

MASTER

The influence of atmospherics of inner city shopping areas on the experiential value of consumers

a study into the contribution of atmospherics of inner city shopping areas to the experiential value of the consumer, and the role of tenant variety in this context

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Appendix 1: Operationalization

Main variable	Survey number	Items	Level of measurement	The way of measuring
Motivation	1	Motivation	Nominal	
General opinion locations and rankings	2	Familiarity with location A	Ordinal	Likert scale (7)
	3	Familiarity with location B	Ordinal	Likert scale (7)
	4	Familiarity with location C	Ordinal	Likert scale (7)
	5	Familiarity with location D	Ordinal	Likert scale (7)
	6	General valuation location A	Ordinal	Likert scale (7)
	7	General valuation location B	Ordinal	Likert scale (7)
	8	General valuation location C	Ordinal	Likert scale (7)
	9	General valuation location D	Ordinal	Likert scale (7)
	10	Proportion of visits to location A	Ordinal	Likert scale (7)
	11	Proportion of visits to location B	Ordinal	Likert scale (7)
	12	Proportion of visits to location C	Ordinal	Likert scale (7)
	13	Proportion of visits to location D	Ordinal	Likert scale (7)
	14	Favourite location	Ordinal	Ranking 1-4
	14a	Reason most favourite location		Open question
	14b	Reason least favourite location		Open question
15	Atmospheric location	Ordinal	Ranking 1-4	
15a	Reason most atmospheric location		Open question	
15b	Reason least atmospheric location		Open question	
Demographics	16	Age	Ratio	Years
	17	Gender	Nominal	
	18	Postal code		4 digits
	19	Household composition	Nominal	
	20	Education level	Ordinal	
	21	Education level partner	Ordinal	
	22	Net income household	Interval	Euros per year
	23	Group composition	Nominal	
	24	Males in group	Ratio	Number of males \geq 18 years
	25	Females in group	Ratio	Number of females \geq 18 years
	26	Children \leq 13 years in group	Ratio	Number of children \leq 13 years
	27	Children \geq 13 years in group	Ratio	Number of children \geq 13 years
	28	Transport mode	Nominal	

Appendix 2: Survey

Huidige locatie <input type="radio"/> Emmapassage <input type="radio"/> Heuvelstraat <input type="radio"/> Pieter Vreedeplein

Enquête Afstudeeronderzoek Consumentenbeleving

1. **Het doel van mijn bezoek is:**

- Doelgericht winkelen
 Winkelen voor plezier
 Beide
 Anders, namelijk.....

Hoe bekend bent u met onderstaande locaties?

	Onbekend			0			Bekend		
2. <u>Emmapassage</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. <u>Heuvelstraat</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. <u>Pieter Vreedeplein</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Wat is uw algemeen oordeel over de onderstaande locaties?

	Negatief			0			Positief		
5. <u>Emmapassage</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. <u>Heuvelstraat</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. <u>Pieter Vreedeplein</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Als u deze binnenstad bezoekt, hoe vaak komt u dan op onderstaande locaties?

	Vrijwel Nooit			0			Vrijwel Altijd		
8. <u>Emmapassage</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. <u>Heuvelstraat</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. <u>Pieter Vreedeplein</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. **Op welke locatie verblijft u het liefst? Maak een top 3.**

- Emmapassage
 Heuvelstraat
 Pieter Vreedeplein

11a. **Waarom verblijft u het liefst op <naam locatie nr. 1> ?**

.....

11b. **Waarom verblijft u het liefst niet op <naam locatie nr. 3> ?**

.....

12. **Welke locatie vindt u het meest sfeervol? Maak een top 3.**

- Emmapassage
 Heuvelstraat
 Pieter Vreedeplein

12a. **Waarom vindt u <naam locatie nr. 1> het meest sfeervol?**

.....

12a. **Waarom vindt u <naam locatie nr. 3> het minst sfeervol?**

.....

Persoonsinformatie

1. **Wat is uw leeftijd?**

..... Jaar

2. **Wat is uw geslacht?**

Man Vrouw

3. **Wat is uw postcode?**

.....

