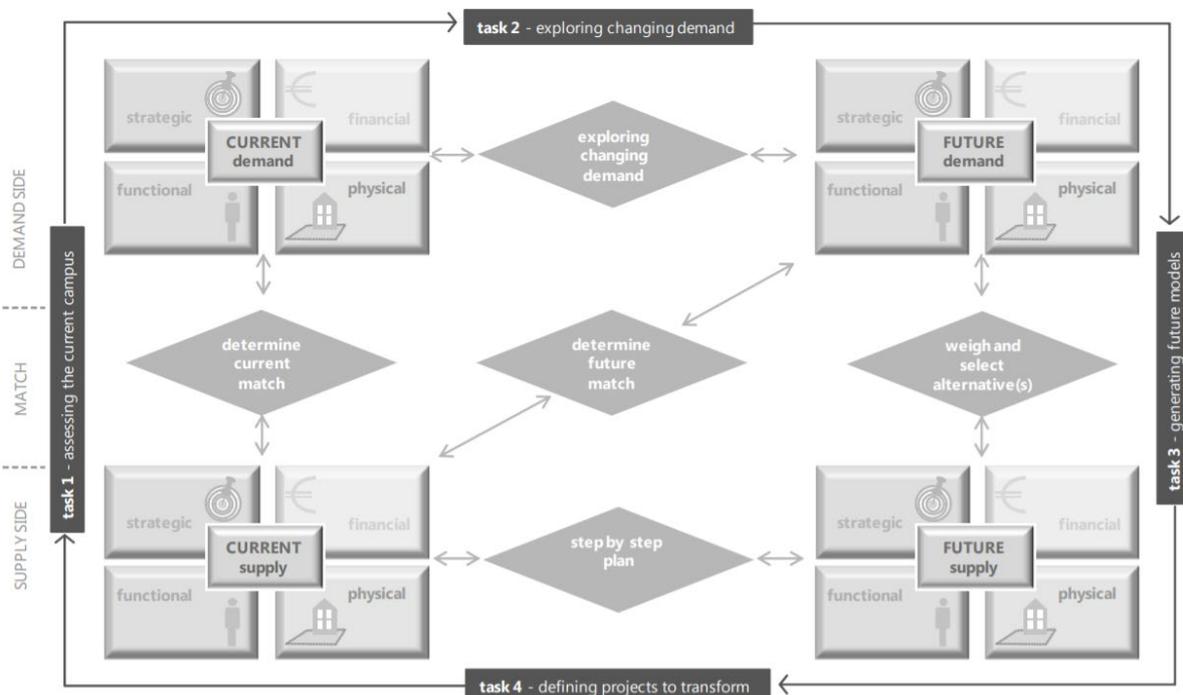
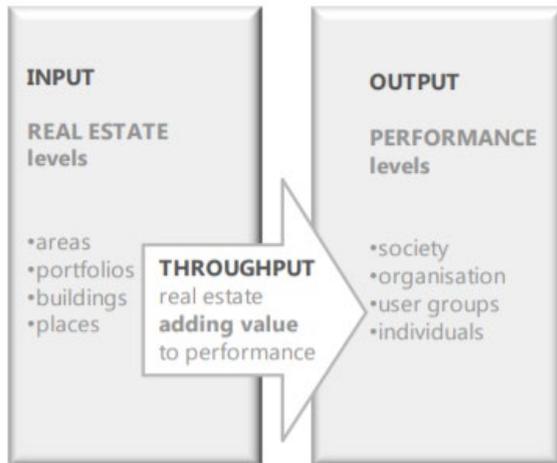


Fig. 5: The four CREM perspectives combined in the DAS-frame (Den Heijer, 2011, p. 115)

However, research on how to make the Church Vision more effective by applying such a framework, has not been conducted yet. In this thesis, Den Heijers' framework will be applied to this work field, in order to enhance this decision making process.

Real estate management – Theoretical framework

As Den Heijer (2011) describes, the basis of real estate management is real estate adding value, positively or negatively, to performance (fig. 3). The input in this thesis will be the available data on religious real estate, the throughput will be adding value and can be seen as the Church Vision that is already adding value on the reuse process of churches. The output will specify the added value for society, the organizations, users and individuals. It is the result of studying existing strategies. This will lead to information that is needed for data collection (Den Heijer, 2011).



This theoretical framework will result in gathering information for the case studies (input). These case studies will be focused on the role of the CREM perspectives on the outcomes of the project. The case studies can subsequently be used to test the available studied literature. The output will be suggestions on how to strengthen and help the position of the decision maker.

Fig. 3: the basis for real estate management (Den Heijer, 2011, p. xiv).

