
Future proof neighborhood shopping centres

In an aging population

A QUANTITATIVE CASE STUDY RESEARCH ON SHOPPING PREFERENCES OF ELDERLY PEOPLE IN A DUTCH AGING NEIGHBORHOOD.

**Master thesis
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1. Abstract

Introduction

It is the year 2019 and the Dutch economy is flourishing. However, the retail sector is still in a 're-inventing phase'. The popularity of e-commerce is increasing and Dutch shopping districts are continuously changing. This affects the profitability of both retailers and retail investors. Considering that the Dutch population is aging, people live longer independently and elderly people like shopping centres as places for spontaneous encounters it seems clear that an increasingly important target group for Dutch neighbourhood shopping centres are the elderly people. If our neighbourhood shopping centres are not tailored towards the wishes of the elderly consumers it can have both a social and financial impact. First of all, the elderly might not be able to buy the goods they need for an autonomous live and they might not like the physical environment of the shopping centre as a social meeting place. Besides this, it can lead to missed financial opportunities for retailers and shopping centre investors.

The main aim of this research is to gain insight into solutions / measures that make existing neighbourhood shopping centres future proof in aging societies such as the Netherlands.

The emphasis in this study is on analysing the wishes of elderly visitors with regard to the characteristics of the shopping centre.

Methodology

The method used for this research is a quantitative approach. A shopping centre in aging neighbourhood Meerzicht, located in Zoetermeer, the Netherlands, was selected as a case. Both shopping centre visitors (N=115) as well as retailers (N=25) contributed to the research. The questionnaires were prepared in Qualtrics and SPSS was used for cross tabulation and logistic regression analysis. Through analysis in SPSS several variables were identified to be relevant. For the visitor research variables were considered relevant when they were significantly related ($p < 0.05$) to the age of the respondents.

Main findings

- There is a significant association between the age of shopping centre visitors and specific needs in the retail program and supply.
- There is a significant association between age of shopping centre visitors and desire for certain facilities and atmosphere of the shopping centre.
- There is a mismatch between the knowledge of retailers about demographics and certain needs of the visitors.

The final model was created by a backward stepwise method (Backward: LR). The likelihood ratio was used as removal criterion. In this model several predictors were included in the model.

Thereafter the predictors were removed by SPSS if their removal is not detrimental to the fit of the model (Field, 2013).

Variable	B	Odds ratio	S.E.	Sig	95% CI for Odds Ratio	
					Lower	Upper
MissesShoes	1.660	5.956	0.631	0.005	1.728	20.527
MissesDIY	1.708	5.520	0.635	0.007	1.589	19.171
CosinessAmbiance	1.835	6.268	0.830	0.027	1.233	31.873
Constant	-0.804	0.447	0.251			

Table 1, Output summary of the logistic regression analysis.

Note: $R^2 = 0.22$ (Cox & Snell) 0.27 (Nagelkerke). Model $\chi^2 = 25.25$, $df = 2$, $p < 0,01$

Main conclusions

Based on the results there are different aspects one should consider ensuring that an existing neighbourhood shopping centre is future proof for an aging population. In this sense 'future proof' is mainly formulated as that the shopping centre should meet the visitors needs in terms of retail program and expectations with regard to available facilities and shopping centre atmosphere.

- First, elderly visitors have a desire for different types of supply compared to younger visitors. Visitors of shopping centre Meerzicht who are older than 65 years old miss the store type 'do it yourself' significantly more than people who are younger than 65 years. Besides this, especially female visitors in the age above 75 express a desire for the store type shoes.
- Second, elderly people prefer that certain basic facilities are well established in the shopping centre. Such as a safe flooring and facilities to support wheelchairs. Furthermore, elderly people care more about aspects that contribute to the cosiness and ambiance of the shopping centre compared to younger people. Elderly people for example indicate that they like it if the common spaces are flourished with couches, plants and music.
- Thirdly, a future proof shopping centre also requires that the tenants are aware of the needs and the demographics of the visitors. Currently there is a knowledge gap between the actual needs of the visitors and the knowledge base of the tenants.

Recommendations for future research

Scaling up quantitative research. In order to make the results of this study more generic for the Dutch population it is advisable repeat this research to more neighbourhood shopping centres in aging neighbourhoods. There might be local differences leading to different results and potentially new insights about shopping preferences of elderly people.

Conducting qualitative research- interviews with elderly visitors. It would be interesting to conduct interviews with elderly visitors. Interviews could provide insight in why the elderly visitors indicated that they miss certain product categories in the shopping centre. The interviews should also elaborate on the physical characteristics of the shopping centre and its facilities. Such research can result in concrete recommendations for improving the retail program of the shopping centre as well as the available facilities and preferred atmosphere for the elderly visitor.

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2. Introduction & main problem statement



2. Introduction & Main problem statement

It is the year 2019 and the Dutch economy is flourishing (Kamphuis, 2019). However, the retail sector is still in a 're-inventing phase'. Well-known shops that have determined the street scene for decades have disappeared or are under pressure. Formulas such as the Blokker, specialized in household items and Hema, a department store in the lower price segment literally must reinvent themselves (Retailnews, 2018). As a result of this, certain owners of shopping centres encounter the consequences of declining rental income (ANP, 2019). Nevertheless, the fact that the popularity of e-commerce is increasing and that Dutch shopping districts are continuously changing can also affect the elderly people in the Dutch society.

Together with other western societies the Dutch population is aging (Kruijff & Langenberg, 2017). Since the 80's the Dutch governmental policy stimulated older people to live longer independently (Duin, Stoeldraijer, Roon, & Harmsen, 2016). As a result, people live longer in their own houses and in their neighbourhoods before they move to a nursing home.

However, as people age, their mobility decreases, and they become more dependent on other people for their daily activities. The average daily distance, frequency and time spent on travelling declines once people get older (Dam & Hilders, 2013).

Previous research has shown that shopping centres are among the favourite places of encounter for the elderly. People prefer shopping centres as meeting places over designated venues in nursing homes and neighbourhood centres (van Melik & Pijpers, 2017)

Elderly people have different motives to go to the shopping centre compared to younger people. For some of them it is a way to deal with loneliness (Kim, Kang, & Kim, 2005). Moreover, older people 'express a desire to be in charge of their own lives'; in other words, they strive for autonomy and independence (van Melik & Pijpers, 2017, p. 291).

The average floor productivity in the Dutch retail landscape is relatively low compared to several other European countries. In different parts of the Netherlands the vacancy rate in shopping centres is relatively high (Stek, 2016). Recent developments in the Dutch shopping centre landscape led to extra focus on food related functions in neighbourhood shopping centres. Based on a sample of thirty Dutch neighbourhood shopping centres the amount of shops in the branches 'in and around the house' and 'free time' have decreased with respectively 8.4% and 2.2% in the period 2004 till 2016 (Stek, 2016). Colliers international projects that several product and service offerings are vulnerable for competition from online shopping till at least 2020 (Ouweland & Haringsma, 2016). Examples of vulnerable functions are 'hobby', 'department store', 'clothing and fashion', 'do it yourself' and 'shoes and leather goods'

The recent shift in supply in our neighbourhood shopping centres makes it relevant to know whether a gap has emerged between the expectations/satisfaction of elderly shoppers and the product offering in neighbourhood shopping centres.

Previous research has focused on the preferences of elderly consumers in relation to store attributes. However, this research was conducted in the 1980's and primarily focused on the characteristics of the individual stores within the shopping centre.

To date, we do not know much about the preferences of older people when it comes to the physical characteristics of the shopping centre and the (type of) supply that older people prefer.

Aim of this research

Considering that the Dutch population is aging, people live longer independently and the elderly like shopping centres as places for spontaneous encounters it seems clear that an increasingly important target group for Dutch

neighbourhood shopping centres are the elderly people. If our neighbourhood shopping centres are not tailored towards the wishes of the elderly consumers it can have both a social and financial impact. First of all, the elderly might not be able to buy the goods they need for an autonomous live and they might not like the physical environment of the shopping centre as a social meeting place. Besides this, it can lead to missed financial opportunities for retailers and owners/investors of shopping centres. If the mix of tenants and product offerings in the shopping centre is not tailored to its catchment area the vacancy rate might rise in the nearby future. This raises the main aim of this thesis: gaining insight into solutions / measures to make existing shopping centres future proof for an aging population.

2.1 Chapter overview

3. Background & extended problem analysis

Chapter 3.1 up until 3.7 elaborates on the background and extended problem analysis. Several trends are highlighted with regard to the aging population, tenant mix and supply in neighborhood shopping centres, shopping preferences and (online) shopping behaviour of the elderly. Thereafter chapter 3.8 introduces the research questions.

4. Conceptual model

Chapter 4 exhibits and explains the conceptual model of this research. The relation between the research questions, independent factors, intervening factors and dependent variables is displayed in the conceptual model.

5. Objective

Chapter 5 elaborates on the objective of this study. The chapter describes the type of insights this study should deliver to different stakeholders that are involved in planning and operating of existing neighborhood shopping centres.

6. Research design and methods

The aim of this chapter is to describe the research design and methods used for this study. The research design displays the different phases and steps in the research project. The methods for both the consumer research as well as the tenant research are explained.

7. Statistical analysis

The purpose of this chapter is to provide statistical data about the selected case, insights in the steps that were taken in the preparation of the fieldwork and details of the data sample.

8. Research findings/results

The results of this research are presented in chapter 8. The different research question and corresponding results are exhibited. Chapter 8.6 highlights the final model describing elderly consumer preferences.

9. Summary and discussion

The purpose of chapter 9 is to provide insight in the main findings resulting from the data analysis. After the main findings the discussion elaborates on further interpretations of the findings. Subsequently, the limitations and recommendations for future research are shown.

10. Reflection

Chapter 10 elaborates on a reflection on the research process.

3. Background & Extended problem analysis



3. Background & extended problem analysis

3.1 Aging of the Dutch population

Since the 50's the life expectation of Dutch women has continuously increased. The life expectation of Dutch men has increased since the 70's. Besides this, the number of children born per women almost halved in the 60's and 70's. As a result, the Dutch population is aging. Figure 1 displays the growth of the Dutch population till 2060. The blue line indicates the 'gray print' (Dutch: grijze druk). The gray print is the ratio between 20-65-year-olds and people over 65 (Kruijff & Langenberg, 2017). It is expected that the gray print will increase from 32% in 2018 to just above 50% in 2040 (CBS, 2018a).

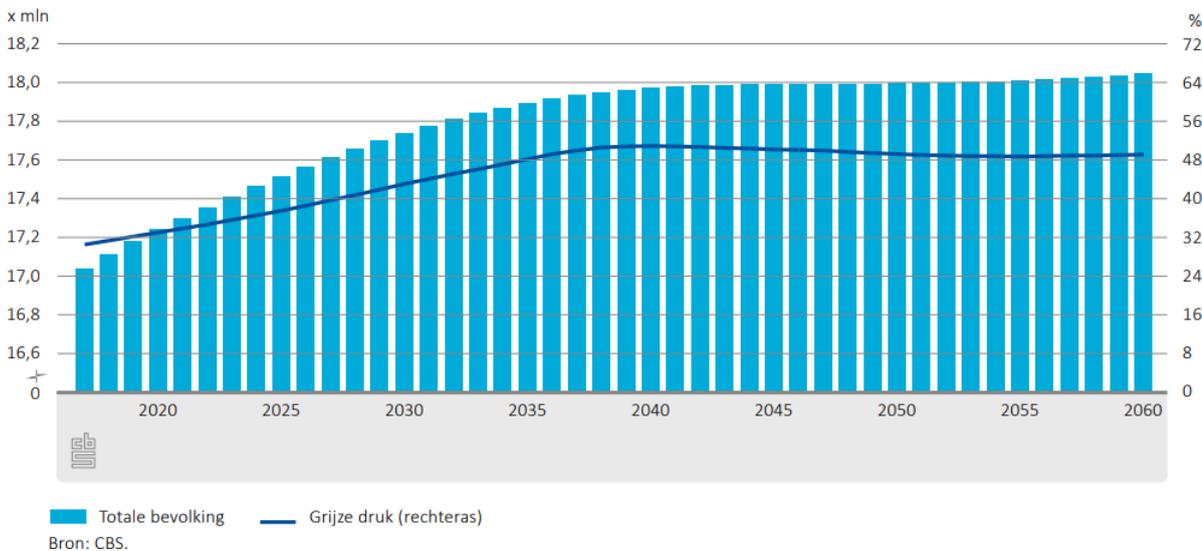


Figure 1 Overview of the expected growth of the Dutch population. The blue line indicates the 'gray print' (Dutch: grijze druk). Kruijff & Langenberg, 2017)

3.2 Trend: Older people live independently for a longer period

Since the 80's the Dutch governmental policy stimulated older people to live longer independently. The policy to limit care in nursing homes only to the people with heavy health problems is continued by the current government. These days, only people in very bad health are eligible for care in nursing homes financed by the Dutch government (Duin et al., 2016). As a result of this policy, people must live longer independently in their own house.

Figure 2 indicates that towards the year 2060 the amount of people in nursing homes will increase. However, the amount of people who live in nursing home compared to the amount of people who live in their own house will decrease (see fig. 3). In 2015, more than 10% of the people under 90 lived in a nursing home and about 32% of the people older than 90 did. The Dutch bureau for statistics (CBS) projects that in 2060 only 5% of the people younger than 90 will live in nursing homes. From the people in the age 90+ about 15% will live in a nursing home according to CBS (Duin et al., 2016, p. 26).

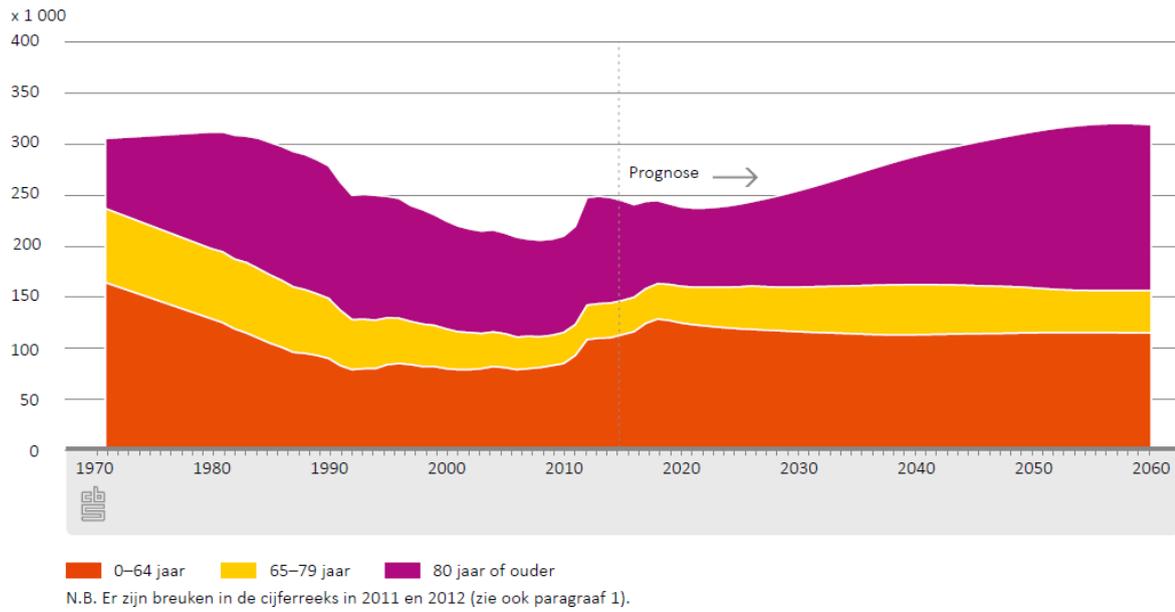


Figure 2, Institutional residents by age. (the period 1972 - 1979 was interpolated) (Duin et al., 2016, p. 26).

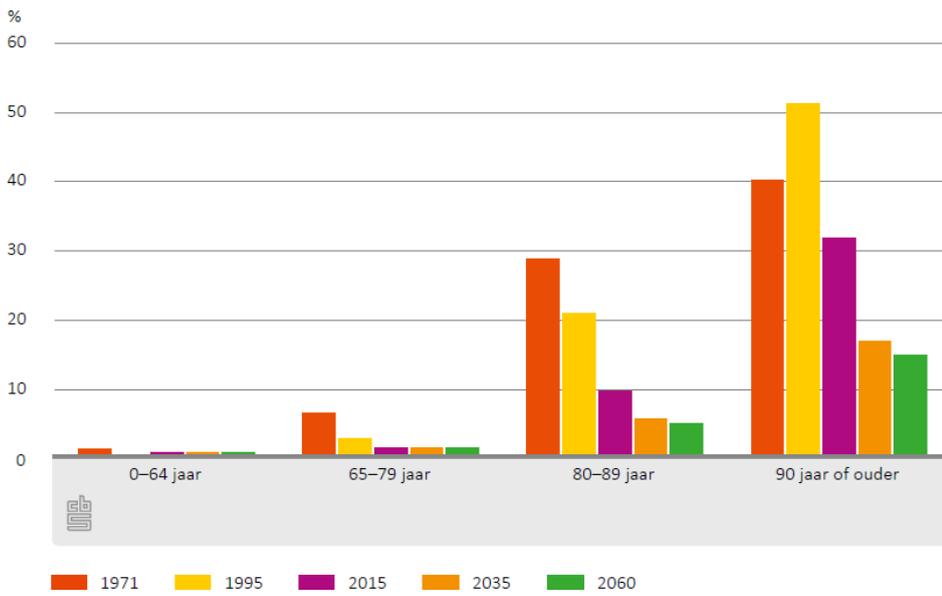


Figure 3 share of people living in institution/nursing homes by age. (Duin et al., 2016, p. 26).

3.3 Shopping centres are favourite spaces of encounter for elderly people

Previous research elaborates on how older people use and experience (semi-) public spaces as spaces of encounter. In a study conducted by van de Kam et al. narrative interviews were conducted with 216 respondents in the age of 70+. The respondents were inhabitants of six urban aging environments in the Netherlands. Table 2 demonstrates the characteristics of these neighbourhoods in terms of population, household composition, share of rental housing and income.

City Where Aging Environment Is Located (Total Population, 2015)	Key Planning and Locational Characteristics	Population (2010)	Share of Population Aged 65+ (2010) in %	Share of Rental Housing in % (2010)	Share of Single Family Homes in % (2010)	Income Index (2005)
Breda (180,000)	Postwar extension area	15,520	18.7	67	60	75
Hengelo (81,000)	Postwar extension area, relatively green area	20,705	20.4	55	72	86
Hoogeveen (55,000)	Outside city center of smaller city	5,025	14.2	43	88	85
Leeuwarden (108,000)	Postwar extension area	5,950	25.7	71	33	68
Middelburg (48,000)	Outside city center of smaller city, relatively green area	9,510	18.5	40	77	103
Nijmegen (171,000)	Postwar extension area, relatively green area	7,225	14	56	75	81

Table 2, Demographics and key planning and locational characteristics of six urban aging environments in the Netherlands (De Kam et al., 2012), mentioned in (van Melik & Pijpers, 2017).

The study examines the use of social and commercial functions with a meeting function. Table 3 indicates frequency of use of the different functions in a neighbourhood in Leeuwarden and in Breda. In both neighbourhoods the local shopping centre is considerably more often visited by the people above the age of 70 compared to other facilities. In Leeuwarden 13.4% of the people in the age of 70+ visit the local shopping centre daily and 77.2% once or multiple times a week. Only 2% of the people in the age 70+ never visit the shopping centre. In Breda 30% of the respondents visits the shopping centre daily, 57,3% once or multiple times a week and 5.3% never (van Melik & Pijpers, 2017).

Older people prefer shopping centres over planned and designed activity spaces in nursing homes and neighbourhood centres. For older people it is important to meet other people. However, they prefer places like shopping centres over specifically designed care venues. Older people perceive designated venues at cares centres as spaces for care and not for leisure. When people attend activities at nursing homes they are continuously reminded about their age. Whereas this is not the case when they walk through the shopping centre or when they drink a coffee in one of the cafés.

Furthermore, older people seek diversity in their encounters with others. They don't like it to be only among other elderly people. Shopping centres are low-barrier meeting places for older people. Van Melik & Pijpers suggests that in the future elderly people should be actively involved in early stages of policy formation and retail planning (2017).

