

# THE SOCIAL SIDE OF ADAPTIVE REUSE

the role of sociocultural  
aspects in adaptive reuse  
decision-making

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# ABSTRACT

Buildings are required to respond to societal challenges such as urbanisation and climate change, for which adaptive reuse poses a solution. Additionally, sociocultural aspects are regarded as more and more important. Although these sociocultural aspects are broadly recognised as relevant, little is known about their role in the adaptive reuse decision-making process of developers, and even less about the challenges they face when incorporating sociocultural aspects. The aim of this study is therefore to examine the role of sociocultural aspects in adaptive reuse decision-making, from the perspective of Dutch developers.

The research combines a literature review with semi-structured interviews with eight developers working on adaptive reuse project. Based on the literature review, six categories of sociocultural aspects were determined: accessibility, amenities, community, identity, inclusivity and urban context. Interview findings were analysed through qualitative coding and subsequently validated with seven of the interviewed developers and a participation advisor.

The findings show that sociocultural aspects are present in developers' decision-making process but decisions regarding sociocultural aspects are often made implicit, in comparison to the explicit decisions related to technical, legal and economic aspects. Identity emerged as the most influential category, guiding concept development throughout both phases, yet is consistently described as difficult to grasp. Challenges include the absence of adaptive reuse-specific legislation, the intangible nature of sociocultural criteria, inconsistent interpretations of inclusivity, and the tendency to lose focus as financial and technical concerns dominate.

In response, a six-step framework was developed to give identity a structured and visible role in the decision-making process, integrating building and neighbourhood analysis across temporal dimensions and incorporating structured resident engagement. Validated positively by practitioners, the framework offers a concrete approach to get a grasp on the identity.

**Keywords:** adaptive reuse, decision-making, sociocultural, developers

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**INTRODUCTION**

**1**

## 1.1 PROBLEM STATEMENT

Rapid urbanisation, technological innovations, and climate change are among the challenges that society is confronted with nowadays (United Nations, 2025). Buildings are required to respond to these challenges, yet they are typically designed and constructed as fixed structures (Askar et al., 2021).

Adaptive reuse poses a solution. Defined as the process of converting a building to a function different from its original use (Douglas, 2006), adaptive reuse allows for the reuse of existing buildings and the accompanying infrastructure, which significantly reduces material consumption, carbon emissions and energy use (Bullen & Love, 2010). Beyond sustainability, adaptive reuse also offers the opportunity to conserve heritage buildings and deliver economic, cultural, and social benefits to surrounding areas (Kyrö & Lundgren, 2022).

An important aspect of adaptive reuse is that it takes place within an existing social and physical environment. When handled well, it can have a significantly positive impact on the heritage value and the vitality of the community, an impact that would be lost entirely in the case of demolition and new-build (Lundgren, 2023; Remøy & Van Der Voordt, 2014). The transformation of, for example, office spaces into housing presents a unique opportunity to address social challenges such as housing shortages and the promotion of social cohesion, where integrating social values into projects can contribute to more inclusive communities (Kyrö & Lundgren, 2022).

Despite this potential, several researchers have concluded that sociocultural aspects are currently inadequately considered in adaptive reuse (Lanz & Pendlebury, 2022; Lundgren, 2023). Adaptability should involve the building's surroundings and account for the perspectives of stakeholders such as existing residents, yet in practice this is insufficiently done (Scialpi et al., 2023).

Alongside the growth of adaptive reuse projects, research into the factors that influence decision-making has increased, resulting in the development of multi-criteria decision-making models (van Laar et al., 2024). These models include criteria ranging from economic to technological and social, though economic criteria tend to dominate given their direct influence on financial viability and adaptive reuse is generally associated with more risk than conventional construction projects (De Jong & Peeters, 2024; Nedeljkovic et al., 2023). While social values are integrated into these models, it remains unclear whether they genuinely influence decision-making in practice or whether they are overshadowed by more measurable criteria such as economic and functional considerations. Moreover, little research has examined the alignment between these models and actual practice (van Laar et al., 2024).

This gap raises an important question: if so little is known about how sociocultural aspects function in the decision-making process, how can their incorporation be effectively stimulated? This research therefore examines the role of sociocultural aspects within adaptive reuse decision-making, with the aim of forming a basis for targeted interventions.

## 1.2 RELEVANCE

The built environment plays a central role in the development and maintenance of social ties among residents (Mouratidis & Poortinga, 2020). At a time of high urbanisation (United Nations, 2025) and with the impact of climate change being higher in urban environments (UN-Habitat, 2024), how buildings are transformed matters not only technically and economically but also socially. The fact that sociocultural aspects are regarded as important yet remain insufficiently considered in practice (Lanz & Pendlebury, 2022; Lundgren, 2023) shows an urgent need for better understanding and more targeted guidance for developers.

Even though the importance of sociocultural aspects in adaptive reuse is recognised (De Jong & Peeters, 2024; Vafaie et al., 2025), little is known about the decision-making process of developers, and even less about the role of sociocultural aspects in this process (van Laar et al., 2024). Understanding this process is a prerequisite for being able to stimulate the incorporation of sociocultural aspects, which is important due to the central role of the built environment in social ties amongst people.

## 1.3 OBJECTIVE AND MOTIVATION

This research primarily aims to gain insight into how sociocultural aspects play a role in the decision-making process of developers undertaking adaptive reuse projects. The motivation lies in the tension identified above: sociocultural aspects are broadly acknowledged as relevant, yet systematically underrepresented in both decision-making models and practice. To address this, the research combines a literature review with interviews with developers in order to determine how sociocultural aspects function in practice and what conditions either enable or hinder their incorporation.

## 1.4 RESEARCH QUESTIONS

This research aims to answer the following research question and sub-questions:

**What is the role of sociocultural aspects in the adaptive reuse decision-making process of developers, and how can further incorporation be stimulated?**

1. What sociocultural aspects that influence adaptive reuse decision-making are identified in academic literature?
2. How are sociocultural aspects currently considered and discussed by developers during adaptive reuse decision-making?
3. What hinders the incorporation of sociocultural aspects in adaptive reuse decision-making?
4. How can developers be stimulated to incorporate sociocultural aspects in adaptive reuse decision-making?

## 1.5 SCOPE

This study focuses on the pre-project and preparation phases of adaptive reuse. The pre-project phase is characterised by a high level of uncertainty and encompasses the decision to preserve, reuse, or demolish a building. The preparation phase is where the majority of design decisions are made. (Vafaie et al., 2023). Since in the remaining phases of the development process, focus lies on the construction and therefore fewer decisions regarding sociocultural aspects are made, the pre-project and preparation phase are sufficient to get an understanding of the decision-making process of developers.

The research focuses on the perspective of developers, as they are the primary decision-makers in development projects (Mackay, 2024). Rather than limiting itself to one specific type of adaptive reuse, such as office-to-housing conversions, this study aims to get a broader understanding of the role of sociocultural criteria aspects in all types of adaptive reuse projects, while remaining attentive to how different project types may give rise to different relationships with sociocultural considerations. Finally, even though the focus of this research is on sociocultural aspects, these aspects cannot be examined in isolation. The roles of technical, legal, and economic factors are therefore also briefly addressed in order to contextualise the position of sociocultural criteria within the wider decision-making process.

## 1.6 CONCEPTUAL FRAMEWORK

Figure 1.1 illustrates how the two trends identified in the literature together lead to the research question. On the one hand, decision-making models have been developed in response to the complexity of adaptive reuse, but little is known about the decision-making process in practice. On the other hand, sociocultural aspects are regarded as important, but are insufficiently incorporated into adaptive reuse projects. This leads to this research focusing specifically on the role of socio-cultural aspects in adaptive reuse decision-making, which is done through the lens of both literature and practice.

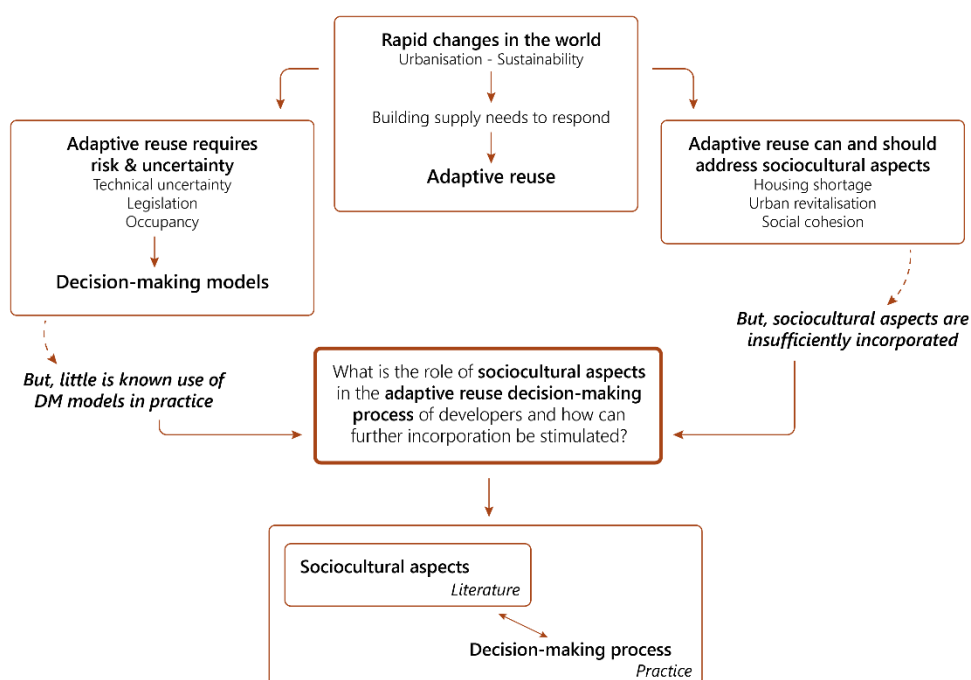


Figure 1.1 Conceptual framework (Own work)

**METHODOLOGY**

**2**

## 2.1 METHODOLOGICAL FRAMEWORK

The research question ‘What is the role of sociocultural aspects in the adaptive reuse decision-making process of developers and how can further incorporation be stimulated?’ is addressed through four sub-questions. Both inductive and abductive logic are employed in answering these sub-questions.

Inductive logic aims to formulate a description of the characteristics of certain concepts (Blaikie and Priest, 2019). Within this study, this is reflected as an overview of sociocultural aspects based on their description in existing literature. This answers the first research question, which forms the basis for the remainder of the research. The remaining research questions are answered using abductive logic. The aim of this logic is to generate a theory based on the experiences and actions of actors (Blaikie and Priest, 2019). The emphasis here is on understanding how the actions influence one another, rather than on an explanation of the actions themselves. The use of both inductive and abductive logic ensures that the research question is examined from two perspectives. Inductive logic examines socio-cultural values from the perspective of a researcher and the literature. Abductive logic provides a more bottom-up approach in which the developer’s perspective takes centre stage.

Throughout the entire research process, a qualitative approach is used. The first research question is answered using a literature review. The three remaining research questions are answered through semi-structured interviews. Figure 2.1 presents the methodological framework, in which the research questions, the connected research method and their relation to other research questions are shown.

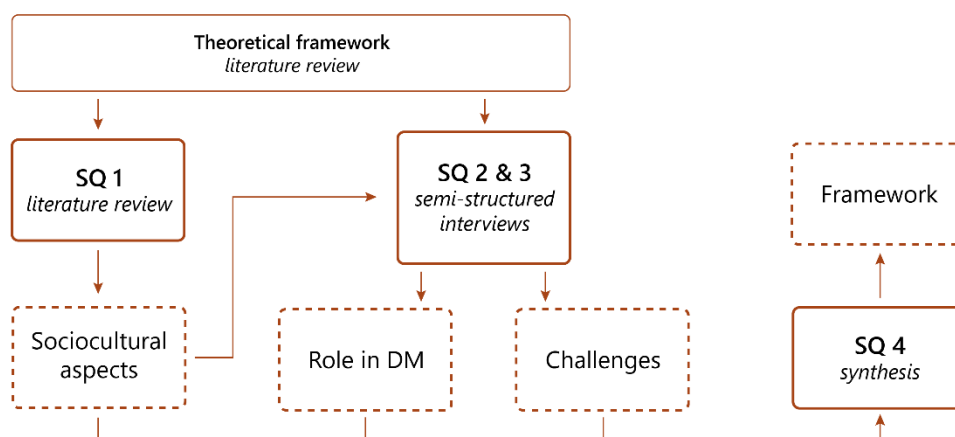


Figure 2.1 Methodological framework

## 2.2 LITERATURE REVIEW

The first research question is: ‘What sociocultural aspects that influence adaptive reuse decision-making are identified in academic literature?’. This research question is answered using a literature review. To find relevant literature, Google Scholar was used. Through the use of search terms such as ‘decision-making’, ‘decision-making model’ and ‘decision-making criteria’ in combination with ‘adaptive reuse’, suitable publications were identified. The primary criterion for

the incorporation of a publication was that the publication had to explicitly list criteria or aspects that influence adaptive reuse decision-making.

In order to identify specific socio-cultural aspects, an extensive list of aspects influencing adaptive reuse decision-making was drawn up, after which for each aspect was assessed whether it is sociocultural based on a previously established definition. The result of this step is a comprehensive list of sociocultural aspects, which are then categorised to make them usable in the remainder of the study. For each category, the significance of the socio-cultural aspects was then further elaborated. This involved examining their meaning, relevance, connection to other aspects and measurability (Figure 2.2).

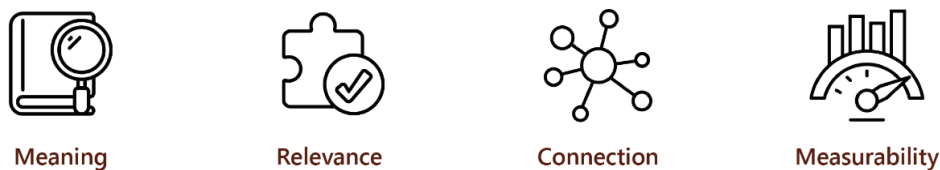


Figure 2.2 Elaboration of sociocultural aspects

## 2.3 INTERVIEWS

Through semi-structured interviews, qualitative data is collected that is used to answer research questions 2 and 3: ‘How are sociocultural aspects currently considered and discussed by developers during adaptive reuse decision-making?’ And ‘What hinders the incorporation of sociocultural criteria in adaptive reuse decision-making?’. By answering these research questions, practical insights into the decision-making process of developers and the challenges they face were gained. Due to the developers being highly different in terms of the size of the development company itself, but also the size and types of projects they work on, it is not the purpose of these interviews to compare developers to one another, but to create a complete overview of all aspects influencing the incorporation of sociocultural aspects in their decision-making.

### Developer selection

In order to gain as broad a picture as possible of the decision-making process, a small number of selection criteria for the interviewees have been drawn up. Firstly, the developers must be working within the Netherlands, given the context of projects such as the role of local municipalities, legislation and regulations. In addition, a suitable developer must have been involved in an adaptive reuse project. This includes both developers who have completed or are currently working on adaptive reuse projects and, equally, developers who decided during the acquisition phase that adaptive reuse was not feasible. It is precisely this latter group of developers that is also relevant for gaining insight into the reasons why it might not succeed.

During the selection of developers, a targeted effort was made to reach as wide a group of developers as possible. As a result, both large and small developers were approached, as well as

those who were, for example, affiliated with contractors or architectural firms. Additionally, the interviews were not limited to a specific type of adaptive reuse.

Initially, development firms were approached via the contact information on their websites. However, no responses came from this, so it was decided to approach developers directly through, for instance, LinkedIn via mutual connections. In the end, eight interviews were planned.

## Data collection

Data collection took place through semi-structured interviews. During the interviews, open-ended questions were asked, initially focusing broadly on the developers' vision and the types of projects they undertake, before moving on to their decision-making process, the role of socio-cultural aspects in this process, and the challenges developers face in adaptive reuse. The full interview protocol can be found in Appendix A2.

There were differences in understanding among developers regarding sociocultural aspects, which were taken into account during the interviews. Consequently, some interviews focused more on sociocultural aspects, whilst others focused more on decision-making regarding adaptive reuse in general. Recordings were made of the interviews, which were transcribed and anonymised using the transcribing function in Microsoft Word.

## Data analysis

The interview transcripts are analysed by coding, for which ATLAS.ti is used. The purpose of using a tool such as ATLAS.ti is to structure relevant interview quotes into categories, which can then be used to draw conclusions. The following codes were used in the analysis of the transcripts:

- Sociocultural aspects
  - Sociocultural – general
  - Sociocultural – accessibility
  - Sociocultural – amenities
  - Sociocultural – community
  - Sociocultural – identity
  - Sociocultural – inclusivity
  - Sociocultural – urban context
- Economic aspects
- Legal aspects
- Technical aspects
- Decision-making
- Challenges
- Company
  - Company – values
  - Company – projects
- Actors
  - Actors – municipality
  - Actors – investor
  - Actors – housing association
  - Actors – residents
  - Actors – architect
  - Actors – contractor
- Adaptive reuse in general

To obtain reliable and generalisable results from the interview analysis, all transcripts are coded in several rounds, ensuring that the level of depth is consistent throughout. Through a co-occurrence analysis, the role of sociocultural aspects, but also technical, legal and economic aspects, in the decision-making process was determined. Additionally, the network tool was used to map out all challenges and their connections to types of aspects and actors.

## **2.4 FRAMEWORK DESIGN**

The fourth research question is: ‘How can developers be stimulated to incorporate sociocultural aspects in adaptive reuse decision making?’. This question is answered through an iterative design and validation process. Unlike the other research questions, which are answered through literature review and semi-structured interviews, respectively, the aim of this research question is to synthesise the insights into a practical tool for developers.

Based on the findings, a concept version of the framework is developed. The concept framework is deliberately kept open enough to allow for feedback, while being simultaneously concrete enough to serve as a basis for discussion. To validate the findings, the concept framework, together with a summary of the main interview findings and the central hypothesis, is presented to the developers. In addition, a participation advisor is consulted to gain a more detailed understanding of how resident engagement can be incorporated effectively into the proposed process. The feedback gathered during these sessions is analysed and used to refine the framework into the final version.

## **2.5 DATA MANAGEMENT PLAN & ETHICAL CONSIDERATIONS**

For this research, a Data Management Plan (Appendix B1) has been developed to make sure that data management risks are considered throughout the process. In addition to the Data Management Plan, a Human Resources Ethics Checklist (Appendix B2) was completed to identify potential risks related to ethical considerations and to draw up mitigating measures. Prior to the interviews, participants were informed of these potential risks and the mitigating measures, after which they signed a consent form. A blank version of the consent form is included in this document as Appendix A1. Lastly, Appendix B3 explains the use of (generative) AI in the writing of this thesis.



**THEORETICAL  
BACKGROUND**

**3**

## 3.1 ADAPTIVE REUSE

Before diving into adaptive reuse, it is important to determine its definition, since it is defined differently by numerous authors (Vafaie et al., 2023). A definition that is adopted by many authors is from Douglas (2006), who defined adaptive reuse as ‘the process of converting a building to a function which is significantly different from the original function’. This definition captures two fundamental conditions. First, the existing building is preserved rather than demolished. Secondly, the new function must differ substantially from the original use. Together, these conditions distinguish adaptive reuse from demolition & rebuild or renovation, in which either the building is not preserved or the function does not change.

Adaptive reuse emerged as a response to shifts in demand, offering an alternative to demolition & rebuild (Remøy, 2024; Askar et al., 2021). From an environmental perspective, adaptive reuse contributes to sustainability by conserving materials, reducing transportation demands, and generating significantly less construction waste compared to new-build alternatives (Remøy & Van Der Voordt, 2014; Kyrö & Lundgren, 2022).

Beyond environmental considerations, adaptive reuse offers notable economic advantages. Studies indicate that adapting an existing building is often cheaper than constructing a new building, particularly when accounting for the costs of demolition and site preparation (Vafaie et al., 2023; Wilkinson et al., 2009). Additionally, the process tends to generate less disruption to surrounding areas and can be carried out with a comparatively lower risk of safety incidents than large-scale demolition (Bullen & Love, 2010).

Adaptive reuse is also closely associated with heritage conservation. The conservation of historically or architecturally significant buildings through adaptive reuse prevents the loss of cultural heritage and generates economic, cultural, and social co-benefits for the communities in which these buildings are located (Bullen & Love, 2010; Yazdani Mehr & Wilkinson, 2021). This intersection between adaptive reuse and heritage shows its sociocultural value.

In practice, adaptive reuse projects take a variety of forms, with heritage buildings and vacant offices representing two of the most common typologies. Vacant offices, in particular, have gained considerable attention in recent decades due to demand shifts in the real estate market, especially in the Netherlands. There is an oversupply of offices, whilst the demand for housing rises (Remøy, 2024). Heritage is also an important subject of adaptive reuse since the building cannot be demolished. If the existing function does not meet demand anymore, adaptive reuse is the only solution to make the building beneficial whilst maintaining its social and cultural significance (Wilkinson et al., 2009)

## 3.2 ADAPTIVE REUSE DECISION-MAKING

The adaptive reuse decision-making process can be divided into four phases: initiation, preparation, execution and post-completion (Arfa et al., 2022). In this thesis, the focus lies on the initiation and preparation phase, since these are the phases in which sociocultural aspects primarily play a role. Therefore, only the initiation and preparation phase will be elaborated.

### 3.2.1 INITIATION PHASE

The first phase, the initiation phase, is characterised by one central decision that needs to be made: adaptive reuse, demolish & rebuild or no project (Wilkinson, 2014).

The future use and target group of the building play an important role in financial feasibility. To determine this, the following three questions need to be asked (Hek, 2024):

- What is allowed?
- What is possible?
- What is desired?

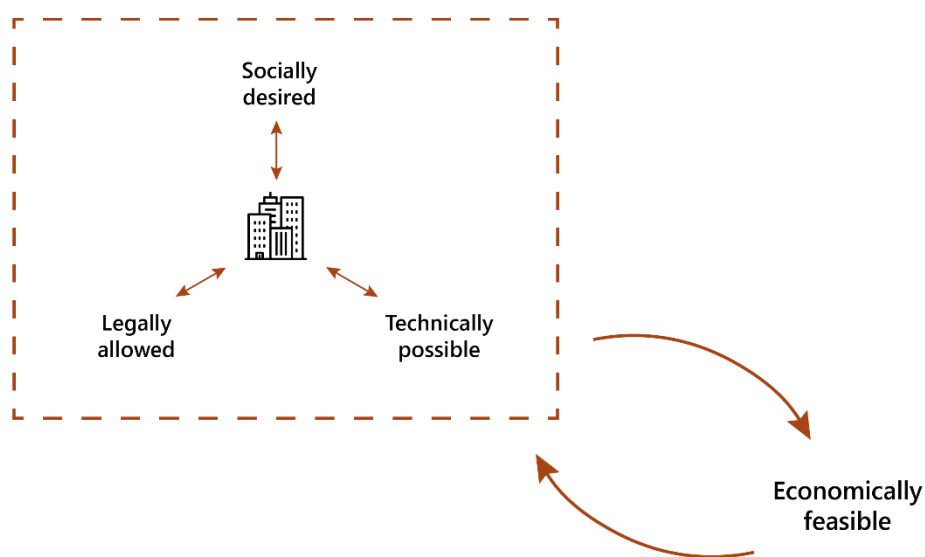


Figure 3.1 Decision-making process initiation phase (Own work; Adapted from Hek, 2024)

From that point onwards, the decision-making process is characterised by a constant going back and forth between the financial feasibility and the concept for the development (Figure 3.1), which is influenced by drivers and barriers such as the ability to attract tenants, municipality policy, investment returns, building layout, market value, maintenance and operating costs (Bullen & Love, 2011). A more extensive list of drivers and barriers is presented in Figure 3.2. These drivers and barriers steer decisions in the initiation phase, but a more extensive analysis is generally made in the preparation phase.

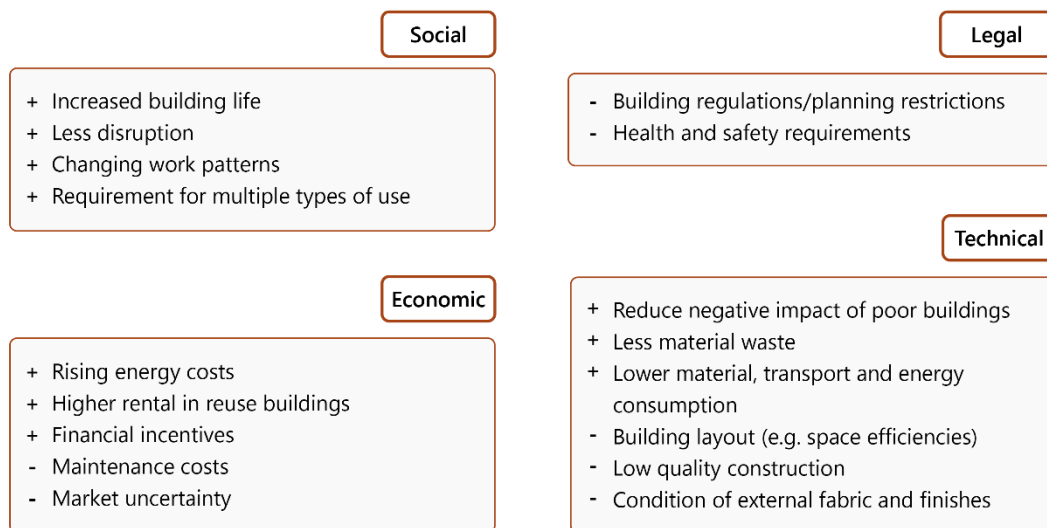


Figure 3.2 Drivers and barriers in adaptive reuse (Own work; Adapted from Bullen & Love, 2011)

## 3.2.2 PREPARATION PHASE

After the decision is made to do either adaptive reuse, demolish & rebuild or nothing, the preparation phase starts. The result of this phase is a complete design that is ready to be executed (Van Laar et al., 2024).

The main characteristic that differentiates adaptive reuse from a new build project is the fact that the starting point is an existing building, in comparison to a blank page. This makes the extensive analysis of the building and its surroundings an important step in the preparation phase (Arfa et al., 2022). In the initiation phase, legal, social, technical and economic aspects have been looked into already. During the preparation phase, this is done more extensively to at one hand, have a complete understanding of the context and limitations, but also to be able to do a value assessment, which influences which characteristics of the building need to be retained (Mısırlısoy & Günçe, 2016). When the project is a heritage building, the heritage values are also examined extensively to determine what interventions can and cannot be done.

Following the analysis, generally, several alternatives for the development are defined and proposed to the stakeholders. This is where a limitation is present: stakeholders often have different ambitions, making it difficult to reach consensus (Arfa et al., 2022). In their research, Aigwi et al. (2021) emphasise the importance of continuous active collaboration between all stakeholders, which are investors, producers, regulators and users. During this collaboration, focus needs to be on constructive outcomes, to find common interest, in comparison to putting emphasis on differences.

Decision-making models play an important role in reaching consensus amongst stakeholders (Arfa et al., 2022). These models can be used to weight different criteria based on values and benefits, through which the most appropriate function can be determined. Additionally, decision-making tools can guide investment choices and lower risks associated with adaptive reuse (Owojori et al., 2021). However, it is unknown to what extent these decision-making models and the accompanying criteria are used in practice to guide decisions. (Van Laar et al., 2024).

### 3.2.3 THE ROLE OF DEVELOPERS

Developers are the primary initiators of adaptive reuse projects, and therefore play a central and steering role throughout the development process (Mackay, 2024). Since the developer is responsible for acquiring the project, securing financing, and coordinating the development process, they function as the main decision-maker, shaping the project from initiation to delivery.

Developers approach adaptive reuse primarily from a financial perspective, evaluating opportunities based on market potential, location, and aesthetic appeal for future tenants or investors (Bullen & Love, 2010). Their orientation is characteristically short-term, focused on investment performance, which stands in contrast to the long-term operational perspective held by building owners and managers (Gelinck & Strolenberg, 2014). However, recently their mindset has evolved. Developers are paying more and more attention to programme, end-users and creating not just financial value, but also social value (Mackay, 2024).

Central to the developer's decision-making process is the identification of risks (Nedeljkovic et al., 2023). Relevant risks include unforeseen structural or technical conditions, complying with building regulations and fluctuating market conditions during both the acquisition and the sales phase of the project (Mackay, 2024), which leads to potential cost overruns (Wilkinson & Reed, 2011). Within the development process, developers therefore need to balance social, technical, legal and financial aspects in order for the development to be successful.

## 3.3 DEFINING SOCIOCULTURAL

Research has shown that adaptive reuse poses a unique chance to address sociocultural issues, such as reducing the housing shortage, creating a sense of community and retaining the identity of an area (Remoy, 2024; Bullen & Love, 2010; Yazdani Mehr & Wilkinson, 2021). Even though the chance is present, several researchers have concluded that sociocultural aspects are currently inadequately considered in the debate on adaptive reuse (Lanz & Pendlebury, 2022; Lundgren, 2023).

Additionally, a clear definition of sociocultural lacks. This section, therefore, will compose a definition, using foundational theories on sociocultural interactions and their relation to the built environment.

### 3.3.1 THE FOUNDATIONS OF SOCIOCULTURAL THEORY

The foundations of sociocultural theory were laid by developmental psychologist Lev Vygotsky (1896–1934) in the early twentieth century. Vygotsky argued that human development does not take place in isolation. Instead, it is shaped by the social and cultural interactions that individuals experience throughout their lives. People develop their identity, understanding and sense of the world through continuous engagement with others and with the cultural context in which they live (Mercadal, 2021). This means that who a person becomes is not solely determined by individual characteristics, but by the relationships and cultural surroundings they are part of.

An important aspect of Vygotsky's thinking is that learning and development always take place in a specific cultural context. The values, norms and practices of a community do not exist outside of individuals. Instead, they are internalised through participation in social life and become part of how a person thinks, acts and understands the world. Sociocultural development is therefore an active and ongoing process, shaped by the community and environment in which a person participates (Mercadal, 2021).

### 3.3.2 SOCIAL INTERACTION AND CULTURAL CONTEXT

To understand what sociocultural means in practice, it is helpful to look at its two components separately. Social interaction refers to the process by which individuals engage with one another, influencing and shaping each other's behaviour, thoughts and emotions. It encompasses various forms of communication and relationships and plays a central role in establishing social norms and shared practices within communities (UNESCO, n.d.). Social interaction is not limited to formal or practical exchanges. It includes the full range of everyday encounters through which people relate to one another and to the world around them.

Cultural interaction adds another dimension to this. American sociologist Talcott Parsons (1902–1979) made an important distinction between social objects and cultural objects. Social objects are the individual actors involved in interaction, meaning the people who engage with one another. Cultural objects, on the other hand, are the shared symbols, beliefs, ideas and value patterns that individuals use to interpret and respond to the world around them (Parsons, 1951).

Parsons (1951) further argued that any social interaction takes place within a cultural context that provides common ground for understanding. This shared cultural context can take different forms and sets the standards for social interactions. An example of a shared cultural context is, for instance, that people in the Netherlands communicate directly and straightforwardly, which can be frowned upon in other countries. Within a shared cultural context, there can also be subcultures. For instance, when entering a church or mosque, talking loudly and having casual conversation can be considered inappropriate, whereas this is not the case when standing outside, next to the building.

Without this shared cultural framework, social interaction would lack the structure necessary for communities to function. Social and cultural interaction are therefore not two separate phenomena, but two dimensions that both influence interactions between individuals.

