

LOCATION BASED SERVICES
What is the perceived value?

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Location Based Services (LBS)

LBS are services accessible via a mobile device

Prerequisites: Internet, GPS, Compass

Distinct characteristics of LBS:

- determine current location of user (geographical positioning)
- provide location specific information
- deliver context relevant information

LBS in Tourism

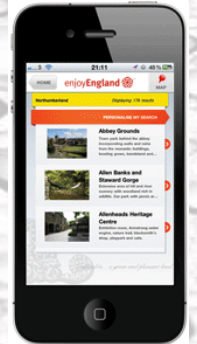
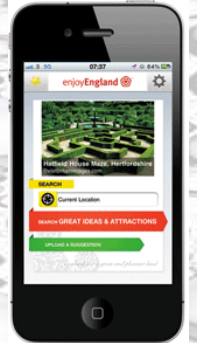
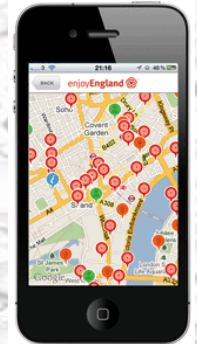
Why are LBS particularly relevant for tourism?

- Unique and valuable information channel in tourism instead of traditional sources
- Tourism industry has always been in the forefront of technology
- User is in unknown environment
- No/limited knowledge about area
- High level of information need

LBS in Tourism

Scenarios of tourists using LBS on the move:

- *Check live traffic (flight, train, bus) information*
- *Book last minute flight*
- *Find typical restaurant*
- *Find the closest underground*
- *Get information about sites, buildings*
- *Get latest weather forecast for activities*



...but where's the problem?

Breakthrough to mass market has not happened yet due to several reasons:

- > External barriers: technological insufficiencies; telecommunication industry; monetary hurdles
- > Attitudinal barriers: insufficient understanding of the real value of using LBS

QUESTION:

What are the decisive values that someone would use touristic location based services?

Rationale for Research

- The willingness to adopt mobile services is highly dependent on the communication of the values (Pura, 2005)
- Understanding consumers and their relative needs and use of services is vital (Woodruff and Flint, 2006)
- Majority of research of mobile services has been technology-oriented, e.g. TAM model (Davis, 1989)
- Huge lack of research from consumer-perspective (Pura, 2005)
- Knowledge of values which trigger intention to use mobile services are paramount (Lubbe and Louw, 2010)

Perceived Value Framework

- Value defined as: “the quality or fact of being excellent, useful, or desirable” (Rescher, 1969, p.1)
- Perceived value construct offers a multi-dimensional construct rather than revising or extending technology-oriented models with value dimensions (Pihlström, 2008)
- Sheth *et al.* (1991a/b) seminal contribution to perceived value by developing a five-dimensional measurement scale of functional, social, emotional, epistemic and conditional value

Research Question & Aim & Objectives

Question:

What are the perceived values of location based services in a tourism context?