	Daily Use	Once or Multiple Times per Week	Once or Multiple Times per Month	Less	Never	Never Heard of Service
Leeuwarden: elderly services organized from local nursing and care home						
Activities organized to facilitate encounters between older people	0.7	4.0	4.0	14.8	75.8	0.7
Other activities	0	7.4	2.0	16.8	73.2	0.7
Meal supply	0	0.7	1.3	2.7	94.6	0.7
Leeuwarden: wider neighborhood services						
Shopping center	13.4	77.2	2.7	4.7	2.0	0
Library	1.3	4.7	10.7	14.1	69.1	0
Neighborhood center	0	8.7	8.7	18.8	63.8	0.7
Church	0	15.4	3.4	4.7	75.8	0.7
Services offered by the Salvation Army	0	1.3	0.7	8.7	89.3	0
Meeting space located in apartment building	1.3	7.4	5.4	5.4	75.8	4.7
Breda: elderly services organized from local nursing and care home						
Restaurant	n.a.	2.7	2.0	2.7	90.0	2.7
Daytime activities	0	4.0	0.7	0	92	3.3
Meeting point	0	0.7	0	0.7	93.3	5.3
Breda: wider neighborhood services						
Shopping center	30.0	57.3	4.0	3.3	5.3	0
Weekly market	n.a.	34.7	12.0	19.3	34.0	0

Table 3, frequency of use of social and commercial functions with a meeting space by people in the age of 70+ in two aging neighbourhoods in the Netherlands (De Kam et al. 2012), mentioned by (van Melik & Pijpers, 2017).

3.4 Elderly people and mobility

As people get older the distance, frequency and time spent on travelling decreases. Figure 4 demonstrates the frequency and purpose of mobility for different age categories.

Figure 5 exhibits the average distance people travel per day for each travel modality. The average travel distance decreases once people get older. Furthermore, the proportion of travelled kilometres as a passenger increases compared to other modalities once people get above the age of 85. So older people are more dependent on friends, family and cabs for their mobility (Dam & Hilders, 2013).

As people get older, their mobility decreases, and they become more vulnerable for (traffic) incidents (add source). When elderly people talk about obstacles they face when they are walking through public spaces, they mention obstacles like 'sidewalks that are too low to access a bus', 'loose stones' and 'slippery walking paths in winter' (van Melik & Pijpers, 2017, p. 14).

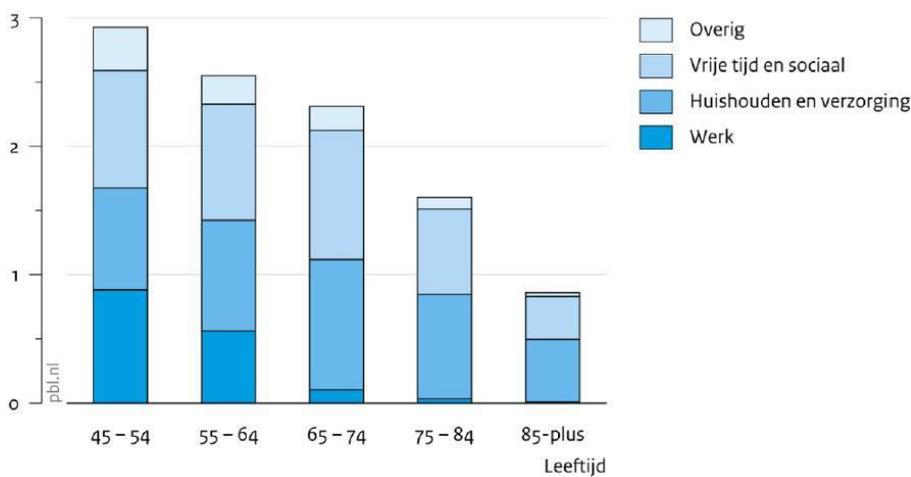


Figure 4, Average number of trips per day by age and movement motive in the year 2010 (Dam & Hilders, 2013, p. 4).

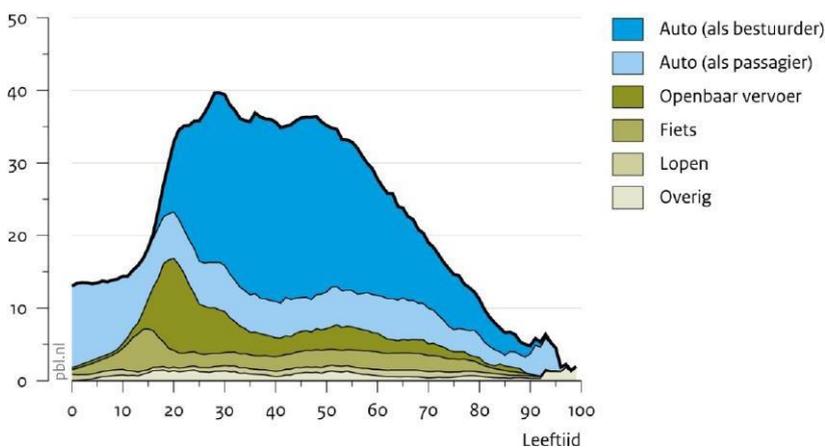


Figure 5, Transport modality by age expressed in number of kilometres per day, period 2010- 2011 (Dam & Hilders, 2013, p. 5).

3.5 Shopping preferences of the elderly

In 1988 Lumpkin & Hite conducted a research on the needs of elderly consumers and the extent to which retailers understand the needs of these elderly consumers. 1482 consumers in the age of 65 or older participated in the research project. However, the sample consisted mainly of relatively better educated and richer respondents. Therefore, the results could not be generalized for the entire elderly population in the United States during 1988 (Lumpkin & Hite, 1988). Although the research dates to about 30 years ago it can bring us some insights on the needs of the elderly with regard to shopping preferences.

Table 4 indicates the top ten of store attributes and its importance to elderly consumers.

Store attribute	Importance to consumers (Mean)
Ability to return unsatisfactory products.	4.4
Sizes and styles suited for customers' age	4.3
Convenient parking	4.1
Readable labels/tags on products	3.9
Discount for senior citizens.	3.8
Knowledgeable salespersons	3.7
Sales (marked-down prices)	3.7
Wide variety	3.6
Comfortable physical environment (lighting and temperature)	3.6
Well known label/brand of products	3.6
Help in finding items in store	3.6

Table 4, Store attributes and its importance to consumers. Mean based on a 5-point scale from Not Important (1) to Very Important (5). Based on Lumpkin & Hide (1988, p. 322).

3.6 Vacancy & tenant mix developments in Dutch neighbourhood shopping centres

Real estate management company Colliers International examined vacancy rates, supply and success factors based on a sample of 30 Dutch neighbourhood shopping centres. In the period between 2004 and 2016 the average size of Dutch neighbourhood shopping centres has increased from around 3.380 m² to just above 3.900 m². On the contrary, the average number of stores per shopping centres slightly decreased to 31.4 (see figure 6). Although, the size of the centres increased the average vacancy rates increased. In 2004 about 4,5% of the shopping floor space was not rented out to tenants, whereas this percentage of vacant floor space increased to 6,9% by the end of 2016 (Stek, 2016).

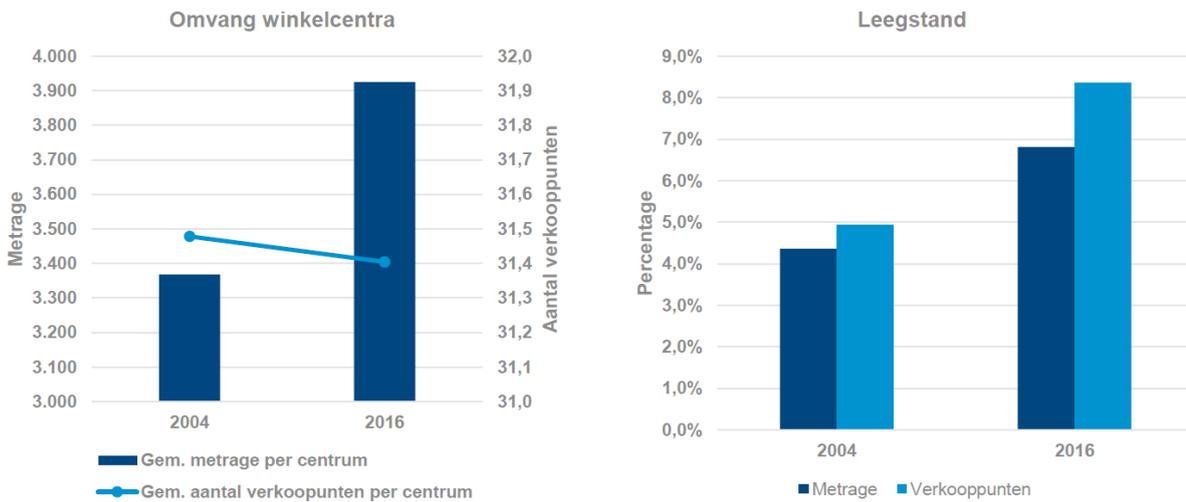


Figure 6, Left graph: average size in m² of neighbourhood shopping centres in the period 2004 versus 2016. Right graph: vacancy in neighbourhood shopping centres specified by meter and point of sales. (Stek, 2016).

It is relevant to mention that there are regional differences in vacancy rates of neighbourhood shopping centres. As portrayed in figure 7 the provinces Limburg, Zeeland and Overijssel are in the have the highest vacancy rates compared to the other Dutch Provinces.

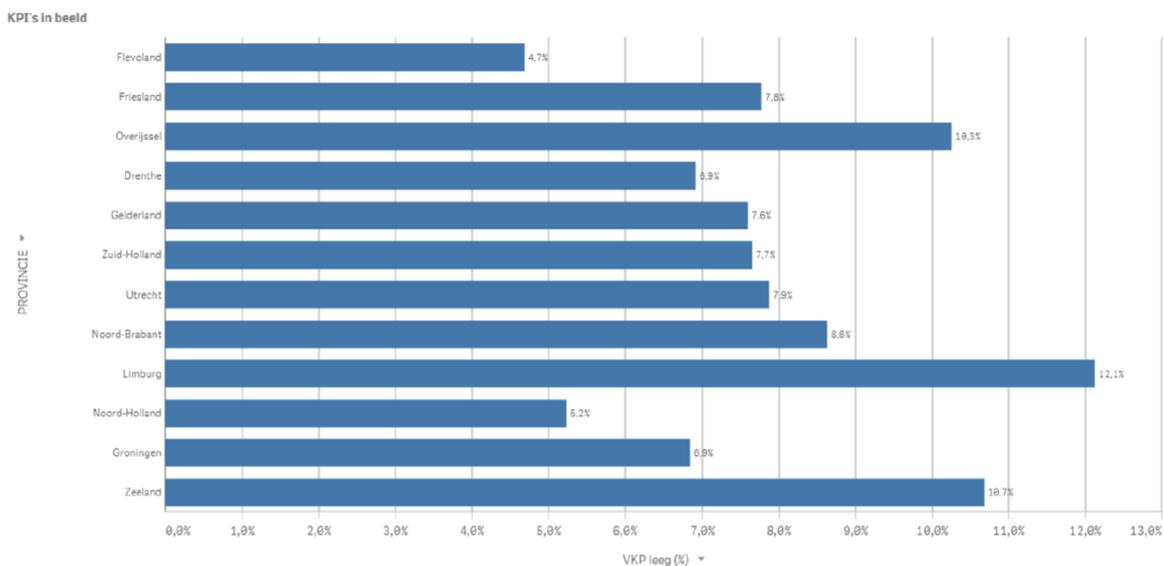


Figure 7, Vacancy, as expressed by the percentage of vacant point of sales for each of the 12 provinces in the Netherlands in the year 2016 (Stek, 2016).

Besides this trend, it is remarkable that the number of supermarkets and the average size of supermarkets in neighbourhood shopping centres increased (see fig. x) (Stek, 2016). Furthermore, as displayed in figure 6 average number of shops in neighbourhood shopping centres that focus on a hospitality function (restaurant, café, bar etc.) increased in the period 2004 till 2016.

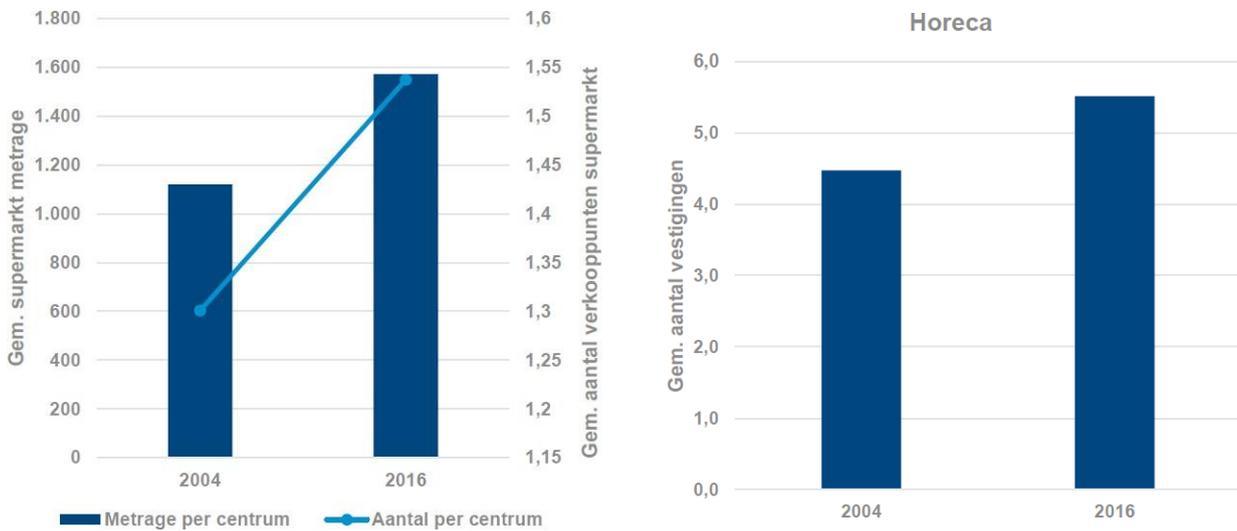


Figure 6, average size of the function 'supermarket' and average number of supermarkets per neighbourhood shopping centres in the years 2004 and 2016

However, as a result of increasing vacancy rates, larger and more supermarkets and more hospitality functions the other 'non-food functions' such as the branch 'in and around the house' and 'free time' are decreasing. As displayed in table 5, Colliers International has marked several functions as vulnerable to internet shopping till 2020 (Ouwehand & Haringsma, 2016).

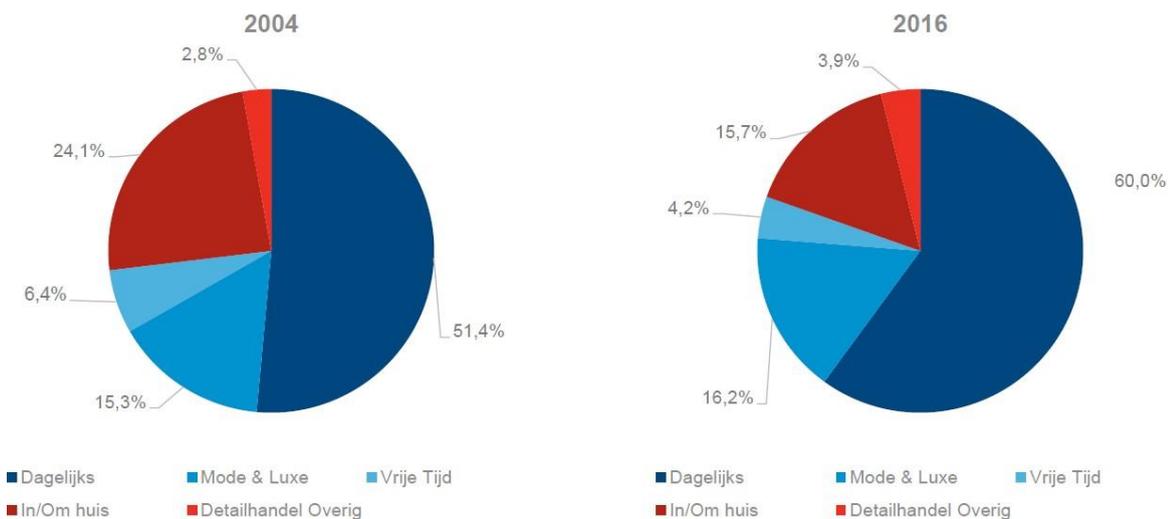


Figure 7, Tenant mix (branching) of neighbourhood shopping centres in the Netherlands in 2004 and 2016. (Stek, 2016).

Very limited vulnerable	Partly vulnerable	Vulnerable
Foods	Home	Sport and game
Personal Care	Shoes and leather goods	Hobby
Jeweller and Optics	Plant and Animal	Media
Antique and Art	Do It Yourself	Brown & White goods
	Clothing and fashion	Car & Bike
	Retail trade 'other'	Department store
	Household and Luxury	

Table 5, Different goods and services and their vulnerability for online shopping (Ouwehand & Haringsma, 2016).

3.7. Online shopping by elderly people

In recent years the product and service offerings in our shopping streets and centres is influenced by online shopping. In order to be able to make predictions on how to make neighbourhood shopping centres future proof it is significant to know how the elderly people adopt online shopping.

Table 6 demonstrates the percentage of Dutch consumers who have bought products online for private purposes during the year 2018. The figures show a clear difference in the adoption of online shopping between people under the age of 65 and above. Appendix one portrays an overview of a variety of product categories and the percentage of consumers that bought online during the year 2018 (CBS, 2018c). The main results are exhibited in figure 8.

Year	12 till 25 years	25 till 45 years	45 till 65 years	65 years and older
2014	77,4	87,7	71,7	32,1
2015	76,7	88,3	72,2	33,6
2016	80,5	89,8	77,5	37,0
2017	82,6	93,7	80,2	41,1
2018	81,7	93,8	82,7	45,4

Table 6 Percentage of Dutch consumers who have bought products online for private purposes during the year 2018 (CBS, 2019)

Online winkelen; kenmerken aankoop, persoonskenmerken

Perioden: 2018
Marges: Waarde

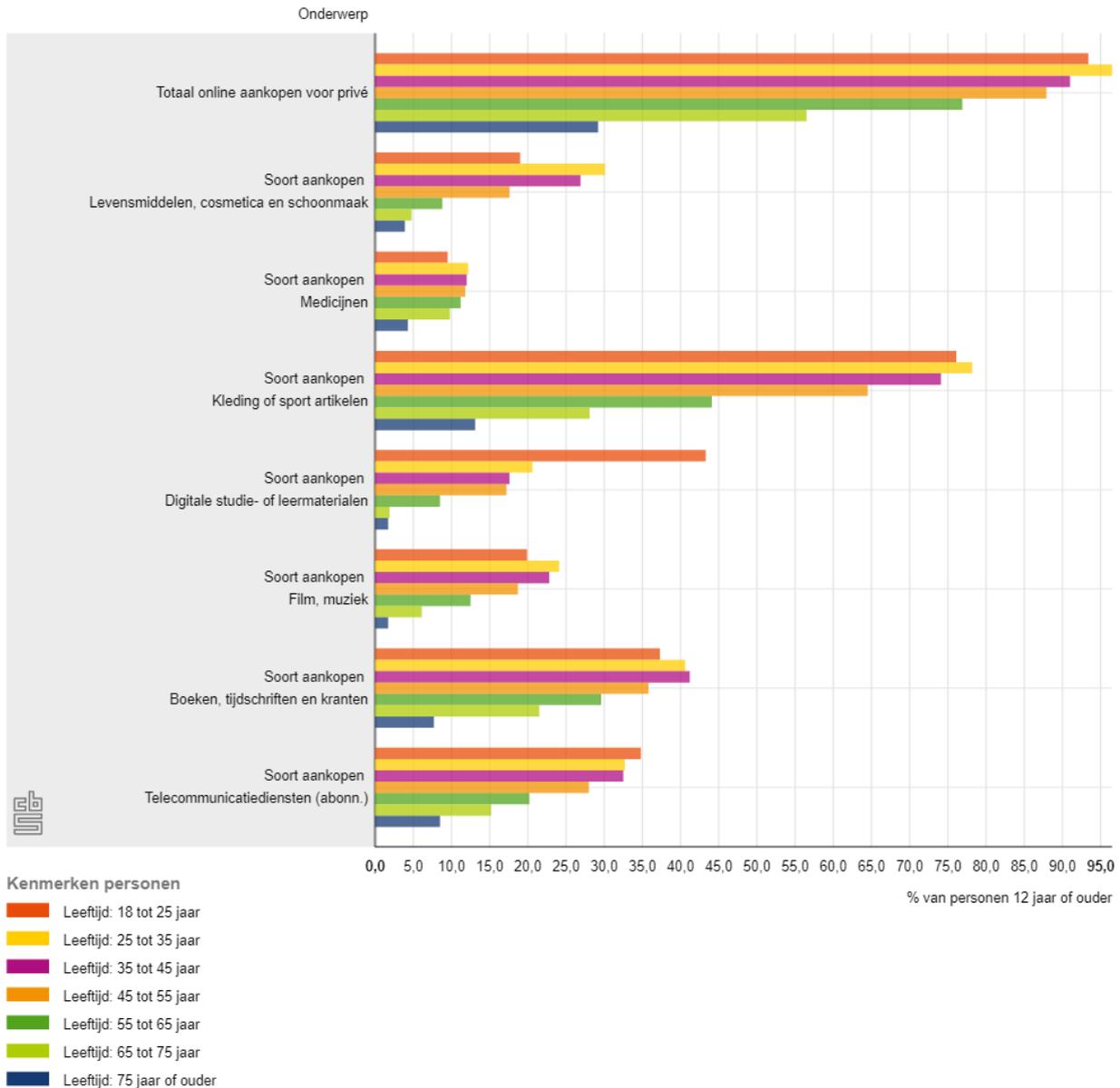


Figure 8 Overview of different product categories and the percentage of consumers that bought online during the year 2018; the results are categorized in age categories (CBS, 2019).