Parsons (1951) described this interdependence systematically. He argued that a social system, the personality of the individual, and the cultural system are three distinct but strongly interrelated aspects of human interaction. None of the three can be fully understood without reference to the other two. A social system cannot exist without individuals and without culture; culture cannot be sustained without individuals who reproduce it through social interaction (Parsons, 1951). This framework makes clear that sociocultural interaction is not a single activity, but a layered system, in which people, relationships and shared meaning continuously influence one another.

### **3.3.3 SOCIOCULTURAL INTERACTION AND THE BUILT ENVIRONMENT**

Sociocultural interactions do not take place in an isolated space. They take place in the built environment: in streets, buildings, squares and neighbourhoods. The relationship between sociocultural interaction and the built environment is one of continuous exchange: the built environment shapes sociocultural interaction, and sociocultural interaction shapes the built environment (Shabatura et al., 2018).

King (1980, as cited in Lawrence & Low, 1990) captures this relationship clearly: buildings, and in a broader sense, the entire built environment, are essentially social and cultural products. They result from social needs and accommodate a wide range of functions such as housing, supermarkets, and recreational places. And their form, size and appearance are determined not just by technical aspects, but by the values, beliefs and social organisation of the society that produces them. The built environment is, in other words, a physical expression of the sociocultural context in which it was created. At the same time, the built environment actively influences the people who use it. It has a direct impact on behaviour, social well-being, and social organisation (Gutman, 1976; Shabatura et al., 2018).

Shabatura et al. (2018) describe the urban environment as a sociocultural space that shapes worldview, behaviour and cultural identity. The cultural heritage embedded in the built environment influences how people perceive and understand the spaces around them. Humans, in turn, give meaning to spaces through values, memories and social relations. This constant interaction between people and their surroundings is what makes the built environment a sociocultural phenomenon, rather than merely a practical place.

Public spaces illustrate this interaction particularly well. Social interaction in public spaces can strengthen people's sense of community and have a direct positive effect on wellbeing. Over time, ordinary places can acquire significant symbolic value through the social relations that take place there. Public spaces, therefore, do more than set the stage for human interaction to take place. They contribute to people's sense of security, identity and belonging (Cattell et al., 2008). Spatial qualities of the built environment, such as its layout, accessibility, and atmosphere, directly influence the quality and quantity of social interaction that takes place within it, which in turn determines the extent to which a space becomes meaningful to the people who use it.

This two-way relationship is also visible at a smaller scale. Rapoport (1969, as cited in Lawrence & Low, 1990) demonstrated that houses built by two different cultural groups in the same geographic area show clear architectural differences, which can only be explained by differences in sociocultural background. When the built environment no longer meets the behavioural or social needs of its users, people seek to adapt it through renovation, transformation or relocation (Lawrence & Low, 1990). On the other hand, people also adapt their own behaviour to fit the environment when it presents limitations. The built environment is thus both a product of sociocultural interaction and an enabling structure for it (Lawrence & Low, 1990; Shabatura et al., 2018).

### **3.3.4 DEFINITION OF SOCIOCULTURAL ASPECTS**

In this research, sociocultural aspects therefore refer to the aspects that influence the sociocultural interaction between individuals and are related to the built environment. Language, for instance, is a cultural product and has an influence on sociocultural interaction, but has no direct connection to the built environment and will therefore not be considered a sociocultural aspect in this study. A sense of community, however, will be considered a sociocultural aspect since the built environment fosters space for these interactions to take place.

Additionally, both sociocultural aspects and criteria will be mentioned in this study. A sociocultural aspect can, for instance, be social cohesion, which can be translated into a criterion such as the number of people residents know within their neighbourhood.

This definition will later be used to further develop sociocultural aspects and to give meaning and definition to these aspects.

**SOCIOCULTURAL  
ASPECTS**

**4**

## 4.1 SELECTION

To understand the role of sociocultural aspects in adaptive reuse decision-making, it is important to create a complete overview of all aspects that could be regarded as sociocultural in this context. Through a full examination of all aspects and criteria that influence adaptive reuse decision-making, a list is compiled based on the previously mentioned definition of sociocultural.

The reason to look at all aspects, and not just those that are social and cultural, is that authors who compiled lists of decision-making criteria, or aspects influencing decisions, all have different methods of categorising the criteria into themes such as economic, technical, financial and social. Bullen & Love (2010), for instance, make a distinction between environmental, economic, social and governance criteria, whereas Geraedts et al. (2024) categorise the criteria into functional, cultural, legal and technical categories. Therefore, it is not possible to merely take all the criteria that are categorised as social and cultural and assume that those are all relevant social and cultural criteria. Secondly, in none of the reviewed papers have the authors given a reason for the placement of a specific criterion within a specific category. Merely looking at the criteria that are categorised by authors as social and/or cultural would possibly give an incomplete overview of the criteria that would be regarded as sociocultural in this study.

Suitable papers were chosen based on the following criteria:

- The paper needs to mention explicit sociocultural aspects or criteria that influence decision-making. Merely mentioning 'social' as an aspect that influences decision-making is insufficient.
- The aspects that are discussed need to influence decisions in the initiation and preparation phase.
- The paper needs to discuss not only sociocultural aspects but also technical, legal and economic aspects to provide context.
- The focus of the paper should be on adaptive reuse projects, not construction projects in general.

In the end, the decision-making aspects from six papers, published by six different authors, were compiled, and it was evaluated whether the aspects were sociocultural or not. This was done using the earlier-mentioned definition, which states that sociocultural aspects are those that influence the sociocultural interaction between individuals and are related to the built environment. Even though this definition is still freely interpretable and will most likely result in a larger number of sociocultural aspects than the number of directly social or cultural aspects mentioned by authors, it does allow for a broader view of what could be regarded as sociocultural.

In publications by Bullen & Love (2010), Geraedts et al. (2024), Van Laar et al. (2024), Schrieken (2007), Tan et al. (2014) and Wilkinson (2014), a total of 269 aspects were mentioned, of which 81 are regarded as sociocultural aspects based on the definition (Figure 4.1). The majority of economic criteria were regarded as irrelevant, except for job creation, since this criterion leads to more social security and therefore influences the social interaction between individuals. Criteria regarding building properties (technical), energy performance (environmental), ownership (legal) and government support (governance) were also not classified as sociocultural criteria. Even though these criteria all somewhat have an influence on individuals and the built

environment, they do not directly influence social and cultural interaction in the same way as, for instance, the presence of amenities or the reputation of the area would do.

Author	Number of criteria	Number of sociocultural criteria
Bullen & Love (2010)	35	9
Geraedts et al. (2024)	49	20
Van Laar et al. (2024)	63	15
Schrieken (2007)	47	22
Tan et al. (2014)	27	6
Wilkinson (2014)	48	9
Total	269	81

Figure 4.1 Number of criteria per publication (Own work)

## 4.4.1 Categorisation

To allow for a more practical use of the sociocultural criteria, they are divided into categories (Figure 4.2). These categories partially correspond to the categories mentioned in the compared publications. When examining the final sociocultural criteria, six categories were identified: accessibility, amenities, community, identity, inclusivity and urban context.

	Bullen & Love (2010)	Geraedts et al. (2024)	Van Laar et al. (2024)	Schrieken (2007)	Tan et al. (2014)	Wilkinson (2014)
<b>Accessibility</b>						
Central location		x	x	x		
Car accessibility		x	x	x		x
Public transport access.	x	x	x	x		x
Disability accessibility			x			
Pedestrian accessibility			x			
<b>Amenities</b>						
Supermarkets		x	x	x		x
Retail & hospitality	x	x	x	x		x
Medical facilities		x	x	x		x
Educational facilities		x	x	x		x
Sport facilities		x	x	x		x
<b>Community</b>						
Meeting places		x	x	x		x
Community activities			x		x	
Social cohesion			x			
<b>Identity</b>						
Neighb. reputation		x	x	x		
Building aesthetic			x		x	x
Building recognisability		x		x		
Heritage	x	x	x	x		
<b>Inclusivity</b>						
Public support			x		x	
Job creation			x			
<b>Urban context</b>						
Liveliness	x	x		x		x
Alignment with existing	x			x	x	x
Alignment with plans	x		x			

Figure 4.2 Categorisation of sociocultural aspects (Own work)

## 4.2 ELABORATION

Per category, the sociocultural aspects will be elaborated to provide a more complete understanding of its meaning, its implications and methods to measure or determine whether a specific aspect is present.

### 4.2.1 ACCESSIBILITY

In the category of accessibility, the following criteria were mentioned: central location, car accessibility, public transport accessibility and pedestrian accessibility (Bullen & Love, 2010; Geraedts et al., 2024; Van Laar et al., 2024; Schrieken, 2007; Wilkinson, 2014). Additionally, disability accessibility was mentioned, but only by Van Laar et al. (2024).

From a broad perspective, accessibility contributes to social well-being through the sense of autonomy of individuals and by preventing social exclusion (Stanley et al., 2011), and since a central location generally means that accessibility is good, centrality has the same effect. On a neighbourhood scale, pedestrian accessibility has the most effect on social well-being. Pedestrian accessibility, or walkability, stimulates social interaction between residents and therefore contributes to social cohesion (Jacobs, 1961; Lund, 2003; Mazumdar et al., 2018). Additionally, walkability contributes to an increase in physical health. The concept of walkability is difficult to define, but indicators of a walkable, and therefore pedestrian accessible, city are the presence of footpaths, the distances between destinations and safety features such as crossings and sufficient lighting (Forsyth, 2015; Dovey & Pafka, 2020).

Indicators of public transport accessibility are the distance to public transport facilities, the average travel time in comparison to other travel modes, reliability and frequency (Saif et al., 2019). In terms of car accessibility, most locations are accessible by car, but the difficulties lie with parking cars. Within cities, parking already is an issue due to the limited space available, and housing generally

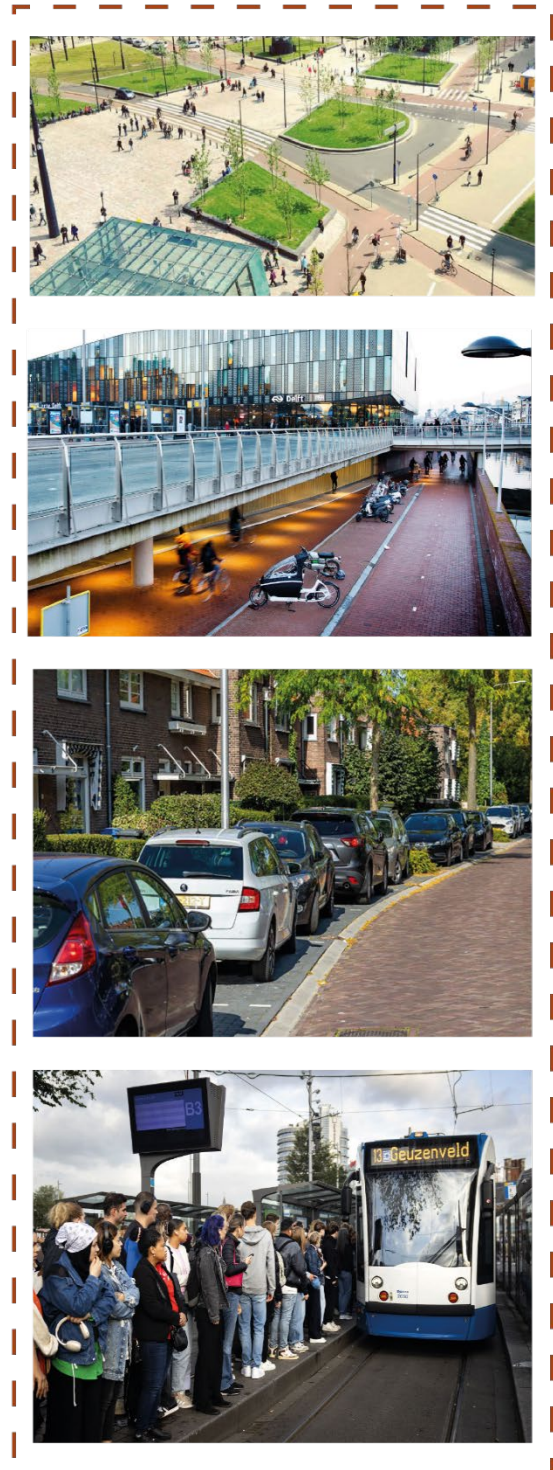


Figure 4.3 Accessibility aspects (Gemeente Rotterdam, 2021; Gemeente Delft, 2021; Het Parool, 2024)

requires more parking spots than offices, which leads to even bigger pressure on the existing number of parking spots (Hobma, 2024). Due to the limited space, additional parking is often realised within the building, but this is costly due to the need to reinforce the existing load-bearing structure, which is especially complex when the building has a heritage status (Blok & Oudenaarden, 2024). Due to parking often resulting in issues in the adaptive reuse process, it plays a central role in the adaptive reuse decision-making process.

## 4.2.2 AMENITIES

This category encompasses the presence of amenities such as supermarkets, retail and hospitality, medical facilities, educational facilities and sport facilities, which are assessed (Bullen & Love, 2010; Geraedts et al., 2024; Van Laar et al., 2024; Schrieken, 2007; Wilkinson, 2014).

There is a strong relation between the presence of amenities and the social well-being of residents in terms of both physical and mental health (Altschuler et al., 2004). Secondly, the number and variety of amenities play a central role in attracting population throughout the day, which fosters social interaction and contributes to the liveliness of a neighbourhood.

In neighbourhoods with limited or no amenities present, fewer people will be outside, and therefore less interaction takes place (Jacobs, 1961). In line with improving liveliness, the presence of amenities has a positive effect on walkability (Mouratidis & Poortinga, 2020). Amenities, therefore, indirectly contribute to the aforementioned benefits of walkability: increasing social interaction and health benefits.

By looking at existing amenities in the neighbourhood, the demand for a building typology and the corresponding target group is determined (Geraedts et al., 2024). Additionally, the absence of certain amenities can guide the decision to include a certain amenity in the development (Van Laar et al., 2024).



Figure 4.4 Amenity aspects (RTL, 2020; Gemeente Delft, 2021; Sportservice, 2025)

## 4.2.3 COMMUNITY

The category of community consists of criteria regarding neighbourhood meeting places, community activities and social cohesion (Geraedts et al., 2024; Van Laar et al., 2024; Schrieken, 2007; Tan et al., 2014 & Wilkinson, 2014). From these concepts, the presence of neighbourhood meeting places and community activities is the most straightforward. Neighbourhood meeting places can be either outdoor, such as parks and playgrounds, or indoors, such as community centres. Community events take place at places like these, with neighbourhood organisations playing a central role in organising activities that foster interaction and contribute to the sense of belonging and community within neighbourhoods (Hoekstra & Pinkster, 2019; Mouratidis & Poortinga, 2020). The number and type of events organised work as an indicator when determining the level of community involvement in the neighbourhood. Similar to the types and number of amenities present, the types and number of neighbourhood places can guide decisions regarding collaborative spaces and activities that will be part of the development.

Social cohesion can be defined as the “extent of connectedness and solidarity among groups in society” (Berkman & Kawachi, 2000, p. 175). Social cohesion has important implications for the health and well-being of those living in cities. Within the Netherlands, the Central Bureau of Statistics (CBS) monitors social cohesion based on indicators such as the willingness to give your house key to a neighbour if you are on holiday, the amount of contact with neighbours and whether you feel at home within the neighbourhood (CBS, 2026).

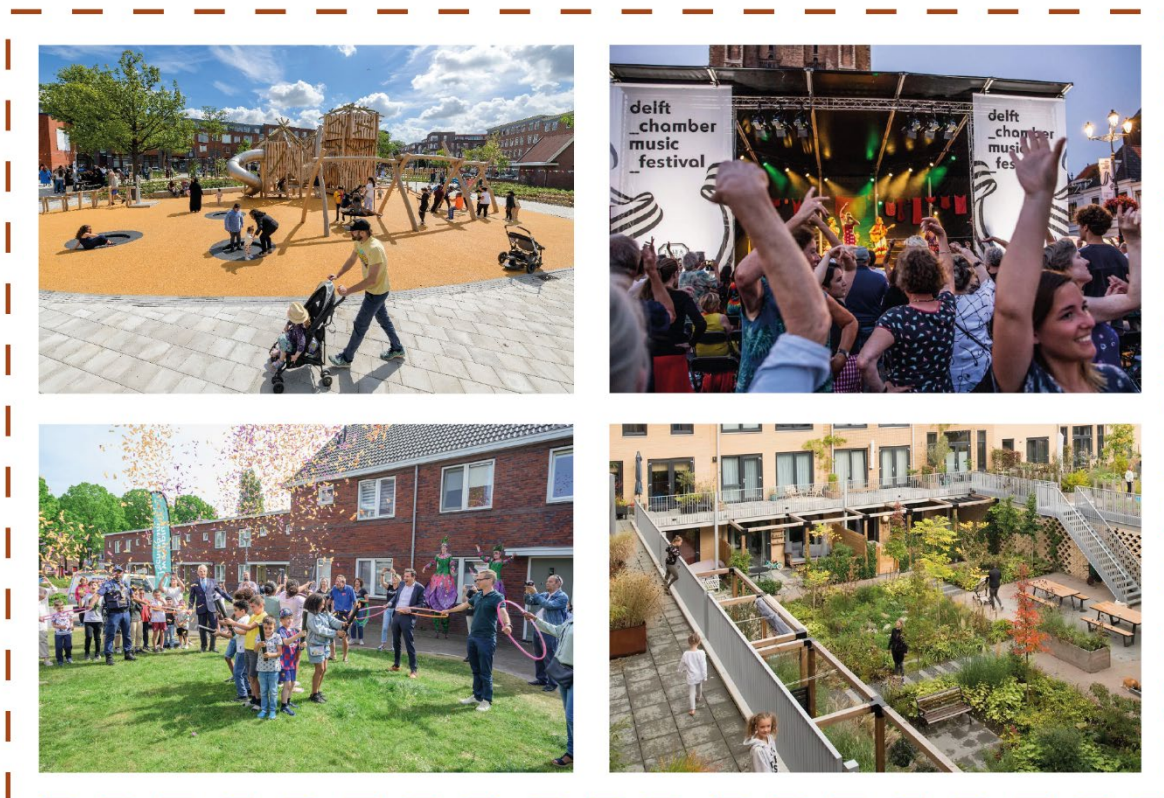


Figure 4.5 Community aspects (Gemeente Rotterdam, 2024; Gemeente Delft, 2021; Renda, 2025; RROg, n.d.)

## 4.2.4 IDENTITY

Within the category of identity, the following criteria were mentioned: reputation of the neighbourhood, aesthetic quality of the building, recognisability of the building and heritage (Bullen & Love, 2010; Geraedts et al., 2024; Van Laar et al., 2024; Schrieken, 2007; Tan et al., 2014 & Wilkinson, 2014).

The reputation of a neighbourhood has an influence on the connection between the residents and their neighbourhood. Within neighbourhoods with a negative reputation, residents generally have less of a connection with the neighbourhood, both socially and physically, and have less trust in neighbours (Otero et al., 2024). For neighbourhoods with a positive reputation, it is the other way around. The reputation of a neighbourhood is the result of personal experiences, media coverage and the physical attributes of the neighbourhood. From these aspects, personal experiences and media coverage have far more effect than the physical attributes (Permentier et al., 2008). This makes it difficult to determine the true reputation or identity of a neighbourhood.

According to Permentier et al. (2008), residents generally rate a neighbourhood higher than non-residents. However, for residents, personal experiences play a larger role, and non-residents are primarily influenced by media coverage, since non-residents simply have fewer personal experiences within the neighbourhood. Since media coverage is more tangible, this is often what is looked at when trying to get an understanding of a neighbourhood's reputation. Therefore, the following should be considered during the adaptive reuse decision-making process. From whose perspective are you looking at a neighbourhood, from a resident's or a non-resident's perspective?

The criterion of aesthetics is related to the building's appearance. Buildings with a poor appearance (Figure 4.6), for example, being outdated or worn, are less likely to be adapted (Wilkinson & Reed, 2011). Other aspects that can be looked at include the state of maintenance, architectural harmony and material quality (Schrieken, 2007; Vafaie et al., 2023). As mentioned before, physical attributes play a role in determining the reputation of a neighbourhood. Therefore, aesthetics, which is a more building-specific criterion, indirectly also influences the neighbourhood reputation.



Figure 4.6 Buildings with a poor appearance (Radar, 2023; DUIC, 2024)

In addition to the aesthetic, recognisability plays a role in determining the identity of the building. Whereas the criterion of aesthetics primarily focuses on whether a building is nice-looking, recognisability also considers the role of the building as a landmark or point of orientation (Figure 4.7). According to Lynch (1960), landmarks play a central role in forming a mental map of urban environments, which contributes to the understanding and positioning of oneself within a city. For a building to be a landmark, it must stand out in comparison to its surroundings, which can be due to its size, its uniqueness or its use in daily life (Lynch, 1960; Schrieken, 2007). This means that both the city cathedral and a corner restaurant can be seen as recognisable buildings. Generally, the following question can be asked to determine recognisability: Is this building used to describe a location within the city?



Figure 4.7 Examples of recognisable places in Delft (In Delft, n.d.)

The last criterion that plays a role in determining the identity of a building and neighbourhood is heritage. As mentioned before, buildings are social and cultural products (King, 1980). When buildings have a heritage status, it is clear that the building has a high sociocultural value, either due to a historic event that took place there or due to its role in a specific period (Cultural Heritage Agency of the Netherlands, n.d.). However, this heritage status also adds a layer of regulations and, therefore, can be a limiting factor in adaptive reuse projects. Additionally, reusing a heritage building starts a discussion amongst stakeholders about both the aesthetic and emotional value of the building, especially when the building does not have a heritage status, since then it is more difficult to determine what is of importance (Van Venrooij, 2024). Aspects that can be looked at to determine heritage value are: recognisability, the architect, heritage status, quality of specific building elements and historic events (Schrieken, 2007).

## 4.2.5 INCLUSIVITY

In comparison to the other categories, inclusivity criteria were mentioned considerably less in the researched publications. The criteria that were identified are public support and job creation (Van Laar et al., 2024; Tan et al., 2014).

Public support, or public participation, refers to the degree to which a development aligns with the wants and needs of the surrounding community and whether residents are actively involved in the decision-making process. Involving the public in adaptive reuse projects contributes to a sense of ownership and belonging and helps ensure that the resulting development genuinely serves the needs of the neighbourhood (Tan et al., 2014; Van Laar et al., 2024). Beyond this, public support can also play a role in preventing displacement and gentrification, which are risks

associated with adaptive reuse, but also with urban regeneration in a broader sense (Mehan, 2025).

In the Netherlands, the Environment Act came into force at the start of 2024. Public participation plays a key role in this legislation (Hobma, 2024). When submitting a planning application, applicants are now required to specify how public participation has taken place in their process (Informatiepunt Leefomgeving, n.d.). This means that if there has been insufficient public participation or if there are objections, a planning permission will not be granted. This has a significant impact on the timeline of the development process. As a result, inclusivity has come to play a greater role in developments.

Job creation is the second criterion identified within this category. Although Van Laar et al. (2024) classify job creation primarily as an economic criterion, its implications extend into the social domain. Employment contributes to social security and the financial stability of residents, and when job creation is aligned with the needs of the local community, it can strengthen the social fabric of a neighbourhood. In the adaptive reuse project of Fenix I, job creation was mentioned specifically as one of the success factors (Vafaie et al., 2025). It should be noted that in order for job creation to be inclusive, the needs as well as the job preferences of residents should be considered. On a wider scale, inclusivity relates to the diversity of aspects such as nationality, race, gender, age, religion and language. Within the Netherlands, cities are characterised by a high level of diversification resulting from international migrations (Hoekstra & Pinkster, 2019). When focusing on inclusivity, these diversities are something to be aware of and also need to be addressed.

## 4.2.6 URBAN STRUCTURES

Within the category of urban structures, the following criteria were identified: liveliness of the neighbourhood, alignment with existing structures and alignment with urban plans (Bullen & Love, 2010; Geraedts et al., 2024; Van Laar et al., 2024; Schrieken, 2007; Tan et al., 2014; Wilkinson, 2014).

Liveliness, or urban vitality, is a recurring theme in urban theory. According to Jacobs (1961), urban vitality is a prerequisite for safe and successful cities and is dependent on factors such as accessibility and building density. A lively neighbourhood attracts people throughout the day, which increases the likelihood of spontaneous social interaction. However, a paradox exists within this relationship. While vibrant neighbourhoods foster social interaction by bringing people together, very lively neighbourhoods simultaneously have a negative effect on social cohesion by reducing the quality of individual interactions due to more anonymity (Sennett, 1990; Mouratidis & Poortinga, 2020). This paradox is relevant to adaptive reuse, as projects may increase the liveliness of a neighbourhood without necessarily strengthening the social bonds between residents.

Additionally, adaptive reuse often happens in an existing urban environment. Alignment with both the existing urban structures and future urban plans is therefore key in realising a project that contributes to the neighbourhood. Even though urban alignment also relates to aspects such as accessibility, identity and amenities, this category is introduced separately since it can also relate to municipality policies and the urban context.

## 4.3 LINKS BETWEEN ASPECTS

The aspects mentioned before cannot be considered in isolation from one another. For some of the aspects, a clear link to other aspects is present, which has been elaborated on before. This section will go into these links in more detail to show how the sociocultural criteria have an effect on one another outside of their own category, which is presented visually in Figure 4.8.

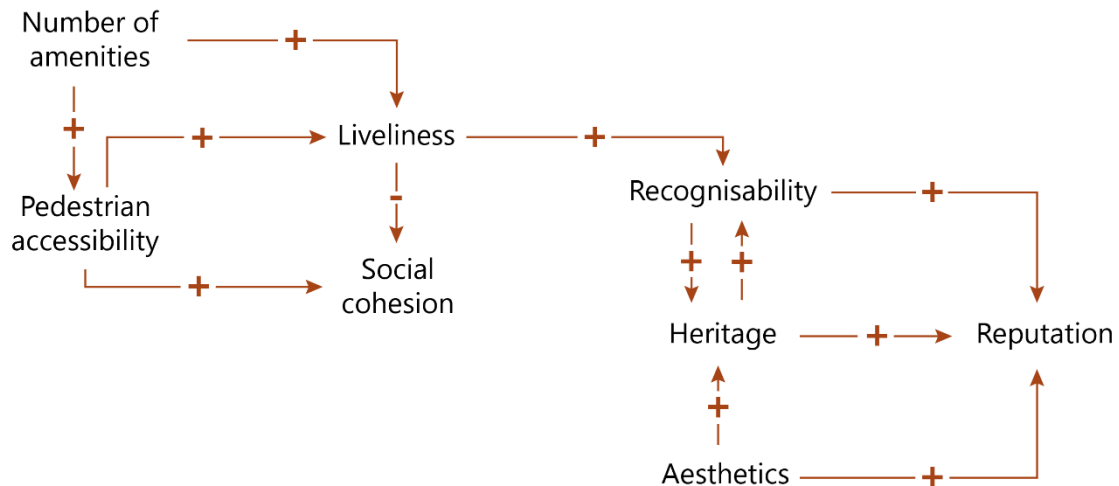


Figure 4.8 Relations between sociocultural aspects (Own work)

When looking at the criteria discussed, the start of the relation can be traced back to the number of amenities in a neighbourhood. A higher number of amenities means that more people will be outside, which fosters liveliness (Jacobs, 1961). Additionally, a higher number of amenities has a positive effect on walkability, improving pedestrian accessibility (Mouratidis & Poortinga, 2020).

Social cohesion, or the level of connectedness between residents (Berkman & Kawachi, 2000), is positively impacted by pedestrian accessibility (Jacobs, 1961; Lund, 2003; Mazumdar, 2018) but negatively impacted by liveliness due to an increase in anonymity (Sennett, 1990; Mouratidis & Poortinga, 2020). The number of amenities, pedestrian accessibility, liveliness and social cohesion therefore form a delicate balance. When there are too few amenities, there is not enough interaction to realise social cohesion. When the number of amenities is high, liveliness will increase, but too much liveliness will reduce the feeling of connection amongst residents.

Other criteria that influence one another are more related to the physical properties of the neighbourhood and the building, and the reputation that stems from that. The link between liveliness and recognisability is based on the idea that a higher number of visitors simply allows a building or neighbourhood to be more recognisable. Since recognisability is considered when assessing heritage, it has a positive effect (Schrieken, 2007). This also goes the other way around due to heritage being regarded as important and therefore recognisable. Aside from recognisability, aesthetics are also considered an aspect that influences heritage (Schrieken, 2007). Additionally, physical building and neighbourhood attributes influence the reputation of an area (Permentier et al., 2008), which can be translated into recognisability, heritage and aesthetics. This shows that all aspects within the category of identity positively influence and strengthen one another, which should be considered when addressing aspects related to identity.

**THE DEVELOPERS'  
PERSPECTIVE**

**5**

## 5.1 DEVELOPER PROFILES

In total, eight interviews were held with eight different development firms. In two of the interviews, two employees were interviewed simultaneously (Figure 5.1). The development firms that were interviewed range from small developers with around five employees that focus specifically on adaptive reuse, to large firms that do both development and construction. The operating area of the developers highly differs. Some developers only work in a specific city, whereas others develop in and around the big Dutch cities in the Randstad. Two of the developers operate nationally.

This wide range of developers allowed for a glimpse into the decision-making process on all different scales. Due to the developers being so different from one another, it is not the goal to compare these findings, but to gain an understanding of what sociocultural aspects play a role in adaptive reuse projects and how this is steered. A summary of each of the interviews is added as Appendix A3 to this document.

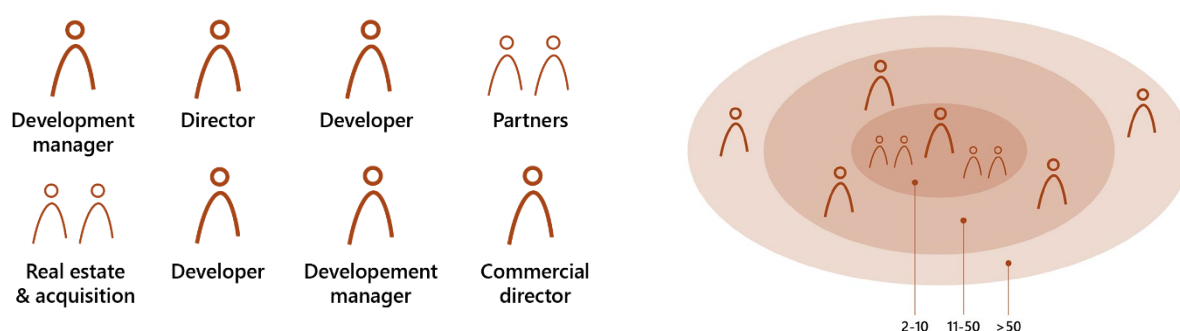


Figure 5.1 Developer roles and firm sizes (Own work)

### 5.1.1 CORE VALUES

All of the developers who have been interviewed have some sort of company vision or policy with which all projects need to comply. These core values form the fundamental beliefs of the company and are a way for the organisation to identify itself. Internally, these core values function as a way to align objectives amongst colleagues, they guide decisions, and they contribute to consistent development strategies. Externally, these core values help the developer to position themselves in a certain way by putting emphasis on what matters to the developer and what types of developments they aim to realise.

Amongst the interviewees, two types of core values were most present: core values related to sustainability and core values related to community. In the category of sustainability, values such as circularity, nature-inclusive and lower CO<sub>2</sub>-emissions were mentioned. When looking at social core values, almost all developers had values that related to community and inclusivity: strengthen society, social cohesion, strong community, socially inclusive and collective spaces.

Through a more extensive analysis of the decision-making process, it can be determined to what extent these values truly influence adaptive reuse decision-making or whether they are mostly used to position themselves externally.

