The Future of Retailing

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Shoppers using their smartphones while shopping
Background

» 97 procent of all Swedes have a smartphone (Findahl and Davidsson, 2015)

» The smartphone is picked up on average 221 times per day to be used for 3 hours and 16 minutes (Karlsson, 2015)

» Younger age groups (15-24 years) use their mobile every other minute (ibid.)

» 62 procent of all Swedes use internet in their mobile every day

» Retail stores try to create customer use by developig apps with functions such as recepies, coupons, shopping lists, and other wich increases the level of in-store mobile use further (Findahl och Davidsson, 2015)
Point of departure

Two possible effects of smartphone usage among shoppers:

1. **ENHANCED SHOPPING EXPERIENCE**
   The smartphones may be used to enhance the shopping experience so that shoppers can be better prepared for making decision. They can Google recipes, product tests, and price comparisons etcetera. (Sciandra and Inman, 2014)

2. **MOBILE BLINDNESS**
   An alternative hypothesis that has been raised lately is mobile blindness - shoppers who use their smartphones during their store visit may become distracted in the same way that drivers are distracted by their mobiles while driving (Kircher, Patten och Ahlström, 2011; Sciandra och Inman, 2014).

   The American candy manufacturer Hershey has claimed that mobile blindness has reduced the impulse purchases of chewing gums (Nathanson, 2013). It has further been noted that sales of magazines at the check out has dropped with 8.2 percent which has led to a demand for alternative locations in-store for the product (Kharif, 2013).
Studies

» Three field studies in 7 ICA stores:

» ICA Supermarket Brommaplan (study 1)
» ICA Kvantum Flygfyren (study 1)
» ICA Kvantum Ekängen (study 2)
» ICA Maxi Hälla (study 2)
» ICA Supermarket Grytan (study 2)
» ICA Kvantum Värtan (study 3)
» ICA Kvantum Sickla (study 3)
Study 1 – At the check out counter
Study 1 – Manual observations at the check out counter

» Two stores
  » ICA Supermarket Brommaplan
  » ICA Kvantum Flygfyren

» Main research question: Are shoppers blinded by their smartphones?
  » We observed the effect of mobile usage of shoppers in line at the check out.
  » We also observed the effects of having digital displays at the check out.

» Observations of what shoppers looked at and what they purchased.
  » 972 shoppers were observed
Study 1 – Manual observations
Study 1 - Results

» Shoppers reduce their purchases from the check out if they use their smartphones (5% of shoppers with a smartphone make a purchase, 15% of non-mobile users make purchases).

» Shoppers make fewer purchases in the check out area when digital displays are present (9% when digital displays are present, 19% when they are turned off).

» Visual distraction (mobile, TV) in the check out area steals shoppers’ attention from products which lead to reduced sales.
Study 2 – Exploratory study
Study 2 – Exploratory eye-tracking study

» ICA Kvantum Ekängen, ICA Maxi Hälla, ICA Supermarket Grytan. No (statistical) differences in age, gender, or household size between the stores.

» Eye tracking of 359 shoppers’ store visits – from entrance to exit.

» 26% of the shoppers used their smartphones during the store visit.

  7 % of their attention was devoted to looking at the phone (42% of the attention was used to look at products and the rest at navigating through the store)
Eye tracking-glasses measure the direction of the pupils
Study 2 - Results

» Shoppers using their smartphones *spend more time* in the store (*+41 %*) [~17 minutes WITH mobile, ~12 minutes WITHOUT mobile]

» Shoppers using smartphones *spend more money* in the store (*+47%*) [414 kr WITH mobile, 280 kr WITHOUT mobile]

» For every *second* the shoppers used their smartphone the spending went up 4 kr.
Study 2 - Problems

» The study was explorative – that is, we know nothing about causalities. We do not know if mobile usage lead to higher purchases or if it were shoppers who where in the store to buy more that used their smartphones.
Study 3 – eye-tracking experiment
Study 3 – eye-tracking experiment

» Two ICA Kvantum-stores
  ICA Kvantum Värtan
  ICA Kvantum Sickla

» Eye Tracking of 117 shoppers
  57 shoppers were asked to use their smartphones (”you may want to use your smartphone for example to check sms:s, Facebook, recipes, etcetera”)
  60 shoppers were asked NOT to use their smartphones
Study 3 - Results

» Shoppers using smartphones spend more time in the store (+38 %) [~15 minutes WITH mobile, ~11 minutes WITHOUT mobile]

» Shoppers using smartphones spend more money in the store (+59%) [465 kr WITH mobile, 291 kr WITHOUT mobile]

» Every time a shopper picked up his/her phone the average basket size increased with 7 kr.
Study 3 – Results continued

» Shoppers using mobiles are effected in multiple ways which in its turn has an effect on the average basket size
  » Distraction (they rely less on their ”auto pilot”)
  » Shopper movement (shoppers go into more isles and turn and go back more often which increases the number of products they are exposed to)
  » The number of products the shoppers look at what you see is what you buy…)
  » Time spent in store (increases)
Study 3 – Shopper using mobile

Note that she stops, looks around, and go back and forth.

- Increased distraction
- Goes back and forth.
- Getting exposed to more products.
- The product she initially was looking for was straight in front of her eyes at the very beginning when she picked up her phone.
Study 3 – Shopper NOT using mobile
1. We found no differences between shoppers who used their smartphones for shopping related issues (shopping lists, recipes, ICA-app) or non-shopping related issues.

2. Shoppers did not perceive the store as better or not as good as a consequence of using a smartphone.

3. Older shoppers were more strongly affected than younger.
Summary and conclusions

» Shoppers’ smartphone usage increases sales.
   » Smartphone users stay longer, see more of the assortment, cover larger areas of the store and deviate more from their shopping plan.