4. **Wat is de samenstelling van uw huishouden?**

Alleenstaand zonder kinderen

Alleenstaand met kinderen

Samenwonend zonder kinderen

Samenwonend met kinderen

Studentenhuis

Thuiswonend

Anders:

5. **Wat is uw basisopleiding**

Basisonderwijs

Middelbaar onderwijs

MBO

HBO

Universiteit

6. **En van uw partner?**

Geen partner

Basisonderwijs

Middelbaar onderwijs

MBO

HBO

Universiteit

7. **Wat is het netto maandinkomen van uw huishouden?**

€ 1.200 of minder per maand

€ 1.200 tot € 2.000 per maand

€ 2.000 tot € 4.000 per maand

€ 4.000 tot € € 6.000 per maand

€ 6.000 of meer per maand

Geen antwoord

8. **Met wie bent u hier?**

Alleen

Familie

Vrienden

Anders:.....

9. **Samenstelling groep aanwezigen (inclusief uzelf):**

Aantal vrouwen:

Aantal mannen:

Aantal kinderen 13 jaar of jonger:

Aantal kinderen ouder dan 13 jaar:

10. **Hoe bent u hier gekomen?**

Auto

Fiets

Openbaar vervoer

Lopend

Anders:

Hartelijk dank voor uw deelname

Onderstaande tabel a.u.b. niet invullen

6
Stad	Locatie	Datum	Tijd	Enquêteur

<p><u>Richtlijnen volgnummer</u></p> <ol style="list-style-type: none"> 1. Stad reeds ingevuld (Tilburg = 6) 2. Locatie als volgt: <ul style="list-style-type: none"> 1 = Emmapassage 2 = Heuvelstraat 3 = Pieter Vreedeplein 3. Datum als volgt: dag en maand aan elkaar <ul style="list-style-type: none"> → 6 februari wordt '0602' 	<ol style="list-style-type: none"> 4. Tijd op moment van afronden weergeven in uren en minuten. <ul style="list-style-type: none"> → 12:34 wordt '1234' 5. Enquêteur weergeven volgens onderstaande lijst: <ol style="list-style-type: none"> 1., 2., 3.,
---	--

Appendix 3: Assessment atmospheric variables

Tenant variety variables



Vacant stores

Percentage of vacant stores in a survey location.



Daily Stores

Percentage of foodstuff and personal care related stores in a survey location.



Fashion & Luxury stores

Percentage of for example 'footwear and leather goods', 'antiques and art' and 'clothing and fashion' related stores in a survey location.



Other stores

Percentage of for example 'sports and games', 'animal and plant' and 'media' related stores in a survey location.



Restaurants & Leisure related facilities

Number of restaurants and leisure related facilities such as bars and a casino in a survey location.



Shop branches

The total number of different stores categories such as for example 'footwear and leather goods' and sports and games' in a survey location.



Average store size

The average store size in square meters of a survey location.



Share of shop formulas

The ratio between retail chain stores such as Zara and H&M and independent retailers.

Aesthetic design variables

Accessibility



Distance to public transport

Distance to the nearest public transport facility measured in meters from the nearest entrance point of the shopping area.



Distance to parking facility

Distance to the nearest parking facility measured in meters from the nearest entrance point of the shopping area.

Service level



Service elements

Categorization made by the number of service elements such as ATM's, WIFI hotspots, maps of shopping area, free bicycle sheds et cetera. The presence of only one different element (or less) is categorized as 'low', two or three different elements as 'medium' and more than three as 'high'.

Shape of facades



1. Diverse (historical)

The architectural style of the facades in the survey area is diverse and historical.



2. Clean and uniform

The architectural style of the facades in the survey area is clean and uniform.



3. Diverse (non-historical)

The architectural style of the facades in the survey area is diverse and non-historical.

Material of facades



1. *Historical*

The materials of the majority of the facades in the survey area are traditional or historical.



2. *Contemporary*

The materials of the majority of the facades in the survey area are modern.

Shape of pavements



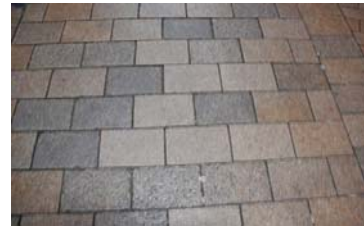
1. *Rough*

Most common material of pavements in the survey area is rough.