## 5.2 THE ROLE OF SOCIOCULTURAL ASPECTS IN DECISION-MAKING

To determine how sociocultural aspects influence adaptive reuse decision-making, a distinction is made between the acquisition (initiation) phase and the development (preparation) phase. For each of the categories, it was determined whether aspects in this category play a role and to what extent. An overview is presented in Figure 5.2.



Figure 5.2 Role of sociocultural aspects per phase (Own work)

It is important to emphasise that even though sociocultural aspects are regarded as important by developers, sociocultural objectives can only be achieved if other aspects within the development process are also in balance. The entire development process is characterised by a constant going back and forth between aspects:

*“[Adaptive reuse] is everything. It involves technical, legal and financial aspects. So if things are going well financially, they might not be going well legally; if they’re going well legally, they might not be going well technically. It’s a bit like a triangle where you have to keep finding the right balance all the time, a bit like a waterbed.” – Developer 2*

Sociocultural aspects can therefore not be seen in isolation. Therefore, effects on, for instance, financial feasibility or technical difficulties that play a role when incorporating sociocultural aspects will also be addressed.

## 5.2.1 ACQUISITION PHASE

In the acquisition phase, developers make the decision to do either adaptive reuse, demolish & rebuild or nothing. This decision is primarily guided by the concept of the development and the technical qualities of the building, which determine the financial feasibility of adaptive reuse. Generally, projects that are under a certain return are not picked up. However, if developers have the financial means and the project does have value, exceptions can sometimes be made:

*“If, at some point, the return falls below a certain threshold, the project may still be cancelled on that basis. However, there may be other reasons to go ahead with it, such as the importance of the project. There, at that moment, with specific stakeholders, there can always be reasons to deviate from the plan.” – Developer 6*

The influence of each of the categories of sociocultural aspects differs, but generally, the acquisition phase is concentrated on quickly assessing the context of the project to determine feasibility. Focus therefore lies on the identity, amenities and accessibility of the building and the neighbourhood around.

### Identity

The category that has the biggest influence during the acquisition phase is identity. The identity of both the neighbourhood and the building play a role in determining the concept of the development, and therefore also on the future function and ultimately on the financial feasibility of the whole development. Especially the identity of the building itself determines whether adaptive reuse is desirable:

*“We then assess the building on the basis of a few technical points, but above all, do we believe the building should be preserved for the community? Does it have sufficient value?” – Developer 1*

### Heritage

The most straightforward way to determine the identity of a building is through its heritage status, which confirms that a building indeed has sociocultural value, but it also complicates the development process since it limits the interventions you can do to the building and requires more care throughout the entire development process.

When it comes to heritage status, it can go two ways: either it is appreciated and therefore is something that has a positive effect on the decision to do an adaptive reuse project, or it is regarded as too complex. One developer specifically stated that they will not work on heritage buildings. Another developer emphasised that buildings with a heritage status are simply appreciated more, which makes it difficult to determine the direction in which you are going to develop the building:

*“Nowadays, there aren’t that many buildings from the 60s, 70s and 80s left, and suddenly it’s announced that they’re going to be listed. But that also means that far more people are going to appreciate them. And that’s always a challenge for a developer, of course.*

*You have to find a way that suits you, but also the person who ultimately has to invest in it.” – Developer 2*

### **Influence on concept**

If a building has a particular identity, there is often a desire to preserve or enhance it. Numerous developers stated that they are passionate about the projects in which they are able to work with a building that has a strong identity. In addition to heritage, cultural relevance and the building forming a point of recognition are aspects that determine the identity of a building:

*“And when you see such an iconic building, one that’s engraved in the minds of everyone in the city, part of the mental map, and the building lends itself to transformation, then, as far as we’re concerned, it’s pretty clear, isn’t it? You want to make the most of that existing building, don’t you?” – Developer 1*

Another advantage of working on a project with a strong identity is that you have something that can guide your development:

*“The great thing is, if you manage to preserve that old property or breathe new life into it, then that value is already there. So, even for your own concept, it simply makes good sense to ask: what qualities does it have, and how can we make use of them again? So that’s definitely something we always do.” – Developer 8*

Additionally, the neighbourhood's identity or reputation influences the concept. This identity is made up of aspects such as the amenities, the people living in the neighbourhood and the liveliness.

## **Amenities & accessibility**

Amenities and accessibility were often mentioned simultaneously when asked about aspects that influence acquisition. Both of them play a role in determining whether it would be feasible to develop a certain type of function in that location, and whether there would be demand for that function. The absence of specific amenities steers the decision to include those in the development, if possible. Both amenities and accessibility, therefore, have a strong influence on feasibility.

### **Explicit accessibility criteria**

Even though all developers regarded accessibility as influential, only three developers had explicit criteria about the accessibility of the project. For one developer, all projects need to be within walking distance of public transport:

*“As we also believe that car dependency will decrease in the future and access to public transport will become more important, we always look for locations that are within walking distance of a public transport station.” – Developer 2*

Public transport accessibility is also a prerequisite, according to another developer, especially when developing offices:

*“I take a very critical look at accessibility when making purchases, and it’s absolutely crucial in the office market. It simply doesn’t work in places that aren’t easily accessible. A large proportion of users always travel by public transport.” – Developer 8*

A third developer emphasises the importance of bicycle accessibility from the university and the presence of supermarkets close by:

*“I think the first things we look at are the location, so how accessible it is, and how easy it is to get around. After all, for students too, it’s not just important to be able to get to university quickly, but also to have a supermarket nearby.” – Developer 4*

These last two examples show that having a specific type of development or target group can also lead to specific accessibility requirements.

### **Future amenities**

An analysis of the existing amenities is also used to determine the demand for future amenities. These amenities need to strengthen both the development and the community. One developer mentioned that they make a location scan during acquisition to determine a mismatch in amenities:

*“But then we’ll take a really close look: who lives there? So who doesn’t live there? What else can we see? What facilities are there? What facilities are missing? What do we think those people need? What’s available there, and what do they need? Is there a mismatch?”- Developer 7*

They also check this with the municipality, since it is often difficult to get a grasp on the demand for specific amenities as a developer.

### **Project timeline**

Both amenities and accessibility determine the timeline of the project, which relates to the fact that amenities and infrastructure generally follow housing and offices in developments, so if nothing is present yet, it will take longer before the area is fully functioning. This is mainly the case in large urban renewal projects, where industrial areas are turned into housing areas. This developer, therefore, favours adaptive reuse over the development of brownfields or greenfields:

*“When it comes to amenities and accessibility for homes, this has a huge impact on the timeline for when you can actually start building. Some areas simply still need a long lead-up period. The downside is that amenities in new areas really lag behind the homes and offices. So you always end up with a sort of ghost town at the start.” – Developer 8*

## Parking

When talking about accessibility specifically, parking was mentioned numerous times as something that significantly influences the development process and therefore needs to be considered during the acquisition phase:

*“Parking is, of course, sometimes an issue, isn’t it? So, when it comes to adding homes to an existing site, is that actually feasible? Can you create enough parking spaces? Can you find space for them if you’re converting the site into housing and also adding extra storeys?” – Developer 1*

Parking is influential in two ways. Firstly, it can be technically complex to realise additional parking, for instance, in a cellar. When choosing to use the ground floor for parking, there will be fewer square meters available for tenants. Both these aspects influence the business case and financial feasibility. Additionally, parking is often a reason for objections from surrounding residents. Therefore, it is important to be aware of the implications that your parking solution will have, since objections will possibly significantly delay the development process.

## Urban context

During the acquisition phase, the urban context influences the decision to do adaptive reuse, to demolish & rebuild or not do the project. In addition to the technical qualities of the building, the way the building fits into the context can also be a reason to decide not to do adaptive reuse, but to demolish & rebuild instead.

One of the developers, who normally focuses on adaptive reuse, stated that they chose to demolish a building that did not fit in the urban context, both in scale and appearance. Therefore, at the beginning of the development, the urban context will guide the decision to demolish or to continue with adaptive reuse, but after this decision, making the new building fit in the urban context is mostly seen as a complexity that is part of every project.

Liveliness of the area is, similarly to identity, often mentioned by developers as either something that is already present in an area, which makes it an attractive place to develop, or it is something they aim to realise with their developments. If an area is already lively, it shows that the development will most likely be received well.

## Community & inclusivity

Little to no comments were made about the influence of community and inclusivity on the decisions made during the acquisition phase. For the majority of the developers, community is something that primarily plays a role in the development of the project after acquisition, meaning that during the acquisition, the social cohesion or sense of community within a neighbourhood does not explicitly guide the decision to start a project, but all developers take it into consideration when continuing their projects, especially since community and inclusivity aspects are present in all core values.

## 5.2.2 DEVELOPMENT PHASE

In the development phase, the project is further elaborated into a full plan that is ready for the start of construction. In this phase, sociocultural aspects influence what elements should be included in the development. During this phase, mainly community, identity and inclusivity guide decisions related to sociocultural aspects.

### Community

The majority of the developers have core values that focus on community, both within the building they are developing and also in relation to the neighbourhood. Examples of these core values are ‘collective spaces’, ‘strong community’, ‘social cohesion’ and ‘preventing loneliness’, which are all introduced because if there is a lack of social cohesion, the development will simply not work. For most developers, community aspects start playing a role after acquisition, as explicitly mentioned by one developer:

*“We find the concept of community very interesting, but for us it comes into play after the purchase, i.e. when we’re actually in the design phase of a development. So how do we ensure that we include community facilities in such a project?”- Developer 8*

#### Community-focused policies

To make sure that the objective of including a communal area does not get lost during the development of the project, one developer included a target in their policy, through which it can easily be determined whether they are still working towards achieving this objective:

*“Well, there are a few. We drew up an ESG policy three or four years ago. ... In it, we’ve set ourselves the goal, for example, of ensuring that every project includes either a meeting space comprising at least 1% of the gross floor area, or a communal outdoor space of... I can’t recall the exact figure off the top of my head, but one of a substantial size that simply encourages social interaction.”- Developer 3*

Another developer sets aside a part of their budget for community-focused interventions:

*“In all our projects, we have a community budget. That way, you can be sure that you can always include it in your development.”- Developer 8*

#### Interaction between residents

The majority of the developers include communal spaces in their developments that encourage social interaction between residents. Specific initiatives are collective gardens, which residents pass through to get to their front doors or wider galleries, so people can stop more easily to have conversations with neighbours when running into one another. The focus of all these interventions lies in the promotion of small interactions:

*“What I’ve discovered for myself, and what’s the most important thing to focus on, and I emphasise this a lot, is what they call ‘weak ties’, so that’s about chance encounters. ...*

*That's why we're also looking very closely at the physical environment. For example, not a car park underneath a block of flats where you go straight to your flat, but designing the car park in such a way that you have to walk a short distance, so that you always bump into someone.” – Developer 5*

## **Connection with the neighbourhood**

In addition to the social cohesion amongst residents, the connection with the neighbourhood is regarded as important, since in adaptive reuse projects, there are always existing users, for whom their daily environment will change. According to one of the developers, you could argue that you are always taking away something from the neighbourhood:

*“The starting point is always to think about what you can bring to the neighbourhood. Because you always end up taking something away, which is strange but true. If you have an empty office building covered in graffiti and you are turning it into apartments, there will always be someone against it. Because, well, that's what they're used to.” – Developer 7*

Many developers recognise this and therefore try to include a collective space in their developments that is accessible to the neighbourhood and stimulates interaction, for instance, through the sharing of gardening tools in a collective garden. But in practice, safety and nuisance lead to either the residents or the investors requesting these collective spaces to be closed off for non-residents, whether just during the night or completely. This shows that even though developers have ideas and a vision regarding collectivity, in practice, it sometimes does not work.

## **Inclusivity**

To the majority of the developers, inclusivity primarily relates to participation and affordability requirements. Fewer developers talked about the development itself being inclusive, but to most developers, inclusivity primarily related to affordability requirements. One of the developers, who also focuses more on inclusivity in their developments, said the following about inclusivity:

*“Inclusivity means having certain facilities in place, listening to how people experience things, recognising cultural differences, and involving people. Those aspects tend to be overlooked.” – Developer 5*

An example of a specific intervention is the incorporation of enough benches in the public space, since in that area there are large Surinamese and Antillean communities, who often sit outside when the weather is nice. When developing from a Dutch perspective, in this case, these aspects tend to be overlooked.

Additionally, inclusivity relates to providing a safe environment for everyone living in the neighbourhood. This is something you need to be aware of and address in your developments:

*“So if you want to make it inclusive, you need to put yourself in the shoes of the people who live here, consider what they need, and figure out how to ensure that this is inclusive. This also means addressing the fact that in some neighbourhoods where there are large*

*Muslim populations, for example, gay people do not feel comfortable living there. So you need to do something about that, too.” – Developer 5*

## **Participation**

In all projects, participation plays a role, which can strengthen the development, but simultaneously be a cause for delays. Per project, the required type and level of participation are determined based on the initial observations during the acquisition phase:

“Yes, and sometimes you know in advance that the neighbourhood will be a challenge. In that case, your engagement process, for example, is very important. But it does require a bit of a bespoke approach. As standard practice, we identify certain risks during the acquisition process, so that you also know: this is an area to focus on during development.” – Developer 8

One developer stated they always start the participation process with guiding principles, and never a design. This will create support since people can actually have input in the development, which, according to the developer, simply makes the design better. Residents are also less likely to object due to this method:

“We always go into the neighbourhood with just a few starting points, not with a finished design. ... And there are always good things coming out of the neighbourhood that you can integrate into your design. ... That always works very well, because it does a couple of things: firstly, you don’t overwhelm the neighbourhood with a design that makes them think, ‘Right, I’m playing catch-up; it’s already been decided, so I might as well put in an objection.’ And the second thing is: the plan simply ends up being better for it.” – Developer 1

Others noted that they had projects with numerous objections at the beginning of the process, but by involving surrounding residents right from the start and explaining the reasoning behind it, people got used to the development happening, but also understood the need for the development since people recognise the demand for housing within their surroundings:

“Well, there is, of course, a real risk that the residents of the existing building might, shall we say, not be too keen on the idea, so very early on in the process, we explained to people: Why are we doing this? We’re doing it because there’s a housing shortage. And you see that if you do that very early on in the process, the residents start to recognise that and say, ‘Yes, that’s right, because my grandchild has been on the waiting list for eight years.’ So by fully involving people in that, essentially identifying that risk very early on.” – Developer 6

## **Identity**

As mentioned before, identity plays a significant role in determining the concept of the development. After acquisition, the identity of the neighbourhood continues to influence the development through, for instance, essence documents that highlight aspects of the building and the neighbourhood that need to be retained:

*“Identity plays one of the most important roles in how we approach the planning process. We have a department, a concept development department, and within that, we have, for example, a methodology that involves an ‘essentials document’; so, when we start a project, we draw up an ‘essentials document’, and that covers a great deal. What sort of neighbourhood or area is it, and what should it become?” – Developer 5*

## **Conflicting identities**

Regardless of the identity of the building and the area, multiple developers state that they find it difficult to determine what to do with this identity. In one specific project, a developer worked on turning a vacant prison into housing. A conflict arose when looking into the courtyards. These courtyards were originally designed as fully paved and closed-off outdoor areas, but in the new development, they were supposed to be collective gardens. This got the developer thinking: how do you open up a heritage building whose identity is primarily based on being closed off? Where is the limit?

Heritage influences the interventions that can be done to the building, which sometimes can be challenging, especially since the original function does not really correspond with future needs. The municipality, therefore, needs to make decisions in these cases; otherwise, there won't be a project:

*“It can no longer serve its original purpose, because otherwise we won't be invited to the table. Suppose it were an office building; apparently, it can't be used as an office building now because it's empty, so it's worth the effort to convert it. Yes, a prison like that is apparently no longer needed as a prison. Okay, I think that also means that the Aesthetics Committee or whoever has to recognise that this has consequences. Because if you're going to live in a prison, it can't be a one-to-one conversion. If you're going to live in an old office building, it can't be a one-to-one conversion either.” – Developer 7*

Additionally, developers sometimes go back further into history to use those aspects of the buildings or area's identity, such as detailing that had been removed in renovations, or the area identity of an old shipyard that had since been transformed into an industrial area with no connection to its history.

## **Accessibility**

During the interviews, only aspects regarding parking were mentioned in the category of accessibility when talking about the development phase. This is something that continues to play a role in the decision-making process, since the technical, legal and financial implications are high. Additionally, residents are often hostile towards new developments due to the number of parking spaces in the neighbourhood, so addressing parking is a form of risk mitigation against official objections.

## Amenities

The majority of the developers also include a secondary function in their developments, often in the form of amenities in the plinth. Two developers had different perspectives on the role of these amenities. One developer stated that these amenities are a good method to maximise revenues since the business case is often tight. In general, you will always be looking into ways to maximise revenues, within certain boundaries:

*“Based on the analysis and observation, you’ll look at the business case, which is always tight to begin with, so that will essentially always mean that, when generating revenue, you’ll always be looking to maximise it. But within the limits of, for example, the general provisions, you also need to ensure the product works properly. So in that way, we’re actually working within the framework of all those values you want to preserve. It’s within that framework that you’ll be maximising.” – Developer 6*

Another developer argues, however, that maximising rents through amenities is less important. According to their experience, investors feel the same since the role of amenities in the plinth is mainly to provide a connection with the neighbourhood, and the rental income of the amenities has little effect on the total value of the building:

*“But when you speak to investors about this, they mainly say it’s a residential building, so it will eventually go to a residential property investor. Their primary aim is simply to ensure their pension funds generate a return and that a good residential product is created. And that ground-floor level is specifically designed to connect with the neighbourhood, to keep it vibrant and to ensure a high quality of living. ... So they don’t need to charge the maximum rent; they’d much rather have a good local business owner who has a connection with the neighbourhood.” – Developer 3*

## Urban context

During the development phase, the urban context always plays a role, but more as a prerequisite. You always need to make sure that the development fits in the urban context, but also is aligned with the municipality's policies. It was not mentioned as something that really needs to be considered during the process. It’s just something you simply need to do and is therefore implicitly mentioned by developers in phrases like: “it needs to fit”.

### 5.2.3 ROLE OF INVESTORS

Even though the developers are the initiators and the primary decision-makers in the development, numerous developers emphasised that, at the end of the day, they rely on investors who are willing to acquire that development for their portfolio:

*“Once we’ve developed and built it, we still need an investor who wants that product.” – Developer 6*

This means that the investment criteria of investors indirectly form the investment criteria for developers. One of the developers shared documents prior to the interview, which stated they aim to create lively, attractive and socio-economically well areas. However, when asked what this meant to them specifically, they responded that these aspects were adopted in their own programme of requirements to make sure the development would suit the investment criteria of investors:

*“That isn’t quite our starting point, but we mentioned it to highlight that investors are asking this of us. We’re asked about it, so we know we need to start our reasoning from there and then, depending on what’s feasible, given that it’s a transformation or in light of the business case. So these are starting points we all use, and for each project we look at what we can adopt.” – Developer 2*

Additionally, even though developers have a vision about the community and choose to include a collective garden, an investor can decide that this garden needs to be closed off at night for safety reasons. This is not necessarily an issue, and this investor may have their reasons, but it does show that developers and investors can have conflicting values:

*“No, but ultimately, if it’s their property and they’ve found that people are sleeping there at night or loitering youths are hanging about, well, you can’t tell them they’re not allowed to put a fence around it. But then the whole communal facility will end up being a bit less communal and public in character than we ever intended. ... But then again, that’s the life of a developer. We develop to sell, and after that, we really don’t have a say in the matter anymore.” – Developer 8*

These examples show that even though developers may have specific ideas, they rely on an investor who is willing to acquire the project. Developers, therefore, look into the investment criteria of investors and incorporate them into their decision-making process to make sure their project is in line with the requirements of investors.

## 5.3 CHALLENGES

During the interviews, developers were asked about the challenges they face in adaptive reuse projects, both in general and specifically for sociocultural aspects. Figure 5.3 displays the distribution of the challenges mentioned in interviews across different categories. The majority of the challenges relate to technical, legal and economic aspects.

With adaptive reuse, you have an existing building whose technical conditions are often uncertain. Additionally, specific regulations and guidelines for adaptive reuse are lacking. This all translates into financial difficulties, resulting in a tight business case. Due to these interdependencies, all challenges developers faced will be elaborated, with a focus on the challenges that influence the incorporation of sociocultural aspects in development.

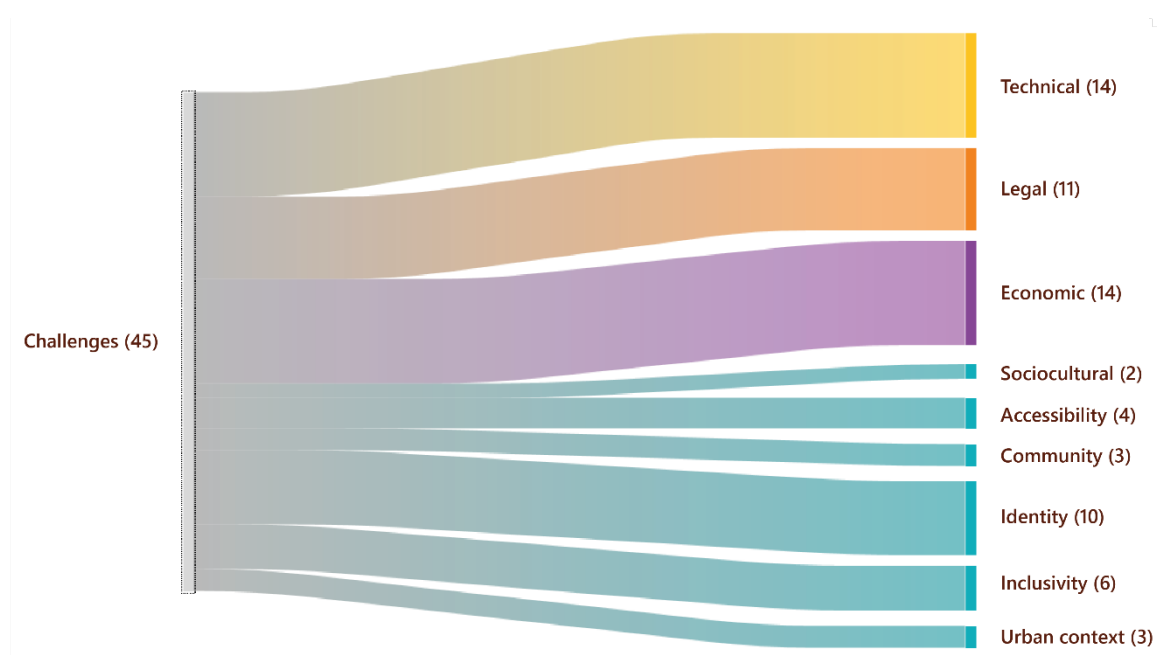


Figure 5.3 Distribution of challenges across aspect categories (Generated using ATLAS.ti)

### 5.3.1 TECHNICAL CHALLENGES

A significant portion of the challenges developers mentioned relates to technical aspects. However, the majority of these challenges overlap and therefore can be reduced to three challenges: the quality of the existing building, the complexity of technical interventions and complying with building codes.

Working on an existing building is always a challenge since there is a high degree of uncertainty related to the quality of the building, especially since the building has possibly been maintained poorly:

*“Yes, when it comes to preserving existing properties, it’s always a bit of a puzzle, particularly regarding the quality of the existing buildings. Sometimes, yes, we do buy up a lot of old buildings, which often haven’t been treated with much care over the past 50 years. So the question is always: to what extent can you preserve and repurpose them? But that’s more from a technical point of view.”- Developer 8*

In line with this uncertainty about the technical quality is the debate about the responsibility for the existing structure. Who is liable if the quality is worse than it was supposed to be?

*“Another key aspect of transformation, in my view, is always identifying who, in technical terms, ultimately takes responsibility for the existing infrastructure. That’s always quite a complex discussion.”- Developer 2*

Providing extra parking is technically challenging due to the need to realise a cellar, which is also costly. Other solutions are parking lifts, but these are also uncertain:

*“Because if you need extra parking spaces, it’s actually quite complicated to add them in an urban setting. Yes, or you’d have to build a basement underneath. That’s very expensive. Or you’d have to use automated parking systems, so it’s not just a lane with lots of bays, but you actually stack the cars and book them in. Yes, but then you run the risk of the lift breaking down, and then your car’s stuck down there and you can’t get away.”  
- Developer 3*

The majority of the technical challenges relate to having to comply with building codes. Challenges such as ceiling height, daylight access, acoustic quality and fire safety were mentioned. Even though these challenges are primarily legal challenges, they translate into a high number of technical interventions that need to be done:

*“Yes, technically speaking, there are some rather complicated aspects involved, particularly when it comes to converting a building that wasn’t originally designed for that purpose into flats. The floors are a key issue. Then there’s fire safety and noise insulation, and those sorts of things are actually quite complex. So, really old buildings, think wooden floors, suddenly have to meet the current regulations requiring 60 minutes of fire resistance. Well, technically speaking, that’s a very complicated job to pull off.” - Developer 7*

### **5.3.2 LEGAL CHALLENGES**

When it comes to legal aspects, almost all developers mentioned challenges related to adaptive reuse being complex due to the high number of legal requirements the building needs to comply with. This translates into the projects taking longer, which influences feasibility:

*“There are a large number of regulations in the Netherlands that make new-build projects complex, but they make adaptive reuse even more complex. This means you have to make more alterations to a building, and that is very costly. For example, we have very strict regulations on noise, to name but one. ... But all these measures piling up, just like daylight requirements, make it very difficult to transform buildings and indeed to develop them at all. It takes a long time, and because of the lengthy process, projects ultimately become less feasible in principle.”- Developer 3*

Five other developers make similar remarks related to strict building regulations hindering the development of adaptive reuse projects. According to one developer, specific regulations for adaptive reuse projects will be necessary for projects to be feasible:

*“The lack of specific regulations for adaptive reuse projects is becoming an increasingly serious problem as sustainability requirements become more stringent. You simply can’t achieve everything in an existing building. The requirements are the same as for new builds.”- Developer 2*

### 5.3.3 ECONOMIC CHALLENGES

The aforementioned technical and legal challenges make adaptive reuse complex. These complexities translate into more investments being required in order for them to be solved. Additionally, the high level of uncertainty, related to, for instance, the technical quality of the building, translates into risks, which strongly influence the business case. In general, there is always too little money:

*“One challenge is the lack of funding. There is plenty of money available, but the business case is simply very complex.” – Developer 6*

Additionally, since multiple developers work for housing associations, the lack of financial means from housing associations also influences the financial feasibility of projects:

*“We do quite a lot of work for housing associations. And yes, the financial viability of housing construction in general is very complicated. ... So anything that makes the building more expensive does make it difficult to include social housing as well.” – Developer 1*

Developing housing in a heritage building is also a challenge due to the inability to add floors. Multiple developers mentioned the importance of maximising the area of the development through adding extra floors, either on top of the building or within the existing structure. In heritage projects, this is often impossible, which also makes the business case tighter since the development simply generates less revenue:

*“If you’d just looked at the Excel sheet, it would have been nice if there had been another floor on top. Well, that was never going to happen. So that also limits what you can do with your programme, because if you have a set number of storeys.” – Developer 7*

### 5.3.4 SOCIOCULTURAL CHALLENGES

The technical, legal and economic challenges highlight the complexities of adaptive reuse projects. These complexities can easily take the overhand during the development process, which hinders the incorporation of sociocultural aspects. Additionally, developers face challenges with the incorporation of sociocultural aspects directly. The challenges related to sociocultural aspects are summarised in Figure 5.4.

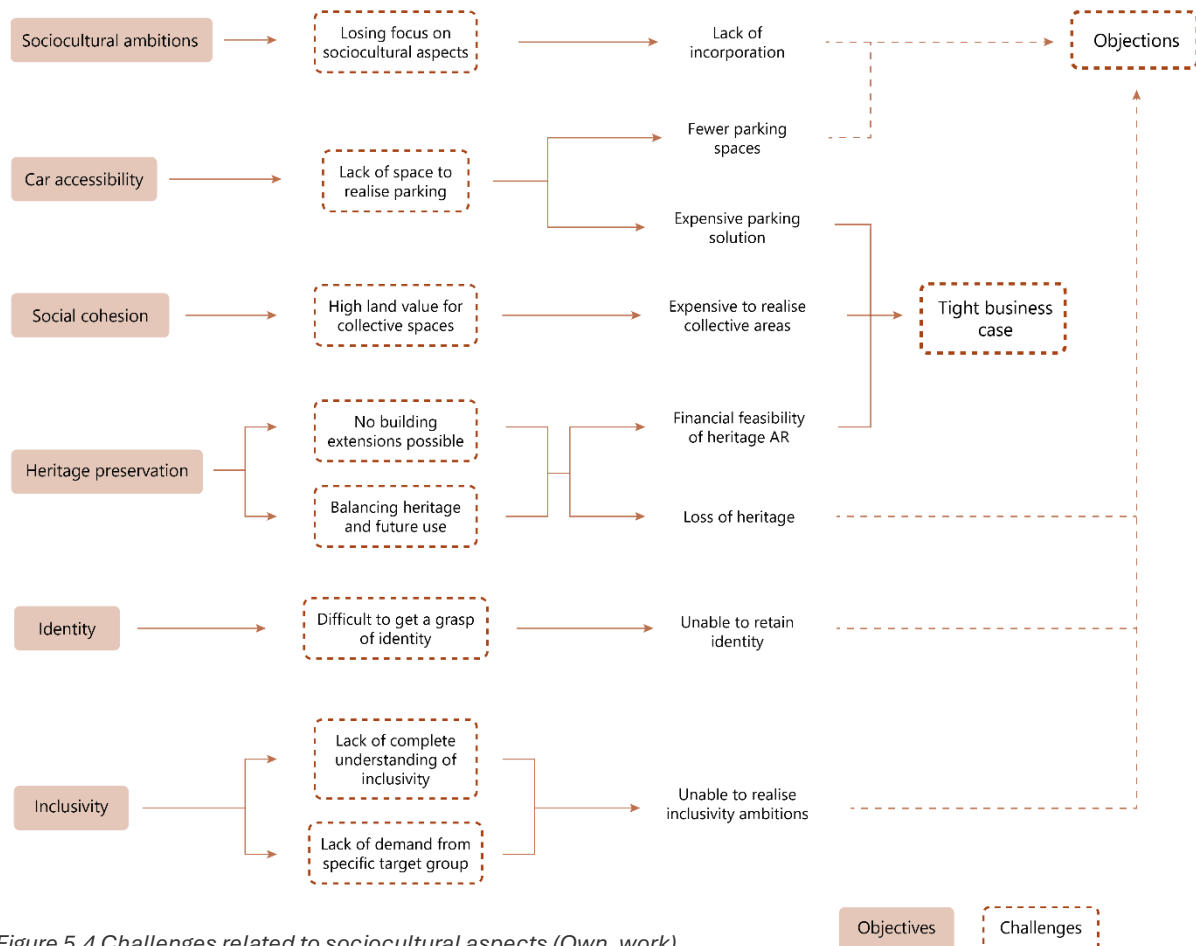


Figure 5.4 Challenges related to sociocultural aspects (Own, work)

### Objections

When asked about the challenges related to sociocultural aspects, permit objections were mentioned the most. As mentioned before, participation is sometimes regarded as an issue due to so-called ‘professional objectors’ who mainly object to pressure developers into financial compensation:

*“When it comes to the local community and public participation, yes... That’s a problem in the Netherlands. Sometimes a project is simply held hostage by an objector who just wants to line their own pockets by continuing to obstruct things. That does, of course, cause problems. You can have the best of intentions, but that isn’t their aim. So we’ll approach them in a friendly manner. But yes, that does make it difficult, of course.” - Developer 1*

These objections significantly hinder and delay the development process and are therefore something that developers actively pay attention to.

