

The Implications of E-shopping for In-store Shopping at Various Shopping Locations in the Netherlands

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ICT: Mobilizing Persons, Places, and Spaces

Bergen, 10 November 2006

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Main Objective

- **Many scholars contend that the implications of e-shopping for in-store shopping largely vary among shopping centres** (see e.g., Timmermans et al., 1991; Stec Groep, 2000; Gillespie et al., 2001; Dixon and Marston, 2002; Dixon et al., 2005);
- **Despite the growing number of empirical studies about the impact of e-shopping on in-store shopping, there are still little empirical studies that take into account a context of shopping centres** (Weltevreden, forthcoming).

Main Objective:

To explore the degree to which online searching and online buying influence the number of trips to, the duration of shopping, and purchases at various shopping locations in the Netherlands.

The Dutch Retail & Transport Context

Shopping Location	Number of Locations		Number of Outlets		Amount of Floor space (in m2)	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
City Centre	138	6%	37,539	32%	6,758,524	24%
Village Centre	785	36%	24,906	21%	4,362,739	16%
City District Centre	90	4%	8860	8%	1,271,033	5%
Neighbourhood Centre	601	28%	12,234	10%	2,093,370	7%
Convenience Centre	400	19%	3046	3%	511,822	2%
Large-scale Retail Location	129	6%	2409	2%	3,192,472	11%
Special Shopping C.	14	1%	287	0%	59,214	0%
Other Retail Locations	N.A.	N.A.	27,571	24%	9,671,737	35%
Total	2157	100%	116,852	100%	27,920,911	100%