2. *Smooth*

Most common material of pavements in the survey area is Smooth.



3. *Mixed*

Most common material of pavements in the survey area is Mixed.

Colour of facades



1. *Dark*

Most common colour of the facades in the survey area is dark.



2. *Mixed*

Most common colour of the facades in the survey area is mixed.



3. *Bright*

Most common colour of the facades in the survey area is bright.

Colour of pavements



1. *Dark*

Most common colour of the pavements in the survey area is dark.



2. *Mixed*

Most common colour of the pavements in the survey area is mixed.



3. *Bright*

Most common colour of the pavements in the survey area is bright.

Indoor



1. *No*

The survey area is outdoor.



2. *Yes*

The survey area is indoor.

Greenery



1. *Low*

There is (almost) no greenery in the survey area.



2. *Medium*

There are several small or medium sized greenery units



3. *High*

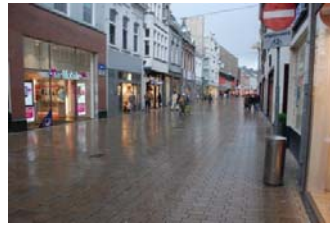
There are several large sized greenery units.

Street furniture



1. None

No litter bins or benches.



2. Low

Only litter bins or only benches.



3. High

Both litter bins and benches.

Shop windows



1. Discrete

The windows of stores in the survey area are small and on ground level.



2. Neutral

The windows of stores in the survey area mostly entirely full of glass on ground level.



3. Striking

The windows of stores in the survey area are full of glass over several stories.

Advertisement signs



1. Discrete

Small advertisement signs parallel to the façade.



2. Neutral

Small advertisement sign perpendicular to façade or medium sized advertisement sign parallel to the façade.



3. Striking

Large advertisement signs perpendicular to the façade.

Width of the street



The average width of the survey area in meters, measured in Google Earth

Height of the buildings



The average number of storeys in the shopping street

Width to height ratio



The average width of the survey area divided by the average number of storeys in the survey area.

Crowdedness

The average number of pedestrians per day in a survey location measured by Locatusonline (2012, 2013 & 2013). A distinction is made of five different retail areas: A1-, A2-, B1-, B2- and C-locations. For this study, these segmentations are divided into three categories: B2- and C-locations stand for 'low crowdedness, a B1-location for 'average crowdedness' and an A1- and A2-location for 'high crowdedness'.

Elevation



1. No

No floors on different heights.



2. Yes

Floors on different heights.

Appendix 4: Answers open questions

Most favourite location	Total
Shop offer	903
Cosiness/ Crowdedness	159
Being Indoor	112
Location	130
Atmosphere	59
Visual appeal	78
Restaurants	51
Spaciousness	49

Least favourite location	Total
Shop offer	202
Visual appeal	68
Cosiness/ Crowdedness	43
Location	42
Atmosphere	33
Spaciousness	14

Most atmospheric location	Total
Visual appeal	353
Cosiness/ Crowdedness	289
Shop offer	197
Atmosphere	80
Being Indoor	77
Spaciousness	49
Furnishing	42
Restaurants	34
Location	14

Least atmospheric location	Total
Visual appeal	160
Cosiness/ Crowdedness	79
Shop offer	77
Atmosphere	48
Spaciousness	46
Location	19

Appendix 5: Ranges within tenant variety characteristics

	Low/Small		Average		High/Large	
	min.	max.	min.	max.	min.	max.
Ratio Vacant stores	0%	8%	8%	12%	12%	40%
Ratio Daily stores	0%	8%	8%	11%	11%	35%
Ratio Fashion & Luxury stores	34%	59%	59%	65%	65%	86%
Ratio Other stores	8%	17%	17%	20%	20%	36%
Leisure/ Restaurants	0	4	4	6	6	24
Amount of branches	4	8	8	9	9	15
Average store size (m ²)	52	213	213	282	282	743
Ratio shop formulas	14%	63%	63%	71%	71%	94%