Often, objections can come from the neighbourhood and in some cases, it is known in advance that within certain neighbourhoods, people are likely to object. If this is the case, developers will take additional steps to prevent them from filing an official permit objection:

*“Yes, and sometimes you know in advance that the neighbourhood will be a challenge. In that case, your participation process, for example, is very important. But it does require a bit of a bespoke approach. As standard, we identify certain risks during the purchase process, so that you also know: this is an area to focus on during development.” – Developer 8*

The reasons behind objections differ and are also difficult to determine beforehand, since the objections are more based on emotional feelings about the development than rational thoughts. It is therefore assumed that mishandling all sociocultural aspects could lead to objections. Additionally, objections directly relate to inclusivity, since participation, which is an aspect that falls under the category of inclusivity, is a means to prevent objections.

## Losing focus

During the initial phase, all stakeholders are often enthusiastic about the incorporation of sociocultural aspects in the development and community and identity are high on the list of priorities. However, after acquisition, focus quickly shifts towards the costs and revenues and practical issues such as parking, whereas, according to one developer, the focus should stay on sociocultural guiding principles longer:

*“Everyone immediately adopts a pragmatic approach, when in fact they really need to take a moment to think: what exactly do you want to create?” – Developer 5*

However, this developer understands this direction of thought. Sociocultural aspects are difficult to grasp, and then it is easy to start focusing on tangible and rational aspects:

*“The world still revolves very much around financial considerations, rationality and economics. Whereas what you actually want to create is something that’s much more based on soft values and emotion, and the idea that people want to enjoy living there. It’s not that people don’t want that, but there’s less control over it, so everyone quickly falls back on Excel and the design.” – Developer 5*

## Realising parking

Parking is considered a prominent challenge in adaptive reuse. This challenge primarily relates to technical, legal and economic aspects, but since parking availability is connected to car accessibility, it is also considered a sociocultural challenge.

## Land price of collective spaces

According to one developer, a challenge they face when aiming to realise a collective space in their developments is that collective spaces are valued with the same square meter price as dwellings. The underlying argument is that due to the collective space, dwellings can be smaller. They are therefore seen as extensions of the dwellings. However, in practice, this is not the case. The dwellings are still the same size, regardless of a collective space being present in the building or not, but the square meters of collective space do not generate revenues:

*“But for that communal kitchen, we simply have to pay the same high average land price as for social and mid-range rental properties, as if it were living space. An investor won’t make a penny more from it, but the larger the space we create, the more we have to pay for the land.” – Developer 3*

This disincentivises developers from including communal spaces within their developments, even though they have the intrinsic motivation to do so.

## Heritage preservation

The first challenge regarding heritage preservation relates to the inability to add floors to heritage buildings to realise more square meters. This challenge, already mentioned as an economic challenge, primarily translates into lower revenues, but it also causes discussion in the decision-making process: how to balance heritage and future use? According to one developer, this also requires flexibility from the municipality; otherwise, there wouldn’t be a development:

*“Yes, a prison like that is apparently no longer needed as a prison. Okay, but I think that also means that the Spatial Quality committee, or whoever, has to recognise that this has consequences. ... A heritage committee can’t just stick to that stance either. If they do, there won’t be a development, and it will remain an empty prison. Is that really better for the neighbourhood? ... How far can you go with those alterations before you cross the line of respect for the old building?” – Developer 7*

## Grasping identity

Throughout the interviews, identity aspects, such as recognisability, heritage and aesthetics, were mentioned as influential, but simultaneously, it was acknowledged by some developers that these aspects are often difficult to grasp, as explicitly mentioned by one developer:

*“Identity is incredibly important, but also very difficult to pin down.” – Developer 5*

Others claimed that they do look at the identity of the neighbourhood, but that this could be done more extensively:

*“So, when it comes to getting to know the neighbourhood, we could take that a step further.” – Developer 6*

*“Yes, and I think we always do that, and we might do it very quickly and in a rather simplistic way, but we always do look at what’s in the vicinity, and what sort of neighbourhood it is.” – Developer 4*

These examples show that even though developers are aware of the role of identity in their decision-making process, they acknowledge that they do not always look into this identity to the extent they may have wanted to, but this is partially due to the difficulties in getting a grasp of the identity. Developers simply do not live in the neighbourhood, in most cases, which makes it difficult to fully put yourself in the shoes of a resident.

## Inclusivity

Similarly to identity aspects, it was noticed during the interviews that developers have different perspectives on the meaning and the scope of inclusivity. When the question was asked about how inclusivity plays a role in their developments, two developers responded differently.

One developer associated affordability primarily with affordability:

*“Yes, of course, inclusivity is also a matter of affordability: you will always need to cater for certain target groups.” – Developer 8*

To another developer, inclusivity also relates to the needs of people with different cultural backgrounds:

*“So, what does ‘inclusive’ actually mean? I think in terms of different levels of scale. The most abstract level is simply having a variety of housing options, because that assumes there is also a variety of people. But that still doesn’t address what it’s like, for example, to live together with people from different cultural backgrounds.” – Developer 5*

It is important to note that these responses do not necessarily represent how these developers truly think about inclusivity, but it does show how these different perspectives can have implications on the extent to which inclusive aspects are included in the decision-making process. A lack of complete understanding, or at least a broad definition to make sure everyone considers the same aspects, is therefore seen as a challenge.

Regardless of the perspectives on inclusivity, a lack of demand from a specific target group can hinder a development from becoming inclusive. One developer elaborated that in one of their projects, although the intention was to achieve an inclusive development with a diverse range of target groups, a particular target group showed no interest, meaning that these objectives were ultimately not achieved.

### 5.3.5 DISTRIBUTION OF CHALLENGES

The majority of the aforementioned challenges are connected to multiple aspects that play a role in the development process. Figure 5.5 shows the distribution of all challenges across the four aspect categories: technical, legal, economic and sociocultural. Within the Venn diagram, challenges are written in bold if there is a connection to sociocultural aspects. Three sociocultural challenges are not related to either technical, legal or economic aspects.

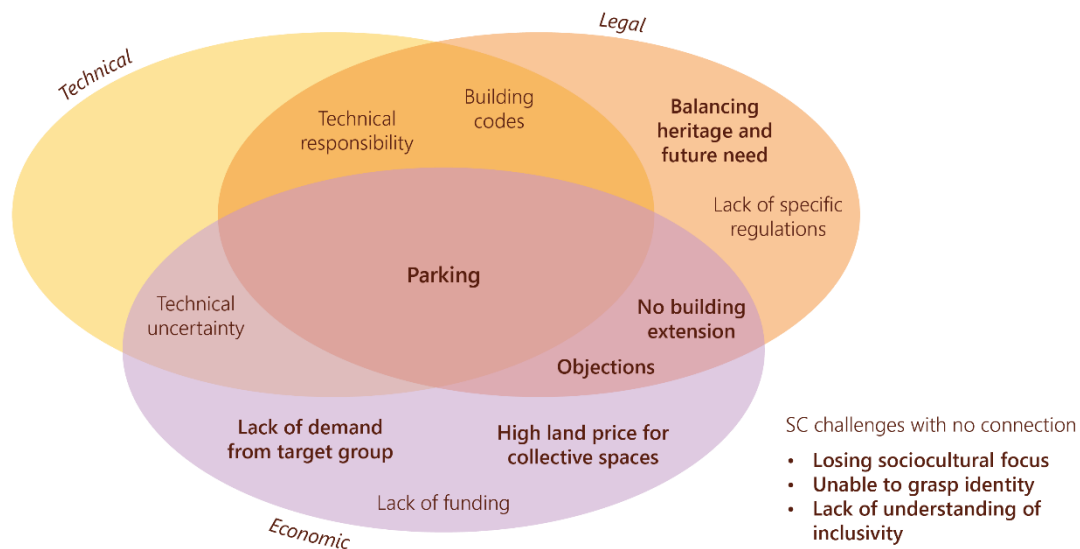


Figure 5.5 Distribution of challenges across categories (Own work)

The majority of the sociocultural challenges developers face also relate to another aspect. This makes it difficult to overcome those challenges since, as previously mentioned, all aspects within the project need to be balanced in order for the project to work. Addressing one challenge, such as realising additional parking, may conflict with the heritage value, and additionally forms an extra challenge if there is already a lack of funding.

Developers have a specific sphere of influence within their developments. Developers rely on the willingness of investors to acquire their projects, and municipalities have a regulatory role through the distribution of permits. Additionally, building codes and other regulations are decided on the national level, making it difficult to have an influence on overcoming those challenges.

When looking into strategies to overcome challenges, it is therefore important to determine the sphere of influence of developers individually, and for what challenges they are relying on other actors.

## 5.4 CONCLUSIONS INTERVIEWS

Through interviews with eight developers, the role of sociocultural aspects in their decision-making process and the challenges they face were examined. An overview of these findings is presented in Figure 5.6.

	General findings	Acquisition phase	Development phase	Challenges
<b>Sociocultural</b>	Sociocultural aspects, in general, influence adaptive reuse decision-making, but need to be in balance with technical, legal and economic aspects.	Accessibility, amenities and identity mainly influence this phase	Community, identity and inclusivity mainly influence this phase	Losing focus on sociocultural objectives
<b>Accessibility</b>	Accessibility is seen as a prerequisite but often also expected to be in place due to adaptive reuse focussing on existing buildings. Parking is a often mentioned challenge.	High influence on feasibility	Parking influences technical, legal and economic aspects	Realising sufficient parking
<b>Amenities</b>	The presence of amenities is a prerequisite since it determines whether there would be demand for housing. Additional amenities are based on what is lacking in the neighbourhood.	High influence on feasibility	Determines future amenities	-
<b>Community</b>	Community is for almost all developers part of their core values. It primarily plays a role after acquisition and is translated into collective spaces. Contributing to social cohesion is an often mentioned objective.	Little effect in this phase	Community-oriented core values lead to collective spaces	High land prices for collective spaces
<b>Identity</b>	The identity of both the neighbourhood and the building strongly influences the business case through the concept. Developers therefore favour projects with a 'strong identity'. Heritage buildings are regarded interesting, but also pose challenges.	Identity strongly influences the concept	Plays important role throughout the development	Difficult to grasp identity  Balancing heritage and future use
<b>Inclusivity</b>	Inclusivity is predominantly related to participation and objections due to objections significantly influencing the development process. Affordability standards are also mentioned.	Little effect in this phase	Focus on participation to create support, improve development and prevent objections	Lack of broad understanding  Objections
<b>Urban context</b>	Liveliness is recognised and is, similarly to identity, appreciated by developers. Adaptive reuse projects are often inner-city developments, making alignment with the urban context complex, but not necessarily an issue.	Liveliness is appreciated	Plays a continuous role throughout the development, but has little effect	-

Figure 5.6 Summarised findings of interviews (Own work)

## 5.4.1 DECISION-MAKING PROCESS

A wide range of types of developers offered an insight into how different sociocultural aspects play a role during adaptive reuse decision-making. It is seen that during both the acquisition and development phases, sociocultural aspects have a steering role in determining feasibility, the concept and the forming of the design.

During the acquisition phase, the focus lies primarily on understanding the context. Amenities and accessibility significantly influence the feasibility of developments, and the identity of both the building and the neighbourhood contribute to the concept, which is something that will play a steering role throughout the entire development process. Additionally, aspects that will significantly influence further development are identified in the acquisition phase, such as possible objections and limitations due to heritage values.

In the development phase, community, inclusivity and identity play a more explicit role in decision-making through the objectives that the developer aims to achieve with the development. Given that community is listed as a core value, emphasis is put on realising social cohesion through collective spaces. Inclusivity is primarily reflected through participation.

## 5.4.2 CHALLENGES

In total, fourteen challenges were identified, of which eight relate to sociocultural aspects, either directly or indirectly. Independence between challenges makes it difficult to address them, and the majority of the challenges are caused by something that is outside the sphere of influence of developers.

The most often mentioned challenges relate to providing enough parking spaces in the development and objections from residents. These challenges emphasise the importance of participation, since parking is often a point of discussion within the neighbourhood and a reason for objections. Other underlying reasons for objections were not discussed specifically.

Lastly, the sphere of influence should be considered when determining methods which can stimulate developers to incorporate sociocultural criteria.



**STIMULATING  
INCORPORATION**



## 6.1 APPROACH

Multiple challenges have been identified, but the majority of these challenges relate to aspects that are outside the sphere of influence of developers. Examples are building codes, technical qualities of the building, little financial means from housing associations. The three challenges that have no connection to legal, technical or economic aspects are:

1. Losing focus on sociocultural aspects
2. Unable to grasp the identity
3. A lack of a complete understanding of inclusivity

As demonstrated, identity plays a guiding role throughout the entire decision-making process. Identity forms the basis for the concept and thus has a significant impact on the business case and financial viability. On the other hand, several developers have indicated that they find it difficult to determine a neighbourhood's identity. As developers, they have a certain degree of distance from the neighbourhood, which means it is not always possible to pinpoint exactly what it is that makes a neighbourhood what it is.

Additionally, differences in the understanding of inclusivity were mentioned between developers. To some developers, inclusivity primarily relates to affordability requirements, whereas others have a broader idea of inclusivity. For them, inclusivity means being aware that there are different people living here, each with their own lifestyles and needs.

Intuitively, there is a link between identity, inclusivity and objections, so the following question was raised: **Could giving more attention to identity also help to mitigate objections?**

Objections, or rather the lack of objections, are a direct incentive for developers to focus more on identity and inclusivity. Multiple developers mentioned objections as a significant challenge in adaptive reuse due to objections delaying the development process and driving up development costs.

Figure 5.1 shows how increasing focus on identity starts a process through which inclusivity, fewer objections and in general more focus on sociocultural aspects are achieved.

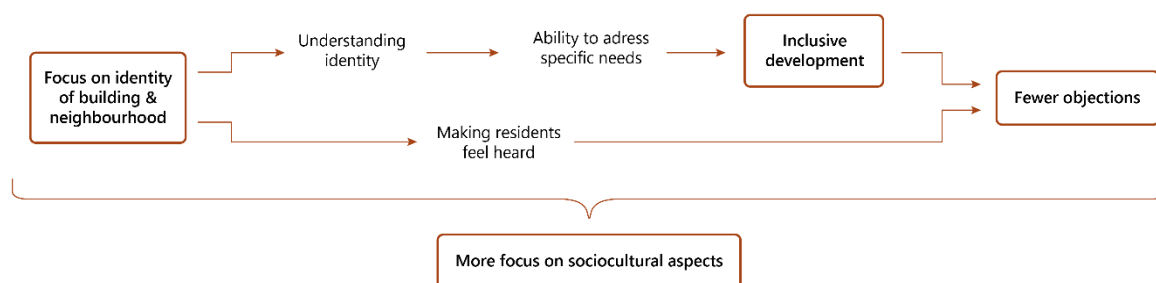


Figure 6.1 Expected outcomes of focusing on identity (Own work)

## 6.1.1 CONCEPT VERSION FRAMEWORK

The primary goal of the framework is to provide tangible steps and actions developers can take to get a better understanding of the identity of both a building and the neighbourhood. Additionally, this framework will give identity, inclusivity and indirectly sociocultural aspects in general a more prominent role in adaptive reuse decision-making.

The framework is made up of three dimensions:

- Building vs. neighbourhood identity
- Past vs. present vs. future
- External vs. internal perspective

### Building – neighbourhood

As previously mentioned, the building identity encompasses aspects such as recognisability, heritage value and aesthetic value. The identity of a neighbourhood is determined by, among other things, socio-demographic aspects, activities within the neighbourhood and the buildings in the neighbourhood (Manahasa et al., 2025), of which the building that is going to be developed is, of course, one. Both the building and neighbourhood will therefore be assessed separately since their identities are, most likely, different. Additionally, it is important to determine the influence of the building on the neighbourhood and vice versa to understand how changing the building will influence the identity of the neighbourhood.

### Past – present – future

The creation of an identity is a complex and dynamic process. Historic events have formed the existing identity, and the identity will continue to evolve due to future events (Robertson et al., 2010). The identity is therefore examined from three different temporal dimensions. Looking at the identity of both the neighbourhood and the building from these three different temporal dimensions contributes to not only having an understanding of the current identity, but also of how this identity came into place and what future directions could be.

### External – internal

Research has shown that perspectives on neighbourhoods highly differ depending on whether you live in the neighbourhood or not (Permentier et al., 2008). This is relevant for developers, since they, in most cases, do not live in the neighbourhood. As a developer, you will have an idea about the identity of the neighbourhood, but it is important to be aware of the fact that your perspective is different from that of people living there. The identity of the building and neighbourhood is therefore consciously assessed both from an external and an internal perspective. Participation is a means of gaining insight into this internal perspective and will therefore play a leading role in understanding the identity.

## Framework

Figure 6.2 shows the steps developers are suggested to take to grasp the identity of both the neighbourhood and the building. Throughout the process, the focus shifts from the developer's perspective to the resident's perspective. An important step in the process is the comparison of the developer (external) perspective and the resident (internal) perspective. By comparing how both the developer and residents perceive the identity, mutual values can be identified. Simultaneously, points of attention, such as conflicting values or aspects of the identity that were previously overlooked, are highlighted. Through the validation of the findings, which encompass the values found within the identity and the points of attention, a decision can be made on what aspects related to the identity of either the neighbourhood or the building should be incorporated in the development.

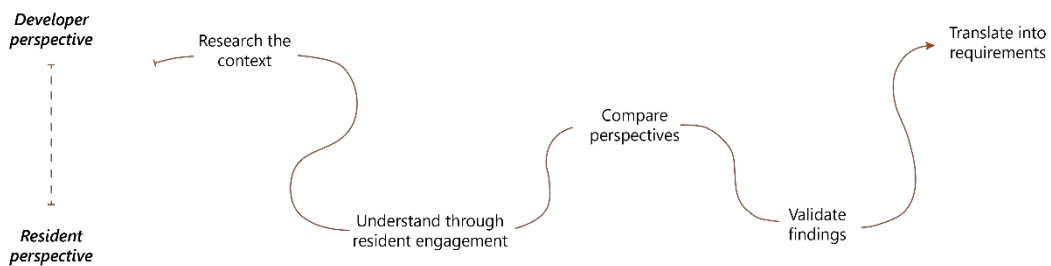


Figure 6.2 Suggested steps to grasp identity (Own work)

Figure 6.3 presents guiding questions that can be used to identify areas for further investigation. In this phase, the main purpose of these questions is to help clarify the meaning of the framework during the validation sessions.

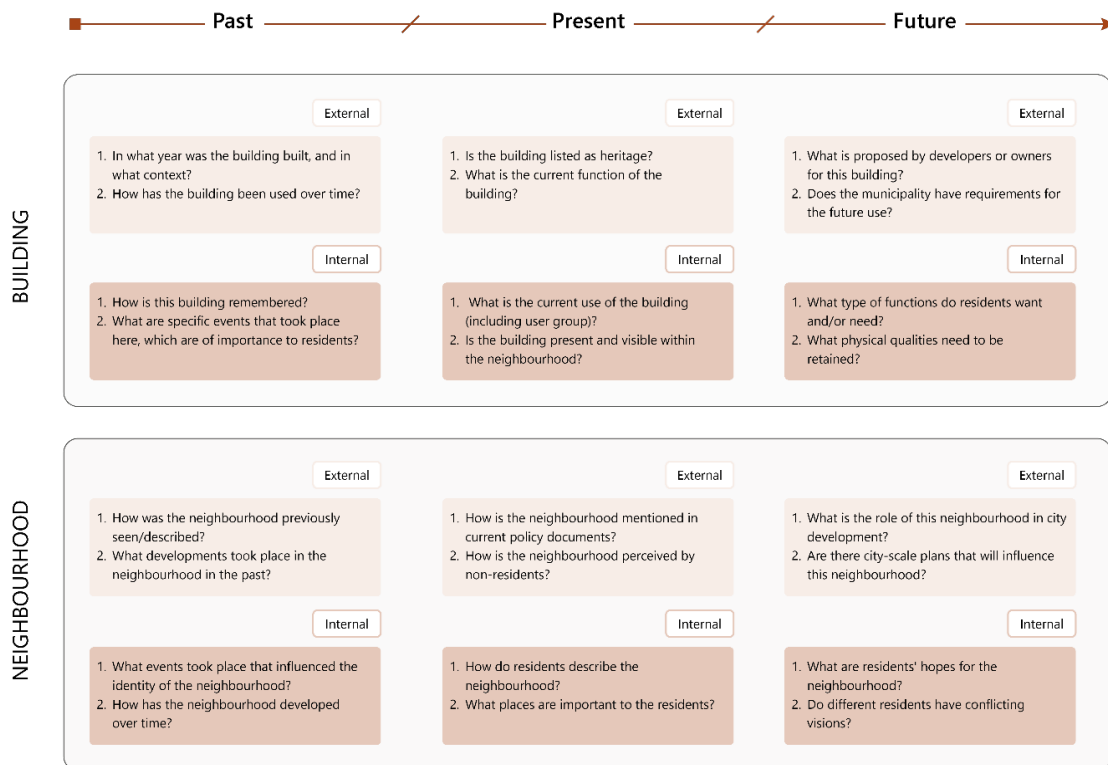


Figure 6.3 Guiding questions per dimension (Own work)

## 6.2 VALIDATION

To validate the conclusions from the interviews and to gain feedback on the proposed framework, all interviewees were asked whether they would be open to having an additional meeting to discuss the findings. The additional goal of the validation sessions was to further clarify the role of identity aspects in their decision-making process. All developers were willing to cooperate, but due to scheduling issues, a meeting was not planned with one of the developers. With the remaining seven, online meetings were held, and the previously elaborated summarised findings (Figure 5.6) were presented. Together with the findings, the hypothesis and first version of a framework were presented in order to provide a basis for examining in greater depth the steps required to properly determine identity. The complete notes of the validation interviews are attached as Appendix A4.

For this framework to work effectively, participation must be taken into account. After all, participation is a means of engaging with the neighbourhood, and the key principle underpinning the proposed framework is engagement with the local residents, in order to define the identity of both the neighbourhood and the building. Due to the central role of participation in grasping the identity, a participation advisor has been asked to elaborate more on how to use participation effectively. Additionally, feedback on the framework was provided.

### 6.2.1 FEEDBACK ON CONCLUSION

The conclusion that identity is the most influential sociocultural aspect in the decision-making process is widely recognised by all developers. As a developer, you seek out specific values, whether these be social, heritage, aesthetic or natural. Determining these values and conducting research into identity to that end is one of the main tasks of developers. Additionally, developers acknowledge that it is in their interest to look into identity, as the foundation of development is the desire to deliver something of quality.

However, it is noticed that the extent to which the identity is examined differs per developer. Additionally, developers often have a commercial perspective and define things in hard terms: something becomes a financial problem, or identity is used as a selling point. They therefore tend to shift their focus to more concrete aspects such as Excel sheets and drawings, instead of intangible aspects such as identity. Acknowledging the difference between the corporate perspective of developers and the social perspective of residents is required to allow yourself to fully immerse in the neighbourhood.

Developers agree that focusing on identity can help to mitigate objections. However, it is important to note that objections can arise for a variety of reasons. Local residents may, for example, feel that their views are not being heard, or they may disagree with the overarching municipal policy on which the development is based. Participation is a tool that allows you to define the identity of the neighbourhood, but also to gain insight into residents' concerns.

## 6.2.2 FEEDBACK ON FRAMEWORK

General responses are that the suggested approach is valuable, especially the concrete questions, because you simply need that attention to identity, but also to sociocultural aspects in general, during your development process. Additionally, since the amount of knowledge also differs per developer within a company, having an integral approach would be helpful to make sure that everyone considers the same aspects.

Numerous developers mentioned the role of municipalities within this process. The municipality is a stakeholder with its own vision and concept, which can add an extra decision to the framework, in comparison to just the perspective of the developer vs. the residents. Additionally, to multiple stakeholders, the municipality is the first point of contact due to the analysis they already have of the neighbourhood, but also their vision and policy documents. They are seen as enablers in the development process and should provide frameworks that steer developers to incorporate social values.

Two developers emphasise the importance of giving something back to the neighbourhood. The idea is not simply to come and gather information and then leave. By, for example, presenting your findings on the history of the neighbourhood, you can spark a conversation that is valuable for further defining its current identity and precise value. Bringing the key principles of your development project to this meeting also fosters a better understanding of exactly what is going to happen and thus provides a clear scope for the discussion. Setting boundaries for resident input is an important step to make sure that you can actually incorporate their wishes. This is a step that needs to be included between researching the context and resident engagement.

## 6.2.3 FEEDBACK PARTICIPATION ADVISOR

When it comes to objections, they are often not related to the development itself but to the impact the development has. Residents are familiar with their neighbourhood, and they use it in a specific way, and the way they go about their day is expected to change. According to the participation advisor, this is the primary reason for objections. Therefore, the difficulty does not necessarily lie in grasping the identity, but in determining what to do with this identity. How are you going to make sure the identity is not harmed? The past and present sections of the framework are valuable for determining the identity and are necessary to make sure you have enough information to make decisions on how to address the identity. When focusing on the 'future', setting boundaries is important to make sure you retrieve suggestions that are within the scope of your development.

Additionally, good communication is important throughout the entire participation process, but especially when it comes to explaining your decisions. The participation advisor suggests that in the 'translate into requirements' step, it should be elaborated to residents why certain aspects are included in the requirements and how this is translated into the design.

Lastly, participation should not be a goal in itself. At the start of the process, you need to think about to what extent you can and want to include resident feedback, and you need to communicate this. If you start an extensive participation process, but due to the business case, there is little room for input, you are setting yourself up for resistance.

## 6.3 FINAL FRAMEWORK

The feedback mentioned above forms the basis for the final framework. This can be summarised into the following points:

- Add the municipality as a stakeholder since they hold existing neighbourhood analyses, policy documents, and a vision that determine possible developments.
- Before engaging residents, set clear boundaries on what their input can realistically influence. Without this, participation raises expectations you can't meet.
- Make giving something back part of the process. Sharing findings (e.g. neighbourhood history) sparks conversation and builds trust before you ask for input.

### 6.3.1 FRAMEWORK STEPS

The final framework is presented in Figure X and consists of six steps, each of which will be elaborated in the sections below. The framework is structured around shifts in perspectives. The beginning focuses on the developer's own research into the identity of the building and neighbourhood. Through engagement with residents, perspective shifts. By focusing on the shared and conflicting values, identity requirements are determined, which are incorporated in the business case in the last step. Throughout the process, the three temporal dimensions continue playing a role.

#### Step 1 - prepare

At the beginning of the process, the developer establishes the boundaries of the participation process. This involves two inputs: the project scope (what kind of development is this, in what context and what lies within influence in the development) and the role of participation in the development. The scope of participation is determined to set boundaries for the participation process, which prevents input that cannot be used in the development from being retrieved.

#### Step 2 - external perspective

After determining the scope of participation, the focus lies on understanding the identity from the developer's perspective. Three directions of input determine the identity values: the building, the neighbourhood and the municipality. When determining the identity values, everything is investigated from two temporal dimensions, the past and the present, to fully understand the context.

The building is assessed on its function, aesthetics, recognisability, and heritage value. For the function, this includes looking into the evolution of the function throughout the years. Additionally, the original aesthetic value of the building and the current value, which can be different, are assessed. Recognisability is more difficult to determine and primarily relates to the present, but, for instance, media coverage can give an insight into the recognisability of the building. Heritage value is the most straightforward method to determine the identity of the

building. When focusing on the heritage value, however, it is important to also connect past use, which is most likely the reason that the building has a heritage value, to current use.

The neighbourhood is examined through its amenities, accessibility, socio-demographic makeup, and role within the city. Determining the current amenities and accessibility of the neighbourhood can be done fairly easily, and for those aspects, it is less relevant to also look into the past perspective. However, when looking into the socio-demographic qualities of the neighbourhood and the role of the neighbourhood, both the past and present perspectives should be addressed to fully understand how the identity of the neighbourhood came to be what it is today.

The municipality contributes to the analysis of both the building and the neighbourhood through, for instance, heritage assessments and socio-demographic analyses.

Based on this first analysis, the identity values of the building and the neighbourhood are determined. These form the basis for the vision of the developer, as established in the interviews. Together with the municipality's vision and policy, since they can be limiting types of developments, the vision of the developer is formed into the concept principles. This is a more future-oriented approach, for which the past and the present form the basis.

### **Step 3 - internal perspective**

Having established identity values and concept principles from an external standpoint, these findings are now brought to residents for validation. In this phase, the scope of participation, which was determined in step 1, plays an important role, since boundaries need to be set for the resident participation.

The identity values, which are related to the past and the present, are presented to start the conversation. Residents are asked whether they recognise the identity values and whether there are values that were missed. Nuance is put on the observation by asking what aspects of the identity are especially important.

For the future perspective, residents are presented with the concept principles and asked what impact the development will have on them, what they feel could be added, and, importantly, how the development can be designed to avoid negatively affecting their daily lives. This last question is crucial in actively addressing the worries of the residents, which will prevent them from objecting to the development.

### **Step 4 - compare & translate**

With insights into both the external and internal perspectives, a comparison can be made. This comparison reveals shared values, which are aspects of identity that both the developer and residents recognise and care about, as well as conflicting values, where the two perspectives clash. For each conflicting value, its significance needs to be determined: does this conflict need to be addressed in the development or is merely acknowledging it enough? The outcome of this step is a set of identity requirements, which are concrete statements about which identity values need to be incorporated in the development.

## Step 5 - inform

As mentioned by the participation advisor, informing residents of your decisions is an important step in participation. Once the identity requirements are established, residents are informed of the outcome and the decisions are elaborated. Three questions structure the communication:

1. What identity values are incorporated? Here, it is important to focus on the shared values instead of conflicting values.
2. Why these identity values? If a conflicting value is not included, put this value in context and emphasise why it conflicts with other objectives.
3. How is this going to be executed? Through answering this question, worries that have been identified in step 3 can be addressed.

It is not necessarily the goal of this step to validate the decisions with residents, but if informing the residents is met with resistance, it might be required to go back to step 4.

## Step 6 - integrate

In the final step, the identity requirements are embedded in the business case. As established in the interviews, identity plays a steering role in adaptive reuse decision-making, but there are other aspects that influence feasibility as well. Especially when it comes to maintaining the building's identity, technical qualities can be limiting, and even though most issues can be solved, this can be costly. It is therefore important to fit identity values into the business case as soon as possible to prevent surprises.

### 6.3.2 PRACTICAL USE

Given that identity plays a significant role in the decision-making process, it is advisable to begin these steps as early as possible in the process. Steps 1 and 2 can be carried out effectively prior to acquisition, thereby ensuring a sound business case. If there is a high degree of uncertainty as to whether or not the project will go ahead, it is best not to carry out Step 3 prior to acquisition. After all, when it comes to participation, it is important to know to what extent you can incorporate the ideas of residents into the development.

In addition, it is important to make room within the business case for identity values, as well as socio-cultural aspects in general. Given that developers do not face any direct financial challenges linked to incorporating socio-cultural values, it is expected that this is feasible. Finally, the aim of this framework is to place socio-cultural values more prominently on the agenda in general. Having concrete and visible steps contributes to this.