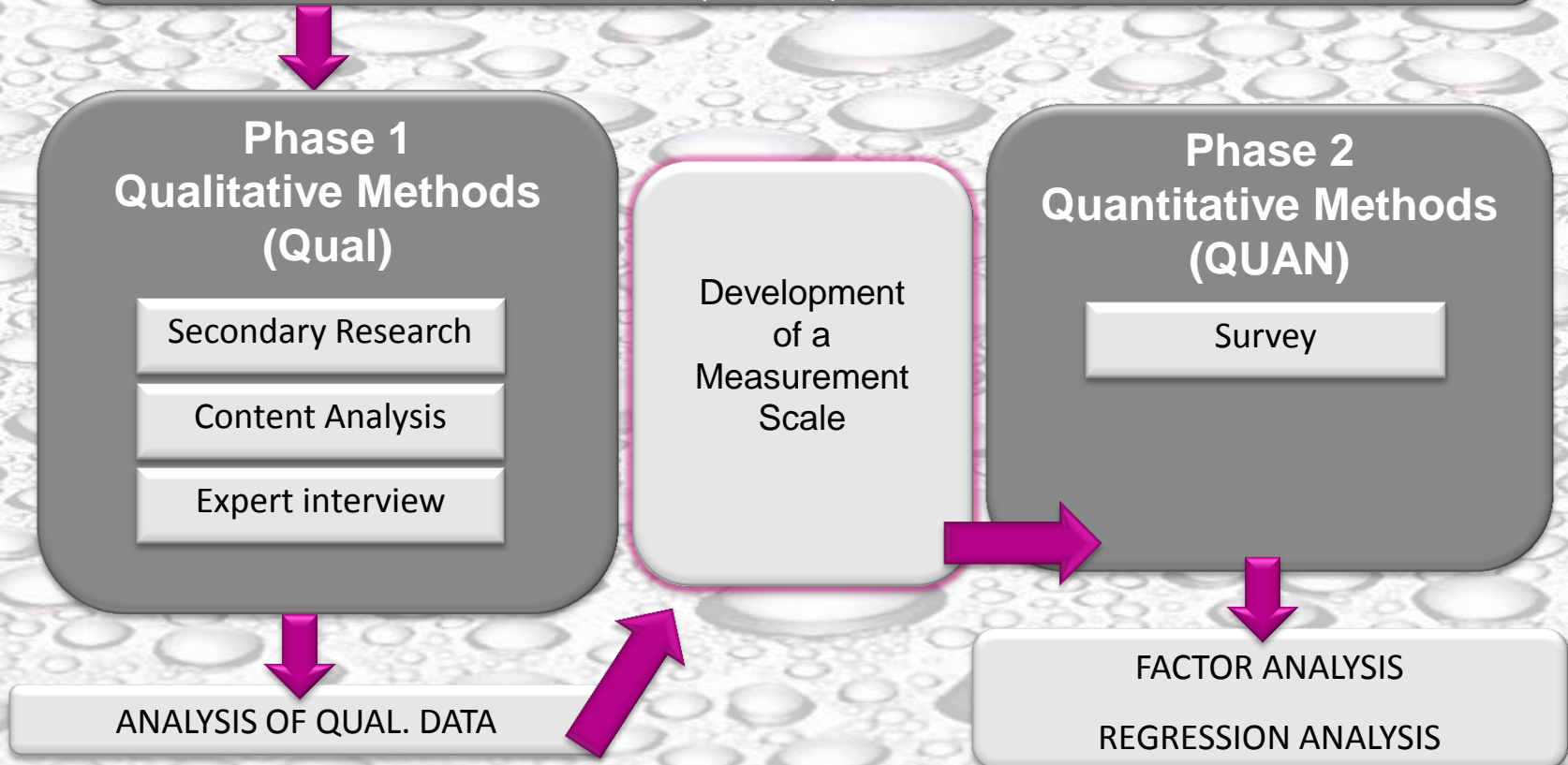
Aim:

The exploration of the perceived value of touristic location based services from a user-centric perspective

- Critical assessment of existing value scales
- Development of a multi-dimensional scale which best fits to measure the perceived value of location based services

Methodological Framework

Mixed Methods Approach
EXPLORATORY SEQUENTIAL STRATEGY
Qual-QUAN



Research Approach

- 1. Development of the Multi-Dimensional Measurement Scale**
for the context of LBS (Sheth et al. 1991a/b; Pihlström, 2008)

SIX-DIMENSIONAL VALUE SCALE

FUNCTIONAL

SOCIAL

EMOTIONAL

EPISTEMIC

CONDITIONAL

MONETARY

- 2. Generation of Pool of Items of Scale**

- **Literature** (Yang and Jolly, 2009; Sweeney and Soutar, 2001; Pura, 2005; Kumar and Lim, 2008; Dickinger, 2006; Mafé *et al.*, 2010; Yu *et al.*, 2010; Lai and Li, 2005)
- **Content Analysis (LBS Context) + Expert Interview (Validation)**

- 3. Quantitative survey**

Type of questionnaire: Online questionnaire

Sample method: Self-selection Sampling; Filter Question: LBS Users

Sample size: n=122

Result Factor Analysis

Pattern Matrix ^a								
Items	Factor							
	1	2	3	4	5	6	7	8
LBS are usually consistent and reliable	,970							
LBS usually have good functions	,698							
LBS usually fulfil my needs well	,807							
LBS are usually easy to use		,886						
LBS usually provide the service in a timely manner		,797						
Using LBS helps me to feel accepted by others			,951					
Using LBS improves the way I am perceived by others			,919					
Using LBS makes a good impression on others			,667					
Using LBS gives me social approval			,920					
Using LBS is fun				,569				
Using LBS is enjoyable				,844				
Using LBS is interesting	,376			,654				
Using LBS is a good pastime				,844				

Extraction Method: Principal Component Analysis.
Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Result Factor Analysis