Appendix 6: Dummy variables

Physical characteristics	Abbreviations	Dummies	Meaning	Meaning	Meaning	
Ratio of vacant stores	Vacancy	→ VacancyL	Low	(1) = 1	Average, High	(2, 3) = 0
		VacancyA	Average	(2) = 1	Low, High	(1, 3) = 0
		VacancyH	High	(3) = 1	Low, Average	(1, 2) = 0
Ratio of daily shops	StDail	→ StDailL	Low	(1) = 1	Average, High	(2, 3) = 0
		StDailA	Average	(2) = 1	Low, High	(1, 3) = 0
		StDailH	High	(3) = 1	Low, Average	(1, 2) = 0
Ratio of fashion and luxury shops	StFash	→ StFashL	Low	(1) = 1	Average, High	(2, 3) = 0
		StFashA	Average	(2) = 1	Low, High	(1, 3) = 0
		StFashH	High	(3) = 1	Low, Average	(1, 2) = 0
Ratio of other shops	StOther	→ StOtherL	Low	(1) = 1	Average, High	(2, 3) = 0
		StOtherA	Average	(2) = 1	Low, High	(1, 3) = 0
		StOtherH	High	(3) = 1	Low, Average	(1, 2) = 0
Number of leisure facilities/restaurant	Rest	→ RestL	Low	(1) = 1	Average, High	(2, 3) = 0
		RestA	Average	(2) = 1	Low, High	(1, 3) = 0
		RestH	High	(3) = 1	Low, Average	(1, 2) = 0
Number of branches	Branch	→ BranchL	Low	(1) = 1	Average, High	(2, 3) = 0
		BranchA	Average	(2) = 1	Low, High	(1, 3) = 0
		BranchH	High	(3) = 1	Low, Average	(1, 2) = 0
Average shop size	StSize	→ StSizeS	Small	(1) = 1	Average, Large	(2, 3) = 0
		StSizeA	Average	(2) = 1	Small, Large	(1, 3) = 0
		StSizeL	Large	(3) = 1	Small, Average	(1, 2) = 0
Ratio of shop formulas	StForm	→ StFormL	Low	(1) = 1	Average, High	(2, 3) = 0
		StFormA	Average	(2) = 1	Low, High	(1, 3) = 0
		StFormH	High	(3) = 1	Low, Average	(1, 2) = 0
Distance to parking facility	Acc1	→ Acc1D	≤ 95m	= 1	> 95m	= 0
Distance to public transport	Acc2	→ Acc2D	≤ 125m	= 1	> 125m	= 0
Amount of service elements	Service	→ ServiceL	Low	(1) = 1	Medium	(2) = 0
		ServiceH	High	(3) = 1	Medium	(2) = 0
Shape of facades	ShFac	→ ShFac1	Diverse & Historical	(1) = 1	Clean & Uniform	(2) = 0
		ShFac2	Diverse & Non-historical	(3) = 1	Clean & Uniform	(2) = 0
Material of facades	MatFac	→ MatFacH	Historical	(1) = 1	Contemporary	(2) = 0
Material of pavements	MatPav	→ MatPavR	Rough	(1) = 1	Mixed	(3) = 0
		MatPavS	Smooth	(2) = 1	Mixed	(3) = 0
Colour of facades	ColFac	→ ColFacD	Dark	(1) = 1	Mixed	(2) = 0
		ColFacB	Bright	(3) = 1	Mixed	(2) = 0
Colour of pavements	ColPav	→ ColPavD	Dark	(1) = 1	Mixed	(2) = 0
		ColPavB	Bright	(3) = 1	Mixed	(2) = 0
Amount of light	Light	→ LightL	Low	(1) = 1	Average	(2) = 0
		LightH	High	(3) = 1	Average	(2) = 0
Background noise	BgNoise	→ BgNoiseL	Low	(1) = 1	Average	(2) = 0
		BgNoiseH	High	(3) = 1	Average	(2) = 0
Music	Music	→ MusicY	Yes	(2) = 1	No	(1) = 0
Smell	Smell	→ SmellB	Bad	(1) = 1	None	(2) = 0
		SmellG	Good	(3) = 1	None	(2) = 0
Indoor	Indoor	→ IndoorY	Yes	(2) = 1	No	(1) = 0
Greenery (visual impact)	Green	→ GreenL	Low	(1) = 1	Medium	(2) = 0
		GreenH	High	(3) = 1	Medium	(2) = 0
Street furniture	Furnit	→ FurnitL	Low	(2) = 1	None	(1) = 0
		FurnitH	High	(3) = 1	None	(1) = 0
Shop windows	ShWin	→ ShWinD	Discrete	(1) = 1	Neutral	(2) = 0
		ShWinS	Striking	(3) = 1	Neutral	(2) = 0
Advertisement signs	AdSign	→ AdSignD	Discrete	(1) = 1	Neutral	(2) = 0
		AdSignS	Striking	(3) = 1	Neutral	(2) = 0
Tidiness	Tidi	→ TidiB	Bad	(1) = 1	Average	(2) = 0
		TidiG	Good	(3) = 1	Average	(2) = 0
Width of the street	Width	→ WidthD	> 6,5m	= 1	≤ 6,5m	= 0
Height of the buildings (stories)	Height	→ HeightD	> 3,5	= 1	≤ 3,5	= 0
Width to height ratio	WHrat	→ WHratD	> 3	= 1	≤ 3	= 0
Crowdedness	Crowd	→ CrowdQ	Quiet	(1) = 1	Average	(2) = 0
		CrowdC	Crowded	(3) = 1	Average	(2) = 0
Colour of the light	ColLigh	→ ColLighC	Cool	(1) = 1	Average	(2) = 0
		ColLighW	Warm	(3) = 1	Average	(2) = 0
Elevation	Elevat	→ ElevatY	Yes	(2) = 1	No	(1) = 0
Weather	Weath	→ WeathR	Rainy	(1) = 1	Sunny	(4) = 0
		WeathC	Cloudy	(2) = 1	Sunny	(4) = 0
		WeathPC	Partially Cloudy	(3) = 1	Sunny	(4) = 0