3.7.1. Trend: increasing percentage of consumers buy groceries online

At the end of the 90's the Dutch supermarket chain Albert Heijn started its online service which enabled consumers to buy their groceries online. In this period several other companies such as Max Foodmarket, 'Smaak.nl', 'Truus.nl' and 'superdirect.com' started web shops where consumers could acquire groceries. However, these initiatives had to stop their activities because of insufficient funding and high costs.

Around the year 2011 several established supermarket brands such as Dekamarkt, Coop, Plus and Boni started their ecommerce platform to buy groceries online.

However, around 2011 the quality of ordering online was often not sufficient. People who acquired groceries online had to deal with incomplete orders, unclear delivery times and technical issues with their ecommerce

platforms. According to Distrifood, Albert Heijn scored the best on the overall quality of their online grocery service. In 2014 jumbo.com started their online platform. Other recent players that entered the market are Picnic, Ekoplaza, Stockit and supermarket chains Hoogvliet and Deen (Distrifood, 2018) .

According to CBS, the percentage of Dutch people who bought their groceries online was only about 2% in the year 2006. However, since 2013 the percentage of people that bought their groceries online is increasing quite rapidly to 29% in 2019 (CBS, 2018b).

Although the percentage of people that buy their groceries once or multiple times per year online is quite high, the share of turnover which can be attributed to online shopping is still relatively low compared to the total turnover in the entire supermarket branch. According to Rabobank, in the year 2018 a bit more than 3% of the turnover in the supermarket sector can be attributed to online shopping. Nevertheless, the market for online groceries is growing rapidly, the turnover growth of this market was about 30% in the year 2018 (Rabobank, 2019). Different viewpoints exist on how the turnover share of online grocery shopping will develop towards the future.

In 2018 supermarket chains Jumbo and Albert Heijn indicate that they expect that, although the market share of their online channels will increase, a lot of their customers will tend to visit the supermarket in order to get inspired for new dishes (Schelfaut, 2018). Analysts from the Rabobank expect that in 2030 about 25% of groceries is acquired online (Wal, 2017).

Retail specialist Paul Moers foresees that online grocery shopping will not grow rapidly in the future. Moers points out that 'many people do not find shopping so annoying at all. In the store we get ideas, we can see and smell the products, we can browse, try new things and socialize with friends (Wal, 2017)'.

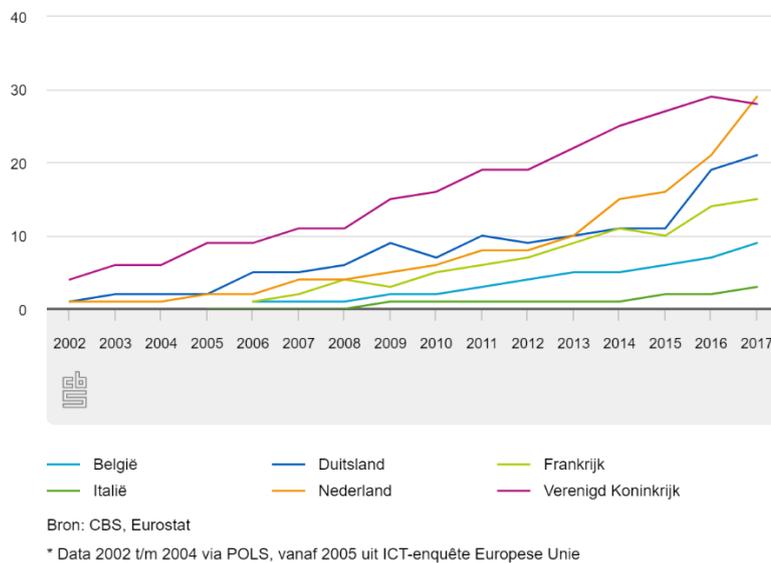


Figure 8b, percentage of Dutch citizens that bought groceries online once or multiple times per year (CBS, 2018b).



Figure 8c, Market share groceries purchased online as a total of the Dutch grocery market (own figure based on figures originated from Rabobank.nl).

3.8 Research Questions

The main aim of this research is to gain insight into solutions / measures that make existing neighbourhood shopping centres future proof for an aging population. This introduces the main research question:
Which measures and solutions can make neighbourhood shopping centres future proof for an aging population?

The sub research questions were formulated based on three main themes: 'facilities & atmosphere', 'physical quality & mobility' and 'retail programme'.

Facilities and atmosphere

Previous research by van Melik & Pijpers shows that older people are frequent users of the local shopping centre (2017). It is therefore relevant to know which facilities and type of atmosphere in the shopping centre contribute to a pleasant stay for the elderly.

RQ 1- Which facilities and atmosphere in the shopping centre contribute to a pleasant stay for elderly people?

Physical quality and mobility

If policy makers and shopping centre owners want to work on future proof shopping centres it is important to investigate whether elderly people perceive their trip to the shopping centre as safe and whether there are any dangerous obstacles. Apart from the trip to the shopping centre it is also relevant to know whether elderly consumer perceive the mobility within the shopping centre as safe and convenient or not. This introduces the following research questions:

RQ 2 - How do elderly people perceive the safety of their trip from home to the shopping centre?

RQ 3 - How do elderly people perceive their mobility inside the shopping centre?

Retail program

The research of Lumpkin & Hide provides some insight in shopping preference of elderly shoppers. However, the research was mainly focused on attributes of the individual stores and since 1988 much has changed about the way people buy their goods and services. Therefore, in order to know how to make neighbourhood shopping centres future proof, it is relevant to gain insight in the type of supply that elderly consumers prefer.

Besides this, vacancy rates in Dutch neighbourhood shopping centres are increasing (Stek, 2016). Therefore, it is important that tenants can adapt to changing market circumstances. For this reason, it is relevant to know whether tenants are aware of the demographics and needs of the shopping centre visitors. This leads to the following research question:

RQ 4 - What are the shopping preferences of elderly people and to what extent is there a mismatch between preferences of elderly consumers and retailers' expectations of their preferences?

Vulnerability Bankruptcy

As displayed in table 5 there are several types of goods and services vulnerable for competition from online shopping. Furthermore, there are large regional differences and the performance of the shopping centres is related to the catchment area. Therefore, it is relevant for owners to have insight in the performance of their tenants. This introduces the next research question.

RQ 5 - How can owners/investors of shopping centres check whether tenants are vulnerable for bankruptcy?

4. Conceptual model



4. Conceptual model

The main aim of this thesis is to gain insight into solutions / measures that make existing shopping centres future proof for an aging population.

Figure 10 demonstrates the conceptual model for this research. This research focuses on the influence and impact of the intervening factors 'age' and 'gender' in relation to the satisfaction and experience with different characteristics of the shopping centre and its surroundings. Previous research has focused on the satisfaction of elderly consumers about different characteristics of the stores itself. These characteristics are out of scope for this research.

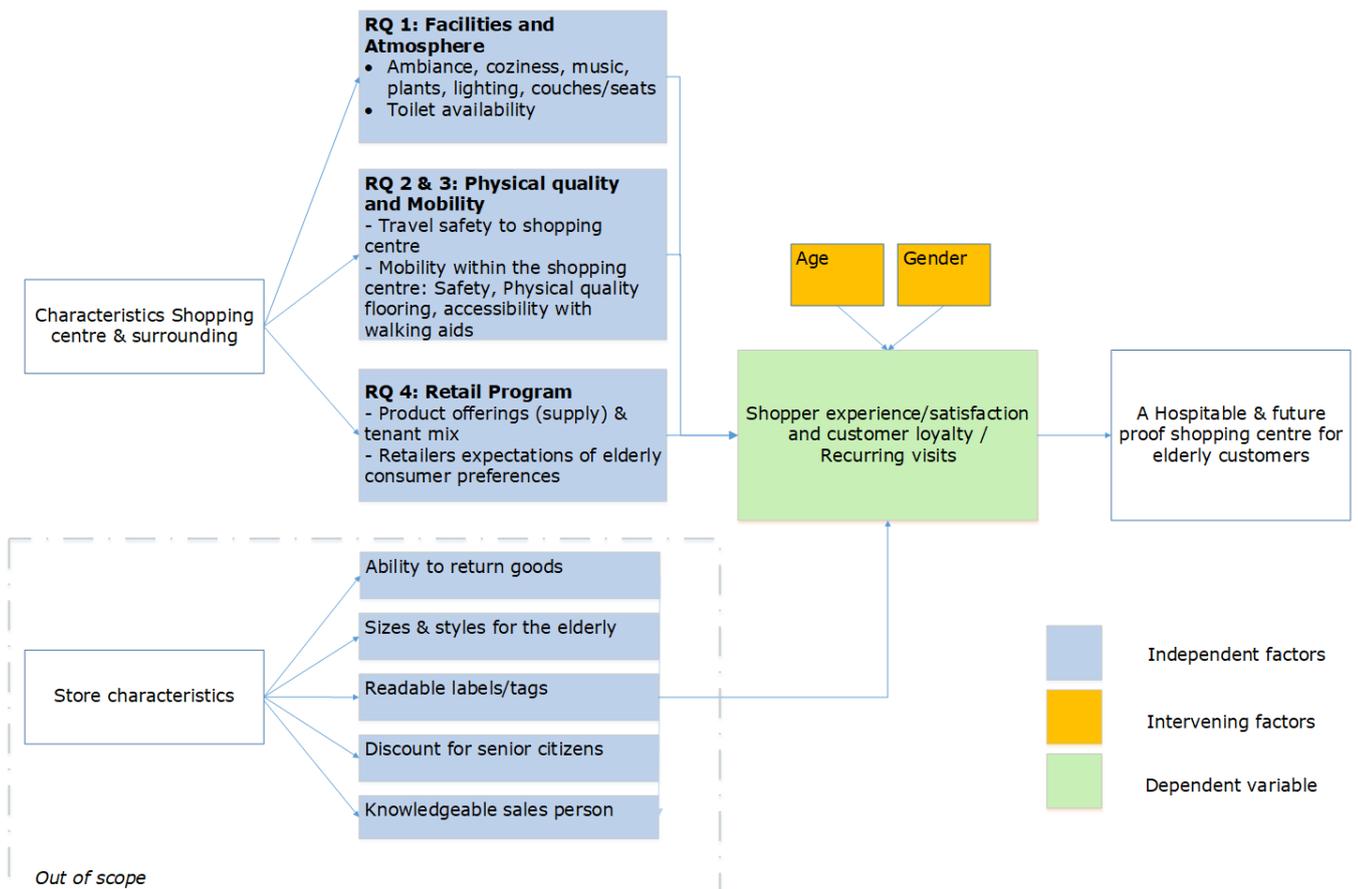


Figure 10 Conceptual model.

Theme	Research question	Independent factors
Facilities and atmosphere	RQ 1 - Which facilities and atmosphere in the shopping centre contribute to a pleasant stay for elderly people?	Ambiance, coziness, music, plants, lighting, couches/seats Toilet availability
Physical quality and mobility	RQ 2 - How do elderly people perceive the safety of their trip from home to the shopping centre? RQ 3 - How do elderly people perceive their mobility inside the shopping centre?	Travel safety to shopping centre Mobility within the shopping centre: Safety, Physical quality flooring, accessibility with walking aids
Retail program	RQ 4 - What are the shopping preferences of elderly people and to what extent is there a mismatch between preferences of elderly consumers and retailers' expectations of their preferences?	Product offerings (supply) & tenant mix Retailers expectations of elderly consumer preferences

Table 7 Percentage of Dutch consumers who have bought products online for private purposes during the year 2018 (CBS, 2019)

5. Objective

The main aim of this thesis is to gain insight into solutions / measures that make existing shopping centres future proof for an aging population

The results of this study should provide policy makers, shopping centre owners and tenant associations with insights in the shopping preferences of elderly people.

The insights of this study can provide policy makers with input for spatial planning in aging neighbourhoods. Besides this, owners of neighbourhood shopping centres face increasing vacancy rates. One of the reasons is that certain product and service offerings are vulnerable to the competition of online shopping. However, elderly consumers will become an increasingly important target group for shopping centres. Therefore, it is relevant for shopping centre owners to be aware of the needs of the elderly consumers.

Different stakeholders can influence the retail program, the available facilities, shopping centre atmosphere as well as the physical quality and mobility of visitors.

The influence of the involved stakeholders on the different themes in this research is displayed in the table below.

Theme	Policy makers, municipality	Owners, investors	Tenant association
Facilities and atmosphere	Can invest in facilities in the public area/ surrounding	Can invest in: <ul style="list-style-type: none"> • Facilities such as toilets • Shopping centre interior (street furniture etc.) • Decoration 	Can co-invest in: <ul style="list-style-type: none"> • Shopping centre interior • Decoration
Physical quality and mobility	Investments in surrounding area: accessibility, safe pavements, safety for pedestrians etc.	Can invest in: <ul style="list-style-type: none"> • Measures in the shopping centre to improve mobility and accessibility 	Advisory role
Retail program	Zoning plan: Restrictions and guidelines on which functions are allowed and which are not.	Leasing: variety of brands and supply in the centre (tenant mix) Activities and events (marketing budget)	Activities and events (marketing budget)

Table 8: The involved stakeholders in a shopping centre can influence different topics with regard to the shopping centre and its surroundings (based on own experience in the retail industry and talks with the board of the tenant association at shopping Centre Meerzicht, 2019).

6. Research design and methods



6. Research design and methods

This research uses statistical analysis and is to be characterized as a quantitative research project. Figure 9 demonstrates the research design and its different phases. Starting from the top left (the literature research) chronological steps in the research project are displayed with arrows. The graph shows from top to bottom the activities in a sequential order. The activities displayed horizontally are 'parallel' and were conducted in the same period. The activities that are related to the collection of data are indicated with yellow, subsequently, the activities to analyse the data are marked in beige colour.

Lastly, the first activity in the scheme 'literature research' is an iterative process which is not only applicable at the start of the research project but also during the analysis, interpretation of results and during the writing of main conclusions and recommendations. The reason for this is that certain results from the data can be unexpected. In those cases, an explanation for the results can be found in previous research and literature.

Methods consumer/visitor research

The consumer research was prepared in Qualtrics and contained open questions, multiple choice questions (single answer possibility) and requests to submit a Net Promoter Score (NPS). The full questionnaire is displayed in appendix two. Hundred- fifteen visitors participated in the research (N=115).

Methods Tenant research

The tenant research was prepared in Qualtrics and contained open questions, multiple choice questions (single answer possibility), multiple choice questions (multiple answer possibilities) and requests to submit a Net Promoter Score (NPS). The full questionnaire for tenants is displayed in appendix three.

The link to the Qualtrics questionnaire was shared by the chairman of the tenant association via the tenant engagement portal Chainels. Subsequently the tenants received the contents of the Qualtrics questionnaire via e-mail, web platform and app. Twenty-three tenants completed the questionnaire of which two replied anonymous. Two tenants replied that they didn't want to fill in the survey after reading the introduction. Out of the thirty- two tenants, twenty-five tenants contributed to the research project. Response rate = 78%.

Processing of data

After the fieldwork the data was exported from Qualtrics to a compatible file for IBM SPSS Statistics 25. Subsequently different analysis was conducted on the dataset. Theories from the 4th and 5th edition of 'Discovering statistics using IBM SPSS Statistics' by Andy Field were used for the interpretation of the results. Besides this, the documentation and tutorials from the course AR3R059 'Applied statistics' were consulted for processing and interpretation of the dataset.

Methods tenant research – feedback session to tenants (research question 5)

In order to capture feedback from the tenants about the demographics and need of the visitors a presentation in Mentimeter is being used. Mentimeter is interactive presentation software. During the presentation tenants were asked to fill in feedback on their phones. The tenants who were present as well as the chairman of the tenant association were not allowed to debate. In the end three retailers and the chairman of the tenant association participated in this feedback session. N=4.

The research design

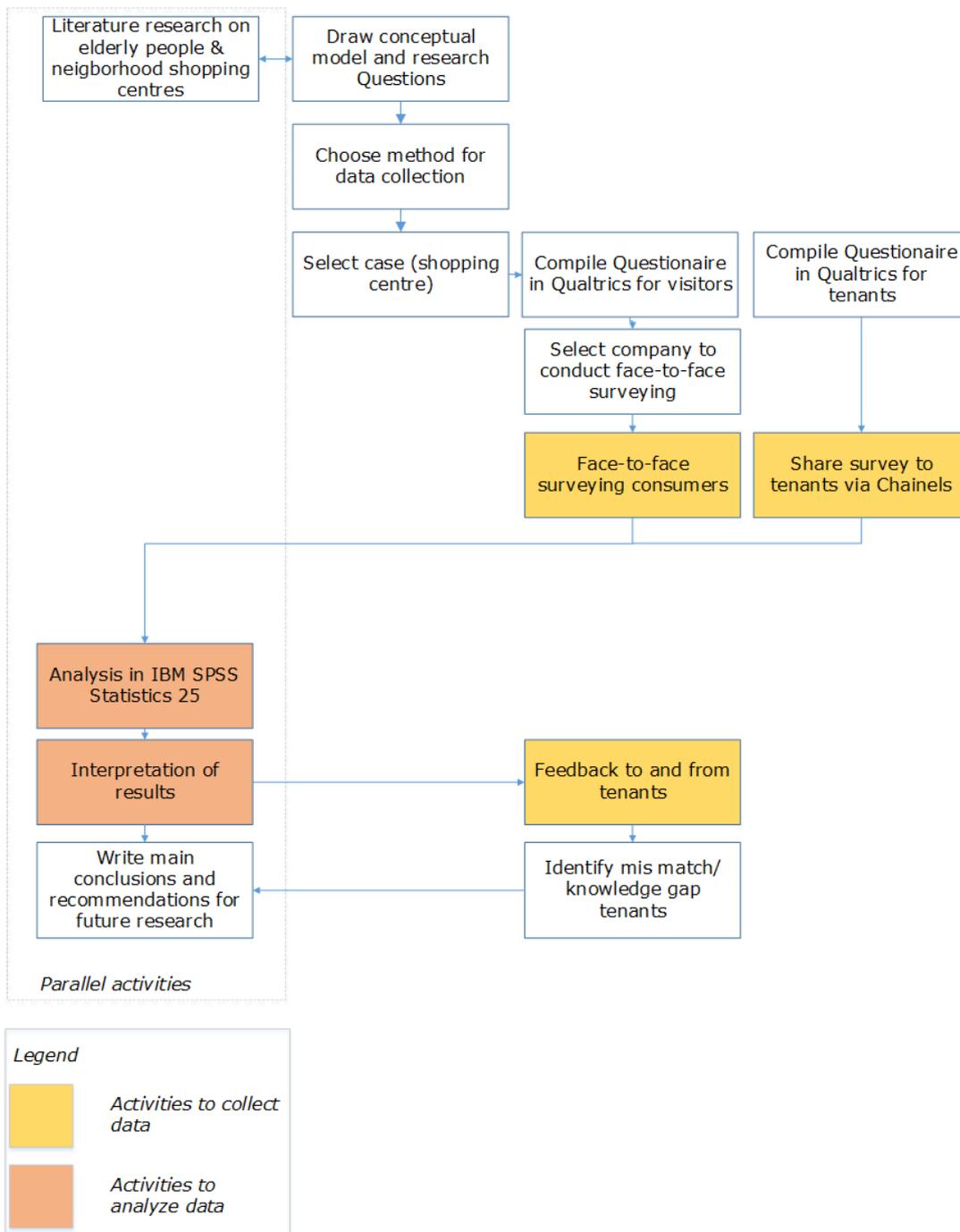
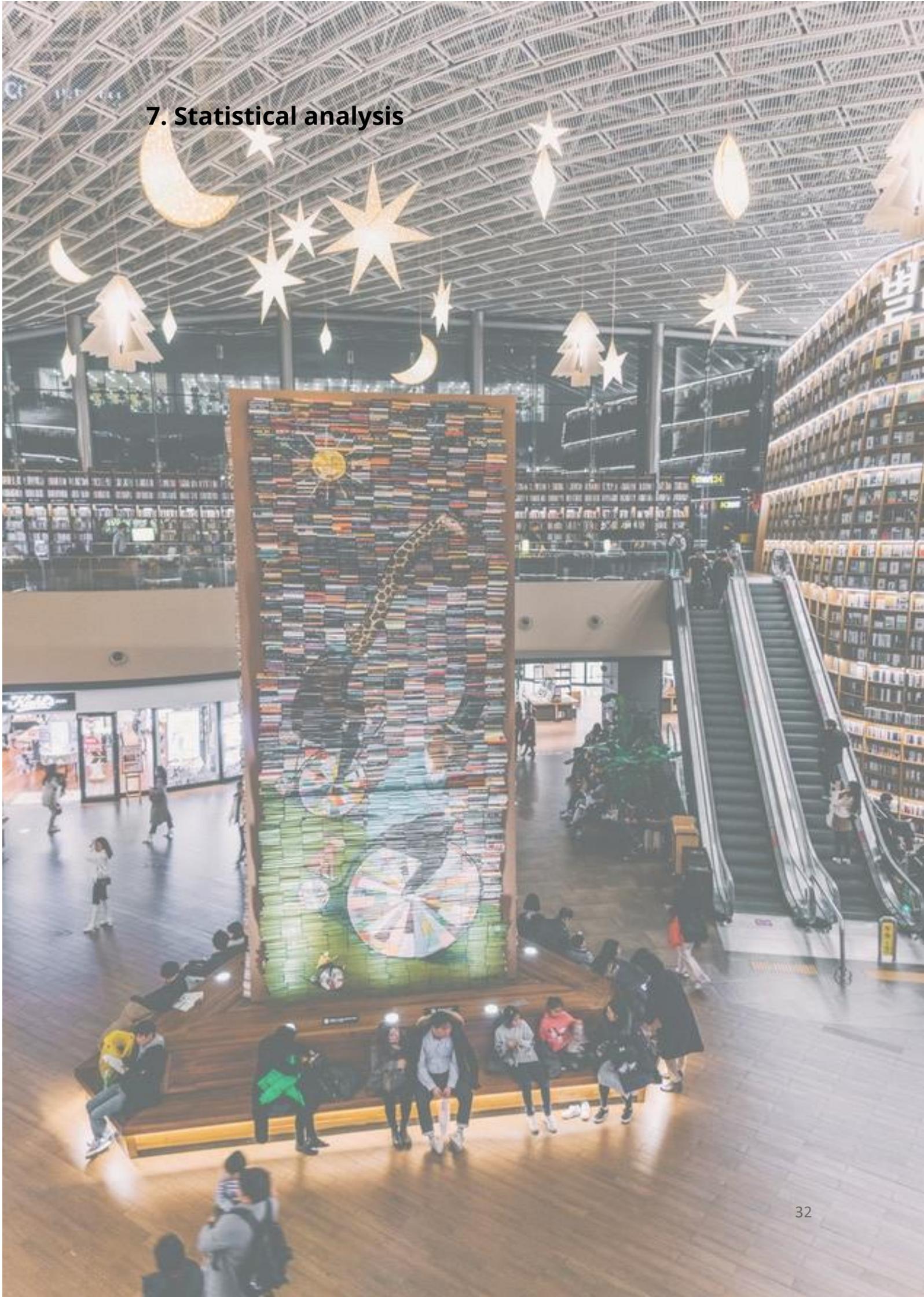