In short, first the available information will be researched, afterwards new information will be gathered by means of case studies and interviews, and subsequently this will be tested to define new strategies for decision makers in this decision making process.

Research model

The first part of the research is done according to the theoretical framework (Section A). Information will be provided in order to form a theoretical basis for the second part. In the second part (Section B), the main research will take place in accordance with the four steps of the DAS-frame. The last part of this thesis will be the concluding chapters (Section C).

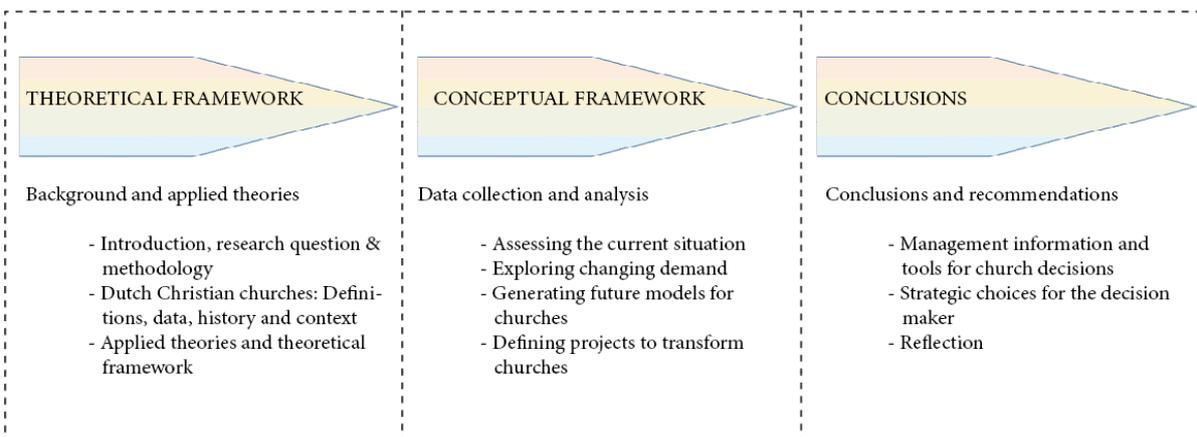


Fig. 4: Research model (Own ill.)

Reflection

1. My graduation project is about providing the decision maker in religious real estate with "munition" to make substantiated decisions. REM, especially with the literature and input of Den Heijer, is par excellence the topic that can contribute to the world of religious real estate management. It is about connecting four variables in every decision: public goals, financial resources, people and buildings.

The information to support real estate decisions in this track will be applied to the topic of decision making in religious real estate. The DAS-frame and the CREM-perspectives that were taught during the course of REM, will be fully used in this research. REM can help adding value in managing real estate.

Combined with Housing Management, Design & Construction Management and Urban Development Management, Real Estate Management forms the master track MBE. As the name shows, it is about managing the built environment. Churches are part of our built environment, and because of the secularization in need of new management tools. Unique for this master is, that it combines the built environment with management. Therefore, I believe this research can contribute to the world of (vacant) religious real estate with MBE as background.

MBE is one the five tracks of the Master programme Architecture, Urbanism and Building Sciences. It is the only track that focusses on management. For the topic of vacant churches, it is important to make well managerial decisions. Where the bachelor was mainly focussed on the building itself, MBE taught to focus on more than that, what brings us back to REM and the connection of public goals, financial resources, people and buildings in every decision.

2. The relevance of this research is that secularization is a real problem. It is happening. Churches are becoming vacant, and if not enough research is done, this will not change. This already follows from the fact that for many churches, no solution is found; they remain vacant. No decision is made.

Churches have a huge societal involvement. They belong to society in a sense and have become part of the environment. Churches should be preserved. For this, several initiations have emerged, like the Church Vision. However, research is needed to contribute to this process.

This thesis aims to improve this through supporting real estate decisions. The decision maker is the topic to improve; he gets stuck in the complexity of the demands of all stakeholders. An important part is to take all perspectives into account. By doing this research, the aim is to improve the process of decision making, and by that contributing to the Church Vision process with the goal "give churches a sustainable future".

References

Bryman, A. (2015). *Social research methods* (5th ed.). Athenaeum Uitgeverij.

Burnard, P. (2004). Writing a qualitative research report. *Accident and emergency nursing*, 12(3), 176-181.

Cresswell, J. W., & Plano Clark, V. L. (2011). Designing and conducting mixed method research. 2nd Sage. *Thousand Oaks, CA, 201*.

Den Heijer, A. (2019). *Campus Matters* [Oration]. Retrieved from <http://brightspace.tudelft.nl>

Den Heijer, A. (2011). *Managing the University Campus: Information to support real estate decisions*. Eburon Uitgeverij BV.

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 1609406917733847.