Appendix 7: Interaction dummy variables

Interaction variables	Abbreviations	Dummies	Meaning	Meaning
Motivation	Motive	→ MotiveD	Hedonic	(2) = 1 Utilitarian (1) = -1
Age class	AgeCl	→ AgeCl1	Generation Y	(1) = 1 Silent Generation (4) = -1
		→ AgeCl2	Generation X	(2) = 1 Silent Generation (4) = -1
		→ AgeCl3	Baby Boomers	(3) = 1 Silent Generation (4) = -1
Gender	Gend	→ GendD	Male	(1) = 1 Female (2) = -1
Postal Category	PostCat	→ PostCatD	Within City	(2) = 1 Outside City (1) = -1
Education	Edu	→ EduD	Low educated	(1-3) = -1 High educated (4-5) = 1
Indoor vs. outdoor	Indoor	→ IndoorD	Indoor location	(2) = -1 Outdoor location (1) = 1

Appendix 8: Results multinomial logit models

Interaction code	Meaning
A1	= Generation Y
A2	= Generation X
A3	= Baby Boomers
G	= Gender
MD	= Motivation
E	= Education level
P	= Postal code
ID	= Indoor/ outdoor

MNL model most favourite location

Variable	Coefficient (β)	Standard Error	β /St. Error	P(z >Z)
Low vacancy ratio	.25843***	.08104	3.19	.0014
Low ratio of daily stores	.15522**	.06387	2.43	.0151
Average ratio of fashion and luxury stores	.64721***	.08862	7.30	.0000
High amount of restaurants/leisure facilities	.37430***	.09471	3.95	.0001
Average amount of shop branches	.65766***	.19021	3.46	.0005
Large average store size	.69002***	.10856	6.36	.0000
Average share of shop formulas	.29665**	.15077	1.97	.0491
Discrete advertisement signs	.41744***	.11417	3.66	.0003
Diverse and historical shaped facades	.79669***	.10326	7.72	.0000
Bright coloured facades	.49339***	.13771	3.58	.0003
Striking shop windows	-.56398***	.11946	-4.72	.0000
Width to height ratio	.64669***	.08479	7.63	.0000

Note: ***, **, * ==> Significance at 1%, 5%, 10% level.