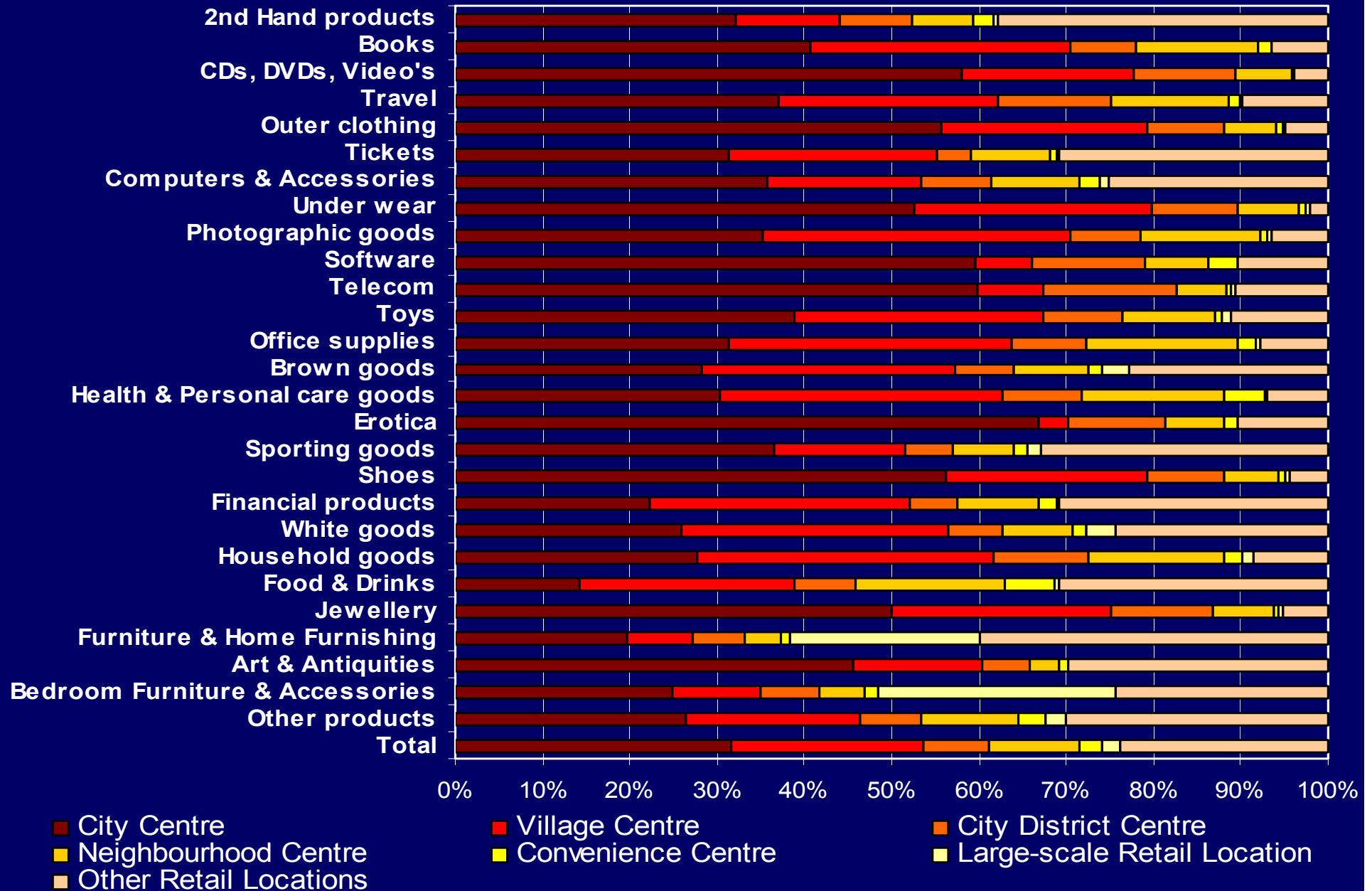
Methodology

- **Online questionnaire about the relationship between e-shopping and in-store shopping (August/September 2006)**
- **Response:**
 - 30,484 internet users invited from Multiscope's panel
 - 4327 people (14,2%) filled in the selection questionnaire
 - 3000 people (9,8%) belong to the research population
- **Respondents could choose among 4352 shopping locations:**
 - 2157 Shopping Centres as defined by Locatus (2006)
 - 2194 'Other Retail Locations' that represent solitary shops in a specific City or Village
 - 1 Category that represents shopping locations in Belgium and Germany
- **Respondents could select 2 shopping locations for the following types of goods:**
 - Daily goods (groceries and health & personal care items)
 - Non-daily goods (e.g., clothing, shoes, books, toys, tickets)
 - Specialty goods (e.g., furniture, home furnishing, electrical appliances, jewellery)
- **The sample perfectly fits the e-shopper profile from the Statistics Netherlands (2005) sample on the variables:**
 - Gender, Age, and Education