Figure 9, The research design and its different phases. Chronological steps in the research project are displayed with arrows. The graph shows from top to bottom the activities in a sequential order. The activities displayed horizontally are 'parallel' and were conducted in the same period

7. Statistical analysis



7. Statistical analyses

This chapter elaborates on the statistical analysis. First, background info is provided on the neighborhood in which the selected shopping centre for this research is located. This part includes a description of expected future developments in the neighborhood. Thereafter, the preparation of the fieldwork is described. Thirdly, the details of the data sample for the consumer research are exhibited.

7.1 The case: background info on shopping centre Meerzicht

To conduct the research a shopping centre was selected in an aging neighbourhood in the Netherlands was selected as a case.

Shopping centre Meerzicht is situated in the South-West of the city Zoetermeer. Zoetermeer is part of the Randstad area in the Netherlands and located in the province South-Holland. Zoetermeer counts 124.710 inhabitants. The neighbourhood Meerzicht, where the shopping centre is located, has 15.239 inhabitants as of January 2018. Figure 11 displays the age structure of the neighbourhoods Meerzicht West and Meerzicht East (*Wijkprofiel Meerzicht 2018, 2018*). Striking detail is that the percentage of people above 65 is relatively high compared to the rest of Zoetermeer. Furthermore, there are relatively more children in the neighbourhood Meerzicht-West compared to Meerzicht east and Zoetermeer as a whole. However, this is partly corrected by the fact that there are

The shopping centre was built in the early 1970's. There are 32 shops located in the shopping centre. Since October 2018 shopping centre Meerzicht is owned by Portico Investments. This investment company acquired the shopping centre from Breevast for a valuation of 21.347.000 euros (Hanff, 2018).

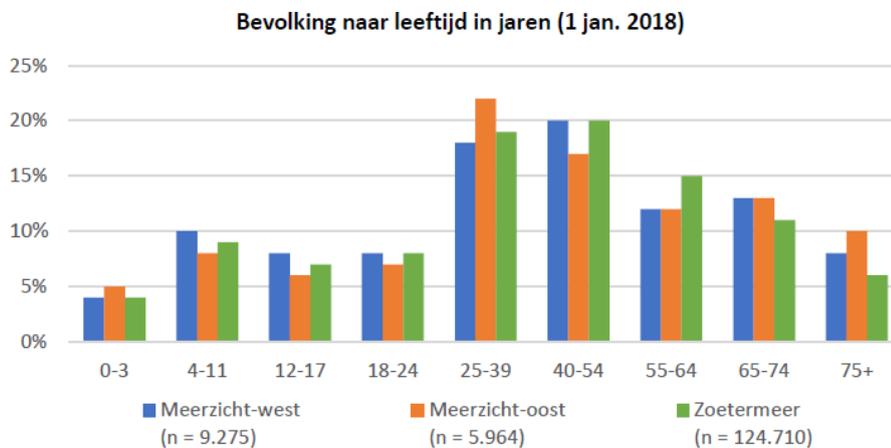


Figure 11 Inhabitants of Neighbourhood Meerzicht mapped in different age categories (*Wijkprofiel Meerzicht 2018, 2018*)

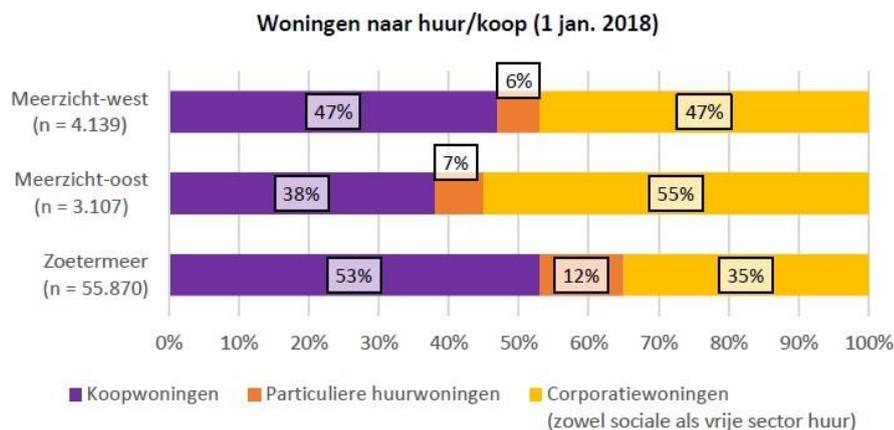


Figure 12 Overview of dwelling types in Meerzicht West, Meerzicht East and for the entire city of Zoetermeer

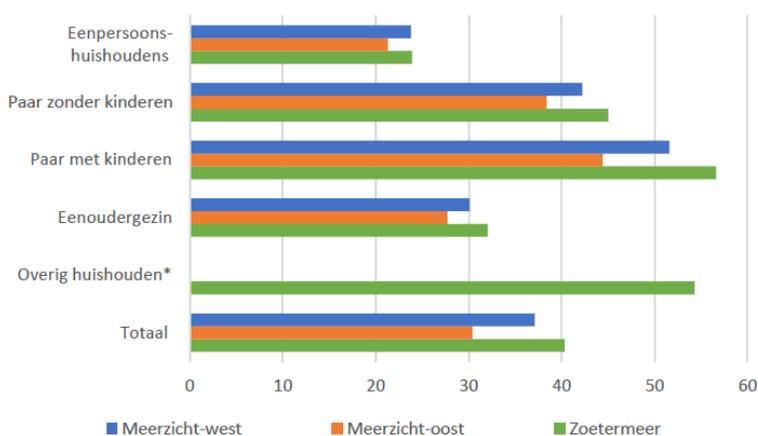


Figure 13 Income per household type (in euro's x 1.000) in Meerzicht West, Meerzicht East and in the city of Zoetermeer (Wijkprofiel Meerzicht 2018, 2018)

7.2 Future developments in Neighbourhood Meerzicht

The next ten to fifteen years the Municipality of Zoetermeer plans to build about 10.000 new houses in the city. The Municipality is looking into different opportunities to build even more houses (16.000) (*Toelichting - Masterplan De Entree Zoetermeer*, 27-11-2018).

For the neighbourhood Meerzicht, a project called 'De Entree Zoetermeer' is particularly relevant. The area around the 'Afrikaweg' is subject for a large-scale development project.

The plan is to build 4.500 houses in the next ten to fifteen years in the area within the dotted lines (see figure 14) (*Masterplan de Entree - Presentatie bewonersbijeenkomst 27 november 2018, 2018*). The main program will consist of houses. Some small-scale retail and places to work are planned like coffee bars and fitness & health studios. For other daily and weekly purchases, the new inhabitants can visit Meerzicht and nearby neighbourhood Driemanspolder (*Toelichting - Masterplan De Entree Zoetermeer, 27-11- 2018*).



Figure 14, The plan area 'Entree Zoetermeer' is indicated with the red dotted line. The municipality of Zoetermeer plan to build 4.500 houses in the period 2019- 2029/2034. (*Masterplan de Entree - Presentatie bewonersbijeenkomst 27 November 2018*).

7.3 Preparing the fieldwork

In order to make sure that the content of the survey met all the applicable privacy requirements the Ethical commission of the TU Delft checked and approved the content.

Two companies were asked to make a quotation to conduct the face-to-face surveying. Based on price, availability and experience the company Markteffect was selected. The activities of Markteffect were limited to providing assistance with the fieldwork.

During a Wednesday, Friday and a Saturday in October a team of two professionals specialized in face to face surveying were present in shopping centre Meerzicht to gather consumer feedback.

As presented in table 9, the exact timeslots during which the consumer feedback was gathered were based on two principles. First, it was expected that during the selected times there was enough 'footfall'; this means that there are enough people passing by in the main corridors of the shopping centre. Second of all, the timeslots were selected so that there was a balance between the number of hours during working time and during leisure time. The professional spent about six hours during working hours of regular customers and about six hours during leisure time. The initial idea was to spend also four hours on Sunday to capture feedback from the 'Sunday shoppers', however then the project would run over budget.

Day	Timeslots	Type of hour during week
Wednesday the 3 rd of October	14.00 – 18.00	4 hours leisure time
Friday the 5 th of October	16.00 – 20.00	±2 hours working time and ± 2 hours leisure time
Saturday the 6 th of October	14.00 – 18.00	4 hours working time

Table 9, The time schedule of the field work (face to face surveying in Shopping Centre Meerzicht).

The consumers could fill in the survey on tablets (iPads). The survey was made using Qualtrics.

To stimulate the response rate, the participating consumers could win 5 prizes of 15 - 20 euros as a reward. The prizes were all provided by local shops: The Butcher, the Florist, the Candy shop, the Barbershop and the Bookshop.

Furthermore, the chairman of the tenant association arranged two jackets with the branding of the shopping centre. The main purpose of the jackets was to show the customers that the professionals from Markteffect were not trying to sell goods or services.

The tenants in the shopping centre were informed beforehand about the presence of the two professionals in the shopping centre so that they could inform their clients.



Figure 15, Two professionals from the company Markeffect in Meerzicht branding, ready to conduct the face to face surveying in shopping centre Meerzicht Zoetermeer on the 3rd of October 2018.

7.4 Details of the sample

In the end there were 115 consumers willing to collaborate in the research (N=115). The average age of the respondents was 61 years old and the median was x (see figure 16). 34.7% of the respondents was male and 65.3% was female.

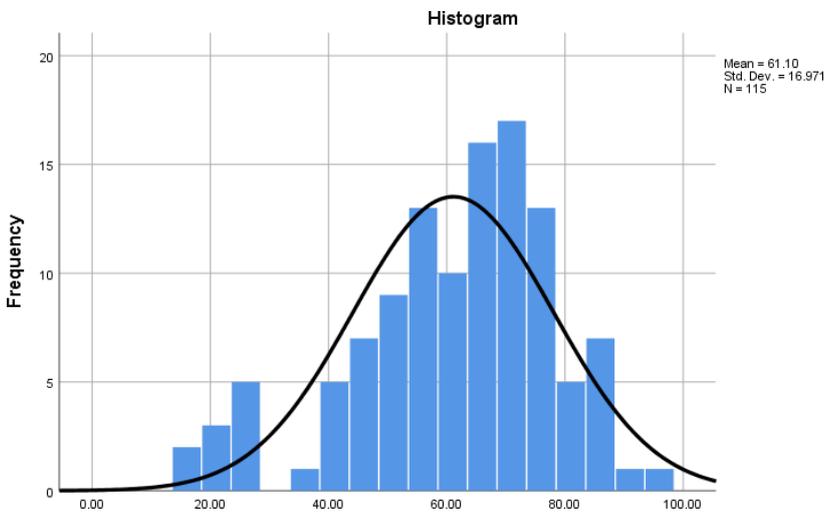


Figure 16, Histogram showing the age of the respondents (N=115). Retrieved from IBM SPSS 25.

7.5 The catchment area of shopping centre Meerzicht

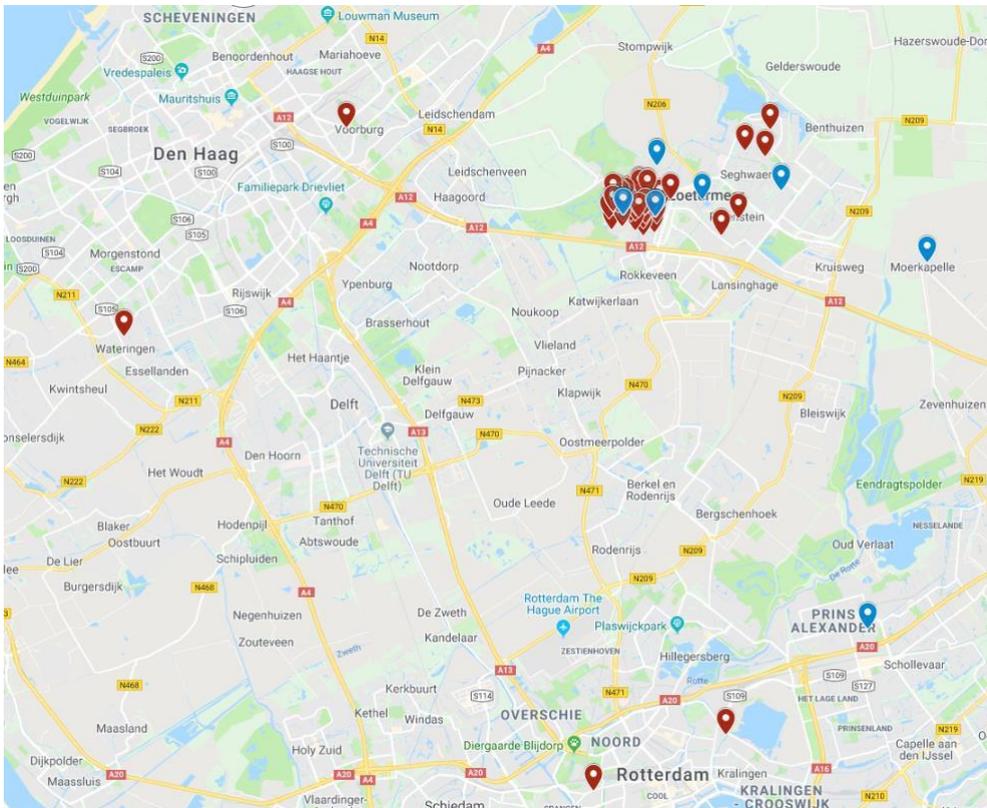


Figure 17, The respondents plotted on the map, it gives insight in the catchment area (the area where the consumers come from).

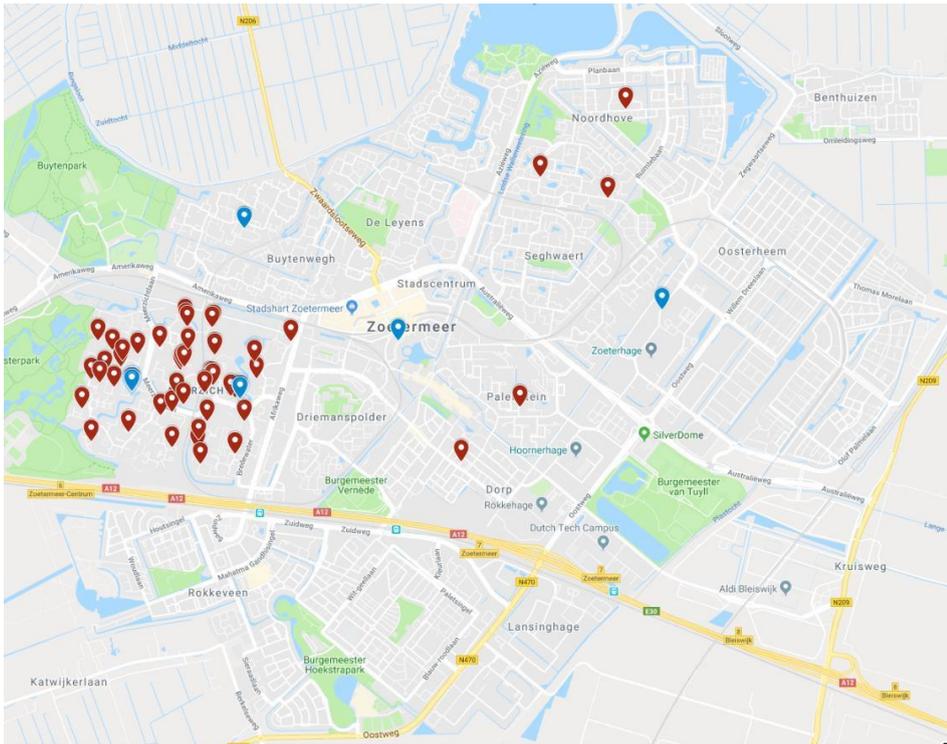


Figure 18, The catchments area, zoomed in at the city Zoetermeer. The main catchment area is the neighbourhood Zoetermeer. The roads 'Afrikaweg' and 'Amerikaweg' are strict 'borders'.

8. Research findings/results

This chapter elaborates on the findings of the data collection. In the following paragraphs the findings from each research question are presented.

8.1 Facilities and atmosphere in the shopping centre

Which facilities and atmosphere in the shopping centre contribute to a pleasant stay for elderly people?

The fieldwork resulted in 115 completed questionnaires by visitors. One of the questions in the questionnaire was as follows: 'What is your golden tip for shopping centre Meerzicht?'. This question resulted in a variety of answers. Among the responses of the visitors there were 14 people who spontaneously suggested that the shopping centre could be cosier or that the ambience should be improved. Figure 19 shows the bar chart of the results. The legend in table 8 explains the content of the response.

The bar chart in figure 19 shows the frequency of people who spontaneously indicated that the shopping centre should be cosier or that the ambience can be improved.