Log-likelihood (LL(β)) = -2277.704

Log-likelihood null model (LL(0)) = -2493.365

Rho Squared (ρ^2) = 0.087

MNL model most favourite location including interactions

Variable	Coefficient (β)	Standard Error	β /St. Error	P(z >Z)
Low vacancy ratio	.27413***	.08202	3.34	.0008
Low ratio of daily stores	.21298***	.07467	2.85	.0043
Low ratio of daily stores * A1	-.21283**	.08740	-2.44	.0149
Low ratio of daily stores * E	.16555***	.05434	3.05	.0023
Average ratio of fashion and luxury stores	.40453***	.11117	3.64	.0003
Average ratio of fashion and luxury stores * A1	.51518***	.12208	4.22	.0000
Average ratio of fashion and luxury stores * A2	.26176*	.15869	1.65	.0990
Average ratio of fashion and luxury stores * P	.15486**	.07807	1.98	.0473
High amount of restaurants/leisure facilities	.40242***	.09768	4.12	.0000
Average amount of shop branches	.45888**	.21197	2.16	.0304
Average amount of shop branches * MD	-.47568**	.19607	-2.43	.0153
Average amount of shop branches * G	-.33362**	.16575	-2.01	.0441
Large average store size	.49922***	.12094	4.13	.0000
Large average store size * A1	.49842***	.12792	3.90	.0001
Average share of shop formulas	.25515*	.15288	1.67	.0951
Diverse and historical shaped facades	.86313***	.12106	7.13	.0000
Diverse and historical shaped facades * G	.14702**	.07170	2.05	.0403
Diverse and historical shaped facades * A1	-.31310***	.11021	-2.84	.0045
Diverse and historical shaped facades * A2	.28115**	.13404	2.10	.0359
Diverse and historical shaped facades * A3	.26776**	.12325	2.17	.0298
Bright coloured facades	.54882***	.14143	3.88	.0001
Bright coloured facades * MD	.19457*	.09999	1.95	.0517
Striking shop windows	-.58612***	.12105	-4.84	.0000
Discrete advertisement signs	.38020***	.11703	3.25	.0012
Width to height ratio	.67706***	.08835	7.66	.0000
Width to height ratio * A3	-.17273*	.09683	-1.78	.0744
Note: ***, **, * ==> Significance at 1%, 5%, 10% level.				

Log-likelihood (LL(β)) = -2229.158

Log-likelihood null model (LL(0)) = -2493.365

Rho Squared (ρ^2) = 0.106

MNL model most favourite location indoor versus outdoor

Variable	Coefficient (β)	Standard Error	β /St. Error	P(z >Z)
Low vacancy ratio	.34914***	.08937	3.91	.0001
Low ratio of daily stores	.27860***	.06909	4.03	.0001
Average ratio of fashion and luxury stores	.56737***	.09099	6.24	.0000
High amount of restaurants/leisure facilities	.25099**	.09890	2.54	.0112
Average amount of shop branches	.56289***	.19944	2.82	.0048
Large average store size	.71245***	.11229	6.34	.0000
Large average store size * ID	.42651***	.09592	4.45	.0000
Discrete advertisement signs	.29778***	.11545	2.58	.0099
Diverse and historical shaped facades	1.10604***	.12932	8.55	.0000
Bright coloured facades	.73548***	.15952	4.61	.0000
Striking shop windows	-.49720***	.12815	-3.88	.0001
Width to height ratio	.96198***	.12514	7.69	.0000
Width to height ratio * ID	-.31730***	.08971	-3.54	.0004

Note: ***, **, * ==> Significance at 1%, 5%, 10% level.

Log-likelihood (LL(β)) = -2268.659

Log-likelihood null model (LL(0)) = -2493.365

Rho Squared (ρ^2) = 0.901

MNL model least favourite location

Variable	Coefficient (β)	Standard Error	β /St. Error	P(z >Z)
Low ratio of daily stores	-.27206***	.06162	-4.42	.0000
Average ratio of fashion and luxury stores	-.57486***	.09334	-6.16	.0000
High amount of restaurants/leisure facilities	-.86905***	.08662	-10.03	.0000
Average amount of shop branches	-1.33009***	.18590	-7.15	.0000
Large average store size	-.83087***	.08112	-10.24	.0000
Average share of shop formulas	-.49766***	.14846	-3.35	.0008
Diverse and historical shaped facades	-.16347*	.09382	-1.74	.0815
Striking shop windows	.78666***	.08489	9.27	.0000
Width to height ratio	-.72831***	.08518	-8.55	.0000

Note: ***, **, * ==> Significance at 1%, 5%, 10% level.

