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Customer Value of Service Customization

Preliminary Results

Daniel Bazzi (Doctoral Candidate)
Christian Laesser (Supervisor)

Research Questions of the Dissertation Project

*What are the common mass customization **practices** in service industries?*

Study1

*What **service types** or features are suitable for customization?*

*What **contextual factors** (personal traits & travel context) favor a superior customer value of customized services?*

Context: Air and rail passenger transportation

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Service Customization = Mass Customization of Services*

"[…] mass production of individually customized goods and services" (Pine, 1993).

"The ability to provide your customers with anything they want profitably, any time they want it, anywhere they want it, any way they want it" (Hart, 1995).

"The use of flexible processes and organizational structures to produce varied and often individually customized products and services at the low-cost of a standardized, mass-production product" (Hart, 1995).

*Services with a high degree of standardization, such as transportation services

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Research on Mass Customization

Supply

- **Manufacturing/Production Processes** (Pine, 1993; Davis, 1989; etc.)
- **Operations Management** (Ahslström et al., 1999; etc.)
- **Strategy & Typologies** (Gilmore & Pine, 1997, Lampel & Mintzberg, 1996; etc.)
- **Product Architecture** (Mikkola, 2006; Sanchez, 1999; etc.)
- **Configurator** (Randall et al., 2007)

- **Service Models** (Frei, 2008; etc.)
- **Customer Relationship Management** (Coelho & Henseler, 2012)
- **Service Architecture** (Voss & Hsuan, 2009; Moon et al., 2010)
- **Service Provision** (Bettencourt & Gwinner, 1996)
- **Service Innovation** (Victorino etc al. 2005)
- **Emloyee Behavior** (Gwinner et al. 2005)

Demand

- **Configuration** (Deallert & Stremersch, 2005)
- **Customer Readiness** (Bardakci & Whitelock, 2003)
- **Customer Value Drivers / Benefits** (Schreier, 2006)
- **Sacrificies** (Hart, 1995)

- **Configuration** (Jin et al., 2012; Kuo, 2010)
- **Satisfaction & Loyalty** (Coehlo & Henseler, 2012)

Products   **Services**

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Is Mass Customization always beneficial?

Benefits:

- Closer fit between needs and product characteristics

- Perceived quality

- Perceived uniqueness

- Process benefit of self-design

- Pride of authorship

Sacrifices:

- Higher price

- Time costs
  - Configuration
  - Waiting for delivery

- Cognitive effort

- Negative emotions (e.g. anticipated regret)

- Information overload

- Frustration through complexity

Customer Value > 0 ?

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Mass Customization Topics in Transportation Services

- Access to infrastructure

- Comfort & Convenience

- Culinary art

- Pricing

- Information

- Upstream & downstream services

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Study 1: Customized Travel Information: Travel Planning App

Context:

- Smartphone app / website for customized travel information that includes various travel modes and means of transportation

Methodological approach:

