



A CONCEPTUAL MODEL FOR THE ASSESSMENT OF USER SATISFACTION OF ONLINE PUBLIC SERVICES



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<eGovMoNet>



Research Group for Media & ICT (MICT) – UGent - IBBT

What is MICT?

- Research Group for Media & ICT
- Part of Ghent University, department for Communications Studies



- Fundamental & applied research in the field of media & ICT
- Spearheads of our research:
 - Adoption, diffusion & implementation of ICT
 - Forecasting & assessment
 - ICT policy, regulation & e-governance
 - Mediasociology & computer-mediated communication (CMC)



- URL: <http://www.mict.be>

What is IBBT?

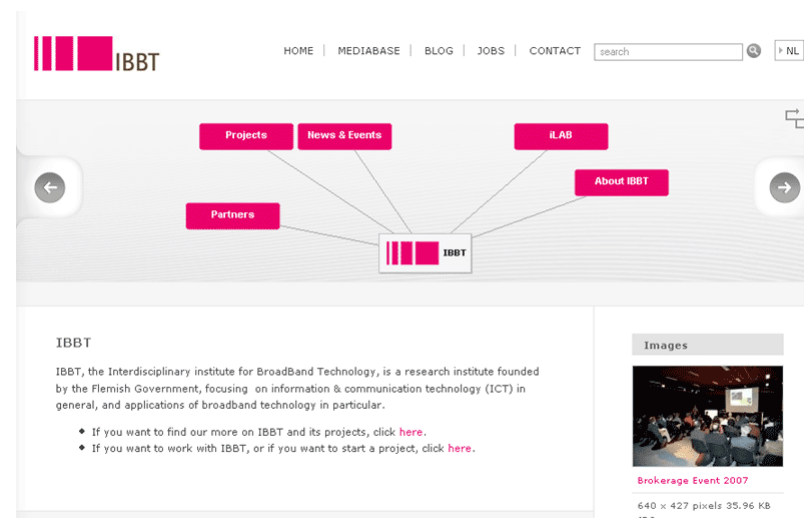
- Interdisciplinary Institute for Broadband Technology
- °2004 by Flemish Government

- Mission: development of high competent human capital & carrying out multidisciplinary research for business and government

- Application domains:

- eMedia
- eHealth
- Mobility & logistics
- eGovernment

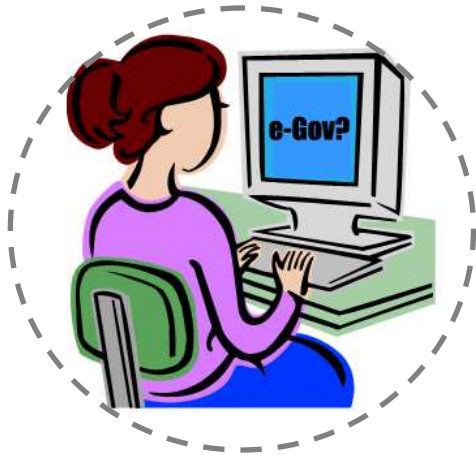
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- Introduction of ICT: new possibilities for the government ~ e-government
- Innovation trend: challenge for government authorities
 - ➔ The development of new services:
 - ICT: more complexity
 - ICT: multifunctional
- BUT: what is the impact for the user?
- Goals of e-government
 - More efficiency: faster, more personal, cheaper, ...
 - Fortifying democracy and narrowing the gap between citizens and government

- Nevertheless the promising benefits:
 - Success of e-government is not always clear (or not yet)
 - More and more remarks about the e-government strategies
- Criticism about electronic public service delivery
 - Too much focus on existing (offline) public services (and the government itself)
 - Often technology centered
 - ➔ *This contrasts sharply with the European Commission's request that – in the light of 'ambient intelligence' – the user, the individual has to be placed at the centre of future developments for an inclusive knowledge-based society for all (eUser)*
- New paradigms: 'user-centered government' & 'multichannel e-government'

- 'Reinventing government'
- New concepts used in the private sector
 - CCSD
 - CRM
- User centric: measurement for knowledge!
- But: user-oriented research must be continuous, not once-only
- IBBT-project DashGov



Study of the demand-side

⇒ What are the needs and expectations of citizens and businesses towards electronic public services?