Log-likelihood (LL(β)) = -2164.428

Log-likelihood null model (LL(0)) = -2493.365

Rho Squared (ρ^2) = 0.132

MNL model least favourite location including interactions

Variable	Coefficient (β)	Standard Error	β /St. Error	P(z >Z)
Low ratio of daily stores	-.24835***	.06357	-3.91	.0001
Low ratio of daily stores * E	-.12353**	.05093	-2.43	.0153
Average ratio of fashion and luxury stores	-.45665***	.09735	-4.69	.0000
Average ratio of fashion and luxury stores * G	.19456**	.08720	2.23	.0257
High amount of restaurants/leisure facilities	-.95684***	.08135	-11.76	.0000
Average amount of shop branches	-1.34976***	.18645	-7.24	.0000
Large average store size	-.49605***	.09911	-5.00	.0000
Large average store size * G	.19868**	.08217	2.42	.0156
Large average store size * A1	-.69248***	.12440	-5.57	.0000
Large average store size * A2	-.33900**	.17254	-1.96	.0494
Large average store size * A3	.28921**	.14473	2.00	.0457
Average share of shop formulas	-.47284***	.15143	-3.12	.0018
Average share of shop formulas * A2	-.42752*	.25498	-1.68	.0936
Striking shop windows	1.09872***	.08572	12.82	.0000
Striking shop windows * G	.14814**	.06156	2.41	.0161
Striking shop windows * A1	-.52751***	.09048	-5.83	.0000
Striking shop windows * E	.17042***	.05770	2.95	.0031
Width to height ratio	-.83894***	.09143	-9.18	.0000
Width to height ratio * A3	.26773**	.11709	2.29	.0222
Width to height ratio * P	-.18085***	.06958	-2.60	.0093
Note: ***, **, * ==> Significance at 1%, 5%, 10% level.				

Log-likelihood (LL(β)) = -2106.133

Log-likelihood null model (LL(0)) = -2493.365

Rho Squared (ρ^2) = 0.155

MNL model most atmospheric location

Variable	Coefficient (β)	Standard Error	β /St. Error	P(z >Z)
Low vacancy ratio	.39961***	.13147	3.04	.0024
Low ratio of daily stores	.44383***	.06726	6.60	.0000
Average ratio of fashion and luxury stores	.28544**	.12321	2.32	.0205
High amount of restaurants/leisure facilities	.51854***	.17618	2.94	.0032
Large average store size	-.45997***	.11016	-4.18	.0000
Average share of shop formulas	.51906***	.16605	3.13	.0018
Diverse and historical shaped facades	1.20517***	.08683	13.88	.0000
Striking shop windows	-.34938***	.11252	-3.11	.0019
Discrete advertisement signs	.56588***	.12936	4.37	.0000
Width to height ratio	.56982***	.07140	7.98	.0000
Indoor shopping location	.76699***	.11613	6.60	.0000
Note: ***, **, * ==> Significance at 1%, 5%, 10% level.				

Log-likelihood (LL(β)) = -2275.448
 Log-likelihood null model (LL(0)) = -2493.771
 Rho Squared (ρ^2) = 0.088