- Kano model of customer satisfaction
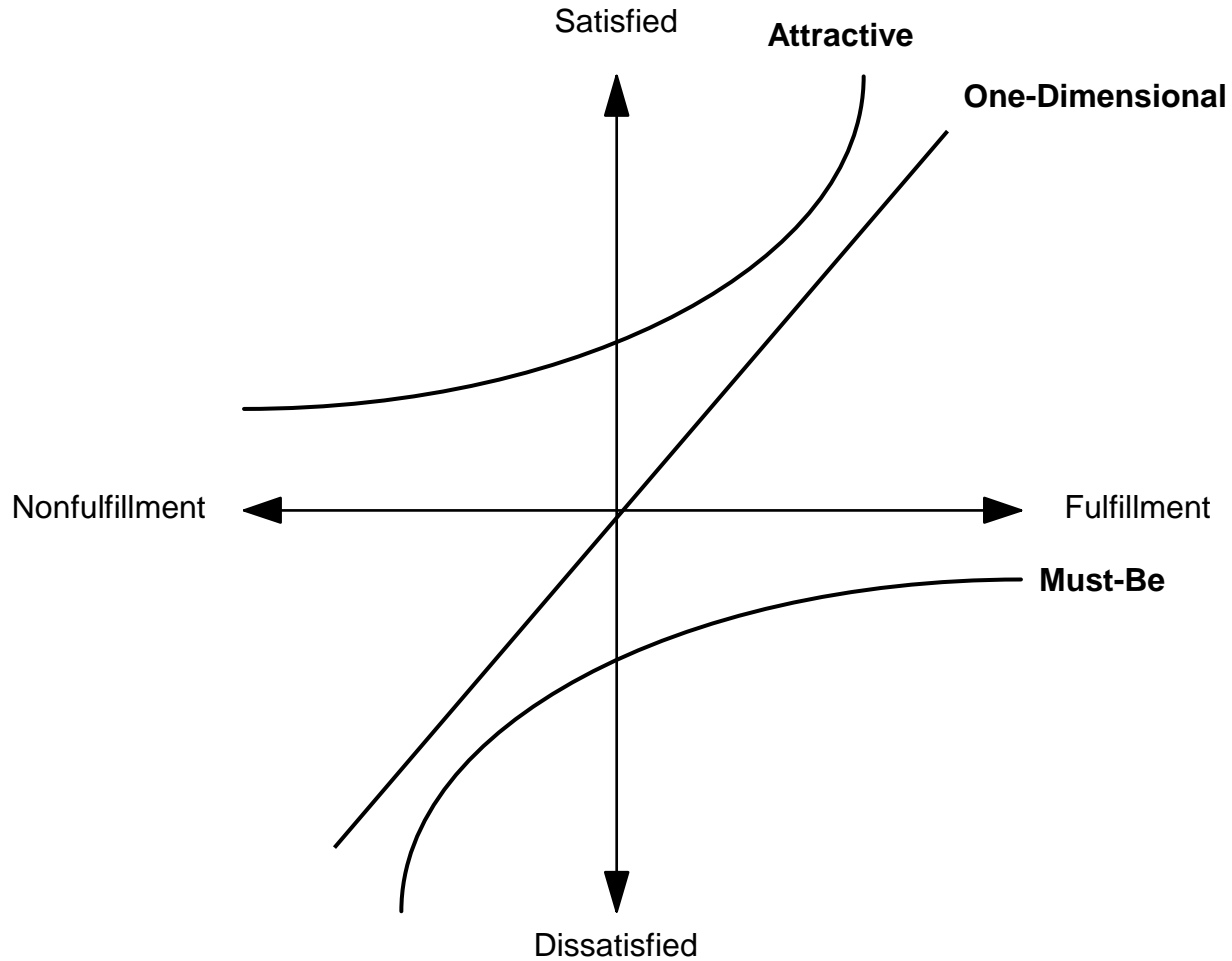
Sample:

- n = 502

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Tavel Planning App: Potential Features

1. Personal profile (travelcards, preferred transportation means)
2. Footpaths (incl. navigation)
3. Bike routes
4. Bikesharing locations
5. Street maps (incl. navigation)
6. Car park
7. Carsharing
8. Carpooling
9. Taxi
10. Flight schedules
11. Long distance buses
12. Filter function «usable time»
13. Filter function «price»
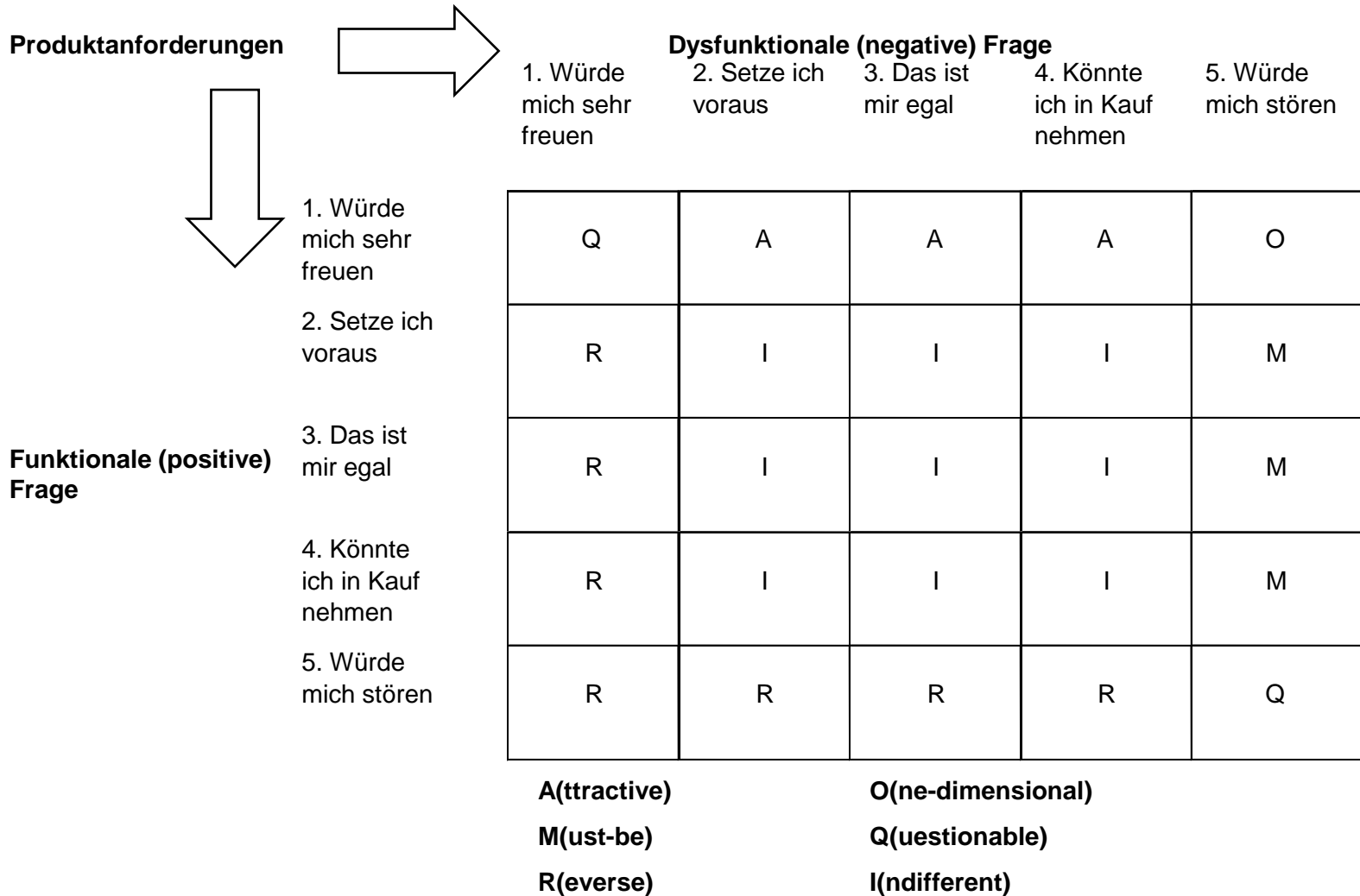14. Filter function «convenience»
15. Filter function «ecology»

