

Situationalization, the new road to adaptive digital out-of-home advertising

March, 2013 Peter Lasinger, Christine Bauer





Advertising is economically important – but its effectiveness is suffering.

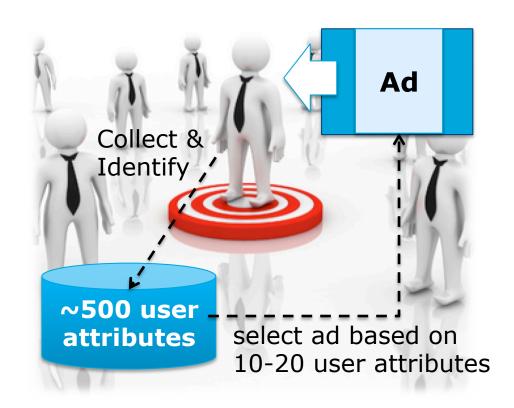


- Advertising in digital media is of significant economical importance
- Contribution per advertisement is shrinking
- Advertising effectiveness is suffering
 - Consumers are overwhelmed by the quantity of advertising messages (Ha and McCann 2008)
 - It is getting more difficult to attract consumers' attention (Pieters et al. 2002)



Personalization promises to increase advertisement effectiveness







However, personalization faces challenges and cannot always be used



How could they possibly know that? Ad Collect & Identify, ~500 user select ad based on attributes 10-20 user attributes

Personalization reactance

Personalizationprivacy trade-off



Research Questions

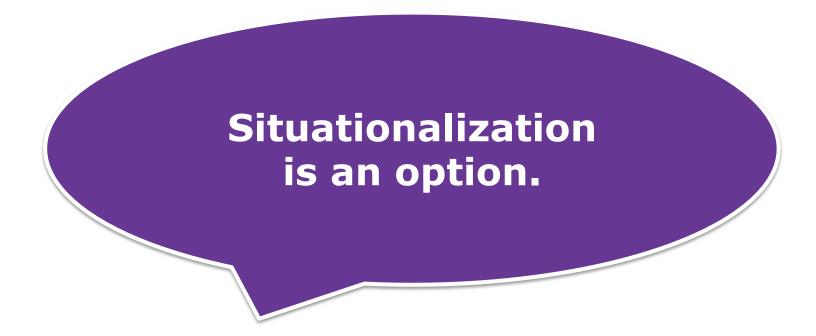


1. Which adaptation strategies can be used to increase advertising effectiveness in digital media?

2. Is there a privacy friendly alternative to adapt advertisements in digital media?









Advertisements aim to influence behaviour...



Behavior = function(Person, Environment) (Lewin 1935)

"personal and environmental determinants combine somehow to cause individuals to do what they do" (Kihlstrom 2012, p. 6)

Communication psychology states that effective communication requires a "fit between person and situation" (Schulz von Thun 2003)



Previous research has verified effects of situations (editorial context). However, only for classical media ads.



- Program content impacts the perception of ads on TV (Norris and Colman 1993; De Pelsmacker et al. 2002)
- Surrounding articles and choice of magazine outlet impact ad perception (Dahlén 2005; Moorman et al. 2002)
- The sponsored event impacts the perception the sponsor's ads (Fleck and Quester 2007)
- The type of movie and context of placement impacts the effectiveness of product placements (Balasubramanian et al. 2006; Russell 2002)

"...virtually all studies have focused on the immediate editorial context, such as articles or television shows or segments, rather than on the total media context" (Dahlén, 2005 p. 89)











Situationalization is not restricted to visual aspects, but can also include audio







We suggest that there are two, orthogonal dimensions of adaptation, resulting in the the PERSIT matrix



		Situationalization	
		no	yes
	n0	(I) no adaptation	(IV) adaptation to a
			specific situation
tio]	1:1	(II) adaptation to a	(V) adaptation to a
lizati		specific individual	specific individual and
lali			to a specific situation
ersona		(III) adaptation to a	(VI) adaptation to a
Per	n:	group of individuals	group of individuals
			and to a specific
			situation





		Situationalization	
		no	yes
Personalization	0u	(I) no adaptation	(IV) adaptation to a specific situation
	1:1	(II) adaptation to a specific individual	(V) adaptation to a specific individual and to a specific situation
	1:n	(III) adaptation to a group of individuals	(VI) adaptation to a group of individuals and to a specific situation

(I) no adaptation

e.g. just displaying the ads, without any adaptation.

Cheapest and least complex approach, however not targeted enough.





		Situationalization	
		no	yes
Personalization	0u	(I) no adaptation	(IV) adaptation to a specific situation
	1:1	(II) adaptation to a specific individual	(V) adaptation to a specific individual and to a specific situation
	1:n	(III) adaptation to a group of individuals	(VI) adaptation to a group of individuals and to a specific situation

(II) adaptation to a specific individual

e.g. using data from web store combined with mobile phones or RFID tags embedded in products.

Identification of past customers (promote new products, cross selling) or presentation of target group specific products (teen, adult, retiree)





		Situationalization	
		no	yes
_	0u	(I) no adaptation	(IV) adaptation to a specific situation
ersonalization	1:1	(II) adaptation to a specific individual	(V) adaptation to a specific individual and to a specific situation
Person	1:n	(III) adaptation to a group of individuals	(VI) adaptation to a group of individuals and to a specific situation

(III) adaptation to a group of individuals

e.g. determination of average age and gender of viewers via video camera – display of suitable product category





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(IV) adaptation to a specific situation

e.g. using noise level - display the ad when a certain noise level is exceeded





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(V) adaptation to a specific individual in a specific situation

e.g. ID of customer and display of product ad depending on the noise level (very low – very high)





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Personalization	1:1	(II) adaptation to a specific individual	(V) adaptation to a specific individual and to a specific situation
Person	1:n	(III) adaptation to a group of individuals	(VI) adaptation to a group of individuals and to a specific situation

(VI) adaptation to a group of individuals in a specific situation

e.g. determination of average age and gender and display of advertisement depending on this information and the noise level







Suggesting Situationalization as an alternative adaptation strategy

- As a privacy friendly form of adaptation
- As an orthogonal concept to personalization

Structuring available adaptation strategies for digital media to support systematic strategic choices

- Awareness of benefits and constraints related to adaptation strategies
- Extending the set of available options

Easing the design and implementation process by combining insights from marketing and information system research

- Integrating marketing (psychological) goals: increasing of advertising effectiveness, customer segmentation, editorial context
- Integrating system design considerations (personalization, situationalization, context-adaptive systems)
- Facilitation of communication between advertisers and system designers



Next research steps



Empirical Evaluation

Expert Interviews Experiment Recommendations

PERSIT tradeoff matrix
Functional requirements per strategy
Adaptation strategy selection process Design Guidelines

Reference Architectures Design Patterns





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