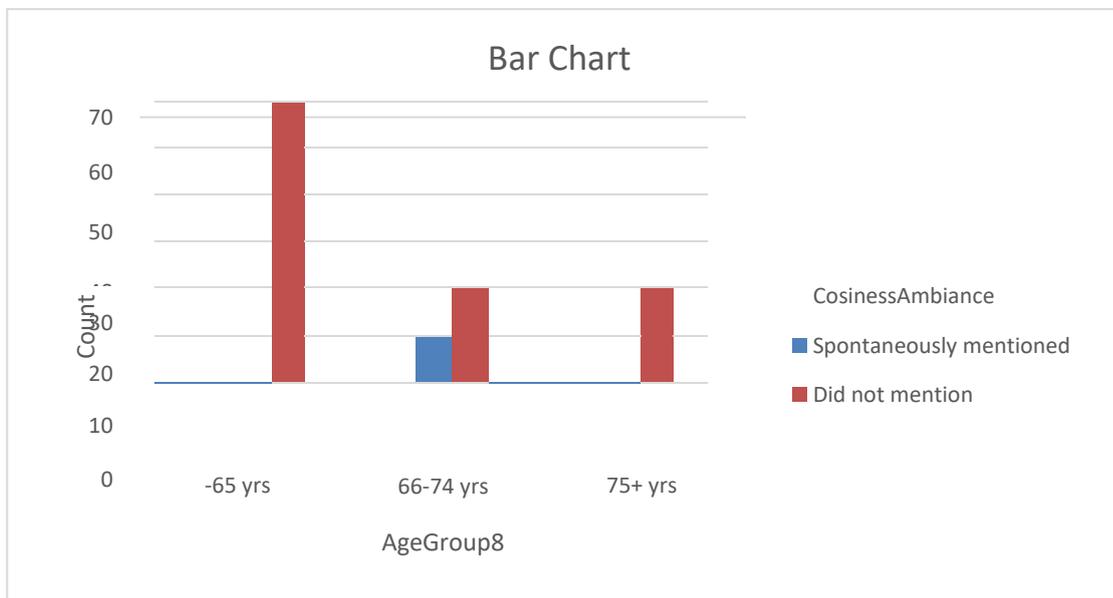


Figure 19 Bar chart that shows the frequency of people who spontaneously indicated that the shopping centre should be cosier or that the ambience can be improved. (Retrieved from SPSS)

Legend	Explanation of the contents of the response.
1. Marked in blue colour (spontaneously mentioned)	People who spontaneously indicated that the shopping centre should have a cosier character, suggestions to improve the ambience in general or specific recommendations like e.g. adding couches, plants or music.
2. Marked in red colour (people did not mention).	People did not spontaneously mention that the shopping centre should be cosier or that the ambience should be improved.

Table 10, Explanatory legend for figure 19

In the next step the frequencies of the responses in three age categories were compared by using crosstabs analysis in SPSS. Thereafter, the column proportions are compared to see whether there is a difference between the 'count' and 'expected count' of the 'CosinessAmbiance' variable.

CosinessAmbiance * AgeGroup8 Crosstabulation

		AgeGroup8			Total	
		-65 yrs	66-74 yrs	75+ yrs		
CosinessAmbiance	Spontaneously mentioned	Count	2 ^a	9 ^b	3 ^{a, b}	14
		Expected Count	7.4	3.8	2.8	14.0
		% within CosinessAmbiance	14.3%	64.3%	21.4%	100.0%
		% within AgeGroup8	3.3%	29.0%	13.0%	12.2%
		% of Total	1.7%	7.8%	2.6%	12.2%
	Did not mention	Count	59 ^a	22 ^b	20 ^{a, b}	101
		Expected Count	53.6	27.2	20.2	101.0
		% within CosinessAmbiance	58.4%	21.8%	19.8%	100.0%
		% within AgeGroup8	96.7%	71.0%	87.0%	87.8%
		% of Total	51.3%	19.1%	17.4%	87.8%
Total	Count	61	31	23	115	
	Expected Count	61.0	31.0	23.0	115.0	
	% within CosinessAmbiance	53.0%	27.0%	20.0%	100.0%	
	% within AgeGroup8	100.0%	100.0%	100.0%	100.0%	
	% of Total	53.0%	27.0%	20.0%	100.0%	

Each subscript letter denotes a subset of AgeGroup8 categories whose column proportions do not differ significantly from each other at the ,05 level.

Figure 20, Results from the cross-tabulation analysis for the variable 'CosinessAmbiance' (retrieved from SPSS, 2019)

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	12.771 ^a	2	0.002	0.002		
Likelihood Ratio	12.419	2	0.002	0.003		
Fisher's Exact Test	12.066			0.001		
Linear-by-Linear Association	4.108 ^b	1	0.043	0.048	0.036	0.020
N of Valid Cases	115					

a. 2 cells (33,3%) have expected count less than 5. The minimum expected count is 2,80.

b. The standardized statistic is -2,027.

Figure 21, Results from the Chi-Square test (retrieved from SPSS, 2019)

29% from the respondents in the age category '66-74 years' spontaneously indicated the shopping centre could be cosier or that the ambiance should be improved. This is significantly more than the percentage of respondents in the age category '- 65 years' =3.3%.

There is a significant association between the age of the respondents and whether they suggest that the ambiance and cosiness shopping centre Meerzicht should be improved

Cramér's V = 0.33 (p<0.01). Bayes factor = 1 /0.075344= 13,272456. The analysis in SPSS demonstrated that the probability of the data is 13,272456 times greater given the alternative hypothesis than given the Null hypothesis (no differences between groups).

Note: 13% of the respondents in the age category 75+ years spontaneously indicated the shopping centre could be cosier or that the ambiance should be improved. Compared to the other age groups the result (13%) was is in between 3.3% and 29%; however, this difference was not significant.

8.2 Physical quality and mobility

8.2.1 Mobility inside the shopping centre

How do elderly people perceive their mobility inside the shopping centre?

Is there a relation between age and the number of spontaneous remarks about mobility?

The question 'what is your golden tip for the shopping centre' brought interesting insights about the mobility of the visitors inside the shopping centre. There were 18 people who indicated that they face mobility related issues. Some of them indicated that the floor is not safe for them to walk or that the shopping centre is not easily accessible for wheelchairs.

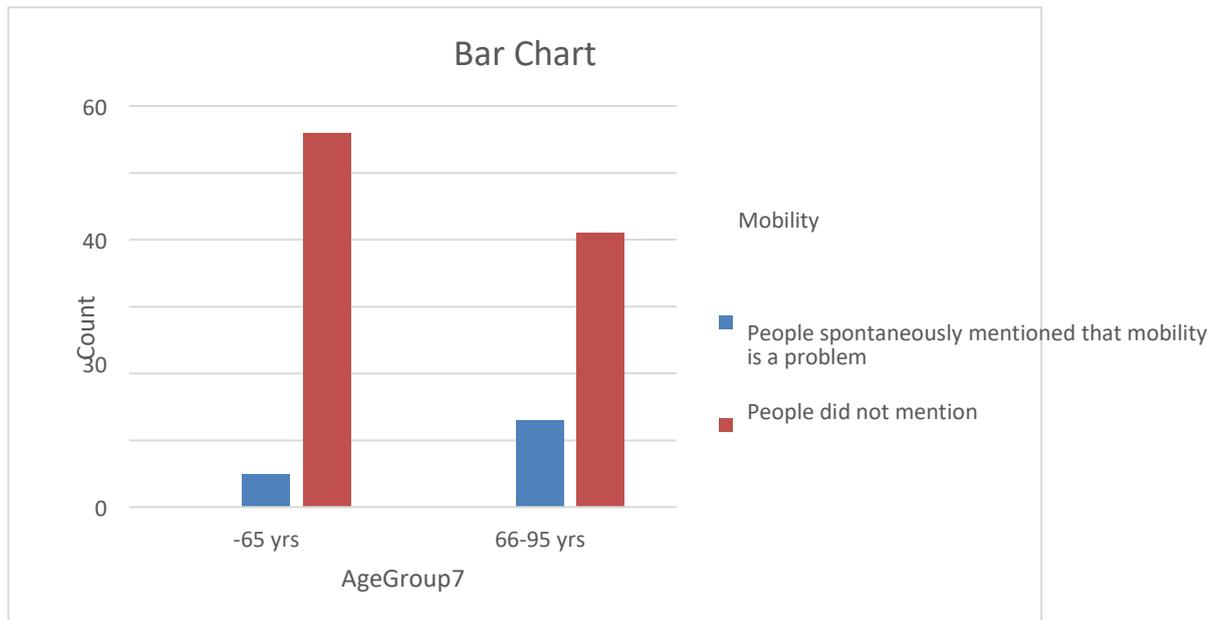


Figure 22, Bar chart that shows the frequency of people who spontaneously indicated that mobility in the shopping centre is a problem for them. (Retrieved from SPSS)

Legend	Explanation of the contents of the response.
1. Marked in blue colour (spontaneously mentioned)	People who spontaneously indicated that the floor is not safe to walk or that the shopping centre is not easily accessible for wheelchairs.
2. Marked in red colour (people did not mention).	People did not spontaneously mention that the floor is not safe to walk or that the shopping centre is not easily accessible for wheelchairs.

Table 11, Explanatory legend for figure 22

Mobility * AgeGroup7 Crosstabulation

		AgeGroup7		Total	
		-65 yrs	66-95 yrs		
Mobility	People spontaneously mentioned that mobility is a problem	Count	5 ^a	13 ^b	18
		Expected Count	9.5	8.5	18.0
		% within Mobility	27.8%	72.2%	100.0%
		% within AgeGroup7	8.2%	24.1%	15.7%
		% of Total	4.3%	11.3%	15.7%
		Standardized Residual	-1.5	1.6	
	People did not mention	Count	56 ^a	41 ^b	97
		Expected Count	51.5	45.5	97.0
		% within Mobility	57.7%	42.3%	100.0%
		% within AgeGroup7	91.8%	75.9%	84.3%
		% of Total	48.7%	35.7%	84.3%
		Standardized Residual	0.6	-0.7	
Total	Count	61	54	115	
	Expected Count	61.0	54.0	115.0	
	% within Mobility	53.0%	47.0%	100.0%	
	% within AgeGroup7	100.0%	100.0%	100.0%	
	% of Total	53.0%	47.0%	100.0%	

Each subscript letter denotes a subset of AgeGroup7 categories whose column proportions do not differ significantly from each other at the ,05 level.

Figure 23, Results from the cross-tabulation analysis for the variable 'Mobility' (retrieved from SPSS, 2019)

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	5.469 ^a	1	0.019	0.023	0.018	
Continuity Correction ^b	4.333	1	0.037			
Likelihood Ratio	5.586	1	0.018	0.023	0.018	
Fisher's Exact Test				0.023	0.018	
Linear-by-Linear Association	5.422 ^c	1	0.020	0.023	0.018	0.014
N of Valid Cases	115					

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8,45.

b. Computed only for a 2x2 table

c. The standardized statistic is -2,328.

Figure 24, Results from the Chi-Square test (retrieved from SPSS, 2019)

The NULL hypothesis (no difference between groups) is rejected based on the analysis in SPSS. Respondents who are 66+ tend to have more spontaneous complaints about their mobility than people who are in the age of -65. Phi = -0,218. P<0.05

8.2.2 Mobility: trip to the shopping centre

Is there a correlation between age and satisfaction 'safety' about the trip to the shopping centre? Sample: all the people that walked to the shopping centre.

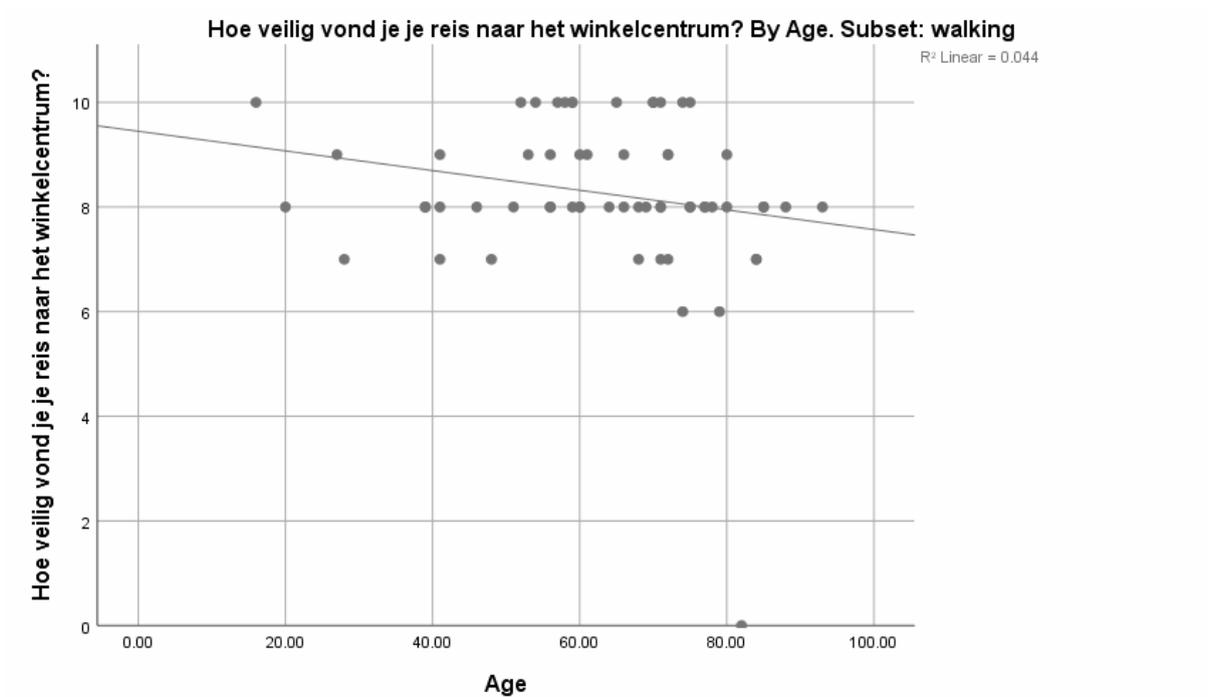


Figure 25, Correlation analysis. Showing the perceived safety of the respondents by age (Retrieved from SPSS, 2019)

Correlations			
		Hoe veilig vond je je reis naar het winkelcentrum?	Age
Hoe veilig vond je je reis naar het winkelcentrum?	Pearson Correlation	1	-0.209
	Sig. (2-tailed)		0.107
	Sum of Squares and Cross-products	137.803	-319.311
	Covariance	2.297	-5.322
	N	61	61
Age	Pearson Correlation	-0.209	1
	Sig. (2-tailed)	0.107	
	Sum of Squares and Cross-products	-319.311	32831.948
	Covariance	-5.322	288.000
	N	61	115

		Hoe veilig vond je je reis naar het winkelcentrum?	Age
Kendall's tau_b	Hoe veilig vond je je reis naar het winkelcentrum?	Correlation Coefficient	1.000
		Sig. (2-tailed)	0.085
		N	61
	Age	Correlation Coefficient	-0.169
		Sig. (2-tailed)	0.085
Spearman's rho	Hoe veilig vond je je reis naar het winkelcentrum?	Correlation Coefficient	1.000
		Sig. (2-tailed)	0.077
		N	61
	Age	Correlation Coefficient	-0.228
		Sig. (2-tailed)	0.077
	N	61	

Figure 26, The correlation coefficients of the conducted analysis. The results are not significant $p > 0.05$ (Retrieved from SPSS, 2019)

The age of the 'walking respondents' is not significantly related to the safety satisfaction. $R_s = -0,228$. $P = 0,077$. 95% BCa. There seems to be a correlation, but it is not significant.

8.3 Retail program

What are the shopping preferences of elderly people and to what extent is there a mismatch between preferences of elderly consumers and retailers' expectations of their preferences?

Is there a relation between age and/or gender and the store type of which people indicate that they are missing in shopping centre Meerzicht?

One of the questions in the questionnaire was as follows: 'Can you indicate which shop or which type of shop you miss in shopping centre Meerzicht?'. This question resulted in a variety of answers. Among the responses there were eighteen women and zero men who mentioned that they miss the store type shoes. Figure 27 displays the bar chart with frequencies of women who indicated that they miss the store type shoes in the shopping centre.

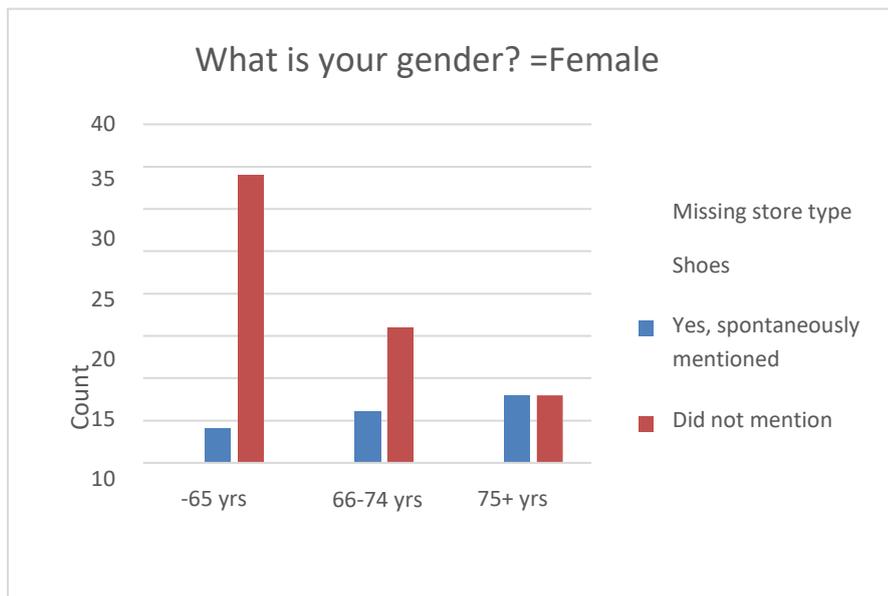


Figure 27, Bar chart that shows the frequency of women who indicated that they miss the store type shoes in the shopping centre (Retrieved from SPSS, 2019)

RemarkSchoenen * AgeGroup8 * Wat is je geslacht? Crosstabulation

What is your gender?				AgeGroup8			Total
				-65 yrs	66-74 yrs	75+ yrs	
			% within AgeGroup8	100.0%	100.0%	100.0%	100.0%
			% of Total	59.0%	23.1%	17.9%	100.0%
Vrouw	RemarkSchoenen	Spontaneously mentioned	Count	4 _a	6 _{a, b}	8 _b	18
			Expected Count	9.0	5.2	3.8	18.0
			% within RemarkSchoenen	22.2%	33.3%	44.4%	100.0%
			% within AgeGroup8	10.5%	27.3%	50.0%	23.7%
			% of Total	5.3%	7.9%	10.5%	23.7%
			Standardized Residual	-1.7	0.3	2.2	
	People did not mention	Count	34 _a	16 _{a, b}	8 _b	58	
		Expected Count	29.0	16.8	12.2	58.0	
		% within RemarkSchoenen	58.6%	27.6%	13.8%	100.0%	
		% within AgeGroup8	89.5%	72.7%	50.0%	76.3%	
		% of Total	44.7%	21.1%	10.5%	76.3%	
		Standardized Residual	0.9	-0.2	-1.2		
Total		Count	38	22	16	76	
		Expected Count	38.0	22.0	16.0	76.0	
		% within RemarkSchoenen	50.0%	28.9%	21.1%	100.0%	
		% within AgeGroup8	100.0%	100.0%	100.0%	100.0%	
		% of Total	50.0%	28.9%	21.1%	100.0%	
Total	RemarkSchoenen	Spontaneously mentioned	Count	4 _a	6 _{a, b}	8 _b	18
			Expected Count	9.5	4.9	3.6	18.0
			% within RemarkSchoenen	22.2%	33.3%	44.4%	100.0%
			% within AgeGroup8	6.6%	19.4%	34.8%	15.7%
			% of Total	3.5%	5.2%	7.0%	15.7%
			Standardized Residual	-1.8	0.5	2.3	
	People did not mention	Count	57 _a	25 _{a, b}	15 _b	97	
		Expected Count	51.5	26.1	19.4	97.0	
		% within RemarkSchoenen	58.8%	25.8%	15.5%	100.0%	
		% within AgeGroup8	93.4%	80.6%	65.2%	84.3%	
		% of Total	49.6%	21.7%	13.0%	84.3%	
		Standardized Residual	0.8	-0.2	-1.0		
Total		Count	61	31	23	115	
		Expected Count	61.0	31.0	23.0	115.0	
		% within RemarkSchoenen	53.0%	27.0%	20.0%	100.0%	
		% within AgeGroup8	100.0%	100.0%	100.0%	100.0%	
		% of Total	53.0%	27.0%	20.0%	100.0%	

Each subscript letter denotes a subset of AgeGroup8 categories whose column proportions do not differ significantly from each other at the 0.05 level.

Figure 28, Results from the cross-tabulation analysis for the variable 'MissesShoes' filtered on the female respondents (retrieved from SPSS, 2019)

Symmetric Measures

What is your gender?			Value	Approximate Significance	Exact Significance
Man	Nominal by Nominal	Phi	. ^c		
	N of Valid Cases		39		
Vrouw	Nominal by Nominal	Phi	0.361	0.007	0.006
		Cramer's V	0.361	0.007	0.006
		Contingency Coefficient	0.340	0.007	0.006
	N of Valid Cases		76		
Total	Nominal by Nominal	Phi	0.302	0.005	0.005
		Cramer's V	0.302	0.005	0.005
		Contingency Coefficient	0.289	0.005	0.005
	N of Valid Cases		115		

c. No statistics are computed because RemarkSchoenen is a constant.