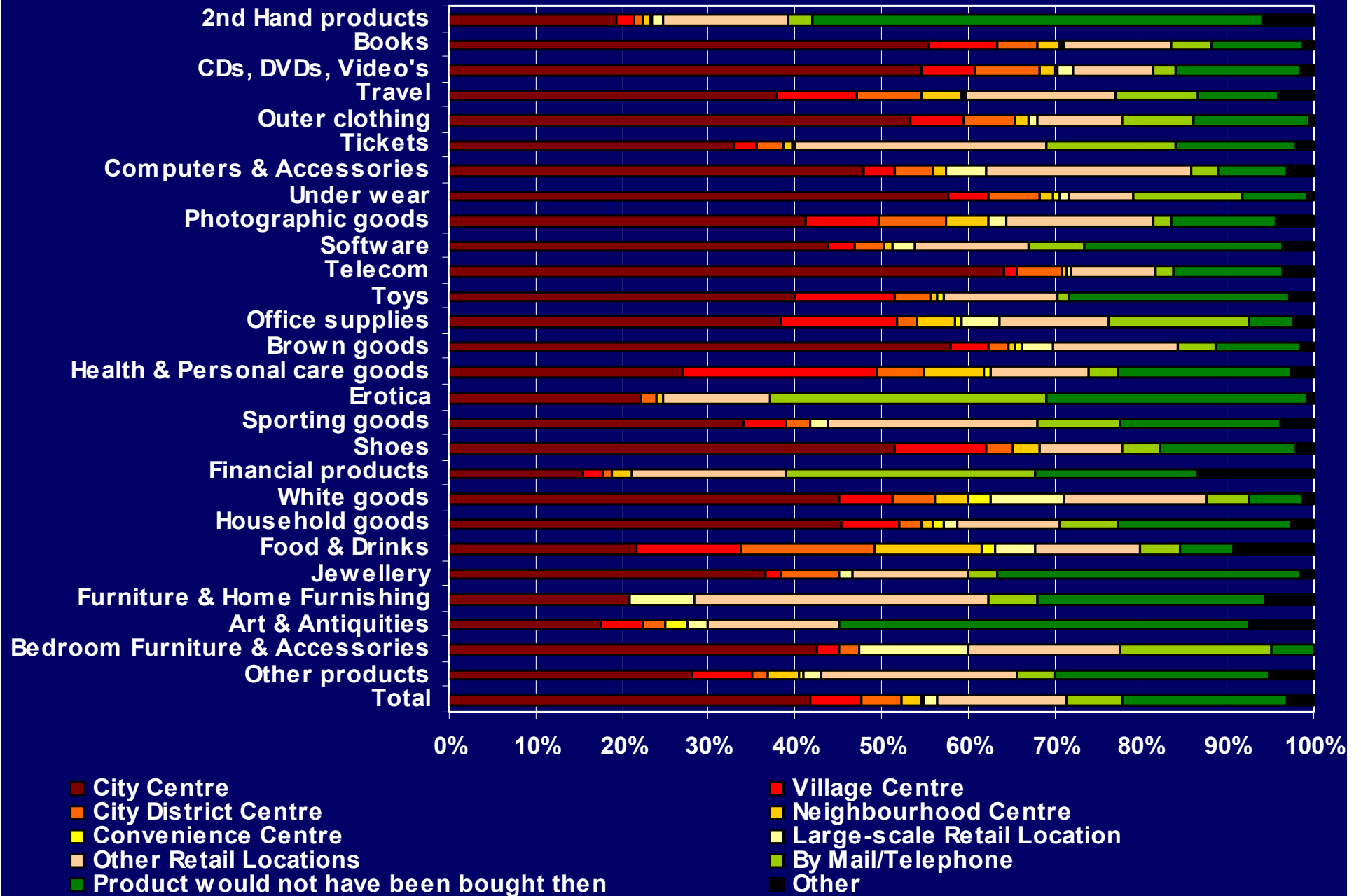
Results 1a: Most popular products purchased online in the Netherlands (2006, 8211 purchases)

#	Retail Category	%	#	Retail Category	%
1	2nd Hand products	13%	14	Brown goods	2%
2	Books	12%	15	Health & Personal Care	1%
3	CDs, DVDs, Videos	11%	16	Erotica	1%
4	Travel	10%	17	Sporting goods	1%
5	Outer clothing	10%	18	Shoes	1%
6	Tickets	6%	19	Financial products	1%
7	Computers & Access.	6%	20	White goods	1%
8	Under wear	3%	21	Household goods	1%
9	Photographic goods	3%	22	Food & Drinks	1%
10	Software	3%	23	Jewellery	1%
11	Telecom	2%	24	Furniture	1%
12	Toys	2%	25	Art & Antiquities	1%
13	Office supplies	2%	25	Bedroom Furniture	1%

Results 1b: Hypothetical substitution of in-store shopping with e-shopping



Results 1c: Potential substitution of in-store shopping with e-shopping



Results 2a: The relationship between e-shopping and in-store shopping for daily items

	City Centre		Village Centre		City District C.		Neighbourh. C.		Convenience C.	
	Freq	Time	Freq	Time	Freq	Time	Freq	Time	Freq	Time
Frequency of Online Searching	+		+							+
Number of Years Buying Online		-				-				-
Frequency of Online Buying										
Urban density	+								-	
Travel time (in min.) to Shopping Centre	-	+	-	+	-		-	+	-	
Attractiveness/Size Shopping Centre				+		+	+	+		
Share of Vacant Shops	-					-				