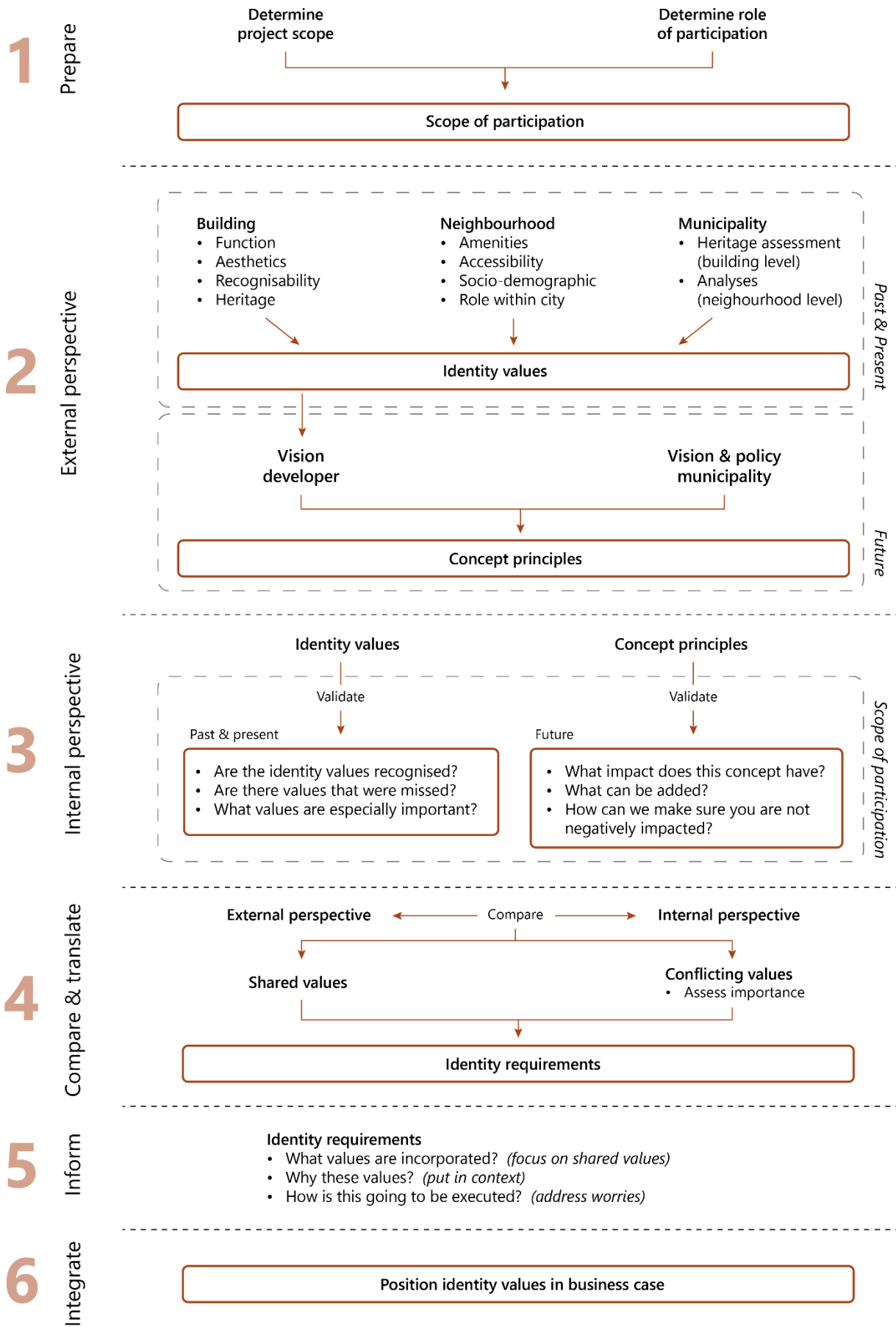


Figure 6.4 Final framework (Own work)

**DISCUSSION**

**7**

## 7.1 INTERPRETATION OF RESULTS

### The role of sociocultural aspects in the decision-making process

This research demonstrates that sociocultural aspects play a significant role in the adaptive reuse decision-making process, but that technical, legal and economic aspects remain dominant. This is reflected in the composition of decision-making criteria identified in the literature review: of all aspects mentioned across the six reviewed publications, approximately 30% were classified as sociocultural.

However, several researchers have previously concluded that sociocultural aspects are insufficiently considered in adaptive reuse decision-making (Lanz & Pendlebury, 2022; Lundgren, 2023). This raises an important question: what does sufficient incorporation look like? Developers operate within the boundaries of what is technically, legally and economically feasible, which is also demonstrated by Bullen & Love (2011). In their study of the barriers and drivers of adaptive reuse, they did not identify any social barriers, which would suggest that social aspects can only have a positive effect on adaptive reuse. However, since technical, legal and economic barriers are present, these will prevent the extent to which sociocultural aspects can be included. A developer may have strong sociocultural ambitions, but if the business case does not allow for them, sociocultural objectives will inevitably shift to the background. The degree to which sociocultural aspects are incorporated is therefore not solely reliant on willingness but also on the ability to do so due to the complexity of adaptive reuse projects.

### The complexity of adaptive reuse projects

A recurring theme throughout the interviews is that everything in adaptive reuse is connected. As one developer described it, the process resembles a waterbed: all aspects need to be in balance in order for the project to work. This makes it difficult to determine precisely how any single aspect influences decision-making, because in practice, all aspects influence one another simultaneously. This interconnectedness, which was also identified when determining sociocultural aspects, means that sociocultural aspects cannot be examined in isolation. A decision that strengthens the sociocultural value of a development may simultaneously create technical complications or reduce financial feasibility. Understanding this complexity is essential for interpreting the role of sociocultural aspects in the decision-making process.

### The absence of explicit decision-making processes

In the interviews, it was found that many developers do not follow an explicit, structured decision-making process. Decisions are mainly made based on professional intuition and experience rather than by systematically applying criteria. This has significant implications for the role of sociocultural aspects specifically. Technical and economic aspects have clear, quantifiable indicators which make them easy to discuss explicitly. Sociocultural aspects, in contrast, lack this measurability, which means they tend to be incorporated implicitly rather than explicitly.

## The prominence of identity

A notable finding is that identity emerged as the most influential sociocultural category in the decision-making process, even though it is not the aspect that developers name first when asked about sociocultural criteria. Accessibility and amenities appear to play a more explicit role in how developers talk about their decisions, likely because these aspects are more tangible and easier to assess. Identity, on the other hand, is acknowledged as important but is simultaneously described as difficult to pin down. This tension between importance and measurability may explain why identity does not feature more prominently in existing decision-making models, despite its apparent influence in practice.

Heritage value is a notable exception within the identity category. It was frequently mentioned by developers and functioned almost as a legal aspect in practice, given that a heritage status directly limits the interventions that can be made to a building and significantly shapes the direction of the entire development process.

## Recognising paradoxes from the literature

The paradox identified in the literature regarding community and social cohesion is recognisable in the behaviour of the interviewed developers. All developers expressed a focus on community and aimed to add a degree of liveliness to their developments through collective spaces and amenities in the plinth. However, as established in the literature, a high degree of liveliness can actually undermine social cohesion due to increased anonymity (Sennett, 1990; Mouratidis & Poortinga, 2020). Developers do not appear to be explicitly aware of this paradox. This suggests that even developers with strong sociocultural ambitions may, without realising it, be working towards outcomes that partially contradict their own objectives.

# 7.2 LIMITATIONS OF THE RESEARCH

## Selection of developers

Developers were approached with an invitation to participate in research on the role of sociocultural aspects in adaptive reuse decision-making. It is possible that developers for whom sociocultural values play no role at all did not respond to this invitation. Several developers who were approached did not accept the invitation, and the reasons behind this are unknown. This means that the interviewed developers may represent a group with an existing affinity for sociocultural values, which would mean that the interviewed developers are not representative of developers in the Netherlands.

## Differences in the understanding of sociocultural aspects

During the interviews, efforts were made to verify that both the interviewer and the interviewee were discussing the same concepts, particularly when more abstract terms such as inclusivity were used. Nevertheless, it became clear during the interviews that each developer understood

these concepts differently. This makes it difficult to determine the precise extent to which each sociocultural aspect actually featured in the conversations. That said, the findings were validated with the developers in follow-up sessions, during which a more detailed explanation was given of how each category of aspects plays a role in the decision-making process. No significant objections to the findings were raised during these sessions.

### **Social desirability**

Sociocultural aspects are generally considered important and are easy to speak positively about. Several developers acknowledged that they sometimes observe a form of ‘social washing’, where sociocultural aspects are used as a way to present an attractive development, without substantive follow-through. The fact that developers recognised this tendency does not necessarily mean they are immune to it themselves. It is possible that developers were less likely to explicitly state, for instance, that financial returns take priority over social values, even if this reflects their actual decision-making. This should be taken into account when interpreting the findings.

### **Lack of nuance in the interviews**

The last practical limitations relate to the interpretation of transcripts and the nuance inherent in spoken conversation. Some aspects may be so self-evident to developers that they were not mentioned frequently, or simply because they did not come to mind during the interview. Additionally, interviews are snapshots in time. A developer may have spoken with particular emphasis about a specific challenge because it happened to have been discussed extensively in a meeting just before the interview, rather than because it is consistently their most pressing concern. Interviewing eight developers helps to mitigate this risk, but does not guarantee that the findings fully reflect the day-to-day reality of the decision-making process. However, as previously mentioned, there were no objections to the findings of this study from developers.

## **7.3 THEORETICAL IMPLICATIONS**

This study addresses the decision-making process of developers and thereby contributes to closing the gap between theory and practice that Van Laar et al. (2024) identified. Existing decision-making models are built on the assumption that criteria are explicitly formulated and consciously weighed at specific moments in the process. This study shows, however, that the decision-making process is far less explicit than these models suggest, and that decisions are made largely on the basis of professional intuition. This implies that the field needs to reconsider how decision-making models are conceptualised: not as structured frameworks of weighted criteria, but as tools that can support and make a dynamic process visible.

## 7.4 PRACTICAL IMPLICATIONS

The findings suggest that there is a clear need for concrete, step-by-step approaches that make it more accessible for developers to give sociocultural aspects a tangible role in the decision-making process. The framework developed in this research is a response to that need.

At the same time, adaptive reuse projects are inherently complex, and many of the challenges developers face relate to a lack of specific legislation and regulation for transformation projects. These challenges were consistently among the first to be mentioned by developers, which means they also overshadow sociocultural aspects to a considerable degree. A developer may genuinely want to realise an inclusive project, but if a large portion of the available budget is absorbed by technical interventions required to meet acoustic or fire safety standards, social ambitions are likely to shift to the background. Reducing the complexity of adaptive reuse projects through dedicated financing instruments or legislation specifically tailored to adaptive reuse would therefore also contribute to creating more space for sociocultural aspects in the decision-making process.

Additionally, some sociocultural aspects are relatively independent of technical, legal and economic constraints, which means they could in principle be addressed alongside these other aspects without direct conflict. However, because the development process demands a constant balancing act between technical, legal and financial considerations, even these more independent sociocultural aspects can lose focus, as explicitly described by one of the developers. This underlines the value of having a structured approach that keeps sociocultural aspects visible throughout the process, even when other pressures dominate.



**CONCLUSION**

**8**

## 8.1 CONCLUSION PER SUBQUESTION

### 8.1.1 SUBQUESTION 1

**What sociocultural aspects that influence adaptive reuse decision-making are identified in academic literature?**

To determine what can be considered sociocultural aspects, six publications containing aspects influencing decision-making were examined. Using the earlier determined definition for sociocultural, 81 sociocultural aspects were identified within these publications, representing approximately 30% of all 269 decision-making criteria examined. These criteria were organised into six categories to make them usable in the research steps to follow: accessibility, amenities, community, identity, inclusivity and urban context.

Accessibility contributes to social well-being through autonomy and the prevention of social exclusion, with pedestrian accessibility in particular fostering social interaction and cohesion. Amenities play a central role in attracting people throughout the day, supporting both liveliness and walkability. Community encompasses neighbourhood meeting places, community activities and social cohesion, with social cohesion being defined as the degree of connectedness and solidarity among residents. Identity relates to the reputation of the neighbourhood, the aesthetic quality and recognisability of the building, and heritage status. Inclusivity, the least-represented category in the literature, covers public support and job creation. Urban context addresses the liveliness of the neighbourhood and its alignment with existing urban structures and future planning.

It should be noted that these categories do not operate independently and therefore influence one another. A higher number of amenities increases liveliness and pedestrian accessibility, which in turn affect social cohesion, recognisability and neighbourhood reputation. This interconnectedness means that sociocultural aspects must be understood as a system rather than as a list of isolated criteria, which has direct implications for how they can be applied in practice.

### 8.1.2 SUBQUESTION 2

**How are sociocultural aspects currently considered and discussed by developers during adaptive reuse decision-making?**

The interviews show that sociocultural aspects are considered by developers throughout the adaptive reuse decision-making process, but that the influence and depth vary between the acquisition and development phases, and the influences differ per category.

During the acquisition phase, identity is the most influential sociocultural category. Developers assess the identity of both the building and its surroundings early on, as it directly informs the concept and financial feasibility of the development. Heritage status is part of this identity, but functions almost as a technical constraint in practice, simultaneously confirming sociocultural value and limiting the interventions that can be made. Amenities and accessibility are assessed alongside identity to determine whether a function would be viable in a given location.

Community and inclusivity, by contrast, play no explicit role during acquisition and are primarily influential in the development phase.

In the development phase, the community takes on greater prominence. Nearly all developers include communal spaces in their projects and have core values that refer to social cohesion, collective living or the prevention of loneliness. Some translate these ambitions into concrete policy targets, such as reserving a minimum percentage of floor area for meeting spaces or setting aside a dedicated community budget. Participation is incorporated across all projects, primarily since it is mandatory, but also as a means to strengthen the development and as a form of risk mitigation against objections. Inclusivity is addressed primarily in terms of affordability and participation requirements, with fewer developers considering it in terms of the spatial or cultural needs of specific resident groups.

Decisions regarding sociocultural aspects are made largely on the basis of professional intuition rather than explicit criteria, meaning sociocultural aspects tend to be considered implicitly rather than systematically, which is caused by sociocultural aspects simply being less explicit. Investor requirements also influence the decision-making process of developers, who therefore align their programmes of requirements with those of investors. Furthermore, even where developers hold clear sociocultural intentions, these can be overridden after sale, as illustrated by collective spaces being closed off at the request of investors or residents. The findings suggest that sociocultural aspects are present in the thinking of developers, but are not treated as explicitly as technical, legal or economic aspects.

### 8.1.3 SUBQUESTION 3

#### **What hinders the incorporation of sociocultural aspects in adaptive reuse decision-making?**

The findings reveal that the incorporation of sociocultural aspects in adaptive reuse decision-making is hindered by a combination of structural barriers and challenges that are specific to sociocultural aspects themselves.

The most influential challenges in adaptive reuse decision-making are not sociocultural in nature, but they lead to sociocultural ambitions being deprioritised. The absence of specific legislation for adaptive reuse results in costly technical interventions for requirements such as fire safety, acoustic quality and daylight access. These costs tighten the business case considerably, leaving less room for sociocultural objectives. The uncertainty surrounding the technical quality of existing buildings reinforces this problem, as unforeseen interventions will have an impact on the budget.

However, several challenges have been identified that specifically relate to sociocultural aspects. First, the focus on sociocultural ambitions tends to be lost as the development process progresses. Although community and identity are often prioritised at the outset, attention quickly shifts toward financial and technical considerations once acquisition is completed. Because sociocultural aspects lack quantifiable indicators, they are harder to hold onto when pressure rises in the development. Secondly, the land pricing of collective spaces disincentivises their inclusion, as developers are required to pay the same price per square metre for communal areas as for dwellings, despite these spaces generating no rental income. Third, identity is widely

recognised as important but consistently described as difficult to grasp, meaning it is often considered superficially rather than thoroughly. Fourth, inclusivity suffers from a lack of shared definition among developers, resulting in inconsistent and sometimes narrow interpretations that limit its influence on design decisions.

Permit objections represent a further challenge, functioning both as a direct disruption to the development process and as an indirect signal that sociocultural aspects have been insufficiently addressed. Finally, the dependency on investors means that sociocultural ambitions can be lost after the development is sold, limiting the extent to which developers can guarantee the outcomes they originally intended. The challenges related to the incorporation of sociocultural aspects relate to other aspects as well, making it difficult to address them, since everything in the development is connected.

## 8.1.4 SUBQUESTION 4

### **How can developers be stimulated to incorporate sociocultural aspects in adaptive reuse decision-making?**

Within the interviews, three challenges regarding sociocultural aspects were identified that fall within the direct sphere of influence of developers: losing focus on sociocultural aspects during the development process, difficulty in grasping the identity of a building and neighbourhood, and a lack of shared understanding of inclusivity. Of these, identity is the most logical entry point, as it plays a steering role throughout the entire decision-making process. A stronger focus on identity not only helps developers to better understand the sociocultural context of a project but also creates conditions in which inclusivity receives more attention and objections are more effectively mitigated. In response to these findings, a framework was developed to give identity and sociocultural aspects in general a more structured and visible role in the decision-making process. The framework is built around three dimensions: building vs. neighbourhood, past vs. present vs. future, and external vs. internal perspective, and guides developers from their own initial research into identity through to engagement with residents and ultimately the embedding of identity requirements in the business case.

The framework was validated with seven of the eight interviewed developers and a participation advisor. Validation confirmed that the approach is recognised as valuable, particularly because it offers concrete steps in a domain that developers consistently describe as difficult to pin down. Feedback led to three refinements: the municipality was added as a stakeholder given their existing neighbourhood analyses and policy documents, a boundary-setting step was introduced before resident engagement to ensure that participation does not raise expectations that the development cannot meet, and an explicit step was added in which findings are shared back with residents, both to build trust and to explain how their input has shaped the development.

When identity is approached as an explicit step in the development process rather than an intuitive judgement, sociocultural values become easier to hold onto, easier to communicate to investors and municipalities, and more likely to be reflected in the final development.

## 8.2 FINAL CONCLUSION

### **What is the role of sociocultural aspects in the adaptive reuse decision-making process of developers, and how can further incorporation be stimulated?**

The aim of this research was to determine what role sociocultural aspects play in the adaptive reuse decision-making process of developers and how further incorporation can be stimulated. The findings across the four subquestions show that sociocultural aspects are present throughout the decision-making process, and they are genuinely valued by developers. However, they are often outweighed by technical, legal and economic considerations, and they lack the tangibility needed to hold their ground when development pressures mount.

Based on a literature review, sociocultural aspects were identified and organised into six categories: accessibility, amenities, community, identity, inclusivity and urban context. These categories are interconnected and must be understood as a system rather than a list of isolated aspects. Identity dominates the acquisition phase, guiding the concept and anchoring financial feasibility. Community and inclusivity gain more attention in the development phase, but primarily through intuition and core values rather than through a structured decision-making process. The result is a pattern in which sociocultural aspects influence decisions without being explicitly managed, making them vulnerable to being deprioritised when technical, legal or economic pressures increase.

Identified challenges to incorporate sociocultural aspects relate to all types of aspects, also technical, legal and economic. The absence of specific legislation for adaptive reuse hinders focus on sociocultural aspects, and the intangible nature of sociocultural aspects means that it is easy to lose focus during the development process. Additionally, aspects such as identity and inclusivity are understood differently across developers and within development teams, leading to inconsistent and sometimes superficial consideration.

The framework developed in response to these findings addresses the challenges that fall within developers' own sphere of influence. Research into identity is treated as a structured process with a focus on building and neighbourhood, past and present, and external and internal perspectives. The inclusion of the municipality as a stakeholder, setting boundaries before resident engagement, and giving something back to the neighbourhood are added based on the experiences of practitioners. Validated by seven developers and a participation advisor, the framework is recognised as a meaningful contribution since it addresses an aspect that developers know matters, but a structured method to assess identity was lacking.

It is not, therefore, the case that developers are unwilling to take socio-cultural aspects into account in their decision-making process, but the complexity of projects sometimes means that these values are pushed into the background. Tools to address socio-cultural aspects, specific regulations and a proactive role on the part of local authorities and investors are required to ensure their full incorporation.

## 8.3 FURTHER RESEARCH

Based on the conclusion of this research, further research should focus on making sociocultural values more tangible and measurable. Greater measurability would strengthen the position of sociocultural aspects within the decision-making process. Research into the long-term effects would be valuable in order to gain a better understanding of the added value of socio-cultural aspects, thereby making their importance clearer during the decision-making process.

Additionally, the framework developed in this research should be validated in practice. Although developers responded positively and considered it a useful and necessary tool, it remains unclear whether it would function as intended in an actual development project. Future research can therefore focus on the application of the framework in one or more real adaptive reuse projects and evaluate its effectiveness, identifying which steps work well and which require refinement. This can form the basis for the development of other frameworks or methods to make sociocultural aspects more explicit in the developer's decision-making process.

**REFLECTION**

**9**

## MY POSITION AS A STUDENT

During this graduation project, I was very aware of my position as a student, but also of my position as a nearly graduated student. I spread MBE over three years in order to go on exchange to Melbourne in the middle of it. However, this meant that the majority of the people I started with had since graduated. I came back to Delft after my exchange, and virtually the only thing I still had to do was my graduation project. That did require some mental shifting, because after seven years of studying, you can't help but start mentally orienting yourself toward the next step in your final year, especially when many people around you have already begun that step. This led me to start my graduation project with one central goal: my last six months at TU Delft should above all be very enjoyable and interesting, and I certainly didn't want to be working on a graduation project I approached with reluctance. I can already say that worked out.

Many MBE students choose to do their graduation project at a company. I consciously chose not to do this either. Although it naturally varies depending on your type of research and the company you graduate with, I found it very pleasant to be able to conduct my entire research in complete freedom. This gave me a great sense of individuality and also ensured that I completed my graduation project with so much enthusiasm.

## MY POSITION AS A RESEARCHER

I was particularly aware of my position as a researcher during the interviews with developers. Apart from the fact that I have no significant work experience and was therefore already asking my questions from the position of a researcher, I noticed a practice-oriented perspective in the developers. I saw this, for example, in how they responded to my questions. When I said something along the lines of: "During my literature review, I came across this, how do you, as a developer, look at it?" there would often be a slightly sceptical look before an answer was given. I noticed that what I was saying didn't really land. When I said something like: "In one of the other interviews, a developer said this, how do you look at that?", the response was generally more enthusiastic. I absolutely do not mean to suggest that developers have no affinity with the academic world, but I did notice more enthusiasm when talking about practical experiences.

This may have something to do with the world developers work in: everything is project-based, where there tends to be too little time rather than too much. There may therefore be less "space" to look at the theory behind their work. I still visited developers in the capacity of a researcher, of course, but I did adjust my questioning. By positioning myself somewhat less as a researcher and somewhat more as a student about to enter the workforce, I have the impression that I received more elaborate answers.

The downside of this practice-oriented approach is that I found it difficult to step back into the role of researcher when further developing the research. I am by nature quite solution-oriented, so I also noticed that I sometimes lose sight of academic grounding. To what extent that is a problem, I'm not sure. I have now worked toward a product that is useful in practice, and I draw satisfaction from that.

## MY FUTURE POSITION AS A...

This graduation research gave me the opportunity to look inside eight different development firms, and I am already very happy about that in itself. MBE is a fairly practice-oriented program, and from the moment I started, I have been eager above all to dive into professional practice. I therefore also structured my graduation research in a way that would allow me to learn more about that practice. I am, after all, about to start working, and I find myself genuinely curious about what it is really like.

With this, my years at TU Delft come to an end. I began a degree in 2019, which, after about half a year, took on a very different shape due to COVID. Although I know plenty of people who, from that point, decided to simply push through their bachelor's and master's as quickly as possible and then get to work, I chose to keep taking my time. It was precisely through that unhurried pace that I discovered what truly suits me. Since I was twelve, I have been saying I would become an architect, but I have now clearly taken a different path. I am very grateful to TU Delft for the broad education I have been able to receive, and I am curious to see where it will take me.





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# APPENDIX A – INTERVIEW MATERIALS

## A1: INTERVIEW CONSENT FORM

Formulier geïnformeerde toestemming - interview  
afstudeeronderzoek Gerlinde Havelaar

U wordt uitgenodigd om deel te nemen aan een afstudeeronderzoek genaamd “*De rol van sociaal-culturele criteria in het besluitvormingsproces van transformatieprojecten*”. Dit onderzoek wordt uitgevoerd door Gerlinde Havelaar, een masterstudent aan de TU Delft.

Het doel van dit onderzoek is om inzicht te krijgen in het besluitvormingsproces van de geïnterviewde in transformatieprojecten doormiddel van het afnemen van een interview en zal ongeveer 60 minuten in beslag nemen. De data zal gebruikt worden voor de master thesis van Gerlinde Havelaar. Tijdens het interview wordt een audio opname gemaakt die na afronding van het interview wordt getranscribeerd en geanonimiseerd. Na het transcriberen wordt de audio-opname verwijderd.

Zoals bij elke online/digitale activiteit is het risico van een databreuk aanwezig. Wij doen ons best om uw antwoorden vertrouwelijk te houden. We minimaliseren de risico's door de interview transcripten te anonimiseren en door de interview opnames op te slaan op de persoonlijke TU Delft OneDrive van Gerlinde Havelaar.

Uw deelname aan dit onderzoek is volledig vrijwillig, en u kunt zich elk moment terugtrekken tijdens het interview zonder reden op te geven. Mocht u na het afronden van het interview besluiten om u terug te trekken, dan dient u dat uiterlijk 31 mei 2026 aan te geven bij de onderzoeker. Alle data wordt dan verwijderd. Na deze datum worden de geanonimiseerde resultaten gepubliceerd.

U bent ten alle tijden vrij om vragen niet te beantwoorden.

De onderzoeker is te bereiken via de volgende contactgegevens:

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VINK DE JUISTE KEUZE AAN	Ja	Nee
<b>A: ALGEMENE OVEREENKOMST – ONDERZOEKSDOELEN, TAKEN VAN DE DEELNEMER EN VRIJWILLIGE BIJDRAGE</b>		
1. Ik heb de informatie over het onderzoek gedateerd [DD/MM/YYYY] gelezen en begrepen, of deze is aan mij voorgelezen. Ik heb de mogelijkheid gehad om vragen te stellen over het onderzoek en mijn vragen zijn naar tevredenheid beantwoord.	<input type="checkbox"/>	<input type="checkbox"/>
2. Ik doe vrijwillig mee aan dit onderzoek, en ik begrijp dat ik kan weigeren vragen te beantwoorden en mij op elk moment kan terugtrekken uit de studie, zonder een reden op te hoeven geven.	<input type="checkbox"/>	<input type="checkbox"/>
3. Ik begrijp dat mijn deelname aan het onderzoek het volgende betekent: Tijdens het onderzoek wordt een audio-opname gemaakt, welke na afronding van het interview wordt getranscribeerd en geanonimiseerd.	<input type="checkbox"/>	<input type="checkbox"/>
4. Ik begrijp dat mijn deelname aan het onderzoek niet wordt gecompenseerd.	<input type="checkbox"/>	<input type="checkbox"/>
5. Ik begrijp dat de studie 18 juni 2026 eindigt.	<input type="checkbox"/>	<input type="checkbox"/>
<b>B: MOGELIJKE RISICO'S VAN DEELNAME (INCLUSIEF DATA BEVEILIGING)</b>		
6. Ik begrijp dat mijn deelname mogelijk mentaal ongemak meebrengt. Ik begrijp dat deze risico's worden geminimaliseerd door de mogelijkheid het interview te beëindigen wanneer gewenst.	<input type="checkbox"/>	<input type="checkbox"/>
7. Ik begrijp dat mijn deelname betekent dat er persoonlijke identificeerbare informatie en onderzoek data worden verzameld, met het risico dat ik hieruit geïdentificeerd kan worden zoals naam, positie en bedrijf.	<input type="checkbox"/>	<input type="checkbox"/>
8. Ik begrijp dat de volgende stappen worden ondernomen om het risico van een databreuk te minimaliseren, en dat mijn identiteit op de volgende manieren wordt beschermd in het geval van een databreuk: het anonimiseren van de transcripten en het verwijderen van de audio opnames van het interview na transcriptie. De transcripten en audio opnames worden opgeslagen op de TU Delft One Drive en is alleen toegankelijk voor de onderzoeker en de afstudeerbegeleiders.	<input type="checkbox"/>	<input type="checkbox"/>
9. Ik begrijp dat de persoonlijke informatie die over mij verzameld wordt en mij kan identificeren, zoals naam, mailadres en telefoonnummer niet gedeeld worden buiten het studieteam.	<input type="checkbox"/>	<input type="checkbox"/>
11. Ik begrijp dat de persoonlijke data die over mij verzameld wordt, vernietigd wordt op 31 mei 2026.	<input type="checkbox"/>	<input type="checkbox"/>
<b>C: ONDERZOEKSPUBLICATIE, VERSPREIDING EN TOEPASSING</b>		
12. Ik begrijp dat na het onderzoek de geanonimiseerde informatie gepubliceerd zal worden in het afstudeeronderzoek van Gerlinde Havelaar.	<input type="checkbox"/>	<input type="checkbox"/>

VINK DE JUISTE KEUZE AAN	Ja	Nee
13. Ik geef toestemming om mijn antwoorden, ideeën of andere bijdrages anoniem te quoten in resulterende producten.	<input type="checkbox"/>	<input type="checkbox"/>
14. Ik geef toestemming om mijn naam te gebruiken voor quotes in resulterende producten	<input type="checkbox"/>	<input type="checkbox"/>
<b>D: (LANGETERMIJN) OPSLAG, TOEGANG EN HERGEBRUIK VAN GEGEVENS</b>		
16. Ik geef toestemming om de geanonimiseerde data in de vorm van interview transcripten die over mij verzameld worden gearchiveerd worden in de TU Delft Repository opdat deze gebruikt kunnen worden voor toekomstig onderzoek en onderwijs.	<input type="checkbox"/>	<input type="checkbox"/>
17. Ik begrijp dat de toegang tot deze Repository open is.	<input type="checkbox"/>	<input type="checkbox"/>

### Handtekeningen

\_\_\_\_\_

Naam deelnemer                      Handtekening                      Datum

\_\_\_\_\_

Naam deelnemer                      Handtekening                      Datum

Ik, **de onderzoeker**, verklaar dat ik de informatie en het instemmingsformulier correct aan de potentiële deelnemer heb voorgelegd en, naar het beste van mijn vermogen, heb verzekerd dat de deelnemer begrijpt waar hij/zij vrijwillig mee instemt.

\_\_\_\_\_

Naam onderzoeker                      Handtekening                      Datum

## A2: INTERVIEW PROTOCOL

### Algemene informatie

Onderzoektitel:	De rol van sociaal-culturele criteria in transformatie besluitvorming
Onderzoeker:	Gerlinde Mathilde Havelaar
Universiteit:	Technische Universiteit Delft
Master:	Management and the Built Environment
Datum:	[dd-mm-yyyy]

### Interview informatie

Type:	Semi-gestructureerd
Duur:	45-60 minuten
Locatie:	Fysiek, indien mogelijk. Anders online (via Teams)

### Introductie

Hartelijk dank voor uw deelname aan dit interview. Dit interview is onderdeel van mijn afstudeeronderzoek naar de rol van sociaal-culturele criteria in het besluitvormingsproces in transformatieprojecten. Hierbij kijk ik specifiek naar de transformatie van kantoorpanden tot woningen. De fase waarop ik focus is de initiële fase, waarin wordt bepaald of er wel of niet met een bepaald project aan de slag gegaan wordt.

Deelname aan dit onderzoek is volledig vrijwillig. Gedurende het proces kunt u zich op elk moment terugtrekken uit het onderzoek zonder het opgeven van een reden. Verder bent u vrij vragen niet te beantwoorden en zijn er geen goede of foute antwoorden.