GOAL: (better) match between demand-side and supply-side

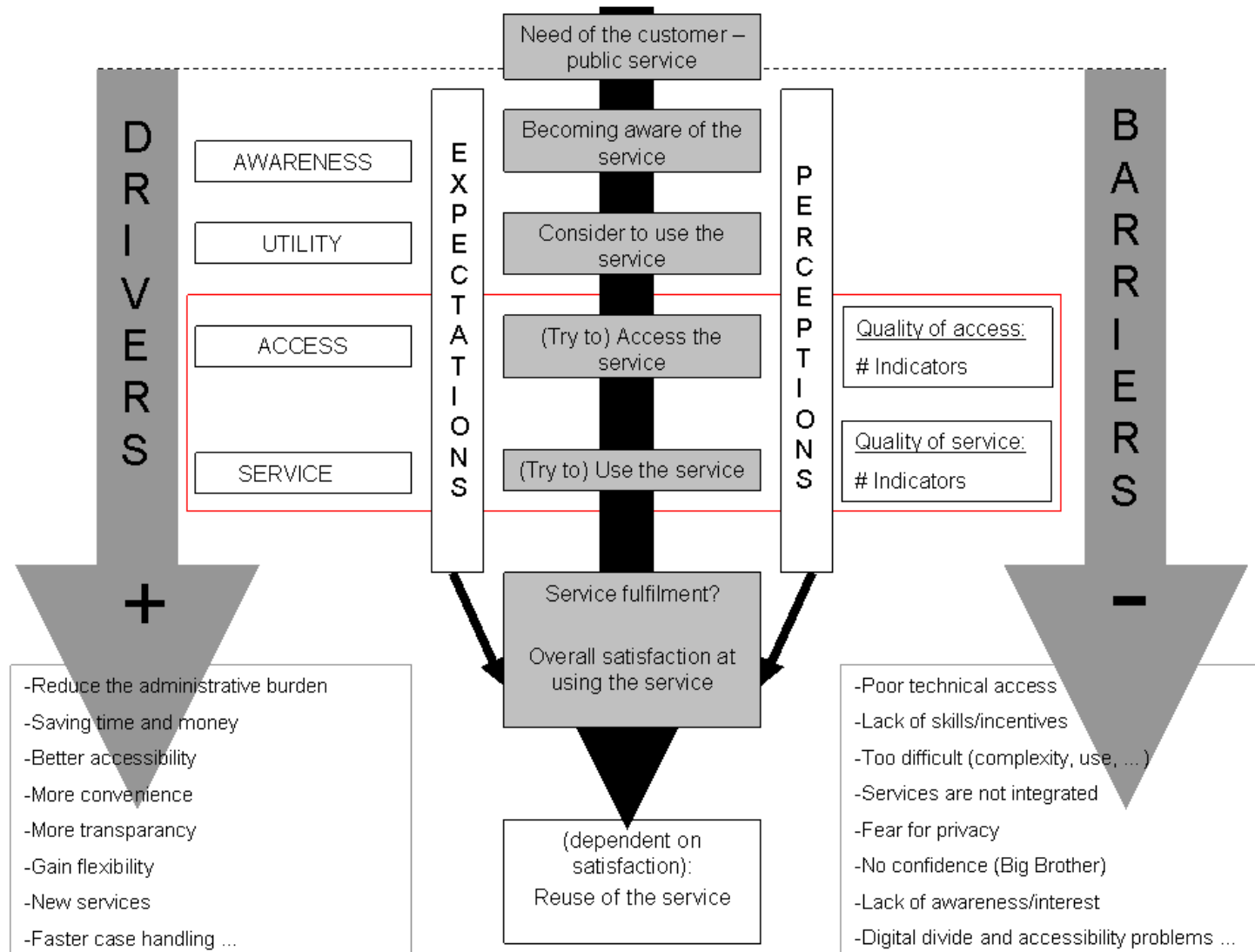
Study of the supply-side

⇒ Mapping the (dis)satisfaction of online public services



- Johnston: user satisfaction (18 items) + MORI
- SERVQUAL: 5 dimensions of service quality + Zeithaml: gap between expectations & perceptions
- Common Measurement Tool (CMT): expectations vs. experiences + surrounding factors
- Balanced E-government Index (Begix): KPI
- eUser: match between demand and supply-side
 - ➔ eUser: important input for own conceptual model

Conceptual model



- Focus on 'quality of access' and 'quality of service'
- Taking into account:
 - Satisfaction
 - Importance
(expectations – perceptions)
- Main question: what has to be measured?
 - ➔ What has an impact on the (dis)satisfaction of the user?

- Research design:
- Large-scale study mapping the needs & expectations of Flemish citizens
- N = 1651, via offline and online data collection
- Items:
 - Possession of ICT
 - Use of ICT
 - Knowledge & attitudes towards e-government
 - Indicators for (dis)satisfaction
 - Attitudes towards new channels such as iDTV & mobile

■ Main results:

Indicator	N	Importance
Decreasing the administrative burden	1635	8,78
Reliability	1633	8,65
Security	1627	8,48
Usability	1621	8,48
Content readability	1628	8,48
Ease of use	1630	8,47
Content quality	1626	8,46
Cost effective	1631	8,45
Privacy / personal information protection	1627	8,34
Transparency	1625	8,32
Courtesy	1626	8,3
Responsiveness	1632	8,28
Accessibility	1632	8,18
Flexibility	1635	8,1
Personal contact	1632	7,38