Figure 29, Cramer's V for the cross-tabulation analysis (Retrieved from SPSS, 2019)

Chi-Square Tests

What is your gender?		Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Man	Pearson Chi-Square	. ^c					
	N of Valid Cases	39					
Vrouw	Pearson Chi-Square	9.927 ^d	2	0.007	0.006		
	Likelihood Ratio	9.670	2	0.008	0.013		
	Fisher's Exact Test	9.530			0.007		
	Linear-by-Linear Association	9.724 ^e	1	0.002	0.002	0.002	0.001
	N of Valid Cases	76					
Total	Pearson Chi-Square	10.519 ^a	2	0.005	0.005		
	Likelihood Ratio	10.076	2	0.006	0.009		
	Fisher's Exact Test	10.103			0.005		
	Linear-by-Linear Association	10.400 ^b	1	0.001	0.002	0.001	0.001
	N of Valid Cases	115					

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.60.

b. The standardized statistic is -3.225.

c. No statistics are computed because RemarkSchoenen is a constant.

d. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 3.79.

e. The standardized statistic is -3.118.

Figure 30, Results from the Chi-Square test (retrieved from SPSS, 2019)

50% from the female respondents in the age category '75+ years' spontaneously indicated that they miss the store type shoes. This is significantly more than the percentage of female respondents in the age category '- 65 years' =10.5%.

There is a significant association between the age of female respondents and whether or not they miss the store type 'shoes' in shopping centre Meerzicht. Cramér's V = 0.36 (p<0.01). Bayes factor = 1 /0,112041 = 8,925304. The analysis in SPSS demonstrated that the probability of the data is 8,925304 times greater given the alternative hypothesis than given the Null hypothesis (no differences between groups).

Note: 27,3% of the female respondents in the age category 66-74 years spontaneously mentioned that they miss the store type shoes. Compared to the other age groups the result (27,3%) was is in between 10.5% and 50%; however, this difference was not significant.

Is there a relation between gender and/or age and the Missing store types or missing retail brands? Missing store Type: 'do it yourself'

Figure 27 displays the bar chart with frequencies of people who indicated that they miss the store type 'do it yourself' in the shopping centre.

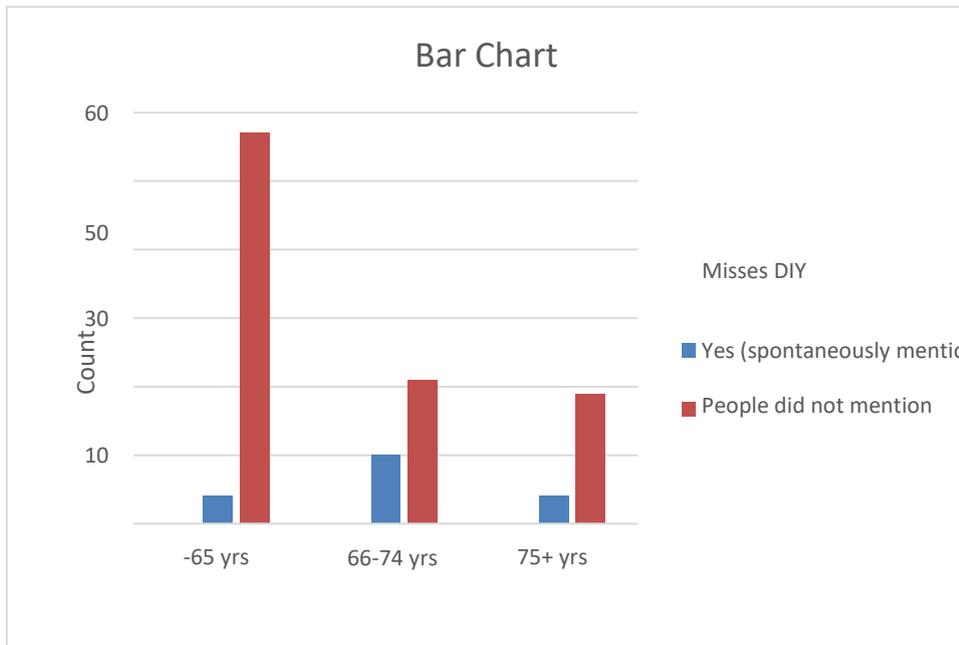


Figure 31, Bar chart that shows the frequency of people who indicated that they miss the store type do it yourself in the shopping centre (Retrieved from SPSS, 2019)

Misses store type 'Do it yourself'* AgeGroup8 Crosstabulation

		AgeGroup8			Total	
		-65 yrs	66-74 yrs	75+ yrs		
Misses store type 'DIY'	Spontaneously mentioned	Count	4 ^a	10 ^b	4 ^{a, b}	18
		Expected Count	9.5	4.9	3.6	18.0
		% within MistDoeHetZelf	22.2%	55.6%	22.2%	100.0%
		% within AgeGroup8	6.6%	32.3%	17.4%	15.7%
		% of Total	3.5%	8.7%	3.5%	15.7%
		Standardized Residual	-1.8	2.3	0.2	
	People did not mention	Count	57 ^a	21 ^b	19 ^{a, b}	97
		Expected Count	51.5	26.1	19.4	97.0
		% within MistDoeHetZelf	58.8%	21.6%	19.6%	100.0%
		% within AgeGroup8	93.4%	67.7%	82.6%	84.3%
% of Total		49.6%	18.3%	16.5%	84.3%	
	Standardized Residual	0.8	-1.0	-0.1		
Total	Count	61	31	23	115	
	Expected Count	61.0	31.0	23.0	115.0	
	% within MistDoeHetZelf	53.0%	27.0%	20.0%	100.0%	
	% within AgeGroup8	100.0%	100.0%	100.0%	100.0%	
	% of Total	53.0%	27.0%	20.0%	100.0%	

Each subscript letter denotes a subset of AgeGroup8 categories whose column proportions do not differ significantly from each other at the ,05 level.

Figure 32, Results from the cross-tabulation analysis for the variable 'MissesDIY' (retrieved from SPSS, 2019)

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	10.349 ^a	2	0.006	0.005		
Likelihood Ratio	10.019	2	0.007	0.010		
Fisher's Exact Test	9.935			0.006		
Linear-by-Linear Association	3.718 ^b	1	0.054	0.073	0.041	0.021
N of Valid Cases	115					

a. 2 cells (33,3%) have expected count less than 5. The minimum expected count is 3,60.

b. The standardized statistic is -1,928.

Figure 33, Results from the Chi-Square test (retrieved from SPSS, 2019)

32.3% from the respondents in the age category '66-74 years' spontaneously indicated that they miss the store type 'do it yourself' in shopping centre Meerzicht. This is significantly more than the percentage of respondents in the age category younger than 65 years=6.6%.

There is a significant association between the age of the respondents and whether or not they miss the store type 'do it yourself' in shopping centre Meerzicht.

Fisher's Exact test = 9.935 ($p < 0.01$). Bayes factor = $1 / 0,058609 = 17,062226$.

The analysis in SPSS demonstrated that the probability of the data is 17,062226 times greater given the alternative hypothesis than given the Null hypothesis (no differences between groups). Odds ratio = $(10/4) / (21/57) = \mathbf{6,78}$

Note: 17.4% of the respondents in the age category 75+ years spontaneously mentioned that they miss the store type 'do it yourself'. Compared to the other age groups the result (17.4%) was is in between 6.6% and 32.3%; however, this difference was not significant.

8.4 Awareness and expectations of retailers about consumer preferences

How aware are tenants of the demographics and needs of the visitors of shopping centre Meerzicht?

As portrayed in the research design (figure 9), the next step in the research was to provide tenants with feedback about the research results. One of the goals of this step was to identify whether there is a mismatch between the knowledge of the tenants about visitors' needs and the real visitors' needs resulting from the research.

	Average age visitors	% of monthly recurring visitors	% of visitors from neighbourhood Meerzicht	Age category in which there are relatively the most people who would like a DIY shop	Age category in which the most women indicate that they miss the store type shoes
Chairman of the tenant association	59 YR	56%	83%	41- 65 YR	41- 65 YR
Retailer 1	47 YR	76%	74%	-40 YR	41- 65 YR
Retailer 2	49 YR	58%	68%	41- 65 YR	41- 65 YR
Retailer 3	55 YR	64%	70%	-40 YR	66-74 YR
Mean	52.5 YR	63.5%	73,8%	N.A.	N.A.
Input from visitor research	61.1 YR	93.2%	82,6%	66-74 YR	75+ YR

Table 12, Overview of answers retrieved from retailers and the chairman of the tenant association showing their current knowledge about the demographics of the visitors, compared to the input retrieved from the visitor research. (Composed using Mentimeter)

A number of results fall out when the input from the retailers is compared with the actual results from the questionnaire. First, the respondents guessed that the average 'Meerzicht visitor' was younger than the real average age. Average age guessed by the respondents is: 52.5 years, whereas the research showed that the average age is: 61 years.

According to the estimation of the retailers, the percentage of monthly recurring visitors was 63.5% whereas the research showed that a substantial larger percentage (93.2%) of the respondents indicated that they will visit Meerzicht within a month.

Furthermore, the retailers estimated that the percentage of visitors from the Neighbourhood Meerzicht would be lower (73.8%) than the actual percentage of 82.6%.

In addition, the retailers estimated that the age of the target group with the most need for a DIY store and shoe store considerably lower than the research has shown.



Figure 34, The neighbourhood Meerzicht is marked with red lines (Retrieved from Google Maps).

8.5. Vulnerability of functions – checking for bankruptcy

How can owners/investors of shopping centres check whether tenants are vulnerable for bankruptcy?

As an owner/investor in shopping centres it is relevant to be aware of the financial situation of the tenants. Tenants that are underperforming might need advice on how to improve their business or advice on how to tailor their product offering to the wishes of the consumers in the catchment area. In numerous foreign countries turnover rent models are being applied. It is known that these type of rent models contribute to more pro-active management by landlords (O'Roarty & Billingsley, 2015). However, in the Netherlands these type of rent models are currently poorly applied. In the Netherlands retailers are often shivery to share turnover figures with landlords. However, in some Dutch outlet centres the landlords do have insights financial performance of tenants (Storms, 2017).

In the questionnaire the tenants were asked to answer the following question:

How do you generally judge the profitability of your store in the Meerzicht shopping centre? Indicate on a scale from 0 to 10 how you judge the profitability of your store in Meerzicht. Select a number from 0 to 4 if your store is loss-making. You select 5 if your shop is performing 'break even' and you select a score of 6 to 10 if your store is profitable.

Table 13a demonstrates the outcome of the questionnaire. The respondents who indicated that their shop performed break even or worse are marked as vulnerable in the table below. Respondents who replied with '6' are marked as partly vulnerable and lastly the shops that scored a 7 or higher are marked as 'not vulnerable'. The full list of replies is demonstrated in table 13b.

Vulnerable functions (break even or lower)	Partly vulnerable (6)	Not vulnerable (7 or higher)
Greengrocer	Butcher	Supermarket
Candy shop	Health and beauty shop	Lunch and coffee place
Fish shop	Optician	Chinese restaurant
Take away restaurant	Low segment clothing, clothing for children, hobby, health care.	Hairdresser/barbershop
Bookstore	Bakery 1	Hearing care professional
	Flower shop	Bakery 2
	Pet shop	

Table 13a, the supply in shopping centre Meerzicht as of October 2018 and the indicated profitability.

#tenant	Type of supply	(Main) target group	Indicated profitability
1	Greengrocer	All ages	Break even (5)
2	Supermarket	All ages	Unknown
3	Butcher	All ages	6
4	Speciality food store: cheese, nuts, wine, chocolate	All ages	Unknown
5	Pharmacy	People in need of medicine and elderly	Unknown
6	Bakery	All ages	Unknown
7	Bakery	All ages	6
8	Flower shop	All ages	6
9	Book store		Break even (5)
10	Lunch and coffee place	All ages	7
11	Ice Cream Parlor	All ages	Unknown
12	Hairdresser's/barbershop	All ages	7
13	Hairdresser's/barbershop	Young people	7
14	Health & Beauty Shop	All ages	6
15	Optician	All ages and more often elderly	6
16	Liquor store	All ages	Unknown
17	Cake, pie, candy and gifts	All ages	Break even (5)
18	Bakery	All ages	8
19	Telephone store	All ages	Unknown
20	Supermarket	All ages	8
21	Health & Beauty Shop	All ages	6
22	Ladies & girls' fashion, nightwear, jewellery, belts.	Young girls and ladies	7
23	Chinese restaurant	All ages	7
24	Indonesian (take away) restaurant	All ages	Unknown
25	Pet shop	All ages	6
26	Pizza (take away) restaurant	All ages	Unknown
27	Pizza (take away) restaurant	All ages	1
28	Hearing care professional	People with hearing issues. Often elderly people	7
29	Dry cleaning, clothing repairs and carpet cleaning	All ages	Unknown
30	Shoe and clothing repair, key maker and dry cleaning.	All ages	Unknown
31	Fish shop	All ages	Break even (5)
32	Low segment clothing, clothing for children, hobby, health care.	All ages, children	6

Table 13b, the supply in shopping centre Meerzicht as of October 2018 and the indicated profitability.

8.6 Final model describing elderly consumer preferences

Several outcome variables show a significant relationship with the predictor variables age and gender. The next step is to build a model that fits the data. By conducting a logistic regression analysis in SPSS, the R-statistic is being calculated.

Several variables are included in the model. Thereafter, for each variable in the model the Wald Statistic and its significance is analysed as well as the odds ratios $\text{Exp}(B)$. If the value is greater than one, than as the predictor increases the odd of the outcome occurring increases (Field, 2013).

Outcome variable	Explanation of values
Mobility	1= People who spontaneously indicated that the flooring is not safe or that the shopping centre is not optimized for wheel chairs. 2=People did not mention
MissesDIY	1= People who responded 'Do it your self-store' to the open question: Which store (type) do you miss? 2 = People did not mention that they miss the store type: 'Do it yourself'
ToiletAvailability	1= People who indicated that there are not enough toilets in shopping centre Meerzicht. 2= People who indicated that there are enough toilets.
MissesShoes	1= People who responded 'Shoe Store' to the open question: Which store (type) do you miss? 2 = People did not mention that they miss 'Shoe Store'
CosinessAmbiance	1= People who spontaneously indicated that the shopping centre should have a cosier character, suggestions to improve the ambiance in general or specific recommendations like e.g. adding couches, plants, music. 2=People did not mention
NeedforHouseholditems	1= People who responded 'Blokker', 'Household items' or 'Action' to the open question: Which store (type) do you miss? 2 = People did not mention that they miss the store type: 'Household items', 'Blokker' or 'Action'.

Table 14, Outcome variables and explanation

8.6.1. Results of the logistic regression analysis

For this analysis there are two age groups. All the people in the age of 65 and younger are in the first age group. The people in the age 66-95 are in the second age group.

Variables in the Equation									
		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
								Lower	Upper
Step 1	Mobility	0.998	0.634	2.482	1	0.115	2.714	0.784	9.398
	MissesShoes	1.660	0.648	6.554	1	0.010	5.260	1.476	18.748
	MissesDIY	1.687	0.645	6.847	1	0.009	5.404	1.527	19.123
	NeedforHouseholditems	0.102	0.461	0.049	1	0.825	1.107	0.449	2.733
	CosinessAmbiance	1.763	0.847	4.332	1	0.037	5.828	1.108	30.647
	ToiletAvailability	0.094	0.434	0.047	1	0.829	1.098	0.469	2.572
	Constant	-1.005	0.370	7.366	1	0.007	0.366		
Step 2	Mobility	1.002	0.633	2.500	1	0.114	2.722	0.787	9.422
	MissesShoes	1.680	0.642	6.843	1	0.009	5.365	1.524	18.888
	MissesDIY	1.682	0.644	6.817	1	0.009	5.375	1.521	18.994
	NeedforHouseholditems	0.112	0.458	0.060	1	0.806	1.119	0.456	2.746
	CosinessAmbiance	1.773	0.846	4.393	1	0.036	5.886	1.122	30.879
	Constant	-0.962	0.311	9.578	1	0.002	0.382		
Step 3	Mobility	0.982	0.626	2.464	1	0.116	2.671	0.783	9.106
	MissesShoes	1.673	0.641	6.814	1	0.009	5.326	1.517	18.697
	MissesDIY	1.690	0.643	6.913	1	0.009	5.418	1.537	19.096
	CosinessAmbiance	1.794	0.840	4.559	1	0.033	6.011	1.159	31.185
	Constant	-0.923	0.266	12.006	1	0.001	0.397		
Step 4	MissesShoes	1.784	0.631	7.990	1	0.005	5.956	1.728	20.527
	MissesDIY	1.708	0.635	7.232	1	0.007	5.520	1.589	19.171
	CosinessAmbiance	1.835	0.830	4.892	1	0.027	6.268	1.233	31.873
	Constant	-0.804	0.251	10.280	1	0.001	0.447		

Figure 35. Variable(s) entered on step 1: Mobility, MissesShoes, MissesDIY, NeedforHouseholditems, CosinessAmbiance, ToiletAvailability.

Output of the logistic regression model no. 1

The final model was created by a backward stepwise method (Backward: LR). The likelihood ratio was used as removal criterion. In this model several predictors were included in the model.

Thereafter the predictors were removed by SPSS if their removal is not detrimental to the fit of the model (Field, 2013).

Table 15 summarizes the model.

Variable	B	Odds ratio	S.E.	Sig	95% CI for Odds Ratio	
					Lower	Upper
MissesShoes	1.660	5.956	0.631	0.005	1.728	20.527
MissesDIY	1.708	5.520	0.635	0.007	1.589	19.171
CosinessAmbiance	1.835	6.268	0.830	0.027	1.233	31.873
Constant	-0.804	0.447	0.251			

Table 15, Output summary of the logistic regression model no. 1

Note: $R^2 = 0.22$ (Cox & Snell) 0.27 (Nagelkerke). Model $\chi^2 = 25.25$, $df = 2$, $p < 0,01$

Output of the logistic regression model no. 2

Subsequently, the logistic regression analysis was conducted on the sample of all the women that filled in the questionnaire. The model summary is portrayed in table 16.

		Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
								Lower	Upper
Step 1 ^a	CosinessAmbiance	-1.146	0.923	1.541	1	0.214	0.318	0.052	1.941
	Mobility	-0.940	0.795	1.400	1	0.237	0.391	0.082	1.854
	Remarkschoenen(1)	1.738	0.665	6.822	1	0.009	5.686	1.543	20.951
	MistDoeHetZelf(1)	2.573	1.123	5.244	1	0.022	13.099	1.449	118.451
	Constant	3.237	2.246	2.078	1	0.149	25.467		
Step 2 ^a	CosinessAmbiance	-1.265	0.908	1.944	1	0.163	0.282	0.048	1.671
	Remarkschoenen(1)	1.858	0.656	8.027	1	0.005	6.410	1.773	23.172
	MistDoeHetZelf(1)	2.630	1.116	5.555	1	0.018	13.879	1.557	123.682
	Constant	1.691	1.760	0.923	1	0.337	5.427		
Step 3 ^a	Remarkschoenen(1)	1.910	0.646	8.733	1	0.003	6.754	1.903	23.972
	MistDoeHetZelf(1)	2.825	1.100	6.598	1	0.010	16.865	1.953	145.608
	Constant	-0.726	0.304	5.679	1	0.017	0.484		

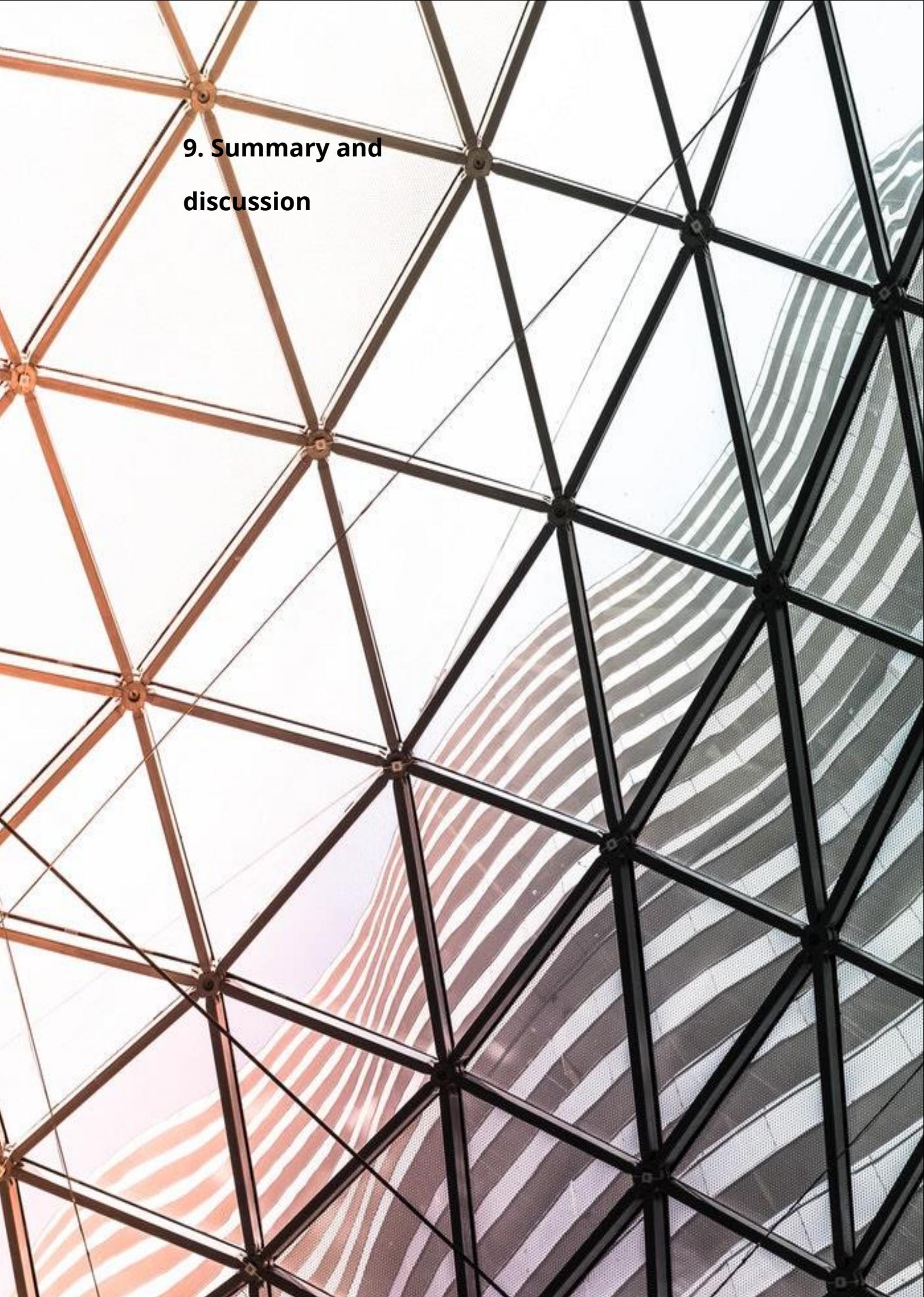
a. Variable(s) entered on step 1: CosinessAmbiance, Mobility, Remarkschoenen, MistDoeHetZelf.

Figure 36, Variable(s) entered on step 1: Mobility, MissesShoes, MissesDiY, CosinessAmbiance (Retrieved from SPSS, 2019).

Variable	B	Odds ratio	S.E.	Sig	95% CI for Odds Ratio	
					Lower	Upper
MissesShoes	1.910	6.754	0.646	0.003	1.903	23.972
MissesDIY	2.825	16.865	1.100	0.010	1.953	145.608
Constant	-0.726	0.484	0.304	0.017		

Table 16, Output summary of the logistic regression model no. 2

Note: $R^2 = 0.29$ (Nagelkerke). Model $\chi^2 = 18.59$ df= 2, $p < 0,01$



**9. Summary and
discussion**

9. Summary and discussion

The aim of this research was to gain insight into solutions / measures that make existing shopping centres future proof for in aging societies such as the Netherlands.

The research question central in this study was formulated as:

Which measures and solutions can make neighbourhood shopping centres future proof for an aging population?

The emphasis in this study was on analysing the wishes of elderly visitors with regard to the characteristics of the shopping centre. The wishes of the visitors regarding characteristics of individual stores was out of scope.

Table 17 summarizes the output of the logistic regression analysis and the relationship with the research themes as well as the independent factors.

Theme	Independent factors	Variable	B	Odds ratio	S.E.	Sig	95% CI for Odds Ratio	
							Lower	Upper
Retail program	Product offerings (supply) & tenant mix	MissesShoes	1.660	5.956	0.631	0.005	1.728	20.527
		MissesDIY	1.708	5.520	0.635	0.007	1.589	19.171
Facilities and atmosphere	Ambiance, cosiness, music, plants, lighting, couches/seats	CosinessAmbiance	1.835	6.268	0.830	0.027	1.233	31.873
		Constant	-0.804	0.447	0.251			

Table 17, Output summary of the logistic regression model no. 1

Note: $R^2 = 0.22$ (Cox & Snell) 0.27 (Nagelkerke). Model $\chi^2 = 25.25$, $df = 2$, $p < 0,01$

9.1 Main findings

1. Elderly consumers have specific needs with regard to the retail program

There is a significant relation between the age of shopping centre visitors and specific needs in the retail program.

The logistic regression analysis, as displayed in table 17 demonstrates that there is a relation between the age of shopping centre visitors and needs in retail program. Visitors in the age of 65+ miss the store type 'Do it yourself' significantly more than visitors who are younger than 65 years, $p = 0.01$. The data analysis showed that especially visitors in the age category 66-74 years old miss the store type Do it yourself. The second logistic regression analysis, as displayed in table 16 showed the relation between age and needs in certain store supply based on all the women in the sample. The women in the sample have a stronger need for the store type shoes and do it yourself compared to the total sample (men + women).

2. Elderly consumers have specific preferences with regard to facilities and atmosphere

There is a significant relation between age of shopping centre visitors and desire for certain facilities characteristics of the atmosphere in the shopping centre.

This research demonstrated that there is a significant association between the age of the respondents and whether they suggest that the facilities and atmosphere in shopping centre Meerzicht should be improved. Cross tabulation analysis demonstrated that people in the age category 66-74 have the strongest desire to improve the atmosphere in the shopping centre. The respondents suggest that facilities such as couches and seats to rest are desirable. Besides this, elderly mention that plants and music would contribute to the atmosphere.

3. Elderly consumers have specific preferences related to mobility and safety

Cross tabulation conducted in SPSS showed that people in the age category 65+ have significantly more issues with mobility in shopping centre Meerzicht compared to people younger than 65 years (see figure 23). The respondents indicated that the mobility related issues are caused by the floor which is unsafe (badly maintained) and because the shopping centre is not easily accessible with walking aids.

4. Mismatch between the knowledge of retailers about demographics and certain needs of the visitors.

Although, the sample of this part of the research was small (N=4), it seems that there is a knowledge gap among the respondents about the demographics in the catchment area and certain needs of the visitors. The retailers estimated that the visitors were an average 8.6 years younger. Furthermore, the retailers estimated that 63.5% of the visitors would return within a month whereas the research showed that this percentage is higher: 93.2%. Moreover, the retailers estimated that a smaller percentage of the visitors would live in neighbourhood Meerzicht (73.8%), however the research showed that 82,6% of the visitors live in the surrounding neighbourhood. In addition, the retailers estimated that the age of the target group with the most need for a DIY store and shoe store considerably lower than the research has shown.

General conclusion statement based on the results

Based on the results there are different aspects one should consider ensuring that a neighbourhood shopping centre is future proof for an aging population. In this sense 'future proof' is mainly formulated as that the shopping centre should meet the visitors needs in terms of supply and expectations with regard to available facilities.

- First, elderly visitors have a desire for different types of supply compared to younger visitors. Visitors of shopping centre Meerzicht who are older than 65 years old miss the store type 'do it yourself' significantly more than people who are younger than 65 years. Besides this, especially female visitors in the age above 75 express a desire for the store type shoes.
- Second, elderly people prefer that certain basic facilities are well established in the shopping centre. Such as a safe flooring and facilities to support wheelchairs. Furthermore, elderly people care more about aspects that contribute to the atmosphere and ambiance of the shopping centre compared to younger people. Elderly people for example indicate that they like it if the common spaces are flourished with couches, plants and music.
- Thirdly, a future proof shopping centre also requires that the tenants are aware of the needs and the demographics of the visitors. Currently there is a knowledge gap between the actual needs of the visitors and the knowledge base of the tenants.

9.2 Discussion

Before the conclusions are interpreted thoroughly, it is important to elaborate on the validity of the results. With regard to the results as presented from research question 5 about checking for bankruptcy. A remark has to be made. Before the retailers could fill in this question, they had to indicate their role in the shop. They could choose between 'Store manager', 'Shop owner' or 'Shop employee'. 56% of the respondents was store owner, 20% was store manager and 24% was shop employee. One can expect that store owners and store managers have knowledge about the store performance. However, the shop employees might not have a full overview of the financial situation of the shop. Further research is recommended on vulnerability of retail branches and specific retail formulas.

The results of this study show that older visitors to a neighbourhood shopping centre have different preferences regarding the product offerings of shops compared to younger visitors. Particularly striking is the need of the older visitor to a do it yourself store. A possible explanation for this phenomenon is that because of the declining mobility of older people it is more difficult for them to visit a DIY shop on a business park on the outskirts of the city. As portrayed in figure 5, car usage is decreasing once people get older. Both the number of travelled kilometres per day as well as the proportion of people that drive a car decreases once people become older (Dam & Hilders, 2013). Furthermore, as described by van Melik & Pijpers, older people 'express a desire to be in charge of their own lives'; in other words, they strive for autonomy and independence (2017, p. 291).

The fact that the elderly visitors miss the store branch DIY can be explained by the fact that elderly people like it if they can live their life without being dependent on others. This implies that elderly people enjoy it if they are able to fix practical issues on their house and in their garden without help of friend, family and care-takers. The nearest DIY shop is about 6km traveling from neighbourhood Meerzicht. This distance might be just too far for a lot of the older residents in neighbourhood Meerzicht.

Moreover, this study has shown that elderly women, particularly in the age 75+ and to a smaller extent woman in the age 66-74 have a greater need for the product category shoes compared to younger women. A possible explanation for this phenomenon might be that 28.1% of the elderly between 65 and 75 and 13.1% of the over-75s have bought online clothing or sports equipment in the past 12 months. By comparison, in the age of 24 to 45 years, as many as 76.2% of people bought online clothing or sports equipment (CBS, 2018c)

Besides this, it is questionable whether shoes are the type of product elderly would buy online. It is known that elderly people are more often in need of orthopaedic shoes than younger people.

According to Burns, Leese & McMurod, foot health is an extremely common issue in later life. With rising age there is an increased risk of conditions such as diabetes, symptomatic peripheral vascular disease and sensory impairment. These conditions can all be causes of foot problems. Furthermore, the study by Burns et al. shows that painful foot was significantly associated with incorrect shoe length (2002). Orthopaedic shoes are products that require a visit to a physical shop since the orthopaedic specialist measures and examines the feet before recommending a shoe.

In addition to specific wishes regarding product offering, this study also showed that elderly people attach more value to factors that contribute to the atmosphere in the shopping centre. The older visitors mention benches, plants and music as factors to improve the atmosphere. These results support previous research from van Melik & Pijpers who describe in their research that shopping centres are among the favourite meeting places for the elderly (2017). Elderly people prefer places like shopping centres for spontaneous meetings over specifically designed care venues. To facilitate spontaneous encounters, it is important that elderly people can sit in comfort and socialize. A green environment with plants and a background music can contribute to the atmosphere. Also, the high percentage (82.6%) of people who indicate that they will come back within a month illustrates that Meerzicht has an important group of regular visiting clients.

Finally, this research has shown that there is a mismatch in the knowledge of retailers about the demographics and needs of the visitors. Sufficient knowledge of the needs in the catchment area can be an opportunity for existing tenants to expand or alter the product range.

Data insights about the visitors are often collected on behalf of the real estate investor. In general, data reports such as purchase flow research and social media statistics are shared during the half- yearly or annual tenant meeting. However, not all tenants are present at such meeting. Moreover, the investor is sometimes selective in sharing certain data such as footfall counts with tenants. Data about visitors which is in the possession of the real

estate investor is normally shared with the property management firm (Storms, 2017). Since not all the tenants attend the annual tenant meeting can and since not all the available data is being shared this can result in information a- symmetry between the shopping centre investor and the tenants.

9.3 Limitations

One of the limitations of this research is that the questionnaire for the visitors was limited to Dutch language. By examining the demographic details of neighbourhood Meerzicht, one can see that 19% of the inhabitants from the western part and 25% of the inhabitants from the eastern part were born outside of the Netherlands (*Wijkprofiel Meerzicht 2018*, 2018). For future research it would be relevant to translate the questionnaires into various languages such as English to increase the number of responses from non-Dutch visitors.

The second limitation of this study is the limited number of retailers (n = 4) which was present during the feedback of the results. In order to get a good picture of the knowledge of retailers about the demographics and needs of the visitors a larger sample is needed. For each retail branch in the shopping centre a tenant representative should be present and participating in the research.

9.4 Recommendations for future research

Scaling up quantitative research

In order to make the results of this study more generic for the Dutch population it is advisable to repeat this research to more neighbourhood shopping centres in aging neighbourhoods. There might be local differences leading to different results and potentially new insights about shopping preferences of elderly people.

Conducting qualitative research- interviews with elderly visitors

It would be interesting to conduct interviews with the elderly visitors that filled in the questionnaire. Interviews could provide insight in why the elderly visitors indicated that they miss certain product categories in the shopping centre. Does it have to do with the fact that their mobility has decreased and that they are dependent on the local neighbourhood centre? Or are they not familiar with online shopping? Or would they never shop online for certain products such as shoes? It would be relevant to get a better understanding of their motives. Besides this, the interviews could also elaborate on the physical characteristics of the shopping centre and its facilities. Such research can result in concrete recommendations for improving the accessibility of the shopping centre as well as the preferred atmosphere and ambiance for the elderly visitor.

Set up qualitative research to investigate whether there is an information a-symmetry between landlords and tenants

It would be interesting to conduct interviews with shopping centre investors, property managers and tenants. Firstly, it would be relevant to analyse all types of data about visitors that can be measured or gathered. Second, it would be interesting to ask tenants which of this data they could use to improve the profitability of their shop. During this step, a distinction can be made between the 'data wishes' of different types of tenants. It could be that there are divergent wishes between local entrepreneurs and retail chains. Thirdly, the shopping centre investors and property managers can be confronted with the data needs of the tenants and bottlenecks and hurdles about data sharing and transparency can be mapped.

10. Reflection



10. Reflection

First, I will elaborate on my initial motivation to subscribe for the retail graduation lab.

In 2012, I co-founded the company Chainels. Chainels is the tenant engagement portal for shopping centres and inner cities. The purpose of the portal is to facilitate collaboration and data sharing between tenants, landlords and service providers like property management, marketing and security.

During day- to- day work I am in frequent contact with landlords, property managers and retailers. In my opinion retail is one of the most dynamic asset classes in real estate. Retailers have to adopt continuously to meet the ever-changing demands of consumers. Retail real estate should facilitate these changing needs as much as possible.

In spring 2016 I subscribed for the graduation lab 'department stores and the attractive city'. The leading researchers for the graduation lab at the time were: dr. Ir. D.C. Kooijman and Dr. Ir. H.T. Remøy.

My initial research proposal (P1) was focused on exploring the future of department stores in the Netherlands. The idea was led by the bankruptcy of the former V&D departments stores. Back then I was interested to explore opportunities for the large retail spaces that were left vacant. However, in October 2016 Mr. Kooijman announced that he would leave the TU Delft as of the first of November. Thereafter I had a meeting with my second mentor Mrs. Remøy.

Mrs. Remøy pointed out that Mr. Kooijman's expertise was focused on retail and department stores and that it might become a challenge to give me enough guidance on the retail topic. During the meeting I indicated that I was interested in quantitative research methods.

In the summer of 2016, I had my first meeting with my current mentor Dr. C.J. van Oel. During our meeting, I shared my research about department stores so far. Besides this, I shared my enthusiasm about retail and showed her the features of tenant engagement portal Chainels. During the meeting we concluded that there were numerous possibilities to conduct quantitative analysis in the retail domain. Since I'm working a lot with data on a day- to- day basis and because it would be easier for me to focus on a topic which has some common grounds with my work.

My plan was to conduct research on factors that contribute to the performance of shopping centres. The purpose of the research was to analyse tenant and shopping mall characteristics and its influence on the number of visitors and visitor dwell times. During this research I examined different technologies that can be used for the localization of people in a shopping centre. Mrs. van Oel indicated that it would be helpful to have an expert on the topic of indoor localization in the mentor team.

During my P2, which was in January 2017, Ir. Edward Verbree joined the mentor team. Because of his background with GIS (Geographic Information Systems) Mr. Verbree could guide me with the technical aspects of localization of visitors in a shopping centre. In this period, I was in contact with the marketing manager of CBRE GI, the retail investment firm that owns, among other assets, a prime shopping area in the centre of Rotterdam. My plan was to use this shopping area, as case for the data collection.

During an interview I held with the marketing manager I learnt about the ways in which the real estate investment firm captures data of visitors.

Back then, certain footfall figures were collected, however the data was only captured on a few spots in the shopping area, so it was not possible to analyse data on the level of the individual store. Besides this, the dwell time of the visitors was not being stored as well. During the interview I learnt a lot about the potential limitations of researching footfall databases. The marketing manager indicated for example that it not easy to identify whether a person is just passing by all the shops or enters a shop. Furthermore, I learnt that during events in the shopping centre there are sometimes a lot of visitors on the street whereas the turnover of the shops is disappointing. Moreover, I learnt that there is already existing knowledge about the attractivity of certain retail brands. I learnt that retail formulas such as Bijenkorf and Primark are anchors in the shopping area and drivers of footfall. The limitations of the footfall database and the uncertainties about potential GDPR related issues forced me to choose another methodology for data gathering.

After discussing the feedback from the interview with the marketing manager with my mentor Mrs. van Oel, I decided to compose questionnaires to capture feedback from visitors and tenants. I had conducted a literature research on factors that influence shopping centre performance. My plan was to receive feedback from both visitors and tenants and develop a model for data sharing between the involved stakeholders in a shopping centre. After sharing this plan with Mr. Verbree, he pointed out that the methodologies that I was about to use were not in line with his field of expertise.

Thereafter, Ir. J.S.J. Koolwijk was appointed as my new second mentor. After I finished the questionnaires for visitors and tenants, I shared them with the marketing manager of CBRE GI. Although the marketing manager indicated that my research with regard to the marketing topics was interesting, it turned out that consumer and tenant research was conducted in the shopping centre recently. Therefore, it did not seem like a good idea to bother the tenants and consumers with another research within a short timeframe.

After this news I decided to pick another case for my research project as soon as possible. I knew the board from the tenant association of Shopping Centre Meerzicht and convinced them to collaborate in my research project. Mid-august 2018 the board gave their approval for the research. Since I was struggling to combine my research project with the work for my company, I decided to seek assistance from two people from the company Markteffect for the face-to-face surveying.

When I started analysing the dataset, I noticed that the average age of the respondents was unexpectedly high: 61 years and a month. After discussing the first results of my data analysis with my mentors I decided to focus my research on shopping preferences of elderly people. I believe that the results can provide input for fruitful discussion on the future of neighbourhood shopping centres in an aging population.

In general, it was quite challenging to combine a full-time job with my graduation project. There were periods where the company grasped my full attention and I was not able to work on the research for several consecutive months. I noticed that each time when I continued working on the thesis after a period of work for the company that it took some effort to get complete focus on my research. However, I kept investing time in my research during the weekends and sometimes during the evenings. What really helped me was that I planned three 'thesis weeks. During these weeks I spent at least 80% of my time on my research. In the last week of November 2018, I focused on data analysis and on learning the ins- and- outs of SPSS. In the second thesis week, during the Christmas Holidays (2018- 2019), I focused on writing several chapters of my thesis, including problem analysis, background information, methods and initial findings. During the last week of February 2019, I focused on finalizing the logistic regression model, the conclusion, discussion, recommendations for future research, the reflection and abstract.