MNL model most atmospheric location including interactions

Variable	Coefficient (β)	Standard Error	β /St. Error	P(z >Z)
Low vacancy ratio	.40099***	.13435	2.98	.0028
Low vacancy ratio * P	.18508***	.05652	3.27	.0011
Low vacancy ratio * E	.19661***	.05517	3.56	.0004
Low ratio of daily stores	.44342***	.06778	6.54	.0000
Average ratio of fashion and luxury stores	.24875**	.12613	1.97	.0486
High amount of restaurants/leisure facilities	.50320***	.18003	2.80	.0052
Large average store size	-.50431***	.11464	-4.40	.0000
Large average store size * MD	.52135***	.11171	4.67	.0000
Average share of shop formulas	.59949***	.17050	3.52	.0004
Average share of shop formulas * MD	-.72851***	.18492	-3.94	.0001
Diverse and historical shaped facades	1.26536***	.09141	13.84	.0000
Diverse and historical shaped facades * A2	.29399**	.13248	2.22	.0265
Diverse and historical shaped facades * P	.12954*	.06913	1.87	.0609
Striking shop windows	-.50509***	.12266	-4.12	.0000
Striking shop windows * A1	.26013***	.09417	2.76	.0057
Discrete advertisement signs	.56899***	.13216	4.31	.0000
Discrete advertisement signs * MD	.30103***	.09586	3.14	.0017
Width to height ratio	.67613***	.07607	8.89	.0000
Width to height ratio * A3	-.24287**	.09865	-2.46	.0138
Width to height ratio * E	-.14710***	.05709	-2.58	.0100
Indoor shopping location	.82299***	.12031	6.84	.0000
Indoor shopping location * MD	.14993**	.07297	2.05	.0399

Note: ***, **, * ==> Significance at 1%, 5%, 10% level.

Log-likelihood (LL(β)) = -2232.813
 Log-likelihood null model (LL(0)) = -2493.771
 Rho Squared (ρ^2) = 0.105

MNL model least atmospheric location

Variable	Coefficient (β)	Standard Error	β /St. Error	P(z >Z)
Low vacancy ratio	-.27877***	.10740	-2.60	.0094
Low ratio of daily stores	-.13521**	.05991	-2.26	.0240
Average ratio of fashion and luxury stores	-.54479***	.09929	-5.49	.0000
Large average store size	.63544***	.09740	6.52	.0000
Average share of shop formulas	-.81592***	.16245	-5.02	.0000
Diverse and historical shaped facades	-.76903***	.08317	-9.25	.0000
Striking shop windows	.52669***	.06928	7.60	.0000
Width to height ratio	-.83336***	.07701	-10.82	.0000
Indoor shopping location	-.16665*	.08685	-1.92	.0550

Note: ***, **, * ==> Significance at 1%, 5%, 10% level.

Log-likelihood (LL(β)) = -2288.400
 Log-likelihood null model (LL(0)) = -2493.771
 Rho Squared (ρ^2) = 0.082

MNL model least atmospheric location including interactions

Variable	Coefficient (β)	Standard Error	β /St. Error	P(z >Z)
Low vacancy ratio	-.27224**	.11174	-2.44	.0148
Low vacancy ratio * A3	-.36798***	.10979	-3.35	.0008
Low vacancy ratio * P	-.29225***	.06411	-4.56	.0000
Low vacancy ratio * E	-.25051***	.07882	-3.18	.0015
Low ratio of daily stores	-.11034*	.06095	-1.81	.0703
Low ratio of daily stores * P	.12040**	.05402	2.23	.0258
Average ratio of fashion and luxury stores	-.47788***	.10194	-4.69	.0000
Large average store size	.55665***	.09961	5.59	.0000
Large average store size * MD	-.28132***	.10917	-2.58	.0100
Average share of shop formulas	-.73649***	.16512	-4.46	.0000
Average share of shop formulas * MD	.41865**	.18137	2.31	.0210
Diverse and historical shaped facades	-.95106***	.10565	-9.00	.0000
Diverse and historical shaped facades * A1	.31468**	.13380	2.35	.0187
Diverse and historical shaped facades * E	-.18555**	.07903	-2.35	.0189
Striking shop windows	.68563***	.08157	8.40	.0000
Striking shop windows * A1	-.38267***	.09613	-3.98	.0001
Width to height ratio	-.84168***	.07834	-10.74	.0000
Indoor shopping location	-.31619***	.09582	-3.30	.0010
Indoor shopping location * A1	.15506*	.08526	1.82	.0690
Indoor shopping location * A2	.21190**	.10311	2.06	.0399
Indoor shopping location * E	-.14820**	.06573	-2.25	.0242

Note: ***, **, * ==> Significance at 1%, 5%, 10% level.

Log-likelihood (LL(β)) = -2242.665
 Log-likelihood null model (LL(0)) = -2493.771
 Rho Squared (ρ^2) = 0.101