- Need for a qualitative in-depth research
- Research design:
- 3 focus group interviews
 - 1: G2B
 - 2: G2C
- Items:
 - Overall attitude towards government & public service delivery
 - Brainstorm about indicators for (dis)satisfaction
 - Testing conceptual model & indicators

■ Main results:

- Quality of access: 'awareness' and 'findability' most important
- Quality of service: 'content/information' most important
- Indicators:

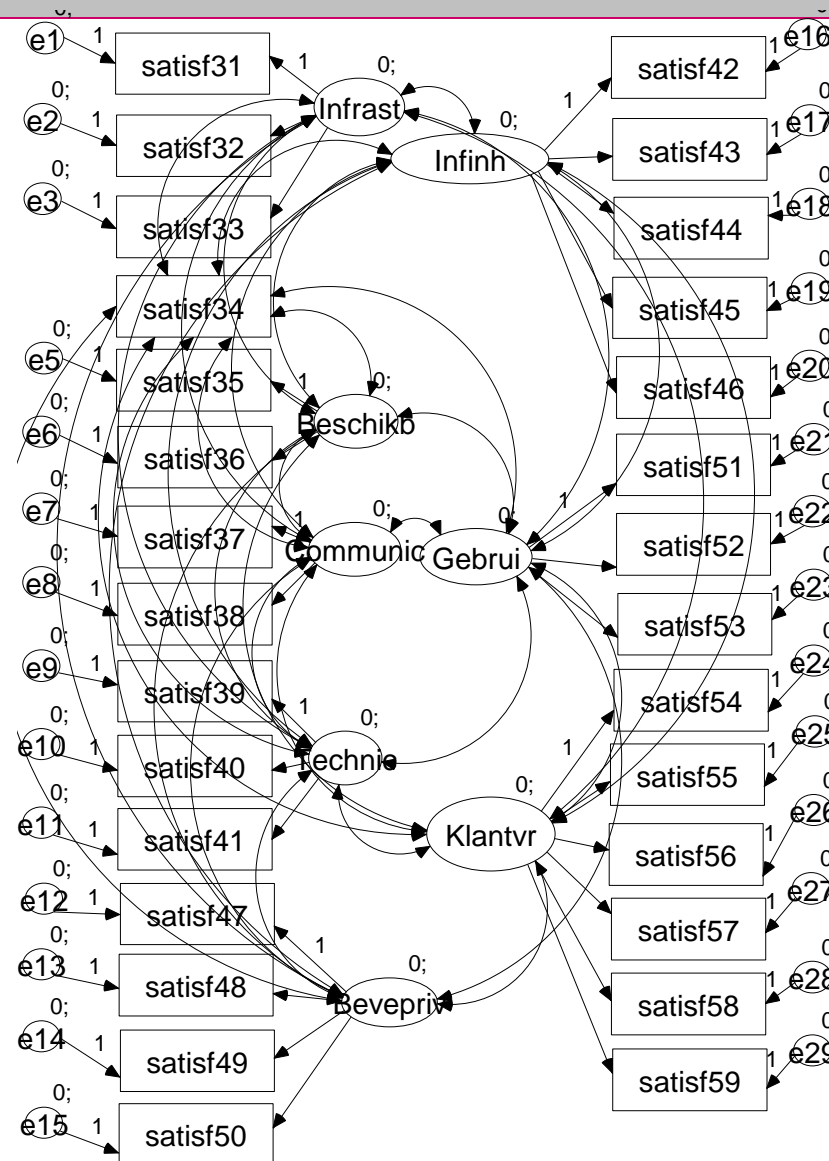
KEY-INDICATORS	INDICATORS
1) Infrastructure (+)	
	1.1) Skills (+++)
	1.2) Hardware (+)
	1.3) Software (+)
2) Availability (+)	
	2.1) Anytime (+)
	2.2) Anyplace (+)
3) Awareness (+++)	
	3.1) Communication (++)
	3.2) Findability (+)
4) Cost (+)	
	4.1) Affordability (+)

■ Main results (2):

KEY-INDICATORS	INDICATORS
5) Technical aspects (+)	
	5.1) Speed of the system (+++)
	5.2) Technical reliability (+++)
	5.3) Compatibility - OS/browser (+)
	5.4) Plugins (+)
6) Content (+++)	
	6.1) Content recency (+++)
	6.2) Content readability (++)
	6.3) Content credibility (++)
	6.4) Content usefulness (+)
	6.5) Content sufficiency (+)
7) Security/privacy (+)	
	7.1) Acknowledge the receipt of transaction (+++)
	7.2) Protection of personal information (++)
	7.3) Security of the transaction (+)
	7.4) Identification (+)
8) Usability (+)	
	8.1) Help/guidance (+++)
	8.2) Ease of navigation (+)
	8.3) Lay-out & design (+)
9) Customer friendly (++)	
	9.1) Integration of the different services (+++)
	9.2) Decrease of the administrative burden (+++)
	9.3) Possibility of personal contact (+++)
	9.4) User-oriented (++)
	9.5) Flexibility (+)
	9.6) Customisation/personalisation (+)