» Smartphone usage has a negative effect on sales at the checkout
1. Increase smartphone usage

2. Sensory marketing

3. Digitalizing stores
2

- Technology & Tools to Facilitate Decision Making
- Visual Display & Merchandise Offer Decisions
- Consumption & Engagement
- Big Data Collection & Usage
- Analytics & Profitability
The five elements of the cityscape

1. Path
2. Landmark
3. Edge
4. Node
5. District

P.L.E.N.D.
The five elements of the cityscape

PATH
- The perceptual element that is the most apparent for the shopper
- Influences where the shopper will move
- Influences how deep into the store the shopper will go
LANDMARKS
- Easy to identify or recognize
- Used for navigation
- Put in visual places
- Provides a contrast from the background

The five elements of the cityscape

2. Landmark
The five elements of the cityscape

EDGES
• Influences where the shopper will look
• Influences the pace of the shopper
• Influences the shopper’s orientation

Examples:
• Lower shelves make a shopper look into the department
• Wider isles between the shelves make the shopper increase the pace
• Shelves put to create an uneven edge to the racetrack forces shoppers to look around

3. Edge
The five elements of the cityscape

**NODES**

- Strategic areas serving to connect the shopper’s various paths

Examples:
- Open areas
- Places that are perceived as the mid point of the store
- Escalators
- Resting areas
DISTRIBUTED

• Contains elements that are perceived to be similar
• The shopper sees it as if s/he goes into a district

The five elements of the cityscape

5. District
Collaboration:

Academic research:
Babson College
Stockholm School of Economics
The five elements of the cityscape

Paths

1. Path
Paths

Grid layout

Free form layout

Racetrack layout
What does the shopper see?

Figure 3  Shopper Wearing TNS EyeCam™

Figure 5  “Snap Shot” of Media Exposure in a Supermarket
BREAKING THE STRAIGHT LINES
Paths

BREAK THE STRAIGHT LINES

“Legible”
but
boring

Inspiring
but
messy
The five elements of the cityscape

2. Landmark

Landmarks
Landmarks

Navigation

Inspiration

Sales
Landmarks

A store’s usefulness/legibility is controlled by:

1. Complexity
2. Novelty
3. Incongruity
4. “Surprisingness”

“Legible” but boring

Inspiring but messy
The presence of landmarks
The purpose of a mannequin?

Mannequins as Landmarks
Example: Nyköping. Store with two stories where all the mannequins were taken out from the women’s department. An exception was made for the A-area (the green cross) which was left untouched.
Mannequins as Landmarks

Method

*Getting rid of the mannequins*

Example: Nyköping. On the lower floor is the men’s department (blue) and the children’s department (red).
Effect?
The shoppers in the women’s department spend less when the dolls were removed

- A reduction of 56 kr per basket (- 22 %)
Perception of H&M

Women’s department

Mannequins as Landmarks

Perception of H&M

<table>
<thead>
<tr>
<th>Statement</th>
<th>Without dolls</th>
<th>With dolls</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;It was easy to find what I wanted&quot;</td>
<td>4,97</td>
<td>5,2</td>
</tr>
<tr>
<td>&quot;The prices in the store are reasonable&quot;</td>
<td>5,85</td>
<td>6,14</td>
</tr>
<tr>
<td>&quot;I get good value for money in this store&quot;</td>
<td>5,64</td>
<td>6,01</td>
</tr>
</tbody>
</table>

Mannequins are needed for:

• navigation
• inspiration and
• quality perception
What about the men’s department?
Men’s department

**No** difference in average basket size

*But…*

<table>
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<tr>
<th>Statement</th>
<th>No dolls</th>
<th>With dolls</th>
</tr>
</thead>
<tbody>
<tr>
<td>“The clothes in the store are of good quality”</td>
<td>3.82</td>
<td>4.5</td>
</tr>
<tr>
<td>“It took more time than expected to shop today”</td>
<td>3.0</td>
<td>2.3</td>
</tr>
</tbody>
</table>
And the kid’s department?
Children’s department

Those who only visited children’s department

- **Average basket size** 154 kr with dolls
- **Average basket size** 265 kr without dolls

- *An increase of 72 %*

Shop for more without dolls
Childrens’ department

“Det var enkelt att hitta varor jag ville ha”
“Jag får mycket för pengarna”

Utan dockor
Med dockor

Mannequins as Landmarks

<table>
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<th>“It was easy to find what I wanted”</th>
<th>“I get a lot for my money”</th>
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<td>5.49</td>
<td>6.13</td>
</tr>
<tr>
<td>4.69</td>
<td>5.68</td>
</tr>
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</table>
Landmarks

Mannequins increase the legibility

"Legible" but boring

"Surprisingness"

1. Complexity
2. Novelty
3. Incongruity

Inspiring but messy
The location of landmarks
Where do landmarks work the best?

• ”Background present advantage”
  To facilitate navigation
  -> Special displays located in their home department

• ”Surprisingness effect”
  To enhance inspiration
  -> Special displays located in a foreign department
The five elements of the cityscape

Districts

5. District
Districts

Keeping categories together

“Legible” but boring

Mixing products that are used together but come from different categories

Inspiring but messy

Complexity
The five elements of the cityscape

3. Edge
HOT SPOTS?
HOT SPOTS?
Other uses of hot spots and creating a 3D-store
Show VIVIDNESS
And FUNCTIONALITY
VIVIDNESS
Behöver du hjälp med sorteringen?
CROSS MERCHANDISE?
CROSS MERCHANDISE?
Which is more inspiring?
The 3D store
Project X