### Algemeen

- Kunt u kort vertellen wie jullie zijn en wat jullie doen? Wat voor projecten, wat is jullie specialisatie zou u zelf zeggen?
- In hoeverre doen jullie transformaties? Waarom wel, waarom niet?
- Hebben jullie een bedrijfsvisie of bepaald beleid waar al jullie projecten aan moeten voldoen? Zowel transformatie als niet transformatie?
- Hoe vindt acquisitie van transformatieprojecten plaats?

## Besluitvormingsproces

- Hoe verloopt het besluitvormingsproces bij transformatieprojecten?
  - Maken jullie gebruik van een bepaald model, of hebben jullie zelf iets ontwikkeld?
- Wat zijn output documenten in verschillende fases?
- Hoe verhouden verschillende aspecten zich tot elkaar in dit besluitvormingsproces?
  - Economisch: kosten, winst
  - Technisch: asbest, technisch haalbaar
  - Juridisch / gemeentelijk: bestemmingsplan
  - Sociaal-cultureel: bereikbaarheid, historische waarde, voorzieningen, sociaaleconomische staat van de omgeving

## Sociaal culturele criteria

- Hoe kijken jullie als ontwikkelaar tegen sociaal-culturele criteria aan?
  - Kijken jullie hier expliciet naar?
- In literatuur zijn allerlei sociaal-culturele criteria geïdentificeerd. Zou u mij kunnen vertellen in hoeverre en waarom deze een rol spelen in jullie besluitvormingsproces?
- Wat voor input data gebruiken jullie om deze criteria te beoordelen?

	Toelichting
<b>Toegankelijkheid</b>	
Centrale locatie	Aantal voorzieningen en mensen
Auto toegankelijkheid	Tijd tot snelweg, file tijden, parkeerplaatsen
OV toegankelijkheid	Afstand tot OV, frequentie, verbindingen
Gehandicapten toegankelijkheid	Is het (mogelijk) toegankelijk
Voetgangerstoegankelijkheid	Zijn er (goed doorlopende) voetpaden
<b>Voorzieningen</b>	
Dagelijkse voorzieningen	Afstand tot supermarkt, aantal binnen 500 m
Winkels en horeca	Type winkels en horeca, diversiteit
Medische faciliteiten	Divers aanbod
Onderwijs faciliteiten	Basis tot hoger, afhankelijk van doelgroep
Sport faciliteiten	Aantal sportclubs, diversiteit
<b>Community</b>	
Openbare ontmoetingsplekken	Afstand tot park, gebruik openbare ruimte
Buurt activiteiten	Actief buurthuis
Sociale cohesie	Zou je je sleutel aan je buurman geven?
<b>Identiteit</b>	
Reputatie van het gebied	Media, criminaliteit, demografie
Herkenbaarheid van gebouw	Landmark, afspreekpunt, verhalen
Esthetische waarde van gebouw	Conditie, authenticiteit
Monumentale waarde	Monumentale status (of bijna)
<b>Inclusiviteit</b>	
Publieke steun / participatie	Betrokkenheid bij project
Baan creatie	Aantal, aansluiting lokale vraag, diversiteit
<b>Stedelijke structuren</b>	
Aansluiting op plannen	Visie documenten, strategieën
Levendige buurt	Mixed-use, avond activiteit, leeftijdsdiversiteit
Aansluiting op bestaande	Zelfde gebouwhoogte, zelfde typologie

### **Hindernissen bij het incorporeren van sociaal-culturele aspecten**

- Zouden sociaal-culturele aspecten wat u betreft een grotere rol moeten spelen in het besluitvormingsproces?
- Wat zijn de grootste belemmeringen bij het incorporeren van sociaal-culturele aspecten?

### **Afsluiting**

Ik denk dat we alles hebben besproken. Zoals u weet heb ik dit gesprek opgenomen en zal ik het gaan verwerken en anonimiseren. Mocht u aanvullingen hebben op hetgeen dat we hebben besproken, of zijn er juist dingen die u terug wilt nemen, dan kunt u mij berichten. Vind u het goed als ik contact met u opneem als ik nog vervolgvragen heb?

## A3: INTERVIEW SUMMARIES

These interview summaries give a further explanation of what was discussed in each of the interviews. Interview transcripts form the basis for these interview notes. For each of the interviews, the developer and their vision is shortly elaborated. This is followed by their decision-making process and the challenges they face during projects.

### 1. Interview I

#### 1.1 About the developer

The developer that was interviewed is one of the founders/owners of the development firm. The firm consists of around 8 people, of which a high number of interns. They are closely connected to an architecture firm, since one of the founders of the development company also founded the architecture firm, which contributes to their ability to do adaptive reuse projects:

*“En zij zijn ook wel heel goed in transformaties, dus dat maakt ook dat wij de risico's goed kunnen inschatten die bij transformatie komen kijken. Want die ervaring is er ook vanuit de samenwerking met het architectenbureau. Het is eigenlijk een soort ketensamenwerking tussen de architecten en de ontwikkelaar, dus daardoor passen dat soort opgaven bij ons.”*

This developer has the following core values, for all types of projects:

1. Building in wood
2. Circularity
3. Nature inclusive – contribution to biodiversity
4. Socially inclusive – mix of target groups
5. Collective spaces

The first three values relate to them wanting to have a small CO2 footprint. However, the majority of their projects are newly build projects in which they include crushed building materials from the demolished building.

Currently, they are working on a tender for a transformation project, which is the old courthouse in Breda.

#### 1.2 Decision-making process

Acquisition happens either through direct contact within their network:

*“We waren al in gesprek met een corporatie daar. We doen ook best wel veel dingen voor corporaties. En via ons netwerk was het gebouw ook bij ons genoemd.”*

Or they get approached due to their relation with the architecture firm, either through that firm, or directly.

The first step in the decision-making process is to determine whether the project will be able to comply with their **core values**. These values are present in all projects, so if a project cannot achieve this, it will not be done:

*“Ja dus, dat zijn eigenlijk de 5 kernwaarden die die we in al onze projecten meenemen, en anders doen we het niet.”*

The building is assessed on a few aspects. They look at the technical aspects, but mainly at the sociocultural value:

*“Vervolgens beoordelen we dat op een paar technische zaken, maar vooral, ja, wil je behouden, vinden wij dat het gebouw behouden moet worden voor de gemeenschap. Heeft het voldoende waarde? Kijk, op moment dat iets de monumentenstatus heeft of beschermt stads- of dorpsgezicht, is dat duidelijk hè, maar dat was hier bijvoorbeeld niet het geval.”*

In the case of one of the projects, the building did not have a heritage value, but that makes it even more difficult to determine the value. However, this is an iconic building. It is part of the mental-map of residents. Additionally, they want to reuse the building due to the CO2 footprint:

*“En straks is er best wel veel discussie, en ik weet niet of je die discussie al helemaal beslecht is om het gebouw te behouden of te slopen. En als je ziet dat zo'n iconisch gebouw als de voormalige rechtbank, dat bij alle [bewoners van de stad] op het netvlies staat, onderdeel is van de Mental-Map, en het gebouw leent zich ook voor transformatie dan is dat wat ons betreft vrij duidelijk hè? Dan wil je dat benutten dat bestaande gebouw? Je wilt dan die constructie benutten, want uiteindelijk is het, wij zitten op kijken of dat je die CO2 footprint in de bouwsector zo laag mogelijk kunt houden. Ja, stap één is dan natuurlijk niet bouwen.”*

When looking at the technical aspects, they mainly look at the **support structure**, since they are planning to add floors and build with wood, which the existing support structure needs to be able to carry:

*“Wij transformeren dat bestaande gebouw naar woningen toe en we toppen het ook op met hout, dus er zijn dan ongeveer 100 woningen die we toevoegen in de voormalige [gebouw]. Dus dat is echt transformatie van het bestaande gebouw. We onderzoeken dan het draagvermogen van de huidige draagconstructie en onderzoeken dan hoeveel lagen in hout we er op kunnen zetten.”*

But, sometimes it simply doesn't work:

*“Maar wij zeggen ook, op het moment dat je een gebouw er staat en het leent zich niet om te behouden... Want dat is natuurlijk nog het allerbeste als het gaat om CO2 uitstoot, als dat kan doen we dat, maar dat kan niet altijd. Soms zijn er allerlei problemen waardoor dat niet meer niet meer gaat.”*

It is not mentioned in the interview explicitly, but due to their core values, it can be assumed that technical limitations play the biggest role in project feasibility.

Additionally, they do not come across many buildings that are suitable for adaptive reuse since the easily transformed buildings are already transformed:

*“De transformatieprojecten zijn ook niet meer zo dik bezaaid. Als het gaat om de alle pakhuizen, die zijn wel ongeveer getransformeerd in Nederland, weet je wel, dus dat geldt ook wel voor kantoren die zich daarvoor lenen. Dus ik zal niet zeggen dat er niks meer is, maar het is wel dunner, zeg maar hè, dus het komt ook niet zoveel op ons pad. We gaan het zeker niet uit de weg. Sterker nog, we zijn daar zeker in combinatie met [architectenbureau] heel goed in, maar we zien er nog niet zoveel. Kijk, we bestaan nu 7 jaar. Ik denk dat [project] inderdaad eigenlijk het beste voorbeeld is wat we nu hebben gedaan, of ja, hebben gedaan, dat hebben we uitgewerkt tot schetsontwerp.”*

### 1.3 Challenges

**Financial feasibility and contact with the municipality** are **not** considered issues in adaptive reuse projects:

*“Nou niet zozeer financieel, ook niet de gemeente.”*

That there are no challenges with the municipality, is due to the fact that their core values correspond with the policy guiding principles of the municipality. Therefore, the municipality takes on a facilitating role in their projects:

*“Kijk, de kernwaarden van [ontwikkelaar] die kun je één op één neerleggen bij de beleidsuitgangspunten van de gemeente. Dus de gemeente, die staat er helemaal achter, ja die vinden dat fantastisch. Als wij bij gemeente aankomen, dan worden we producten waar we aan werken boven op de stapel te liggen. Dit is een project waar ze graag aan willen werken. ... De taal, de uitgangspunten, de doelstelling en de ambities zijn gewoon één op één.”*

**For a housing association, financial feasibility** is a challenge, which translates into them having more limitations in the projects. However, for housing association they handle some expenses differently to relieve them:

*“We doen best wel veel voor corporaties. En ja, daar is de financiële haalbaarheid van woningbouw in zijn algemeenheid heel ingewikkeld. Dat heeft niks met hout te maken. Maar dat is gewoon sowieso al een uitdaging. Dan is alles wat het gebouw duurder maakt, dat maakt het wel ingewikkeld om ook de sociale woningbouw toe te voegen. Binnen onze mogelijkheden houden we daar natuurlijk ook rekening mee. Kijk bijvoorbeeld, de gebouwen zijn groen en dragen bijna biodiversiteit. Bij [project] hebben we dat gedaan met plantenbakken, 3000 planten, en dat moet beheerd worden en dat kost geld. Voor een corporatie gaan we daar dan op een andere manier mee om.”*

They take an active approach towards **participation**, but sometimes it negatively impacts a projects timeline:

*“De reden is dat je niet iedereen altijd tevreden kunt houden. Als het gaat om de buurt en de participatie, ja... Daar heeft Nederland last van. Soms wordt een project gewoon gegijzeld door een bezwaarmaker die daar gewoon zichzelf wilt verrijken door dwars te blijven liggen. Daar heb je natuurlijk wel last van. Dan kun je nog zo mooi heel goed willen doen, maar dat is niet zijn doel. Dus die gaan we dan ook wel benaderen op een vriendelijke manier. Maar ja, dat maakt het natuurlijk wel lastig.”*

Realising enough **parking spaces** is difficult since you are building in an existing environment:

*“Parkeren is natuurlijk soms ook een punt, hè? Dus als het gaat om het toevoegen van woningen in een bestaande locatie. Lukt dat dan hè? Kun je voldoende parkeerplaatsen genereren? Kun je die een plek geven, als je gaat transmeren naar woningen en je gaat ook nog optoppen met woningen. Dus dat is ook wel een punt waarbij je natuurlijk wel lenigheid ook van de gemeente nodig hebt, om dat ook te kunnen doen. Ja, en verder eigenlijk niet hoor. Dat is toch wel een beetje de belangrijkste dingen verder.”*

The last mentioned challenge relates to the need to realise more **escape routes** when adding floors, which is both legally and technically challenging and requires a lot of contact with either a VVE or a housing association:

*“Je ziet zeg maar technisch, als je in een galerijflat hebt of portiekflat, maakt ook niet uit, en je hebt zo'n bestaand gebouw met een VVE en je gaat optoppen, ja, dat is juridisch echt gedoe. En als je dat met een corporatie doet, dan moet je nou, je moet zorgen voor vluchtwegen, Je moet hele liftkern moet omhoog, dus er zitten echt veel, ook wel technische juridische haken en ogen aan.”*

## 2. Interview II

### 2.1 About the developer

The two partners of this development firm were interviewed.

They are a Dutch project developer that focusses on inner city adaptive reuse projects, in the Randstad region with a specific focus on Amsterdam, Rotterdam, The Hague and Utrecht in which they realise 150-500 housing units per development. These projects are done fully at their own risk from zoning and planning permission to tenancy, construction and everything in between.

Their business outlines are:

1. Growth region in the Netherlands
2. (Re)development potential
3. Walking distance from public transport hub or stop (<1 km)
4. Minimum plot size of 1.500 m<sup>2</sup>
5. Development volume of > 5.000 m<sup>2</sup> GFA

### 2.2 Decision-making process

Project acquisition takes place either through the free market or they are approached by office owners:

*“Nou deels gewoon in de vrije markt. Dus er worden gewoon kantoorgebouwen in gestructureerde verkoopprocessen door makelaarskantoren verkocht. Dan doen we mee in zo'n proces en dan proberen we als beste bidder uit de wedstrijd komen, dus dat is een*

*manier. We worden ook wel eens gevraagd door eigenaren van bestaan kantoorgebouwen van joh, we zitten met een probleem, kunnen jullie ons helpen. We proberen ook actief kantooreigenaren te benaderen als ze een leegstaande of leegkomende kantoorgebouwen hebben wat wij interessant vinden om hun over te halen om het aan ons te verkopen.”*

The first investment criterion is that the location needs to have a **growth perspective**, which in practice always is within the Randstad:

*“Dus we zoeken naar locaties met bovengemiddeld groei perspectief, economische demografisch gezien. Dat is gewoon eigenlijk de Randstad en daarbuiten wordt het wel heel lastig.”*

Additionally, **public transport accessibility** plays a role:

*“Als je dan naar zo een microlocatie kijkt, omdat we ook denken dat in de toekomst de auto afhankelijkheid minder wordt en de OV bereikbaarheid belangrijker, zoeken wij altijd naar locaties die op loopafstand liggen van een openbaar vervoer station.”*

An additional criterion relates to the **size of the project**. They want to have a certain position on the market in which they have fewer competitors but also have a project size that is interesting for investors. For project too big, it will be difficult to find a suitable investor:

*“We willen grotere projecten doen dan de lokale ontwikkelaars en kleinere projecten doen dan de internationale partijen. Dus we gaan onder de 1000 woningen zitten, maar boven de 100 woningen qua target. Dat heeft eigenlijk met onze concurrentiekracht te maken, maar dat is wel een belangrijk investeringscriterium voor ons, dat het dus een beetje tussen tafellaken en servet wordt.”*

With project acquisition, they have been **hesitant to take on projects in locations that still needed a lot of development**. For instance, they actively avoided the southeastern part of Amsterdam since little amenities were present and the area was highly monofunctional. Therefore, they prefer areas such as Blaak in Rotterdam, in which amenities are already presents and there are fewer uncertainties about future developments:

*“Per stad is die dynamiek weer anders, maar goed, dat is een ander type locatie dan een monofunctionele kantoorlocatie net buiten de stad. En net buiten de stad neigt het al veel meer naar gebiedsontwikkeling. Dan moet je eigenlijk al up-teamen met een aantal andere ontwikkelaars in de buurt om dat voor elkaar te gaan krijgen. En binnenstedelijk is het meer passen en meten en hebben we een hele andere dynamiek weer. Wij hebben bijvoorbeeld altijd Amsterdam Zuidoost gemeden ... Je had allen de Arena en het AMC en ertussenin gewoon alleen maar ellende. Toen werden er ook wel van die transformaties bestudeerd, maar we hebben gedacht, ja, jeetje, dat gaat wel heel lang duren en dan heb je ook hele andere risico's dan als je bijvoorbeeld op de Blaak een transformatie weet te trekken. Dus wij hebben binnen die steden ook wel eigenlijk impliciete voorkeur voor wat meer de echte binnenstedelijke locaties, dan de kantoorgebieden die net buiten de ring liggen.”*

When acquiring a new project, a few **scenarios** are developed, which always includes both adaptive reuse and demolish & rebuild, but the starting point is adaptive reuse:

*“In principe doen wij alleen maar herontwikkelpojecten en in sommige gevallen komt uiteindelijk de transformatie casus niet goed genoeg uit en dan besluiten we tot sloop nieuwbouw over te gaan, maar dat is nooit uitgangspunt vooraf, maar het is wel altijd een van de scenario's.”*

During the decision-making process they do not look at **sociocultural aspects** explicitly:

Question:

*“Dingen als toegankelijkheid, bepaalde voorzieningen, die identiteit van een gebouw en het gebied of de reputatie, maar ook aansluiting op bepaalde stedelijke ontwikkelingen. Zijn dat dan dingen waarvan jullie denken, daar zijn wel bijvoorbeeld actief mee bezig, of is het gewoon altijd een beetje alles op basis van ervaring, maar niets is heel expliciet?”*

Answer:

*“Denk dat je dat laatste wel kunt stellen.”*

During the development, technical aspects need to be considered constantly. When choosing the **facade**, several aspects need to be weighted, which result in the following question rising: we have limitations, how are we handling them?

*“Ook bij wijze van spreken in de keuze van wat voor gevel krijg je er dan? Ja, dan heb je ook weer te maken met het bestaand casco. Wat kan het eigenlijk überhaupt aan qua gewicht? Het kan niet alles aan, dus dan zoek je daar toch naar een goede kwaliteitsslag, rekening houdend met de beperkingen die je hebt. Dat is nog steeds de vraag: we hebben beperkingen en hoe gaan we daarmee om?”*

## 2.3 Challenges

When asked about the challenges of adaptive reuse projects, both in general and with the incorporation of sociocultural criteria, the **lack of specific legislation for adaptive reuse** was mentioned first.

*“Volgens mij hebben we toen genoemd dat het gebrek aan specifieke regelgeving voor transformatieprojecten steeds een groter probleem wordt met oplopende duurzaamheidseisen, Je krijgt gewoon niet alles voor elkaar in een bestaand gebouw. De eisen zijn hetzelfde als bij nieuwbouw.”*

An additional challenge is caused by more and more buildings gaining **heritage value**, sometimes quite out of the blue, which puts both the developer and the investor in a difficult position because it is something you have to consider:

*“En nou ja, waar 15 jaar geleden iedereen blind zei joh, haal die sloophamer er maar doorheen, zijn er nu bijna niet zoveel meer over en wordt het nu in één keer bekendgemaakt dat het monumenten gaan worden. Maar dat betekent ook dat veel meer mensen er ook waardering voor krijgen. En dat is natuurlijk altijd lastig als ontwikkelaar. Je moet wel een manier vinden die je zelf aanstaat, maar ook de degene die het uiteindelijk in belegging moet nemen. Maar ik denk in ieder geval dat dat daar de het grootste deel van de culturele criteria bij in zit.”*

**Alignment in the urban context** was also mentioned as a challenge, but primarily in relation to the extension of the building. These extensions are done to realise the maximum amount of square meters, but this also comes with technical limitations:

*“Dus hoe werkt het in de stedenbouwkundige context? Waar kunnen we nog meters bij vinden? Dus je wilt altijd eigenlijk liever nog een beetje optoppen of aanvullen. Nou al die elementen zijn daar naar voren gekomen en ook het hele ontwerptraject hebben dat wel eens op de schop weer moeten gooien omdat we er toen achter kwamen, oh, we kunnen wel het maximale randje opzoeken met meters, maar misschien wordt daar de techniek eigenlijk weer te ingewikkeld.”*

In line with these technical limitations, uncertainty about who has **responsibility for the quality of the load bearing structure** was mentioned as a challenge. Apart from this, **a lot of the challenges are the same as with newly builds nowadays**:

*“Een andere specifieke voor transformatie vind ik altijd wie nou in technische zin de verantwoordelijkheid uiteindelijk op zich neemt voor het bestaande casco. Dat is altijd best wel een ingewikkelde discussie. Voor de rest denk ik dat dat de meeste hindernissen met de transformatieprojecten dezelfde zijn als die nieuwbouw ook heeft de afgelopen twee, drie jaar.”*

### 3. Interview III

#### 3.1 About the developer

The development firm consists of around 15 people. Within the firm, one of the board members was interviewed.

They primarily focus on inner city developments, but also more and more on the rings of cities. Since they do a lot of inner city developments, adaptive reuse often comes by. They do not develop a specific type of project, but based on the location they determine what suits that place best and how value can be created.

Within their developments, their ESG policy plays a role. Their policy contains, amongst other things, the following:

1. For all projects, at least 1% of the GFA needs to be communal space.
2. Participation plays a central role in the development
3. Projects are evaluated in terms of resident satisfaction

This policy is introduced for two reasons. Firstly, the developers themselves find these and other aspects important, but it is also often required from investors.

Previously they did not do this, but nowadays they do the majority of their projects at their own expense and risk.

## 3.2 Decision-making process

**Often, they initiate projects** and approach owners themselves. After developing, they sell the plan.

*“Wij zijn er vanaf het initiatief en vaak komt dat ook vanuit onszelf. We gaan vaak naar eigenaren met een idee, met een plan om een ontwikkeling ergens voor elkaar te krijgen. En dat brengen we tot start bouw en in de basis verkopen we dan ook het plan. Het is niet dat we vastgoed houden.”*

Sometimes they are **approached by owners** and then they develop the plan together. However, adaptive reuse is not ‘holy’, sometimes they decide to demolish & rebuild:

*“Zo kan het ook ontstaan, dat we gezamenlijk met zo’n eigenaar een plan ontwikkelen, maar ook kantoren. En voor ons is transformatie in die zin niet heilig. We kijken het echt wel van ja, wat is het meest opportune sloop-nieuwbouw of een transformatie?”*

When developing, they keep in mind the **architectural value** of the building, and try to maintain it, especially if it has a **heritage value**. Then it is often the only solution:

*“Ja, zeker wel. Als je een bepaald gevoel en een bepaalde architectonische kwaliteit hebt, dan zal je sneller besluiten om daar om dat te behouden. Dan heeft dat ook een bepaalde waarde. Ik denk wel dat de meeste dingen vaak in Nederland al, bij wijze van spreken, gemeentelijke- of rijksmonumenten zijn en dat het dan al snel waarde heeft en dan is transformatie vaak de enige weg ook.”*

When it comes to creating the **communal space** in their developments, a lot needs to happen before that guiding policy principle is not going to be incorporated:

*“Ik sluit niet uit dat het er nooit dan uit gaat als het financieel echt niet uit kan, ja, dan ga je toch kijken, he kan het wel financieel uit? Maar het is altijd andersom benaderd en dan moet er ook echt wel wat water door de Rijn, willen wij van ons beleid afwijken. Dan krijg je echt wel allemaal kritische vragen, ook hier intern.”*

## 3.3 Challenges

The first mentioned challenge relates to the difficulties with **daylight** in a specific project. **Ceiling height** generally isn’t an issue since offices often have high ceilings. However, realising enough natural light also becomes expensive due to the need for an atrium:

*“En dat heeft ermee te maken dat die woningen best ingewikkeld waren omdat het een vrij diepe plattegrond was, waardoor je vrij lastig met je daglicht uit kwam. Nou dat is dus één van de dingen waar je in eerste instantie naar kijkt: kan ik van zo’n kantoorgebouw een goed woongebouw maken? Qua verdiepingshoogte gaat het vaak wel, want een woonverdieping is lager dan een kantoorverdieping over het algemeen, dus daar zit je vaak wel redelijk goed, maar vanuit constructie of daglicht kan best wel ingewikkeld zijn. Als je een heel groot log kantoor hebt, ja, ga daar maar eens woning in krijgen, dan moeten vaak atria gemaakt worden, en dat is kostbaar.”*

The following quotes also highlight the effect of **regulations about noise and daylight** and the delays that this causes:

*“Heel veel regels in Nederland maken nieuwbouw complex, maar daarmee transformatie nog complexer. Daarmee moet je meer interveniëren in een gebouw en dat is heel kostbaar. Wij hebben bijvoorbeeld hele strenge regels over geluid, noem maar wat. Het is heel ingewikkeld om bijvoorbeeld langs een spoor of bijvoorbeeld langs een weg te bouwen.”*

*“Maar al die stapeling van die maatregelen, net als daglicht, zorgt ervoor dat het heel moeilijk is om te transformeren en ook gewoon überhaupt te ontwikkelen. Het duurt lang, door de lange duur worden uiteindelijk projecten in principe ook minder haalbaar.”*

An additional challenge is **parking**, both the parking norm, and the complexities that come with realising extra parking:

*“Ja, nou, dat is wel een goede dat je dat aangeeft, want het is wel een struggle in heel veel transformatie plannen. Omdat woningbouw vaak een zwaardere parkeernorm heeft dan kantoorgebruik. ... Want als je extra parkeren nodig hebt, dan is dat binnen stedelijk best wel ingewikkeld om dat toe te voegen. Ja, of je moet een kelder eronder nog maken. Dat is heel kostbaar. Of je moet met autosystemen werken, dus niet dat je een rijbaan hebt met allemaal vakjes, Maar dat je het echt stapelt en inschrijft. Ja, alleen dan kan je weer hebben, dat de lift wel eens kapot is en dan staat je auto daar beneden en kan je niet weg.”*

In one of their projects, they received an **objection against the permit**, which significantly delayed the decision making process:

*“Bij volgens mij [project], waar we het over hadden. We zijn nu in de verkoop, start bouwen na de zomer. Volgens mij zijn we in 2015, toen werkte ik nog niet bij [ontwikkelaar], begonnen. Dat is tien jaar daarna hè. En het bezwaar kwam vanuit de buurt, dus Het is een Raad van State procedure geweest die we uiteindelijk hebben gewonnen. Maar de oorspronkelijke architect was het niet eens met de het ontwerp van [architectenbureau]. ... Maar als een leek ernaar kijkt. Er gebeurt heel weinig aan het gebouw, maar toch lukt het partijen dus om dat soort besluitvormingsprocessen zo lang te vertragen.”*

The last challenge relates to the **land price** they need to pay. They need to pay the same for the communal area as they do for the housing, even though it won't generate any income:

*“Maar voor die gemeenschappelijke keuken moeten wij gewoon een net zo hoge gemiddelde grondprijs betalen voor sociaal en middeldure huur. Lees alsof het woonmeters zijn. Daar krijgt een belegger, krijgt er geen cent meer op, maar hoe groter wij dus die ruimte maken, hoe meer grondprijs wij moeten betalen.”*

## 4. Interview IV

### 4.1 About the developer

Two developers were interviewed, who have the roles real estate and acquisition. This development firm focusses on temporary adaptive reuse projects, in which vacant offices are turned into student housing. Their area of focus is Delft.

Their two core values are:

1. Reducing vacancy
2. Reducing the student housing shortage

Since their target groups is students, they focus a lot on collectiveness and community, but this is something that primarily plays a role within their neighbourhoods. In some of their projects, they do however organise events for the entire neighbourhood, but this does not play a direct role during the development.

## 4.2 Decision-making process

The first thing this developer looks at is the location of the vacant office, to see whether it is within **cycling distance from the TU Delft**. Additionally a **supermarket** needs to be close-by:

*“Eerste dingen waar we ernaar kijken is, denk ik locatie, dus hoe bereikbaar het is, hoe makkelijk je op plekken komt. Want ook voor studenten is het niet alleen belangrijk om snel bij studie te komen, maar ook dat je gewoon een supermarkt in de buurt hebt. Dat is wel noodzakelijk. Dus we zijn nu een beetje aan het kijken of we een kaart kunnen ontwikkelen waarin je dus per locatie ziet of dat binnen die bepaalde factoren past.”*

Since they are working on temporary projects, they will make little interventions. Therefore, it is important that the building allows for temporary adaptive reuse: **windows can be opened, the grid allows for student rooms to be realised and there is enough daylight**:

*“Voor het pand zelf hebben we ook een aantal eisen die maken of een pand transformeerbaar is of niet, dus voor een slaapkamer heb je natuurlijk te openen ramen nodig, dus dat moet ook wel passen in dat bestaande pand. Het moet niet te diep zijn, anders heb je geen daglicht en je moet een werkbaar stramien hebben.”*

However, they are very reliant on **building owners willing to corporate**, so sometimes they will choose to continue with a project that is a little less suitable, but there is a willingness from building owners:

*“Maar je hebt heel vaak het perfecte pand, dat daar dan andere factoren zijn, bijvoorbeeld dat de pandeigenaar er gewoon niks meer wilt. En bijvoorbeeld bij een pand dat wat minder geschikt is voor de transformatie, en dat je wel een pandeigenaar hebt die mee wil werken, dan moet je ook weer die afweging maken. Van ja, maakt dat iets minder goed te transformeren pand echt uit voor wat we willen bereiken en vaak kom je dan toch de conclusie dat dat niet zo heel veel uitmaakt.”*

They do not look at the **sociocultural aspects**, such as the amenities or the social cohesion, of an area extensively, because it would create more limitations:

*“Ja en ik denk dat we altijd wel, en dat doen we dan misschien heel snel en kort door de bocht, maar we kijken altijd wel van waar light het nu, wat is er in de buurt, wat voor een wijk is het? Verwacht je dat studenten zich daar een beetje fijn voelen of moeten we daar iets mee? En dat zit er wel in. Maar dat zijn niet de dealbreakers voor ons, al zouden we dat wel graag willen. Maar dat is gewoon voor ons niet weggelegd, omdat we dan nog meer kansen moeten laten gaan. Dus ja, dat zit er gewoon niet in.”*

## 4.3 Challenges

Their primary challenges relates to the ability to find suitable projects, because there are **fewer vacant buildings** and the municipality often has plans for those vacant buildings:

“Tegenwoordig merk je ook wel dat het wat moeilijker wordt. Omdat er nou vooral in Delft gewoon überhaupt veel minder leeg staat, omdat gemeentes dus momenteel heel erg in een fase zitten waarin ze dus voor al hun gebieden aan het bedenken zijn. Wat ze ermee willen doen? Waardoor de termijn die we vaak toch wel nodig hebben, niet haalbaar is.”

Additionally, they are **relying on both the building owner and the municipality** for corporation:

“Een pandeigenaar moet zelf al openstaan voor het hele idee van ik ga hier tijdelijk studenten huisvesten. Dan moet de gemeente ook nog vinden dat het in een gebied ligt waar ze wonen toelaten en waar ze denken van okay, hier kan dat. Dus dat zijn al twee hele grote factoren die heel veel knelpunten kunnen opleveren.”

This can be a cause of frustration, because they often see a possibility, but then especially **the municipalities don't want to develop housing there**, even though the building has been vacant for quite some time:

“Dus dat heel veel bedrijventerreinen worden langzamerhand meer wonen, maar de gemeentes moeten ook zorgen dat ze genoeg bedrijvigheid houden, dus daar wordt een beetje om gevochten. Dus we merken heel vaak dat het gewoon zo is van ja, hier zit bedrijvigheid, dat willen we vraag zou houden, dus het mag hier gewoon niet. Ondanks dat het gebouw dan al best een tijd leeg staat, zeg maar, dus dat je zou zeggen... Het voelt het heel krom want het staat gewoon al super lang leeg, doet er gewoon iets mee en dat de gemeente zegt ja, het kan gewoon niet.”