Patton, M. (2002). *Qualitative research and evaluation methods*.

Spradley, J. P. (1979). *The ethnographic interview*. Holt, Ri.

Yin, R. (2013). *case study research design and methods*. Sage Publications Inc.

LITERATURE STUDY

CASE STUDY

PLANNING

<p>STEP 1 Assess the current situation</p> <p>"What management information is required, what management information is available and what is the demand for additional information for assessing the current situation?"</p>	<p>Step 1 is about gathering data on the building stock. Literature about existing databases and the religious real estate building stock are consulted here. Indispensable is the PhD thesis of H.E. Wesselink, since he provided the most accurate database considering Dutch religious real estate, together with the "kerkenkaart". In step 1, the spatial context is important. Step 1 will provide Strengths & Weaknesses.</p>	<p>Research background information. Begin defining strengths & weaknesses (S&W).</p>	<p>Search numbers on Dutch churches (amounts, functions, denominations, etc).</p>	<p>Complement the inventory with new information of BOEi.</p>	<p>Finish SWOT analysis.</p>	<p>Finish info gathering. Work on decision model. Combine decision model with simple roleplay.</p>	<p>Finish transcribing & coding Compile database.</p>	<p>Gather information of step 1, 2 and 3. Gather all existing tools for decision maker. Start decision model with use of database.</p>
<p>STEP 2 Explore the changing demand</p> <p>"What management information is required, what management information is available and what is the demand for exploring the changing context and demand?"</p>	<p>In step 2 the changing context is researched. For this, literature study is the most important source as well. It is about trends in the Netherlands (on churches). In step 2, the societal context is important. Opportunities & Threats will be provided here.</p>	<p>Search information on spatial & societal context of Dutch churches. Begin defining opportunities & threats (O&T)</p>	<p>Continue</p>	<p>Identify political, economic, demographic and technological developments. Scenario planning.</p>	<p>Interview 2 process managers. Interview 1 stakeholder for each CREM-perspective. Interview 1 campus-manager Transcribe & code</p>	<p>Finish info gathering. Work on decision model. Combine decision model with simple roleplay.</p>	<p>Finish transcribing & coding Compile database.</p>	<p>Gather information of step 1, 2 and 3. Gather all existing tools for decision maker. Start decision model with use of database.</p>
<p>STEP 3 Generate future models</p> <p>"What management information is required, what management information is available and what is the demand for additional information for generating future models for dealing with churches?"</p>	<p>In step 3 the most important information to generate future models will follow from case studies. These will be chosen in consultation with BOEi. A total of 4 interviews will be conducted on these case studies, with each a different perspective.</p> <p>Next to this, 2 process managers on the Church Vision will be interviewed since they have to take into account all 4 perspectives.</p> <p>Additionally, a campus manager will be interviewed.</p> <p>From these interviews, it will be researched what went well, what did not, and what were the lessons learned. This will form the basis for the database.</p>	<p>Define case studies. Plan interviews with 2 Church Vision process managers. Plan interviews on case studies. Plan interview on university.</p>	<p>Search numbers on Dutch churches (amounts, functions, denominations, etc).</p>	<p>Complement the inventory with new information of BOEi.</p>	<p>Interview 2 process managers. Interview 1 stakeholder for each CREM-perspective. Interview 1 campus-manager Transcribe & code</p>	<p>Finish info gathering. Work on decision model. Combine decision model with simple roleplay.</p>	<p>Finish transcribing & coding Compile database.</p>	<p>Gather information of step 1, 2 and 3. Gather all existing tools for decision maker. Start decision model with use of database.</p>
<p>STEP 4 Define projects to transform</p> <p>"What management information is required, what management information is available and what is the demand for additional information for defining projects to transform the current supply?"</p>	<p>In step 4, the database from the case studies will be used for the decision model. A simple roleplay will be introduced here with the goal to make every stakeholder aware of each others perspectives.</p> <p>In addition, BOEi will be consulted for important management tools that are already available.</p>	<p>Research background information. Begin defining strengths & weaknesses (S&W).</p>	<p>Search numbers on Dutch churches (amounts, functions, denominations, etc).</p>	<p>Complement the inventory with new information of BOEi.</p>	<p>Interview 2 process managers. Interview 1 stakeholder for each CREM-perspective. Interview 1 campus-manager Transcribe & code</p>	<p>Finish info gathering. Work on decision model. Combine decision model with simple roleplay.</p>	<p>Finish transcribing & coding Compile database.</p>	<p>Gather information of step 1, 2 and 3. Gather all existing tools for decision maker. Start decision model with use of database.</p>

NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.
P1	P2	Start BOEi	P3	P4	End BOEi	P5	P5	P5
2019	2020							