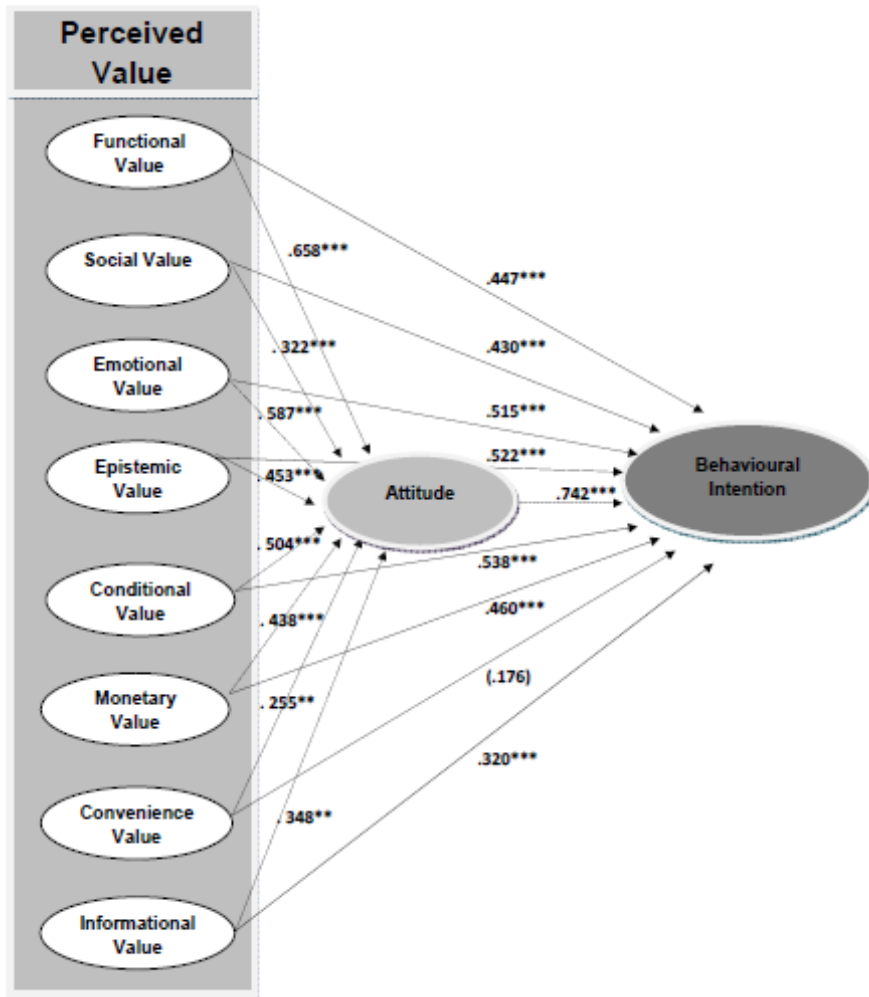
Pattern Matrix ^a								
Items	Factor							
	1	2	3	4	5	6	7	8
I use LBS to experiment with new ways of doing things					,844			
I use LBS to test new technologies					,796			
I use LBS out of curiosity					,819			
I value if LBS provide good service for the price						,942		
LBS are usually reasonably priced						,866		
I value the independence of place and time offered by using LBS	,348						,647	
I value the knowledge about places I get by using LBS							,652	
I value the feeling that by using LBS, I can orient myself even in unfamiliar environments				,311			,675	
I value the permanent availability of information by using LBS							,821	
I value the real time information that LBS offer								,772
I value the up-to-date information that LBS offer								,877

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Result Regression Analysis



All 17 hypothesised paths (exc. 1) between *values* and *Attitude* resp. *Behavioural Intention* could be supported

Strongest correlation with *Attitude*:

- functional value ($\beta=.658^{***}$)
- emotional value ($\beta=.587^{***}$)
- conditional value ($\beta=.504^{***}$)

Strongest correlation with *Behavioural Intention*:

- conditional value ($\beta=.538^{***}$)
- epistemic value ($\beta=.522^{***}$)
- emotional value ($\beta=.515^{***}$)

Key Results

- Initially proposed 6-dimensional scale could be supported, two new value dimensions in the context of LBS were extracted (convenience value and informational value)
- Distinct values determine
 - Users' *Attitude* towards using LBS (funct.)
 - Users' *Behavioural Intention of using LBS* (cond.)
- Informational value will be the key value of the future: personalised, up-to-date and real-time information through LBS use; Need for testing in further research

Implications & Recommendations

- Understanding of specific values of touristic LBS from consumer-centric perspective
- Understanding of which values are crucial for consumers' attitudes resp. behavioural intentions toward using LBS
- Companies need to highlight particular values (*Att + BI*) in communication to current as well as potential consumers to make them adopt services in the future

Thank you!

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