Due to them focussing on temporary adaptive reuse projects, it is sometimes **difficult to finalise the business case**, and therefore even more difficult to incorporate sociocultural aspects in their decision-making process, even though they would have wanted to:

“Dus wat we ook wel merken is omdat je met die tijdelijkheid zit, ben je heel afhankelijk van hoe lang je ergens kunt zitten of je businesscase goed valt of negatief valt en ook hoeveel geld je overhoudt om te besteden. Dus dat was volgens mij ook één van die vragen die je op de mails gezet. We kwamen hier erop dat we zouden een deel van deze sociaal culturele aspecten prima willen meenemen in onze besluitvormingsproces. Maar daar zit het geld er ook gewoon niet voor in. Omdat het tijdelijk is, heb je maar beperkt geld dus eigenlijk.”

## 5. Interview V

### 5.1 About the developer

This developer is more area focused than building focused, so the majority of their developments are on a neighbourhood level. Their company consists of several teams. The interviewee is a development manager with a specific focus on the social approach.

A strategy steers all choices within the company, both during acquisition and during further development. This strategy contains the following:

1. Lower CO2 emissions
2. Strong community
3. Aesthetics
4. Nature inclusive

## 5.2 Decision-making process

The interviewee is responsible for the acquisition of projects in collaboration with housing associations. In the context of this research project, those projects are not considered as adaptive reuse, but aspects of the decision-making process will also play a role in adaptive reuse projects.

For the acquisition of these types of projects, both **tenders and partner selections** are used, but the developer prefers partner selections due to the ability to work together more closely:

*“Je hebt zeg maar tenders en partnerselecties en wij zijn eigenlijk altijd voor partnerselecties, want dan kijk je hoe je met een partner een plan kan maken. En een tender is vaak dat je vraagt aan een partner om een plan te maken en het is heel complex om een plan te maken want het wordt door heel veel dingen beïnvloed en als je dat dan doet zonder dat je in dialoog bent met degene met wie je het samen doet, weet je gewoon dat je uiteindelijk weer opnieuw kan doen. Dus wij doen het liefst partnerselecties bij die woningcorporaties want dan gaat het echt over buurten.”*

Sometimes they also **take the initiative themselves**, if they see that a certain neighbourhood needs attention. Then they contact the housing association over there:

*“Maar wij kunnen ook zelf zeggen van ik kijk naar bijvoorbeeld, dat hebben we gedaan in [stad], we werken met [woningcorporatie] samen. Wat gebeurt er in [stad]? Met die wijk gaat het niet goed. Ja, welke corporatie heeft daar het meeste bezit? Dan moeten we contact leggen met de coöperatie. Wij zien dat dit gebeuren. Wij zouden deze rol erin kunnen spelen met...”*

Someone else works on the acquisition of projects such as **vacant factories**:

*“Als het gaat over zo een fabriek bijvoorbeeld, dan is het gewoon mijn collega, ... die gaat dan in dit geval naar [stad], die ziet dat aan fabriek leeg staat. Die gaat met de eigenaar praten en die gaat kijken of die dat kan kopen. Dus dat is zeg maar gewoon het kopen van een locatie en dan hoop je dat de gemeente daar al iets wil, in de visie. Denk je dat het wel zo is, dan ga je proberen dat van koud naar warm te maken en daar iets mee te doen.”*

For these types of acquisitions, it **starts off with a financial transaction**. However, as developers they have social aspects such as quality and aesthetics in the back of their mind, so they will take this into consideration.

*“Maar bijvoorbeeld bij zo'n fabriek die we kopen, dan begint het gewoon het geld, een transactie, dus van hoeveel kost het? Wat kunnen we hier realiseren? En dan hebben wij als organisatie gewoon een directie die heel erg zit op sociale kwaliteit en schoonheid en hebben we een strategie die wordt gevolgd. Dus wij zelf vinden het heel belangrijk. En*

*natuurlijk, vaak vindt de gemeente het ook belangrijk, maar wij vinden het zelf ook belangrijk. Dus het is niet dat alleen de gemeente het vraagt.”*

Social aspects do not directly play a role in acquisition, but the goal is that someone grants you the project, so you dive into the **selection criteria of the other party**:

*“Kijk, in de acquisitie wil je dat de ander jou iets gunt. Dus als er een partnerselectie is, dan is er een uitvraag. Dan kijken we op de verschillende aspecten waar ze ons op bevragen. En daar zit ook het sociale aspect bij, hoe wij daaraan kunnen bijdragen, dus dan speelt het een rol.”*

They do not make a lot of money from neighbourhood focused projects, but **they feel a responsibility** to do these kinds of projects. When acquiring a project, they will not specifically do so just because it has a social aspect, but they do want to help neighbourhoods if there is an issue:

*“Een wijk en buurtopgave doen we eigenlijk, ja het levert ons geld op, maar het is niet waar we het meest op verdienen. Dus we doen dat ook wel heel erg vanuit een ja intrinsieke maatschappelijke verantwoordelijkheid. Terwijl bij een andere plek kan zijn dat we dat vanuit de financiële overwegingen doen. Maar eigenlijk zijn die strategische pijlers altijd onderdeel van de keuze die we maken. Altijd, in meer of mindere mate. Maar wij zullen niet een plek kiezen, een locatie aankopen omdat er een sociaal aspect is, maar als we bijvoorbeeld zien dat er een vraagstuk is in de wijk en buurt en een corporatie die een vraagstuk heeft, dan gaan wij wel kijken, kunnen wij daar iets mee doen?”*

### 5.3 Challenges

Since the interviewee primarily focusses on area redevelopment, technical challenges were not discussed explicitly since that is not the scale on which they work. **Financial aspects** are a major challenge though, due to them working with housing associations a lot. This results in Excel sheets playing a large part in the decision-making process, but the actual meaning of these numbers is something different:

*“Dus geld is eigenlijk heel vaak een belangrijk punt. De corporatie heeft maar beperkt geld, moet altijd afboeken, dus je ziet dat het geld en het vastgoed, omdat dat ook heel goed te grijpen is, dus je zet het in een Excel-standje. Je kunt het tekenen, en of het nou waar is...”*

After the selection procedure, one of the challenges is that everyone involved **loses themselves in financial and legal aspects** such as the costs and revenue and parking even though it is important to focus on the higher goal first. This also includes her direct colleagues:

*“We lopen tegen heel veel dingen aan. In bijvoorbeeld een partnerselectie, dan is iedereen heel enthousiast. Ja, leuk gaan we doen. Maar als dat dan bijvoorbeeld betekent, nou laat ik het zo stellen... een gemeente heeft een ander beleid, dan is een van de belangrijkste dingen eigenlijk het financiële component, dus iets wat meteen waar meteen alle focus op van iedereen op is. Hoe gaan we dit haalbaar maken? Dus wat zijn de kosten, wat zijn de inkomsten? Hoe zit het met parkeren? Hoe zit het met auto's? Iedereen gaat meteen in een pragmatische focus, terwijl ze juist eigenlijk nog even moeten nadenken, wat willen jullie eigenlijk maken?”*

The last challenges mentioned relates to the difficulties with **putting yourself in someone else's shoes**. Sometimes you need to 'handle' people that have opposing views, and how will you bring them together in the neighbourhood:

*“Dus als je het inclusief wil maken, dan ga je je dus verplaatsen in wie woont hier en wat hebben deze partijen nodig en hoe zorg je er dan voor dat dat ook inclusief is? Dat betekent ook, want je ziet ook aan de andere kant gebeuren dat bijvoorbeeld in sommige wijken waar heel veel moslims wonen, dat mensen die homoseksueel zijn daar niet prettig kunnen wonen. Daar moet je dus ook iets mee doen. Dus hoe kan je zorgen dat er plekken zijn, dat mensen elkaar tegenkomen. Het zit hem dus ook heel erg in ja, de identiteit van een plek. In heel veel dingen zit het hem. Dus even los nog van het hoogste abstractieniveau gaat het heel erg over wie gaat er wonen, wat zijn die mensen, wat beweegt mensen en hoe zorg je dat het er voor iedereen fijn is?”*

## 6. Interview VI

### 6.1 About the developer

This developer is part of contractor firm. Originally, they only did construction, but they have now also been doing developments themselves, for quite some time now, which they started doing due to a shift in the market and to also make their position stronger. Through developments they want to make impact within existing cities.

They argue that they distinguish themselves from other developers due to their close link to the contractors, which allows them to have a good understanding of possible risks and ways to mitigate those.

The majority of the development firms projects are new-build projects, but this specific branch of the company is focused on renovation and adaptive reuse. They have experience as contractors in this field, but are now expanding their work by developing the projects themselves.

They have four core values that steer their decisions:

- Strengthen society
- Cherish the earth
- Optimise space
- Use technology

### 6.2 Decision-making process

As developers, they get a lot of chances from their position in the market: they have been around, so people can find them whenever there are land positions or specific projects.

Whenever they a project comes on their radar, they start by **observing**:

*“Als zo'n project in beeld komt dan willen we eigenlijk eerst de positie innemen van observeren. We gaan eerst observeren. Waar bevindt het project zich? Wie maken er gebruik van, wie leven eromheen en dat kompas is dan ook ingericht op sociale menselijke aspecten, maar ook op de aarde, dus op duurzaamheid. ... Van gemeente, tot*

*bewoners, tot de eigenaren om ons heen. En dan met mekaar gaan kijken van nou, hoe past dat nou in de businesscase? En dan komt vaak wel de moeilijkheid naar voren, want dan gaat het over kosten, dan gaat het over ruimtegebruik. En eigenlijk zijn dat de onderwerpen waar allemaal beperkingen op zijn.”*

During this observation phase, they also conduct a **market analysis**. However, even though the it does not fit in the business case, they sometimes decide to continue with a project, if it is of high importance (i.e. a prestige project).

*“Dus ja, daar zit natuurlijk wel ook de marktanalyse bij hè? Van welk programma willen we nou in en hoe past dat dan op elkaar? Kijk, nu is het wel zo, wij hebben ook onze, hoe zeg je dat, onze normen vastgesteld voor het rendement dat we op een project willen hebben? Dus als het op een gegeven moment ergens onder een bepaald rendement komt dan kan het zijn dat het op basis daarvan toch niet doorgaat. Het kan ook zijn dat er andere redenen kunnen zijn om het wel door te laten gaan, de belangrijkheid van het project.”*

Looking at the **identity and historic value** is also part of the observation phase:

*“Ja kijk we, we proberen het dan toch te beoordelen in de zin van ja zou dat onderwerp, of die geschiedenis, of die waarde, zou dat vandaag de dag nog steeds waardevol zijn in het verhaal van de plek. Dus op die manier beoordelen we dat.”*

All their observations will become part of the **project context**, through which it becomes part of the project:

*“Nou, het wordt gewoon volledig als context eigenlijk meegenomen. Het gaat onderdeel zijn van het project.”*

However, the business case is always tight, so after the analysis they will **try to maximise revenues**, but this is always done within certain frames:

*“Vanuit de analyse en observatie ga je kijken naar de business case en die is in de basis altijd krap, dus die dat gaat er eigenlijk altijd wel voor zorgen is dat je bij het creëren van opbrengsten altijd wel een soort maximalisatie opzoekt. Maar wel binnen de grens van bijvoorbeeld algemene voorzieningen die je ook nodig hebt om het product ook te goed te laten werken. Dus op die manier zoeken we eigenlijk binnen die kaders van al die waardes die je wil behouden. Daarbinnen ga je maximaliseren.”*

## 6.3 Challenges

This developers states that they look into the identity of the neighbourhood, but it is **difficult to fully understand this identity**, since it is difficult to reach people, also due to changes in society:

*“Dus dat verplaatsen, dat zouden we nog een stapje verder kunnen brengen. Dat heeft ook met, denk ik, de verandering van de maatschappij te maken van hoe de maatschappij met elkaar samenwerkt en communiceert. Dat werkt gewoon vandaag de dag alweer heel anders dan 10 jaar geleden en al helemaal anders dan 30, 40 jaar geleden. ... Dus generaties gaan er anders mee om. Kijk, weet ik het, 50 jaar geleden zat de helft bij de kerk en de andere helft niet, en die waren lid van een vereniging of wat dan ook. Ja, dat is op*

*zijn kop gegaan. Dus mensen die communiceren en verbinden anders met elkaar. En dat gebeurt dus ook in de maatschappij, in de wijken. Dat gebeurt op een andere manier.”*

Another challenge relates to the continuous discussion about how to handle the growth of cities and **whether it is an issue to also remove aspects of the city:**

*“Het is toch altijd wel interessant natuurlijk. Überhaupt, van ja hoe groeien steden nu en hoe verkeerd is het dat je dingen ook weghaalt uit een stad? Die vraag is altijd heel ingewikkeld om te beantwoorden, want ja, dat weet je soms niet. Soms is iets weghalen juist heel goed om iets nieuws te creëren. Wat past bij het nu, en soms is het heel krachtig om dingen juist wel te bewaren. Dus ja, ik ben echt wel altijd voorstander van om, ja, heel erg zuinig te zijn op die dingen die heel waardevol zijn en daar hebben we natuurlijk ook een systeem voor, met monumenten en dergelijke. Die is soms wat rigide geweest en daar lijkt nu ook wel weer wat meer flexibiliteit in te komen. En dat raakt volgens mij precies dit verhaal van, ja, wat beoordeel ik nou vandaag de dag als waarde? En moet dat behouden blijven. Ja of nee?”*

**Objections** from people was also mentioned as a challenge, or a risk, that is part of social aspects:

*“En, dat gebeurt dus niet alleen op technisch gebied, maar ook op sociaal gebied. ... bijvoorbeeld dat mensen uit de omgeving ergens voor een plan gaan liggen.”*

To summarise, there are **multiple challenges** that influence the decision-making process:

*“En de uitdaging zit hem in de complexiteit. Gewoon de complexiteit door het gebrek aan ruimte. De complexiteit door het gebrek aan financiële middelen. Er is wel heel veel geld, maar het business case is gewoon heel erg complex. Complexiteit aan regelgeving. Dus ja, dat zijn de uitdagingen.”*

## 7. Interview VII

### 7.1 About the developer

This is a local company, with a little over 20 employees. Within this company, they have developers, architects, project managers and project leaders, which means that they like to work on project where they can have exchange between these disciplines.

The person who was interviewed is one of five developers that work at this company. Per year, they realise approximately 100 dwellings in and around Rotterdam.

In all of their project, two themes play an important role:

- Social cohesion
- Preventing loneliness

They are therefore a developer that focuses on housing, wellbeing and care. Their aim is to realise dwellings that are suitable for multiple stages of life, but also to develop for specific target groups (primarily elderly).

## 7.2 Decision-making process

With every project they have adaptive reuse as the starting point since this suits their sustainability mission. It is always **'adaptive reuse, unless ...'**:

*“Dat is natuurlijk altijd de keuze waar je als eerste voor staat. En vanuit de duurzaamheidsambitie die wij zelf wel hebben, begint het bij transformatie, tenzij. Dat is het uitgangspunt. En dan ga je wel kijken of dat lukt of niet. En of het lukt, hangt over het algemeen af van techniek en financiën. Dat is waarop je dan de afweging maakt.”*

However, sometimes **technical limitations** lead to them having to demolish the building and build something new:

*“Het zat constructief in een raar stramien. We konden hem eigenlijk niet optoppen, want dat was helemaal, het had geen millimeter beton meer in dan noodzakelijk, en het stramien was zo onhandig dat we daar geen woning in konden krijgen met de huidige wooneisen. Je slaapkamer moet een bepaalde maat hebben, je woonkamer ook. Dat ging dat gewoon niet in. Het past er gewoon niet in, hoe efficiënt je het ook aanpakt.”*

During the acquisition phase, they look at the neighbourhood to see what they can add in terms of **amenities**, both practical or community oriented. They do this through a quickscan of the location, on which the programme of requirements is then based:

*“Het zit bij ons echt in ons programma van eisen dat je bij de start van een project bekijkt. In de acquisitiefase kijken we al van: wat kunnen we hier toevoegen aan zo'n wijk? Dus we maken een hele locatiescan. Die gaat niet alleen over de locatie zelf, maar dan kijken we ook naar de hele wijk. De reikwijdte bepalen we een beetje met een onderbuikgevoel, op basis van de grootte van het project. Hoe groter het project, hoe groter de impact op de wijk, dus dan gaan we ook veel groter kijken. Klein project, kijk je wat kleiner. Maar dan gaan we heel goed uit: wie woont daar? Wie woont er dus niet? Welke dingen zien we nog? Welke functies zijn er? Welke functies zitten er niet? Wat denken wij dat die mensen nodig hebben? Wat zit daar en wat hebben ze nodig, zit daar nog een mismatch? Nou, dat check je bij de gemeente. En zo gaan we dat helemaal bepalen. Dus dat zit wel in onze modellen die we hebben voor quickscans van de locatie. En als een project echt binnenkomt, maken we een quickscan en dan gaan we daar serieus door. Dan maken we een locatiescan, die nog wat uitgebreider is. Ja, daar zitten gewoon standaard inhoudsopgaves in met de onderwerpen. Daar blijkt wel uit, als je die dingen onderzoekt, ja, dat doe je om er vervolgens ook op door te pakken. De uitkomst is dus elke keer anders. Maar dat wordt gegoten in een programma van eisen, wat bij ons een projectplan is. En daar moet je verantwoorden wat je gaat doen.”*

Due to the developer being quite small, they do not have **integral decision-making models**. The person that was interviewed oversees all decisions that are made:

*“Dus ja, als het goed is, als je de stappen goed hebt gedaan, dan zitten die elementen erin als ze nodig zijn, en niet als ze niet nodig zijn. We zijn wel zo klein in die zin dat ik het als ontwikkelteam aanstuur. We moeten alles met elkaar doen, alles gaat via mij. Dus ja, ik heb er gewoon zelf controle op en kijk er zelf naar.”*

### 7.3 Challenges

One challenge they came across relates to the heritage status of a project, and **how to handle this heritage status**, since apparently the old function is no longer needed, so how to look forward? They also needed the help of the municipality for this:

*“Oké, dat betekent ook, vind ik dan, dat Welstand of wie dan ook, moet erkennen dat het consequenties heeft. Want als je in een gevangenis gaat wonen, kan dat niet één op één. Als je in een oud kantoorgebouw gaat wonen, kan het ook niet één op één.”*

In heritage projects, they come across a lot of challenges that make it difficult to do adaptive reuse, since there are **limitations in what you can do within that monumental status**, which are also technically and financially difficult:

*“Ja, er zitten een aantal technische en een soort architectonische beperkingen, vaak als je een heel sterk monumentaal gebouw hebt. Neem bijvoorbeeld zo’n gevangenis: dan is het heel ingewikkeld om daar een verdieping op te zetten die architectonisch een beetje klopt, een vleugel aan te bouwen, iets ernaast te zetten. Dat zijn vaak vanuit monumentale status en redelijke eisen best heel ingewikkeld. Daar word je heel erg in beperkt, en dat is gewoon vaak ook financieel ingewikkeld. Dus zeker bij echte monumentale gebouwen is dat ingewikkeld.”*

In these kind of projects, it would have been nice if **another floor** could have been added for the financial feasibility, but that was simply not the possible due to the **heritage value**. This resulted in an **unusual building typology**:

*“Ja, het was ingewikkeld geworden. Terwijl, als je puur naar de Excelsheet had gekeken, was het fijn geweest als er nog een laag op had gezeten. Nou, maar dat ging hem nooit worden.*

*Dus dat beperkt je ook in wat je met je programma kunt doen, want als je een aantal verdiepingen hebt, kun je daar wel of niet bijvoorbeeld appartementen in maken. Uiteindelijk hebben we in de meeste vleugels dus, die sterren die je zeg maar in de tuin ziet staan, dat zijn eigenlijk allemaal rijtjeswoningen. Raar gezegd: rijtjeswoningen die rug-aan-rug tegen elkaar staan. Dat is een beetje een apart product.”*

Additionally, technical challenges, such as **fire safety and acoustics**, play a role:

*“Ja, technisch zitten er best wel ingewikkelde dingen aan, ook met het maken van appartementen in een gebouw dat daar niet voor bedoeld was. Dat is met name de vloeren. Dan kom je op brand en geluid, en dat soort zaken zijn best heel ingewikkeld. Dus echt oude gebouwen, denk aan houten vloeren, die moeten dan opeens voor de huidige regels aan 60 minuten brandwering voldoen. Nou, dat is technisch een hele ingewikkelde klus om voor elkaar te krijgen.”*

## 8. Interview VIII

### 8.1 About the developer

The person who was interviewed is commercial director at this development firm.

For all their projects, they acquire existing real estate, after which they either do adaptive reuse, or demolish-rebuild. They focus do not focus on one specific type of developments, they do both offices and housing.

As a developer, they argue that in the end they develop for the end user, so in each project, a statement should be made about this end user.

### 8.2 Decision-making process

Their decision-making process starts off by doing a quickscan in which they primarily look at the **development and market potential**:

*“Dus hoe we het nu doen, is dat we eigenlijk helemaal aan het begin als we een lead krijgen of iets dergelijks, dat we heel snel een quickscan doen, waarbij we kijken naar een aantal dingen. Dat is dus het huidige object en de huidige exploitatie, maar ook naar de ontwikkelpotentie. Dus: ligt er al iets in een document van de gemeente of de provincie waaruit we kunnen afleiden dat er op termijn in ieder geval ontwikkelpotentie in zit? Ja of nee.*

*En als dat zo is, kijken we ook naar de marktpotentie: welk type vastgoed, welke doelgroep, welke marktwaarde denken we dan te kunnen realiseren? Als iets uiteindelijk geen ontwikkelpotentie heeft, kopen we het niet aan, want we zijn uiteindelijk echt een ontwikkelbedrijf.*

*En als het onvoldoende marktpotentie heeft, kopen we het ook niet aan. En dat gaat eigenlijk als volgt: als wij naar de huidige bouwkosten kijken, weten we een beetje per vierkante meter wat we aan investering moeten doen, en op heel veel plekken in Nederland ligt de huidige marktwaarde daaronder. Dus dan beginnen we er eigenlijk ook niet aan.”*

The **development vision and project brief of the municipality** for the area also play a role in this phase:

*“Nou, soms liggen er gewoon al een ontwikkelvisie of een projectnota van de gemeente voor een bepaald gebied, waarin staat: “Wij willen in deze periode dit bedrijventerrein transformeren naar een gemengde woonwijk. We zien daarin zoveel ruimte voor zoveel honderdduizend m<sup>2</sup> vastgoed, zoveel woningen.”*

*Ja, dan weet je dat je een positie neemt in een gebied waarvoor ook vanuit de gemeente draagvlak is om te gaan ontwikkelen. En dat is echt noodzakelijk, want zelfs mét dat draagvlak doe je er vaak nog 5 jaar over om tot start bouw te komen.*

*En als dat draagvlak er van tevoren nog niet is, ja, dan moet je op een veel langere termijn een businessplan kunnen maken.”*

Additionally, they look at the **amenities and accessibility** of the project. This is very important in determining the feasibility, especially in office developments. It also determines the start-up period of a project:

*“Voorzieningen en bereikbaarheid. Daar kijk ik heel kritisch naar bij aankopen, en zeker bij kantorenmarkt is bereikbaarheid mega belangrijk. Dat werkt gewoon niet op plekken die niet goed bereikbaar zijn. Een groot deel van de gebruikers komt altijd met het openbaar vervoer.*

*Qua voorzieningen en bereikbaarheid voor woningen bepaalt dat heel erg de tijdlijn waarop je uiteindelijk kunt starten. Sommige gebieden hebben gewoon nog enorme aanlooptijd nodig. Het nadeel is dat voorzieningen in nieuwe gebieden echt achterlopen op de woningen en kantoren. Dus dan heb je altijd een soort spookstad in het begin.”*

Lastly, they have **investment criteria** which projects need to comply with:

*“En voor ontwikkeling hebben we ook investeringscriteria. Die zitten heel erg op de dingen die ik in het begin al noemde: zit er een huidige exploitatie op, dus komt er huur uit? Kunnen we binnen een periode van 5 jaar van de huurcontracten af, zodat we ook kunnen starten met bouwen? Zit er voldoende ontwikkelpotentie in? Wij doen het alleen als er minimaal 20 miljoen aanneemsom gerealiseerd kan worden, want we hebben een beetje gevoel bij welk volume er dan moet komen. En ook: heeft het voldoende marktpotentie, halen we een bepaalde vrij-op-naam-prijs, zien we dit als een duurzame kantoorlocatie? Dat soort dingen scoren we allemaal. En tegenwoordig kijken we ook heel erg naar risico's, zoals netten congestie en bezwaarperiodes, dat soort dingen.”*

However, they are also **opportunistic** in their projects:

*“Ja, ik moet er wel bij melden dat het proces heel helder is, maar in de praktijk zijn we ook best opportunistisch. Uiteindelijk, als er dingen langskomen die we interessant vinden, zullen we er altijd naar kijken. Ook al scoort het op 9 van de 10 criteria net niet voldoende, maar we vinden het toch interessant. Die ruimte hou je altijd.”*

After acquisition, sociocultural aspects such as **community** start playing a bigger role, which are **embedded in the concept**:

*“Ja, en ik denk vooral in die conceptfase, dus als we het project helemaal hebben aangekocht en daarna bepalen wat de bebouwing wordt, wat het programma is en voor wie we het doen, daar zitten heel veel van dit soort definities in. Dan zeg je met elkaar: "Oké, we gaan dit." En dat zit heel erg in het concept van je gebouw. Als het concept is: "Wij zijn één grote collectieve buitenruimte." Ja, dan moet je dat daarna je hele project overeind houden, want dat is dan echt verankerd in het concept.”*

### 8.3 Challenges

This developer acknowledges that sometimes, **objections from the neighbourhood** can be a challenge, but this is something they assess during the acquisition process:

*“Ja, en soms weet je van tevoren al dat de buurt een uitdaging is. Dan is je participatietraject bijvoorbeeld heel belangrijk. Maar het is wel een beetje maatwerk. We*

*hebben standaard dat we bepaalde risico's in kaart brengen tijdens de aankoop, zodat je ook weet: dit is een aandachtspunt voor tijdens de ontwikkeling.”*

From a **technical perspective**, it is always difficult to determine what aspects of the property can be reused:

*“Ja, ik denk qua behoud van bestaand vastgoed: het is altijd wel een puzzel, ook wat de kwaliteit van het bestaande vastgoed is. Soms is het ja, wij kopen ook veel oude gebouwen op, die zijn vaak niet met heel veel liefde behandeld in de 50 jaar daarvoor. Dus het is ook altijd de vraag van, in hoeverre kun je het behouden en hergebruiken? Maar dat is meer vanuit technisch oogpunt.”*

The last challenge relates to the **project turning out differently than expected**, especially in relation to the **target group**. Sometimes the market responds differently to your ideas:

*“Maar op een gegeven moment ga je met je project naar de markt, en als er dan een heel andere partij op biedt waarmee het project haalbaar wordt dan zit je nog in een fase waarin de ambitie soms een beetje kan sneuvelen.”*

## A4: NOTES VALIDATION INTERVIEWS

### Developer 1

This developer sees it as both their responsibility and as achievable.

In their view, identity is not that difficult to define, but you do need to investigate it and immerse yourself in it. A concept can then be built around that research. It is our task as developers to look at the identity, but the extent to which this happens, differs per developer.

He considers the proposed approach sound: whoever researches the history and the current situation thoroughly will understand the context. These do not have to be mutually exclusive; they can coexist and reinforce each other.

The developer describes a cycle: research → neighbourhood → design → back to the neighbourhood. Design was added as a step to not come to the residents empty handed.

Within that cycle, it is also important to be clear about what is and is not possible.

He also looks at broader external influences that need to be incorporated into the future identity, such as CO<sub>2</sub>, heat, and loneliness. He also emphasises the importance of looking at what is absent: identity can also be lacking, for example due to a lack of social safety or meeting places.

Identity is the most important starting point, including for a smooth process, though he acknowledges that practical issues still need to be resolved and that financial pressure exists. When engaging with the neighbourhood, you also need to entice people: if you come empty-handed, you are only taking and not giving.

After observing, you must take an extra step and formulate starting points, a sketch, icons, or a diagram, so that there is something to discuss, without creating the impression that the development is already underway.

### Developer 2

Objections are something you want to prevent, and identity is beyond question for this developer. The organisation actively works with identity. They focus heavily on inner-city projects, where identity is fragmented, unlike a VINEX neighbourhood, where you are dealing with one specific type of user. By developing, you change the identity, and the question they ask themselves is: does this fit here, and will people be happy with it?

A good participation process does exactly what my framework describes, though he acknowledges that not everyone takes this approach. The municipality is an important stakeholder with its own vision and policy, which can add an extra dimension to the concept framework.

They also refer to the 'Leefbaarheids Effecten Rapportage' as a useful tool.

## Developer 4

For this developer, identity has no strong direct link to the objective. The target group has, however, helped in dealings with the municipality. The focus is primarily on the concept, and identity and vibrancy are added in collaboration with the municipality, which partly determines what it should become.

## Developer 5

This developer raises the question of how you define the aspects of identity. Developers often define things in hard terms: something becomes a financial problem, or identity is used as a selling point. The tension between the social and the commercial is a recurring theme in this.

Through concept development and participation, identity can be well articulated, but you can also use identity to support your participation process. Conversations about identity lead to emotional recognition, and developers must be able to empathise emotionally with residents. The practical business mindset needs to be set aside temporarily.

The developer notes that a developer is looking for a 'brand', while a resident lives in 'stories'. These different perspectives and interests must be acknowledged. Developers have a corporate and financial perspective, whereas the residents perspective is emotional.

The developer views municipalities and authorities as enablers: they should provide frameworks, not rules, that steer developers to incorporate social values. They mention the guide 'Fysiek volgt sociaal' and the healthy living environment policy of the municipality of Eindhoven as examples of steps already being taken. In conversations with residents, they advocate asking 'how' questions, such as: how can what we build here contribute to a healthy community?

## Developer 6

The developer recognises the conclusion but questions what 'getting a grip on identity' actually means. Value, and social value in particular, is difficult to estimate and therefore hard to grasp. Developers therefore tend to dive into an Excel sheet or drawing when other things are not concrete.

Regarding objections, he notes that the reasons for these can be all sorts of things, but that residents often have concerns which are good to address to take their worries away. After all, residents are part of the neighbourhood and of the overall plan.

As a developer, you look for value: social, monumental, aesthetic, natural. Determining that value, and thereby investigating identity, is one of the main tasks. Within the organisation, the extent to which this happens varies per person. The interviewee has completed additional training in restoration and therefore has more knowledge about aspects that influence identity.

He concludes that the suggested approach is valuable, because you simply need that attention to identity.

## Developer 7

Whether it is their responsibility, this developer not entirely sure, but it is at least in their interest. Objections are unpredictable and, especially late in the project, have a significant financial impact: homes become more expensive or returns decline. The foundation is a desire to deliver something of quality.

It is about the relationship of the project to the neighbourhood, and the extent to which identity plays a role depends on the scale of the project. The identity narrative needs to be coherent, but does not necessarily have to be the same as the current one. A well-articulated identity is important to prevent objections, but also in dealings with the municipality and the planning committee. Moreover, you cannot simply change the identity of a neighbourhood. The ambition is to leave it better than you found it, though sometimes you miss the mark or fail to communicate your intentions clearly.

The local municipality plays an important role and is the first point of contact, as they have analyses, visions, and policy documents. Sometimes, however, objections come from residents who actually disagree with the underlying municipal policy instead of the development.

Participation needs to be funnelled, and it is therefore useful to focus it on identity. What existing residents think must be gathered through direct contact with the neighbourhood.