Validation & results

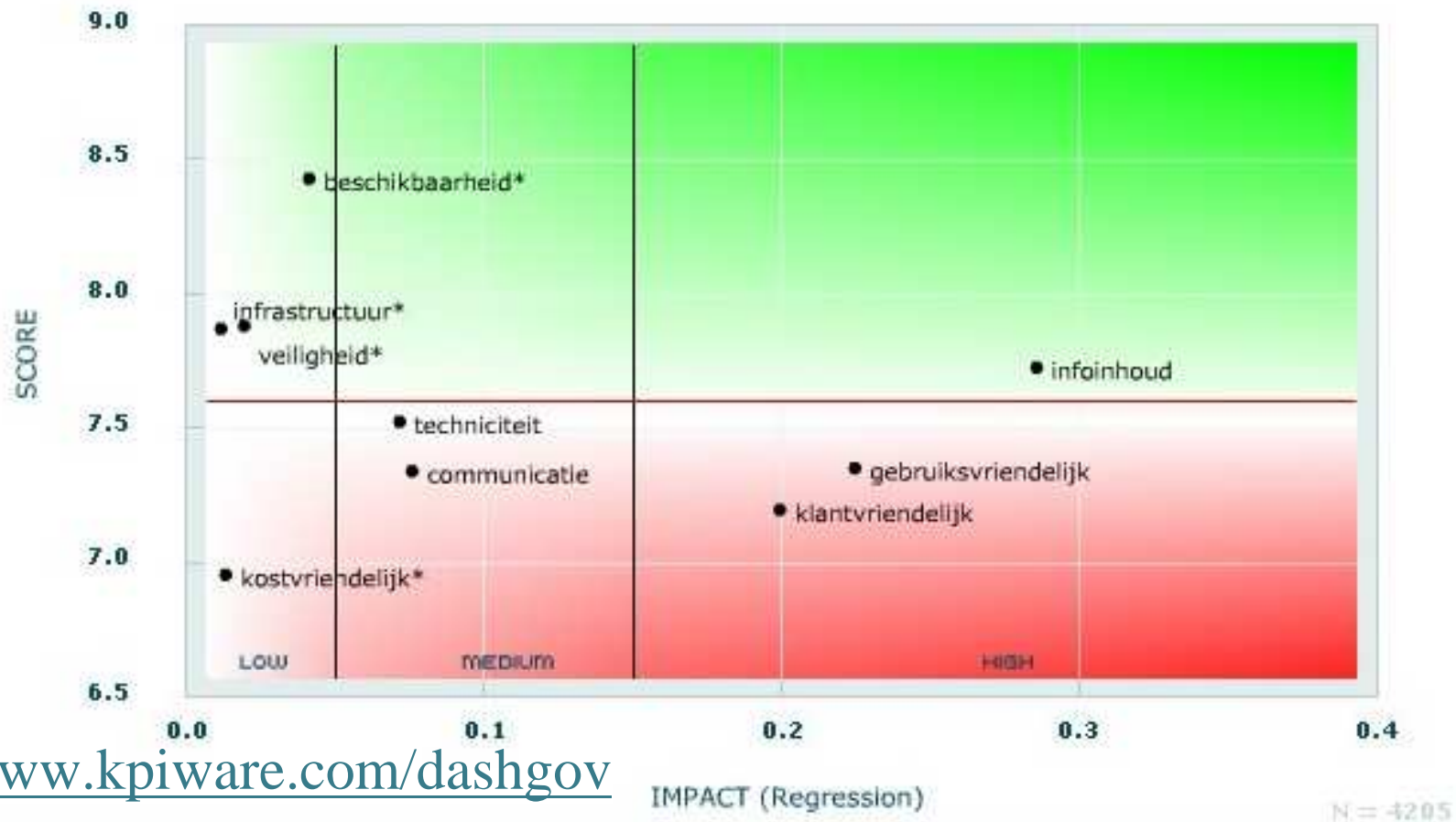
■ SEM



Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	,919	,897	,923	,902	,923
Saturated model	1,000		1,000		1,000
Independence model	,000	,000	,000	,000	,000

Dedicated Software (demo)



<http://www.kpiware.com/dashgov>
li : dashgov pw:guest

- Criticism & rethinking of e-government
- Focus on user-oriented approach
- Research flow:
 - Desk research
 - Quantitative research
 - Qualitative research
- Necessity of an integrated approach for the development of conceptual model & indicators

Thank you for your attention!

■ More information:

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