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RFID Loyalty Programs: The Consumer Perspective

Harold Boeck, Professor of marketing
Université de Sherbrooke (Canada)
Tagging Consumers
(Yes. Let’s talk about it)

What is it?
• The consumer carries a tag which emits a radio signal
• Automatically identify consumers at a distance

Objective:
• Track their movement within the store
• Collect behavioral data
• Offer a quicker more personalized and enhanced buying experience
Examples of consumer tagging

• Subcutaneous microchip implanted in customer's arm to identify VIP patrons

• An RFID tag on a consumer's cell phone replaces wallet and allows for contactless payment

• Access to festival site by scanning RFID ticket from within consumer's pocket
Consumer resistance

• “Spychips”
• 666
• Boycotts
• Moratorium

• Metro recalls 10,000 loyalty cards
• Wal-Mart cancels project?
Broad questions

Are consumers ready to adopt RFID in an everyday setting?

Are willing to interact with the technology during their shopping experience?
Research question

1) Will an increase in a marketing program’s RFID intrusion level translate into an increase of the consumer’s perceived intrusion?

2) Will an increase in the perceived intrusion affect the consumer’s attitude towards the RFID-based marketing program?
Previous research

- Privacy has been identified as a major practical implementation challenge
- Privacy is the most significant cost to consumers
- Privacy attitude influences the propensity to buy tagged items
- Consumers seem moderately privacy aware
Let’s test it!

- We presented 4 loyalty program scenarios to consumers (students)
- Based on real-life examples
- Incrementally increase « intrusion » factors
Experiment scenarios

<table>
<thead>
<tr>
<th>Intrusion factor</th>
<th>Scenarios</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Magnetic card is scanned manually at the Point of Sale (PoS) and interactive kiosk</td>
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Scenario 1:
- Barcode
- Control group = No RFID
# Experiment Scenarios

**Scenario 2:**
- Scenario 2 = Scenario 1 except barcode Vs. RFID
- Serves to compare group 1 vs group 2

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**Mi-Tu (Hong Kong)**
**Experiment scenarios**

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**Scenario 3:**
- We add 2 more intrusion factors = 3

Mi-Tu (Hong Kong)

In-store heat map
Better Earth (New-York)
Experiment scenarios

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Scenario 4:
• We add 1 more intrusion factors = 4

- Mi-Tu (Hong Kong)
- In-store heat map
- Better Earth (New-York)
- Yes Bank (India)
Sample

• Convenience sample of North American university students

• 388 valid responses
  – 56.7% females and 43.3% male respondents
  – Age varied between 18 and 48 (average 22)
Results

Comparing
Scenario 1 Vs 2: no perceived difference
Scenario 1 Vs 3: no perceived difference
Scenario 3 Vs 4: significant perceived difference
Scenario 1 Vs 4: more significant perceived difference

Warning:
Scenario 4 had severe kurtosis = too many « off the chart » responses
i.e. we lost normality = model not 100% stable to compare groups
(but I’m still sure at 99.9% based on other statistical compensations)
Results

• Taking the most “extreme” scenario, we wanted to measure how much the perceived intrusion would affect the consumer’s attitude towards using the RFD loyalty program.

Perceived intrusion explains -0.42 of the variations in the attitude towards the program (That’s a lot)

<table>
<thead>
<tr>
<th>Att_Prog1</th>
<th>I like the proposed loyalty program more than other programs</th>
</tr>
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<tr>
<td>Att_Prog2</td>
<td>I have a strong preference for the proposed loyalty program</td>
</tr>
<tr>
<td>Att_Prog3</td>
<td>I would recommend the proposed loyalty program to others</td>
</tr>
</tbody>
</table>
“Consumers don’t perceive RFID to be intrusive per se”

A basic RFID loyalty program will not generate more perceived intrusion than a regular barcode loyalty program.
“If the consumers perceive an intrusion, it will affect their attitude”

- An increase in a marketing program’s RFID intrusion level can translate into an increase of the consumer’s perceived intrusion.
- An increase in the perceived intrusion negatively affects the consumer’s attitude towards the RFID-based marketing program.
“Intrusion threshold quite elevated”

- The “intrusion threshold” was quite elevated and, based on the limits of our experimentation scenarios, was only achieved in the most extreme RFID scenario. The tipping point seems to be when the sales staff automatically identifies the consumers as they enter the store (Scenario 4).
Caveats

- Experimental model not completely stable
- Tested on University students
- Further testing is required
- These results should be considered preliminary and should be validated
Are consumers ready to be tagged with RFID?

- This indicates that consumers are ready to carry RFID tags that identify them at a distance by retailers.

- The study recommends that marketing managers proceed cautiously with RFID enabled marketing initiatives while keeping in sight their consumers’ intrusion threshold.
Thank you