They also make use of local real estate agents, who are closely connected to the area. Their approach: start with external parties, then verify with residents.

## Developer 8

The developers views participation as a means of gaining a grip on identity. Incorporating that identity is entirely the developer's own responsibility. If you interpret it incorrectly, you can quickly miss the mark, but a good interpretation also improves the product. A residents' association or similar body can play a useful role in this.

Participation serves multiple purposes:

- Allowing residents to get used to the new situation
- Gaining a better understanding of the identity.

Attention to the neighbourhood and identity is part of the profession, but there is no fixed participation procedure: it is location-specific. Due to the Environment and Planning Act, there is now an obligation to participate.

Focusing on shared values is important, not only on differences. Since construction always causes some degree of disruption, that shared interest provides a good point of connection.

History is also researched and presented to the neighbourhood, which sparks interesting conversations and sometimes yields new information. This can also be used to demonstrate that a function previously existed. Not "we want a bakery because it can do well here commercially", but "there should be a bakery here again, because there used to be one."

Scale determines the approach: for a small project with two neighbours, you simply handle it yourself, for example by meeting once a quarter. Participation sessions can be well facilitated by

others; maintaining the identity is then down to the developer. Identity and amenities are the two most important pillars.

Finally, he notes that while listed buildings are challenging to work with, the very fact that something is listed already determines that its identity must be preserved.

## Participation advisor

Objections do not necessarily relate to the preservation of identity, they often relate to the development in general. Residents use the neighbourhood in a specific way, and now that is going to be changed. Identity is connected to the neighbourhood. Objections however are often related to the impact of the development, not the development itself.

Grasping identity, especially of a building, is not hard. The difficulty lies in determining what to do with this identity. What are you going to do to make sure that the existing neighbourhood and the development blend?

You need guidelines whenever you go to the neighbourhood. Especially when focusing on the 'future' aspects. Do you have the ability to do something with residents suggestions? You therefore need to set frames in which they can suggest options.

The 'past' and 'present' look good, and this advisor thinks that this approach would be valuable.

About 'translate into requirements': elaborate to residents why you have chosen to include aspects in the requirements and how this is translated in the design.

Connection to the identity of the neighbourhood is difficult due to the different perspectives within the neighbourhood.

Sometimes there simply is no place for extensive participation due to the character of the project. This needs to be communicated well. Participation should not be a goal in itself. What is your intention with participation? That should be the question you ask yourself first. If you do decide to start an extensive participation process but don't intend to take all the feedback on board, you're setting yourself up for resistance.

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# APPENDIX B – RESEARCH ETHICS

## B1: DATA MANAGEMENT PLAN

### Plan Overview

A Data Management Plan created using DMPOnline

**Title:** The role of socio-cultural criteria in adaptive reuse decision-making

**Creator:** Gerlinde Havelaar

**Affiliation:** Delft University of Technology

**Template:** TU Delft Data Management Plan template (2025)

#### Project abstract:

Over the last few years, adaptive reuse projects have grown in popularity and with that, research into the factors that influence decision-making about adaptive reuse projects (van Laar et al., 2024), resulting in the creation of multi-criteria decision-making models. These models contain criteria ranging from economic to technological and social. Nowadays, sociocultural aspects are considered more and more important (De Jong & Peeters, 2024; Vafaie et al., 2025), but, as with all criteria, it is unclear how these aspects guide decisions in adaptive reuse projects. Therefore, the main aim of this research is to improve the alignment between theory on socio-cultural decision-criteria and practice.

The following research question will be answered:

**To what extent are socio-cultural decision-making criteria for adaptive reuse addressed by practitioners, and how can decision-making models be adapted to better enable practice to incorporate socio-cultural criteria?**

This will be done with the following subquestions:

1. What socio-cultural decision-making criteria are identified in adaptive reuse decisionmaking models in academic literature?
2. How are socio-cultural criteria currently considered and discussed by practitioners during adaptive reuse decision-making?
3. What challenges do practitioners experience when incorporating socio-cultural criteria into adaptive reuse decision-making?
4. How can existing adaptive reuse decision-making models be improved to better enable the practical treatment of socio-cultural criteria?

The data collection methods that will be used are a literature review and semi-structured interviews. Additionally, the findings of the interviews are validated through the analysis of decision-making documents, but only if the interviewees are willing to share this information. Within the semi-structured interviews, primarily developers, but also other initiators of adaptive reuse projects, will be interviewed to answer subquestions 2 and 3. The data that will be collected

is the contact information of interviewees and mp3 recordings of the interviews. This data is saved on a TU Delft OneDrive and will be processed using Atlas.ti, using a TU Delft licence.

**ID:** 197854

**Start date:** 27-01-2026

**End date:** 18-06-2026

**Last modified:** 02-03-2026

## 0. Administrative questions

1. Provide the name of the data management support staff consulted during the preparation of this plan and the date of consultation. Please also mention if you consulted any other support staff. n/a

2. Is TU Delft the lead institution for this project?

- Yes, the only institution involved

## I. Data/code description and collection or re-use

3. Provide a general description of the types of data/code you will be working with, including any re-used data/code.

Type of data/code	File format(s)	How will data/code be collected/generated? For re-used data/code: what are the sources and terms of use?	Purpose of processing	Storage location	Who will have access to the data/code?
Personally Identifiable Information (PII) of participants: name, email, job title and company	.xlsx file	Reaching out to interviewees.	For administrative purposes: obtaining consent and communicating with participants.	Personal TU Delft OneDrive	Gerlinde Havelaar, Hilde Remoy and Vincent Gruis
Informed consent forms	PDF	Informed consent forms signed digitally or in person.	To obtain and document informed consent.	Personal TU Delft OneDrive	As above
Non-disclosure agreement from external parties	PDF	NDA signed digitally or in person	To gain access to documents from third parties	Personal TU Delft OneDrive	As above
Interview recordings	MP3	Collected during the interview, if consent is given.	To allow for transcription	Researchers' iCloud (during collection) and personal TU Delft OneDrive (after completion of interview)	As above
Anonymised interview transcripts	.doc file	Generated using the recordings and transcription in MS Office	Interview analysis	Personal TU Delft OneDrive	As above
Data analysis	.atlasti	Uploaded transcripts	Interview analysis	Atlas.ti Cloud (accessed with TU Delft licence)	As above
Company documents	t.b.d.	Collected from interviewees	Case analysis	Personal TU Delft OneDrive (unless agreed differently with the company)	As above

## II. Storage and backup during the research process

4. How much data/code storage will you require during the project lifetime?

- < 250 GB

5. Where will the data/code be stored and backed-up during the project lifetime? (Select all that apply.) ● TU Delft OneDrive

## III. Data/code documentation

6. What documentation will accompany data/code? (Select all that apply.)

- Data – Codebook describing the contents, structure, layout, and variable definitions of the data
- Data – Methodology of data collection

## IV. Legal and ethical requirements, code of conducts

7. Does your research involve human subjects or third-party datasets collected from human participants?

If you are working with a human subject(s), you will need to obtain the HREC approval for your research project.

- Yes – please provide details in the additional information box below

Professionals in the field of adaptive reuse will be interviewed. I intend to apply for ethical approval from the Human Research Ethics Committee, but have not yet done so.

8. Will you work with personal data? (This is information about an identified or identifiable natural person, either for research or project administration purposes.)

- Yes

The personal data that is collected is name, email and company. This data is collected for project administration purposes, but will be anonymised in the final publication.

9. Will you work with any other types of confidential or classified data or code as listed below? (Select all that apply and provide additional details below.)

If you are not sure which option to select, ask your Faculty Data Steward for advice.

- Yes, confidential data received from commercial, or other external partners

I will use data from companies about their decision-making processes and their projects. This data will be handled and stored in accordance with the company's wishes.

**10. How will ownership of the data and intellectual property rights to the data be managed?**

For projects involving commercially-sensitive research or research involving third parties, seek advice of your [Faculty Contract Manager](#) when answering this question.

This is an internal TUD MSc thesis project

**11. Which personal data or data from human participants do you work with? (Select all that apply.)**

- Proof of consent (such as signed consent materials which contain name and signature) Audio
- recordings
- Job title and/or employer
- Telephone number, email addresses and/or other addresses as contact details for administrative purposes
- Names as contact details for administrative purposes

**12. Please list the categories of data subjects and their geographical location.**

Interview participants are working at companies situated in the Netherlands and are, most likely, Dutch themselves, but nationality is not asked.

**13. Will you be receiving personal data from or transferring personal data to third parties (groups of individuals or organisations)?**

- No

**16. What are the legal grounds for personal data processing?**

- Informed consent

**17. Please describe the informed consent procedure you will follow below.**

The researcher will inform the potential participants about the goals and procedures of the research project. The researcher will also inform them about the personal data that is being processed and for what purpose. This information will be provided to the potential participants through an email prior to the interview, in which interviewees are asked to sign the informed consent form. If the interviews happen in person, the form will be taken along to allow participants to sign in person, if preferred.

**18. Where will you store the physical/digital signed consent forms or other types of proof of consent (such as recording of verbal consent)?**

The informed consent forms are stored in the personal TU Delft OneDrive, but will be protected by a password.

**19. Does the processing of the personal data result in a high risk to the data subjects? (Select all that apply.)**

If the processing of the personal data results in a high risk to the data subjects, it is required to perform a Data Protection Impact Assessment (DPIA). In order to determine if there is a high risk for the data subjects, please check if any of the options below that are applicable to the processing of the personal data in your research project.

If any category applies, please provide additional information in the box below. Likewise, if you collect other type of potentially sensitive data, or if you have any additional comments, include these in the box below.

If one or more options listed below apply, your project might need a DPIA. Please get in touch with the Privacy team (privacy-tud@tudelft.nl) to get advice as to whether DPIA is necessary.

- None of the above apply

**23. What will happen with the personal data used in the research after the end of the research project?**

- Anonymised or aggregated data will be shared with others

Anonymised interview transcripts will be put in the repository as an appendix to the master's thesis.

**24. For how long will personal research data (including pseudonymised data) be stored?**

- Personal data will be deleted at the end of the research project

**25. How will your study participants be asked for their consent for data sharing?**

- In the informed consent form: participants are informed that their personal data will be anonymised and that the anonymised dataset is shared publicly

## V. Data sharing and long term preservation

**27. Apart from personal data mentioned in question 23, will any other data be publicly shared?**

Please provide a list of data/code you are going to share under 'Additional Information'.

- All other non-personal data/code produced in the project

**29. How will you share research data/code, including those mentioned in question 23? Select all that apply and provide additional details below.**

- I am a Bachelor's/Master's student at TU Delft and I will share the data/code in the body and/or appendices of my thesis/report in the TU Delft Repository

**30. How much of your data/code will be shared in a research data repository?**

- < 100 GB

**31. When will the data/code be shared?**

- At the end of the research project

**32. Under what licence(s) will the data/code be released?**

- Other – please explain below

I would like my thesis to be placed automatically under copyright in the TU Delft Repository.

## VI. Data management responsibilities and resources

**33. If you leave TU Delft (or are unavailable), who is going to be responsible for the data/code resulting from this project?**

My supervisor, Hilde Remøy, professor at Real Estate Management

**34. What resources (for example financial and time) will be dedicated to data management and ensuring that data will be FAIR (Findable, Accessible, Interoperable, Re-usable)?**

4TU.ResearchData is able to archive 1TB of data/code per researcher per year free of charge for all TU Delft researchers. I do not expect to exceed this and therefore, there are no additional costs of long term preservation.

**35. Which faculty do you belong to?**

- Faculty of Architecture and the Built Environment (ABE)

## B2: HUMAN RESEARCH AND ETHICS CHECKLIST

# Delft University of Technology

# HUMAN RESEARCH ETHICS

# CHECKLIST FOR HUMAN RESEARCH

# (Version January 2022)

### IMPORTANT NOTES ON PREPARING THIS CHECKLIST

1. An HREC application should be submitted for every research study that involves human participants (as Research Subjects) carried out by TU Delft researchers
2. Your HREC application should be submitted and approved **before** potential participants are approached to take part in your study
3. All submissions from Master's Students for their research thesis need approval from the relevant Responsible Researcher
4. The Responsible Researcher must indicate their approval of the completeness and quality of the submission by signing and dating this form OR by providing approval to the corresponding researcher via email (included as a PDF with the full HREC submission)
5. There are various aspects of human research compliance which fall outside of the remit of the HREC, but which must be in place to obtain HREC approval. These often require input from internal or external experts such as [Faculty Data Stewards](#), [Faculty HSE advisors](#), the [TU Delft Privacy Team](#) or external [Medical research partners](#).
6. You can find detailed guidance on completing your HREC application [here](#)
7. Please note that incomplete submissions (whether in terms of documentation or the information provided therein) will be returned for completion **prior to any assessment**
8. If you have any feedback on any aspect of the HREC approval tools and/or process you can leave your comments [here](#)

## I. Applicant Information

<b>PROJECT TITLE:</b>	The role of socio-cultural criteria in adaptive reuse decision-making
<b>Research period:</b> <i>Over what period of time will this specific part of the research take place</i>	Feb 2026 – June 2026
<b>Faculty:</b>	Architecture
<b>Department:</b>	Management and the Built Environment
<b>Type of the research project:</b> <i>(Bachelor's, Master's, DreamTeam, PhD, PostDoc, Senior Researcher, Organisational etc.)</i>	Master's
<b>Funder of research:</b> <i>(EU, NWO, TUD, other – in which case please elaborate)</i>	Not applicable
<b>Name of Corresponding Researcher:</b> <i>(If different from the Responsible Researcher)</i>	Not applicable
<b>E-mail Corresponding Researcher:</b> <i>(If different from the Responsible Researcher)</i>	Not applicable
<b>Position of Corresponding Researcher:</b> <i>(Masters, DreamTeam, PhD, PostDoc, Assistant/ Associate/ Full Professor)</i>	Not applicable
<b>Name of Responsible Researcher:</b> <i><b>Note:</b> all student work must have a named Responsible Researcher to approve, sign and submit this application</i>	Hilde Remøy
<b>Position of Responsible Researcher :</b> <i>(PhD, PostDoc, Associate/ Assistant/ Full Professor)</i>	Full Professor

## II. Research Overview

**NOTE:** You can find more guidance on completing this checklist [here](#)

### a) Please summarise your research very briefly (100-200 words)

What are you looking into, who is involved, how many participants there will be, how they will be recruited and what are they expected to do?

*Add your text here – (please avoid jargon and abbreviations)*

In this research, the following research question will be answered:

To what extent are socio-cultural decision-making criteria for adaptive reuse addressed by practitioners, and how can decision-making models be adapted to better enable practice to incorporate socio-cultural criteria?

The data collection methods that will be used are a literature review and semi-structured interviews. Within the semi-structured interviews, primarily developers, but also other initiators of adaptive reuse projects, will be interviewed to gain insights into their decision-making process and the use of socio-cultural criteria. A total of 5 to 10 people will be interviewed. They are recruited via email or LinkedIn and asked if they are willing to answer questions about their decision-making process.

Additionally, the findings of the interviews are validated through the analysis of decision-making documents, but only if the interviewees are willing to share this information.

- b) **If your application is an additional project** related to an existing approved HREC submission, please provide a brief explanation including the existing relevant HREC submission number/s.

*Add your text here – (please avoid jargon and abbreviations)*

Not applicable

- c) **If your application is a simple extension of, or amendment to,** an existing approved HREC submission, you can simply submit an [HREC Amendment Form](#) as a submission through LabServant.

### III. Risk Assessment and Mitigation Plan

*NOTE: You can find more guidance on completing this checklist [here](#)*

Please complete the following table in full for all points to which your answer is “yes”. Bear in mind that the vast majority of projects involving human participants as Research Subjects also involve the collection of **Personally Identifiable Information (PII)** and/or **Personally Identifiable Research Data (PIRD)** which may pose potential risks to participants as detailed in Section G: Data Processing and Privacy below.

To ensure alignment between your risk assessment, data management and what you agree with your Research Subjects you can use the last two columns in the table below to refer to specific points in your Data Management Plan (DMP) and Informed Consent Form (ICF) – **but this is not compulsory**.

It’s worth noting that **you’re much more likely to need to resubmit your application if you neglect to identify potential risks**, than if you identify a potential risk and demonstrate how you will mitigate it. If necessary, the HREC will always work with you and colleagues in the Privacy Team and Data Management Services to see how, if at all possible, your research can be conducted.

			<i>If YES please complete the Risk Assessment and Mitigation Plan columns below.</i>		<i>Please provide the relevant reference #</i>	
ISSUE	Yes	No	RISK ASSESSMENT – what risks could arise?  <i>Please ensure that you list ALL of the actual risks that could potentially arise – do not simply state whether you consider any such risks are important!</i>	MITIGATION PLAN – what mitigating steps will you take?  <i>Please ensure that you summarise what actual mitigation measures you will take for each potential risk identified – do not simply state that you will e.g. comply with regulations.</i>	DMP	ICF
<b>A: Partners and collaboration</b>						
1. Will the research be carried out in collaboration with additional organisational partners such as:  <ul style="list-style-type: none"> <li>One or more collaborating research and/or commercial organisations</li> </ul>		x				

			<i>If YES please complete the Risk Assessment and Mitigation Plan columns below.</i>	<i>Please provide the relevant reference #</i>		
<b>ISSUE</b>	<b>Yes</b>	<b>No</b>	<b>RISK ASSESSMENT – what risks could arise?</b>  <i>Please ensure that you list ALL of the actual risks that could potentially arise – do not simply state whether you consider any such risks are important!</i>	<b>MITIGATION PLAN – what mitigating steps will you take?</b>  <i>Please ensure that you summarise what actual mitigation measures you will take for each potential risk identified – do not simply state that you will e.g. comply with regulations.</i>	<b>DMP</b>	<b>ICF</b>
<ul style="list-style-type: none"> <li>• Either a research, or a work experience internship provider<sup>1</sup></li> </ul> <i><sup>1</sup> If yes, please include the graduation agreement in this application</i>						
2. Is this research dependent on a Data Transfer or Processing Agreement with a collaborating partner or third party supplier?  <i>If yes please provide a copy of the signed DTA/DPA</i>	<b>x</b>		Data leaks could arise and data could be used not in accordance with the NDA.	A NDA is already signed with ERED, one of the parties whose data will be used, and the data will be used in accordance with that NDA. If data from other parties will be used, additional NDA's will be signed, if required by the company. The NDA will be stored in accordance with the DMP.	<b>x</b>	
3. Has this research been approved by another (external) research ethics committee (e.g.: HREC and/or MREC/METC)?  <i>If yes, please provide a copy of the approval (if possible) and summarise any key points in your Risk Management section below</i>		<b>x</b>				
<b>B: Location</b>						
4. Will the research take place in a country or countries, other than the Netherlands, within the EU?		<b>x</b>				
5. Will the research take place in a country or countries outside the EU?		<b>x</b>				
6. Will the research take place in a place/region or of higher risk – including known dangerous locations (in any country) or locations with non-democratic regimes?		<b>x</b>				
<b>C: Participants</b>						

			<i>If YES please complete the Risk Assessment and Mitigation Plan columns below.</i>		<i>Please provide the relevant reference #</i>	
<b>ISSUE</b>	<b>Yes</b>	<b>No</b>	<b>RISK ASSESSMENT – what risks could arise?</b>  <i>Please ensure that you list ALL of the actual risks that could potentially arise – do not simply state whether you consider any such risks are important!</i>	<b>MITIGATION PLAN – what mitigating steps will you take?</b>  <i>Please ensure that you summarise what actual mitigation measures you will take for each potential risk identified – do not simply state that you will e.g. comply with regulations.</i>	<b>DMP</b>	<b>ICF</b>
7. Will the study involve participants who <b>may</b> be vulnerable and possibly (legally) unable to give informed consent? (e.g., children below the legal age for giving consent, people with learning difficulties, people living in care or nursing homes,).		<b>x</b>				
8. Will the study involve participants who <b>may</b> be vulnerable under specific circumstances and in specific contexts, such as victims and witnesses of violence, including domestic violence; sex workers; members of minority groups, refugees, irregular migrants or dissidents?		<b>x</b>				
9. Are the participants, outside the context of the research, in a dependent or subordinate position to the investigator (such as own children, own students or employees of either TU Delft and/or a collaborating partner organisation)?  <i>It is essential that you safeguard against possible adverse consequences of this situation (such as allowing a student's failure to participate to your satisfaction to affect your evaluation of their coursework).</i>		<b>x</b>				
10. Is there a high possibility of re-identification for your participants? (e.g., do they have a very specialist job of which there are only a small number in a given country, are they members of a small community, or employees from a partner company collaborating in the research? Or are they one of only a handful of (expert) participants in the study?		<b>x</b>				
<b>D: Recruiting Participants</b>						

			<i>If YES please complete the Risk Assessment and Mitigation Plan columns below.</i>		<i>Please provide the relevant reference #</i>	
ISSUE	Yes	No	RISK ASSESSMENT – what risks could arise?  <i>Please ensure that you list ALL of the actual risks that could potentially arise – do not simply state whether you consider any such risks are important!</i>	MITIGATION PLAN – what mitigating steps will you take?  <i>Please ensure that you summarise what actual mitigation measures you will take for each potential risk identified – do not simply state that you will e.g. comply with regulations.</i>	DMP	ICF
11. Will your participants be recruited through your own, professional, channels such as conference attendance lists, or through specific network/s such as self-help groups	x		Participants can be approach against their wishes or feel the need to be forced into participation based on their connections to me or people I know.	Participants are contacted in a polite manner via email or LinkedIn and are free to decline the invitation to participate in the research.		
12. Will the participants be recruited or accessed in the longer term by a (legal or customary) gatekeeper? (e.g., an adult professional working with children; a community leader or family member who has this customary role – within or outside the EU; the data producer of a long-term cohort study)		x				
13. Will you be recruiting your participants through a crowd-sourcing service and/or involve a third party data-gathering service, such as a survey platform?		x				
14. Will you be offering any financial, or other, remuneration to participants, and might this induce or bias participation?		x				
<b>E: Subject Matter</b> <i>Research related to medical questions/health may require special attention. See also the website of the <a href="#">CCMO</a> before contacting the HREC.</i>						
15. Will your research involve any of the following: <ul style="list-style-type: none"> <li>• Medical research and/or clinical trials</li> <li>• Invasive sampling and/or medical imaging</li> <li>• Medical and <i>In Vitro Diagnostic Medical Devices</i> Research</li> </ul>		x				

			<i>If YES please complete the Risk Assessment and Mitigation Plan columns below.</i>		<i>Please provide the relevant reference #</i>	
<b>ISSUE</b>	<b>Yes</b>	<b>No</b>	<b>RISK ASSESSMENT – what risks could arise?</b>  <i>Please ensure that you list ALL of the actual risks that could potentially arise – do not simply state whether you consider any such risks are important!</i>	<b>MITIGATION PLAN – what mitigating steps will you take?</b>  <i>Please ensure that you summarise what actual mitigation measures you will take for each potential risk identified – do not simply state that you will e.g. comply with regulations.</i>	<b>DMP</b>	<b>ICF</b>
16. Will drugs, placebos, or other substances (e.g., drinks, foods, food or drink constituents, dietary supplements) be administered to the study participants?  <i>If yes see here to determine whether medical ethical approval is required</i>		x				
17. Will blood or tissue samples be obtained from participants?  <i>If yes see here to determine whether medical ethical approval is required</i>		x				
18. Does the study risk causing psychological stress or anxiety beyond that normally encountered by the participants in their life outside research?		x				
19. Will the study involve discussion of personal sensitive data which could put participants at increased legal, financial, reputational, security or other risk? (e.g., financial data, location data, data relating to children or other vulnerable groups)  <i>Definitions of sensitive personal data, and special cases are provided on the TUD Privacy Team website.</i>		x				
20. Will the study involve disclosing commercially or professionally sensitive, or confidential information? (e.g., relating to decision-making processes or business strategies which might, for example, be of interest to competitors)	x		Participants could share information that they were in hindsight not willing to share.	Participants are allowed to withdraw from the study and all data is anonymized to prevent traceability.		x
21. Has your study been identified by the TU Delft Privacy Team as requiring a Data Processing Impact Assessment (DPIA)? <i>If yes please attach the advice/ approval from the Privacy Team to this application</i>		x				

			<i>If YES please complete the Risk Assessment and Mitigation Plan columns below.</i>	<i>Please provide the relevant reference #</i>		
<b>ISSUE</b>	<b>Yes</b>	<b>No</b>	<b>RISK ASSESSMENT – what risks could arise?</b>  <i>Please ensure that you list ALL of the actual risks that could potentially arise – do not simply state whether you consider any such risks are important!</i>	<b>MITIGATION PLAN – what mitigating steps will you take?</b>  <i>Please ensure that you summarise what actual mitigation measures you will take for each potential risk identified – do not simply state that you will e.g. comply with regulations.</i>	<b>DMP</b>	<b>ICF</b>
22. Does your research investigate causes or areas of conflict?  <i>If yes please confirm that your fieldwork has been discussed with the appropriate safety/security advisors and approved by your Department/Faculty.</i>		<b>x</b>				
23. Does your research involve observing illegal activities or data processed or provided by authorities responsible for preventing, investigating, detecting or prosecuting criminal offences  <i>If so please confirm that your work has been discussed with the appropriate legal advisors and approved by your Department/Faculty.</i>		<b>x</b>				
<b>F: Research Methods</b>						
24. Will it be necessary for participants to take part in the study without their knowledge and consent at the time? (e.g., covert observation of people in non-public places).		<b>x</b>				
25. Will the study involve actively deceiving the participants? (For example, will participants be deliberately falsely informed, will information be withheld from them or will they be misled in such a way that they are likely to object or show unease when debriefed about the study).		<b>x</b>				
26. Is pain or more than mild discomfort likely to result from the study? And/or could your research activity cause an accident involving (non-) participants?		<b>x</b>				

			<i>If YES please complete the Risk Assessment and Mitigation Plan columns below.</i>		<i>Please provide the relevant reference #</i>	
ISSUE	Yes	No	RISK ASSESSMENT – what risks could arise?  <i>Please ensure that you list ALL of the actual risks that could potentially arise – do not simply state whether you consider any such risks are important!</i>	MITIGATION PLAN – what mitigating steps will you take?  <i>Please ensure that you summarise what actual mitigation measures you will take for each potential risk identified – do not simply state that you will e.g. comply with regulations.</i>	DMP	ICF
27. Will the experiment involve the use of devices that are not ‘CE’ certified?  <i>Only, if ‘yes’: continue with the following questions:</i>		x				
• Was the device built in-house?						
• Was it inspected by a safety expert at TU Delft? <i>If yes, please provide a signed device report</i>						
• If it was not built in-house and not CE-certified, was it inspected by some other, qualified authority in safety and approved? <i>If yes, please provide records of the inspection</i>						
28. Will your research involve face-to-face encounters with your participants and if so how will you assess and address Covid considerations?	x		Covid considerations are currently not applicable, but participants could feel uncomfortable during the interviews if I present symptoms of a cold for instance or if my phrasing of the questions makes them uncomfortable.	Participants are allowed to withdraw during the interview without having to give an explanation.		x
29. Will your research involve <b>either</b> :  a) “big data”, combined datasets, new data-gathering or new data-merging techniques which might lead to re-identification of your participants <b>and/or</b>  b) artificial intelligence or algorithm training where, for example biased datasets could lead to biased outcomes?		x				

			<i>If YES please complete the Risk Assessment and Mitigation Plan columns below.</i>		<i>Please provide the relevant reference #</i>	
ISSUE	Yes	No	RISK ASSESSMENT – what risks could arise?  <i>Please ensure that you list ALL of the actual risks that could potentially arise – do not simply state whether you consider any such risks are important!</i>	MITIGATION PLAN – what mitigating steps will you take?  <i>Please ensure that you summarise what actual mitigation measures you will take for each potential risk identified – do not simply state that you will e.g. comply with regulations.</i>	DMP	ICF
<b>G: Data Processing and Privacy</b>						
30. Will the research involve collecting, processing and/or storing any directly identifiable PII (Personally Identifiable Information) including name or email address that will be used for administrative purposes only? (eg: obtaining Informed Consent or disbursing remuneration)	x		PII can be the subject of a data leak.	Only PII required for administrative purposes (contact with participants and giving informed consent) is collected. This data is stored on a TU Delft OneDrive.	x	x
31. Will the research involve collecting, processing and/or storing any directly or indirectly identifiable PIRD (Personally Identifiable Research Data) including videos, pictures, IP address, gender, age etc and <b>what other Personal Research Data</b> (including personal or professional views) will you be collecting?		x				
32. Will this research involve collecting data from the internet, social media and/or publicly available datasets which have been originally contributed by human participants		x				
33. Will your research findings be published in one or more forms in the public domain, as e.g., Masters thesis, journal publication, conference presentation or wider public dissemination?	x		The Masters thesis is published in the TU Delft Repository. A risk that arises is that interviewees could be re-identified	All interviews transcripts are anonymised and only if approved by interviewees and deemed necessary, traceable information, such as projects or companies, is included.	x	x
34. Will your research data be archived for re-use and/or teaching in an open, private or semi-open archive?		x				

## H: More on Informed Consent and Data Management

**NOTE:** You can find guidance and templates for preparing your Informed Consent materials) [here](#)

Your research involves human participants as Research Subjects if you are recruiting them or actively involving or influencing, manipulating or directing them in any way in your research activities. This means you must seek informed consent and agree/ implement appropriate safeguards regardless of whether you are collecting any PIRD.

Where you are also collecting PIRD, and using Informed Consent as the legal basis for your research, you need to also make sure that your IC materials are clear on any related risks and the mitigating measures you will take – including through responsible data management.

**Got a comment on this checklist or the HREC process? You can leave your comments [here](#)**

### IV. Signature/s

***Please note that by signing this checklist list as the sole, or Responsible, researcher you are providing approval of the completeness and quality of the submission, as well as confirming alignment between GDPR, Data Management and Informed Consent requirements.***

**Name of Corresponding Researcher (if different from the Responsible Researcher)  
(print)**

Signature of Corresponding Researcher:

Date: 02-03-2026



**Name of Responsible Researcher: Hilde Remøy**

Signature (or upload consent by mail) Responsible Researcher:

Date: 02-03-2026



## V. Completing your HREC application

Please use the following list to check that you have provided all relevant documentation

### Required:

- **Always:** This completed HREC checklist
- **Always:** A data management plan (reviewed, where necessary, by a data-steward)
- **Usually:** A complete Informed Consent form (including Participant Information) and/or Opening Statement (for online consent)

Please also attach any of the following, if relevant to your research:

Document or approval	Contact/s
Full Research Ethics Application	After the assessment of your initial application <b>HREC will let you know if and when you need to submit additional information</b>
Signed, valid <a href="#">Device Report</a>	Your <a href="#">Faculty HSE advisor</a>
Ethics approval from an external Medical Committee	TU Delft Policy Advisor, Medical (Devices) Research
Ethics approval from an external Research Ethics Committee	Please append, if possible, with your submission
Approved Data Transfer or Data Processing Agreement	Your <a href="#">Faculty Data Steward</a> and/or TU <a href="#">Delft Privacy Team</a>
Approved Graduation Agreement	Your Master's thesis supervisor
Data Processing Impact Assessment (DPIA)	TU <a href="#">Delft Privacy Team</a>
Other specific requirement	Please reference/explain in your checklist and append with your submission

## B3: USE OF AI

Whilst writing this thesis, I made use of the following forms of (generative) AI:

- Claude: for brainstorming research questions and methods and general sparring about the structure of the thesis
- Research Rabbit: for finding suitable papers for my literature review
- DeepL: for translating interview quotes and sections of text that I had written in Dutch
- Grammarly: for spelling and grammar checking