11. Reference list



11. References list

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12. Appendices



Appendix 1- Adoption of online shopping in different age categories during 2018

		Total online purchases for private purposes	Food, cosmetics and cleaning	Medicines	Clothing or sport articles	Digital study or learning materials	Film, music	Books, magazines and newspapers	Tele-communication services (subscriptions)	Soft-/ hardware and electronic supplies	Household goods and appliances	Travel and accommodations	Financial products or services	Tickets for events	Other purchases
Age:	Year														
18 -25 yr	2014	91,3	13,9	2,5	56,0	31,6	23,8	32,5	25,3	22,9	17,1	51,0	9,0	54,2	44,6
	2015	90,6	18,6	4,7	57,9	29,8	20,7	39,1	23,7	36,5	17,3	42,4	6,9	51,6	47,3
	2016	89,6	19,9	6,5	65,7	27,5	16,7	39,0	27,5	37,9	22,5	50,8	.	58,9	48,1
	2017	94,6	33,6	6,6	74,0	38,7	25,7	41,9	34,0	41,8	27,3	58,9	47,4	69,6	54,7
	2018	93,4	19,0	9,5	76,1	43,3	19,9	37,3	34,8	31,5	30,8	58,9	47,2	66,7	52,5
25 - 35 yr	2014	90,2	20,6	4,6	60,7	15,1	28,0	42,1	28,0	28,8	41,1	61,6	12,2	53,6	43,6
	2015	92,1	26,3	6,8	64,7	13,7	25,1	40,9	28,3	31,7	43,2	61,1	12,0	51,9	47,4
	2016	92,4	30,0	8,0	71,2	14,2	25,0	40,3	28,3	40,0	46,6	63,3	.	54,6	46,5
	2017	94,4	39,6	8,8	70,7	14,6	24,1	39,0	26,0	37,4	53,4	68,5	55,4	65,4	45,3
	2018	96,5	30,1	12,2	78,2	20,6	24,1	40,6	32,7	31,4	56,7	69,0	60,3	67,1	51,7
35 - 45 yr	2014	85,5	20,3	6,2	57,7	10,1	30,4	37,3	29,6	23,4	38,7	54,3	7,8	44,6	37,4
	2015	84,6	17,7	5,5	57,9	8,7	20,4	31,4	24,4	31,8	40,3	54,3	7,9	46,6	35,4
	2016	87,2	27,5	7,2	66,5	8,7	23,1	38,1	24,4	31,7	44,4	57,9	.	53,1	39,7
	2017	93,0	37,0	10,2	75,0	11,1	22,6	37,4	32,7	40,5	55,5	64,1	39,5	62,3	45,7
	2018	91,0	26,9	12,0	74,1	17,6	22,8	41,2	32,5	29,9	57,7	65,2	43,3	60,4	45,4
45 - 55 yr	2014	77,4	14,2	6,4	43,6	8,5	18,5	35,1	22,5	20,0	25,3	50,4	4,8	39,9	26,9
	2015	75,9	17,0	7,7	48,6	10,8	17,3	32,7	24,7	27,6	26,7	48,1	6,9	37,7	30,5
	2016	82,2	22,6	8,3	51,5	10,4	15,4	33,4	23,8	26,5	33,8	55,9	.	44,4	34,0
	2017	85,3	30,5	10,1	58,8	13,2	19,3	37,5	28,9	32,1	38,7	58,6	37,3	51,4	38,2
	2018	87,9	17,6	11,8	64,5	17,2	18,7	35,8	28,0	26,8	47,4	62,3	35,6	55,6	39,0

		Total online purchases for private purposes	Food, cosmetics and cleaning	Medicines	Clothing or sport articles	Digital study or learning materials	Film, music	Books, magazines and newspapers	Tele-communication services (subscriptions)	Soft-/ hardware and electronic supplies	Household goods and appliances	Travel and accommodations	Financial products or services	Tickets for events	Other purchases
55 -65 yr	2014	65,2	11,4	5,9	29,8	4,4	11,7	28,9	17,7	15,0	21,0	41,2	4,9	27,9	15,6
	2015	68,0	13,4	6,2	31,3	5,2	11,3	28,5	18,0	22,3	22,5	40,4	6,2	29,8	21,3
	2016	72,2	14,3	8,6	36,1	5,1	10,4	27,2	17,3	21,3	27,2	45,1	.	33,0	20,2
	2017	74,5	21,9	10,5	40,5	7,2	14,7	27,1	19,5	23,6	35,0	47,2	31,3	36,6	24,8
	2018	76,9	8,8	11,2	44,1	8,5	12,5	29,6	20,2	19,1	37,4	50,7	27,8	38,3	23,2
65 - 75 yr	2014	43,6	6,5	3,2	15,6	1,4	5,5	15,7	12,8	11,8	12,3	23,5	4,0	15,7	10,6
	2015	44,9	5,9	4,6	17,3	2,3	6,3	18,6	12,5	13,7	12,4	25,2	3,6	15,5	11,5
	2016	49,8	9,7	6,3	25,4	1,2	5,6	18,2	11,3	11,6	19,2	27,5	.	17,2	12,2
	2017	52,4	13,5	8,2	24,6	2,1	5,0	19,3	12,6	13,8	23,8	31,3	24,6	20,0	13,3
	2018	56,5	4,8	9,8	28,1	1,9	6,1	21,5	15,2	13,0	23,7	32,0	18,2	23,4	13,5
75+r	2014	15,6	1,4	1,6	4,2	.	1,4	5,7	4,3	4,0	2,8	5,8	.	2,8	2,1
	2015	17,2	2,4	1,7	4,2	.	1,0	6,3	2,0	4,0	2,9	7,0	0,9	3,6	2,8
	2016	18,1	4,3	3,5	6,7	.	1,7	6,2	6,4	4,5	3,4	7,1	.	3,5	4,4
	2017	24,6	4,7	3,9	8,9	.	1,1	7,3	6,0	5,0	8,7	8,2	10,0	4,6	6,4
	2018	29,2	3,9	4,3	13,1	1,7	1,7	7,7	8,5	4,2	8,1	14,4	8,1	7,4	3,9
Source: CBS															

Appendix two- Questionnaire for visitors

Leuk dat je deelneemt aan dit onderzoek over winkelbeleving!

Doel van het onderzoek

We zijn geïnteresseerd in jouw mening over winkelcentrum Meerzicht. De feedback van jou en andere bezoekers brengen we in kaart voor wetenschappelijk onderzoek aan de TU Delft. Je input kan bovendien gebruikt worden om de winkelbeleving in Winkelcentrum Meerzicht te verbeteren.

Win een prijs!

Laat aan het eind van de vragenlijst je mailadres achter, je maakt dan kans op 1 van de 5 prijzen ter waarde van 20 euro.

Wil je mee doen aan dit onderzoek en aan de vragenlijst beginnen?

Als je meedoet aan dit onderzoek, geef je toestemming voor het verzamelen, bewaren en inzien van de door jou verstrekte gegevens.

- Ja, ik doe graag mee met het onderzoek
- Nee, ik doe liever niet mee met het onderzoek
- Ik wil eerst nog extra informatie voor ik beslis

Je gegevens

Al je gegevens blijven vertrouwelijk en de data wordt op een beveiligde plek bewaard. De onderzoeksgegevens zijn in de rapportage voor ondernemersvereniging winkelcentrum Meerzicht en bij de TU Delft niet te herleiden naar jou. De Technische Universiteit Delft bewaart je gegevens tot 5 jaar na publicatie. Daarna worden de persoonsgegevens vernietigd.

Meedoen aan het onderzoek is vrijwillig. Wil je tijdens het invullen van de vragenlijst stoppen? Dan kan dat. Je hoeft hiervoor geen reden op te geven maar wij zouden de vragen die je wel hebt ingevuld graag gebruiken voor het onderzoek.

Je kunt ook per email contact opnemen met de onderzoeker, Sander Verseput (s.m.m.verseput@student.tudelft.nl) of met de begeleidster van het onderzoek: Dr.

Clarine van Oel (c.j.vanoel@tudelft.nl).

Wil je meedoen aan dit onderzoek en aan de online vragenlijst beginnen?

Als je hieronder aangeeft mee te willen doen met het onderzoek, geef je toestemming voor het verzamelen, bewaren en inzien van de door jou verstrekte gegevens.

- Ja, ik doe graag mee
- Nee, ik doe liever niet mee

In welk jaar ben je geboren?

Wat is je geslacht?

- Man
- Vrouw
- Gender neutraal

Wat is je postcode? (bijv. 2000 BB)

Wat is het bruto maandelijkse inkomen van je huishouden?

Wat is de samenstelling van je huishouden?

- Eenpersoonshuishouden
- Meerpersoonshuishouden zonder kinderen
- Meerpersoonshuishouden met kinderen

Met welk vervoer ben je hier gekomen? (meerdere antwoorden mogelijk)

- Auto
- Openbaar vervoer

- Fiets
- Lopend
- Motor
- Scooter

Hoe tevreden ben je over de parkeergelegenheid?

Zeer ontevreden

Zeer tevreden

0 1 2 3 4 5 6 7 8 9 10

Kon je makkelijk je auto kwijt?

- Ja
- Nee

Hoe tevreden ben je over je reis in het openbaar vervoer naar het winkelcentrum?

Zeer ontevreden

Zeer tevreden

0 1 2 3 4 5 6 7 8 9 10

Hoe veilig vond je je reis naar het winkelcentrum?

Zeer onveilig

Zeer veilig

0 1 2 3 4 5 6 7 8 9 10

Hoe veilig vond je je reis naar het winkelcentrum?

Zeer onveilig

Zeer veilig

0 1 2 3 4 5 6 7 8 9 10

Stelling: ik zou me in het gebied veiliger voelen als er (meer) camera's ophangen

- Ja
- Nee
- Anders namelijk

Je gaf aan dat je je niet veiliger voelt als er (meer) camera's ophangen in het gebied.
Wat is hiervan de reden?

- Ik voel me al veilig genoeg
- Als ik overal camera's zie hangen dan voel ik me juist onveiliger
- Vanwege mijn privacy heb ik liever niet dat er overal camera's hangen

Mis je een bepaald soort winkel in winkelcentrum Meerzicht?

- Ja
- Nee

Kun je aangeven welke winkel of welk type winkel je mist?

Rank de volgende foto's van het winkelgebied. Zet de aantrekkelijkste op de eerste plaats.





Block 1

Zou je gebruik willen maken van een toiletvoorziening in het winkelcentrum?

- Ja, er zijn te weinig toiletvoorzieningen
- Nee, er zijn voldoende toiletvoorzieningen in de omgeving.

Ben je tevreden over het aantal aanbiedingen in winkelcentrum Meerzicht?

Zeer ontevreden

Zeer tevreden

0 1 2 3 4 5 6 7 8 9 10

Ben je tevreden over het 'soort' aanbiedingen in winkelcentrum Meerzicht?

Zeer ontevreden

Zeer tevreden

0 1 2 3 4 5 6 7 8 9 10

Voldoet het aanbod van winkelcentrum Meerzicht aan je verwachting?

Ik ben ontevreden over het aanbod

Ik ben zeer tevreden over het aanbod

0 1 2 3 4 5 6 7 8 9 10

Wanneer verwacht je weer terug te komen naar winkelcentrum Meerzicht?

- Deze maand nog
- Ergens komende 3 maanden
- Ergens komende 6 maanden
- Ergens komende 12 maanden
- Ik woon ver weg dus weet het nog niet
- Ik ben niet van plan om nog terug te komen
- Ik weet het niet

Heb je een gouden tip voor het winkelcentrum?

Laat hieronder je mailadres* achter en maak kans prijs!

*Je mailadres wordt alleen gebruikt om je te informeren als je hebt gewonnen.



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Appendix three - Questionnaire for tenants

Beste winkelier,

Vanuit een onderzoeker aan de Technische Universiteit Delft hebben wij het verzoek gekregen om een vragenlijst te delen met onze winkeliers.

Het bestuur van winkeliersvereniging Meerzicht steunt dit onderzoek en vraagt u om even de tijd te nemen om de vragenlijst in te vullen. De vragenlijst is opgesteld om uw mening over het winkelcentrum in kaart te brengen. Uw input wordt gebruikt voor wetenschappelijk onderzoek en de resultaten kunnen gebruikt worden om van Meerzicht een aantrekkelijker winkelgebied te maken.

Wij danken u voor uw medewerking!

Wilt u mee doen aan dit onderzoek en aan de online vragenlijst beginnen?

Als u meedoet aan dit onderzoek, geef u toestemming voor het verzamelen, bewaren en inzien van de door u versterkte gegevens.

- Ja, ik doe graag mee met het onderzoek
- Nee, ik doe liever niet mee met het onderzoek
- Ik wil eerst nog extra informatie voor ik beslis

Uw gegevens

Al uw gegevens blijven vertrouwelijk en de data wordt op een beveiligde plek bewaard. De onderzoeksgegevens zijn in de rapportage bij de TU Delft niet te herleiden naar u. De TU Delft bewaart uw gegevens tot 5 jaar na publicatie. Daarna worden de persoonsgegevens vernietigd.

Meedoen aan het onderzoek is natuurlijk vrijwillig. U kunt de vragenlijst ook pauzeren en op een later moment verdergaan. Wilt u tijdens het invullen van de vragenlijst stoppen dan kan dat. U hoeft hiervoor geen reden op te geven maar wij zouden de vragen die u wel hebt ingevuld graag gebruiken voor het onderzoek.

U kunt ook per email contact opnemen met de onderzoeker: Sander Verseput (s.m.m.verseput@student.tudelft.nl) of met de begeleidster van het onderzoek: Dr.

Clarine van Oel (c.j.vanoel@tudelft.nl).

Wilt u mee doen aan dit onderzoek en aan de online vragenlijst beginnen?

Als u hieronder aangeeft mee te willen doen met het onderzoek, geeft u toestemming voor het verzamelen, bewaren en inzien van de door u verstrekte gegevens.

- Ja, ik doe graag mee
- Nee, ik doe liever niet mee

Wat is de naam van uw winkel?

Wat is uw functie?

- Zelfstandig ondernemer
- Store manager
- Assistent Store manager
- Winkelmedewerker
- Franchise nemer
- Medewerker hoofdkantoor
- Stagiair(e)
- Anders namelijk:

Hoe schoon vond u het winkelcentrum de afgelopen maand?

Zeer vies

Zeer schoon

- 0 1 2 3 4 5 6 7 8 9 10

Wat vindt u van de verlichting in het winkelcentrum?

- Ik vind de kleur en de felheid van het licht 'onaangenaam koud'
- Ik vind de kleur en de felheid van het licht 'een beetje koud'
- Ik vind de kleur en felheid van het licht 'aangenaam warm'

Wat vindt u van de uitstraling van het straatmeubilair?

Het gaat hierbij om de bankjes in de openbare ruimte die net buiten het winkelcentrum staan. Deze staan o.a. bij de entree Middelwaard (de entree waar Dunkies kappers en Schoonenberg zijn gevestigd).

Onaantrekkelijk

Aantrekkelijk

0 1 2 3 4 5 6 7 8 9 10

Wat vindt u van het comfort van het straatmeubilair?

Oncomfortabel

Comfortabel

0 1 2 3 4 5 6 7 8 9 10

Hoe veilig voelt u zich in de winkel?

Zeer onveilig

Zeer veilig

0 1 2 3 4 5 6 7 8 9 10

Is uw winkel wel eens overvallen?

Nee

Ja

Hoe lang geleden is uw winkel voor het laatst overvallen?

Hoe vaak is uw winkel overvallen in de laatste 3 jaar?

1 keer

2 keer

3 keer

4 keer

5 keer

Vaker dan 5 keer

Ik weet het niet

Hoe hoog schat uw de maandelijkse omzetsderving in uw winkel als gevolg van winkeldiefstal?

(vul een afgerond getal in zonder euroteken of tekst. Voorbeeld: als u inschat dat uw omzetsderving maandelijks 250 euro bedraagt dan vult u het getal '250' in)

**Heeft u nog aanvullende opmerkingen bij bovenstaande vragen? Dit is uw kans!
Noteer hier uw feedback.**

Wij zijn benieuwd naar de impact van bepaalde evenementen en acties op uw omzet. Kunt u aangeven of de volgende evenementen en acties voor extra omzet hebben gezorgd?

Tip: als u uw omzet niet meer exact weet kunt u ook een schatting maken van de impact van het evenement op uw omzet.

Moederdagactie - zaterdag 12 mei. Tijdens deze dag werden moeders gefotografeerd, de foto's werden op Facebook geplaatst en voor de mooiste foto's werden waardebonnen uitgekeerd. Daarnaast waren er diverse acties van winkeliers.

Vergeleken met een gemiddelde zaterdag was mijn omzet:

- Meer dan 20% lager.
- 15% tot 20% lager.
- 10% tot 15% lager
- 5% tot 10% lager
- Niet meer of minder dan 5% afwijkend
- 5% tot 10% hoger
- 10% tot 15% hoger
- 15% tot 20% hoger
- Meer dan 20% hoger

Van donderdagavond 14 juni tot vrijdagavond 15 juni vond het suikerfeest plaats. Heeft u in de voorliggende periode van maandag 11 juni t/m 15 juni een verschil gemerkt in de omzet van uw winkel?

- Mijn omzet was in deze periode lager dan een gemiddelde midweek
- Er was geen substantieel verschil in mijn omzet vergeleken met een gemiddelde midweek
- Mijn omzet was in deze periode hoger dan een gemiddelde midweek.

Vaderdag - zaterdag 16 juni. Tijdens deze dag stond er een photobooth waar kinderen met hun vaders op de foto konden. Daarnaast waren er diverse acties van winkeliers.

Vergeleken met een gemiddelde zaterdag was mijn omzet:

- Meer dan 20% lager.
- 15% tot 20% lager.
- 10% tot 15% lager
- 5% tot 10% lager
- Niet meer of minder dan 5% afwijkend
- 5% tot 10% hoger
- 10% tot 15% hoger
- 15% tot 20% hoger
- Meer dan 20% hoger

Wat is uw mening over de algemene openingstijden van het winkelcentrum?

- De algemene openingstijden sluiten niet aan bij de wensen van mijn doelgroep & klanten.
- De algemene openingstijden sluiten aan bij de wensen van mijn doelgroep & klanten.
- Anders namelijk

Is uw winkel soms open op zondag?

- Ja
- Nee

Hoe rendabel zijn de koopzondagen voor uw winkel?

Geef op een schaal van 0 tot 10 aan hoe rendabel de koopzondagen zijn. U selecteert een getal van 0 tot 4 indien de zondagopenstelling u geld kost. U selecteert 5 als u ongeveer break even draait en u selecteert een score van 6 tot 10 als uw winkel baat heeft van de koopzondagen.

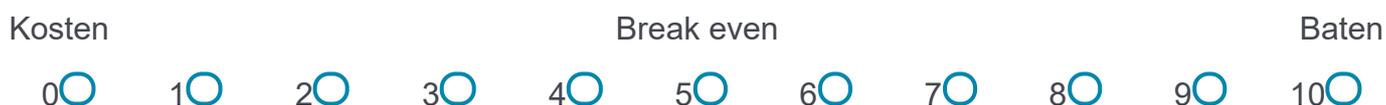


Is uw winkel op vrijdag na 18.00 nog open voor bezoekers?

- Ja
- Nee

Hoe rendabel zijn de koopavonden op de vrijdag voor uw winkel?

Geef op een schaal van 0 tot 10 aan hoe rendabel de koopavonden op de vrijdagavond voor u zijn. U selecteert een getal van 0 tot 4 indien de openstelling op vrijdagavond u geld kost. U selecteert 5 als u ongeveer break even draait en u selecteert een score van 6 tot 10 als uw winkel baat heeft van de koopavonden.



Hoe beoordeelt u in het algemeen de winstgevendheid van uw winkel in winkelcentrum Meerzicht?

Geef op een schaal van 0 tot 10 aan hoe u de winstgevendheid van uw winkel in Meerzicht beoordeelt. U selecteert een getal van 0 tot 4 indien uw winkel verliesgevend is. U selecteert 5 als u ongeveer break even draait en u selecteert een score van 6 tot 10 als uw winkel winstgevend is.



Wat vindt u van de bewegwijzering in het winkelcentrum?

- De bewegwijzering is niet duidelijk, ik krijg vaak vragen van klanten waar bepaalde faciliteiten of andere winkels zijn gevestigd.
- De bewegwijzering is duidelijk, ik krijg niet overdreven vaak vragen van klanten waar bepaalde faciliteiten of andere winkels zijn gevestigd.
- Anders namelijk

Wat vindt u de drie belangrijkste zaken die de eigenaar van het winkelcentrum in haar dienstverlening richting de huurders (u) moet (laten) uitvoeren?

Graag de drie zaken selecteren die u het belangrijkste acht.

- Organisatie van evenementen (marketing)
- In overleg treden met de gemeente over aanpassing van de openingstijden
- Beveiliging
- Informatie delen over de te verwachten drukte
- Anders namelijk
- Aantrekken en behouden van sterke merken (aandacht voor de huurdersmix)
- Technisch beheer
- Schoonmaak
- Social media marketing
- Informatie delen over doelgroepen en het verzorgingsgebied van het winkelcentrum
- In overleg treden met de gemeente over de bereikbaarheid van het winkelcentrum

Heeft u nog aanvullende opmerkingen bij bovenstaande vragen? Of heeft u een gouden tip om het winkelcentrum te verbeteren? Dit is uw kans!

Noteer hier uw feedback of uw gouden tip.

Dit is het einde van de enquête, hartelijk dank voor uw deelname!