Results 2b: The relationship between e-shopping and in-store shopping for non-daily items

	City Centre		Village Centre		City District Centre	
	Freq	Time	Freq	Time	Freq	Time
Frequency of Online Searching	+	+				
Number of Years Buying Online		-				
Frequency of Online Buying						
Urban density						
Travel time (in min.) to Shopping Centre	-	+	-	+	-	+
Attractiveness/Size Shopping Centre		+		+		+
Share of Vacant Shops						

Results 2c: The relationship between e-shopping and in-store shopping for specialty goods

	City Centre		Large-scale Retail Location	
	Freq	Time	Freq	Time
Frequency of Online Searching	+	+	+	+
Number of Years Buying Online				-
Frequency of Online Buying				
Urban density			-	
Travel time (in min.) to Shopping Centre		+	-	+
Attractiveness/Size Shopping Centre		+		+
Share of Vacant Shops				

Results 3a: Substitution of shopping trips to and purchases at retail locations, according to the type of purchase

Shopping Location	Daily items			Non-daily items			Specialty goods		
	<i>Trips</i>	Prod- ucts	<i>N</i>	<i>Trips</i>	Prod- ucts	<i>N</i>	<i>Trips</i>	Prod- ucts	<i>N</i>
City Centre	7%	5%	1013	20%	25%	3828	21%	23%	2280
Village Centre	3%	3%	1017	12%	17%	469	18%	18%	304
City District C.	4%	3%	552	18%	21%	457	22%	22%	258
Neighbourh. C.	3%	3%	1287	15%	17%	224	10%	13%	115
Convenience C.	3%	1%	415	18%	20%	50	3%	3%	35
Large-scale R. L.	6%	3%	78	19%	18%	198	16%	15%	1169
Special Shop. C.	0%	0%	8	12%	4%	25	18%	27%	11
Other Retail Loc.	5%	3%	870	24%	24%	436	21%	22%	1305
Total	4%	4%	5256	19%	23%	5726	19%	20%	5529

Results 3b: Substitution of shopping trips to and purchases at retail locations (non-daily items)

	City Centre		Village Centre		City District Centre	
	Trips	Prod.	Trips	Prod.	Trips	Prod.
Frequency of Online Searching						
Number of Years Buying Online	+			+		
Frequency of Online Buying	+	+	+	+	+	+
Number of shops within 10 min. by car	-	-			-	
Travel time (in min.) to Shopping Centre						
Attractiveness/Size Shopping Centre	+	+				
Share of Vacant Shops						

Results 3c: Substitution of shopping trips to and purchases at retail locations (specialty goods)

	City Centre		Large-scale Retail Location	
	Trips	Prod.	Trips	Prod.
Frequency of Online Searching	+	+	+	+
Number of Years Buying Online	+			
Frequency of Online Buying	+	+	+	+
Number of shops within 10 min. by car	-			
Travel time (in min.) to Shopping Centre	+	+		
Attractiveness/Size Shopping Centre				
Share of Vacant Shops				

Conclusions

- Especially for **City Centres** and **Large-scale Retail Locations** there is a positive relationship between the frequency of online searching and the frequency and duration of in-store shopping;
- However, (Large) **City Centres** are also most likely to face substitution of in-store shopping with e-shopping, followed by **Other Retail Locations** and **City District Centres**;
- **Village Centres** are relatively immune to substitution of in-store shopping;
- For **Neighbourhood** and **Convenience Centres** the adverse effects of e-shopping are practically absent;

- Online searching is not always complementary to the frequency of in-store shopping (in the case of specialty goods);
- The impacts of e-shopping on in-store shopping at the various shopping locations largely differ among products;
- E-shopping creates additional demand (19% of all online purchases would not have been made without the Internet).