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Kano's Model for Customer Satisfaction

Quelle: Berger et al (1993)

Kano: Functional and Dysfunctional Questions

Functional Form	
Was würden Sie sagen, wenn die Reiseplanungs-App über personalisierbare Profileinstellungen verfügt?	Das würde mich sehr freuen Das setze ich voraus Das ist mir egal Das nehme ich gerade noch hin Das würde mich sehr stören
Was würden Sie sagen, wenn die Reiseplanungs-App NICHT über personalisierbare Profileinstellungen verfügt?	Das würde mich sehr freuen Das setze ich voraus Das ist mir egal Das nehme ich gerade noch hin Das würde mich sehr stören
Dysfunctional Form	

Kano: Classification of the Attributes

Produktanforderungen

Funktionale (positive) Frage

	Dysfunktionale (negative) Frage				
	1. Würde mich sehr freuen	2. Setze ich voraus	3. Das ist mir egal	4. Könnte ich in Kauf nehmen	5. Würde mich stören
1. Würde mich sehr freuen	Q	A	A	A	O
2. Setze ich voraus	R	I	I	I	M
3. Das ist mir egal	R	I	I	I	M
4. Könnte ich in Kauf nehmen	R	I	I	I	M
5. Würde mich stören	R	R	R	R	Q

A(ttractive)   **O(ne-dimensional)**

M(ust-be)   **Q(uestionable)**

R(everse)   **I(ndifferent)**

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Quelle: Berger et al., 1993

Results

	Must-be	One dim.	Attractive	Indfferent	Reverse	Questionable
Personal profile	10%	22%	19%	37%	9%	3%
Footpaths	12%	25%	25%	29%	3%	5%
Bike routes	5%	10%	20%	57%	6%	3%
Bikesharing	2%	3%	14%	69%	10%	2%
Street maps	9%	25%	18%	39%	5%	4%
Car park	4%	13%	20%	55%	5%	3%
Carsharing	3%	3%	9%	76%	8%	2%
Carpooling	2%	2%	12%	70%	13%	1%
Taxi	3%	8%	17%	61%	9%	2%
Flight schedules	4%	12%	22%	48%	11%	3%
Long distance buses	4%	11%	19%	56%	9%	2%
Filter «usable time»	5%	10%	21%	50%	12%	2%
Filter «price»	13%	25%	20%	36%	3%	2%
Filter function «convenience»	11%	19%	20%	45%	4%	2%
Filter «ecology»	2%	9%	17%	60%	11%	2%

Customer Satisfaction Coefficient

	Satisfaction Coefficient	Dissatisfaction Coefficient
Profil	0.46	-0.37
Fusswege	0.54	-0.41
Fahrradrouten	0.32	-0.16
Bikesharing	0.19	-0.05
Strassenrouten	0.48	-0.37
P+Rail	0.36	-0.18
Carsharing	0.13	-0.07
Carpooling	0.16	-0.04
Taxi	0.28	-0.12
Flug	0.40	-0.19
Fernbus	0.33	-0.17
Filter Nutzare Zeit	0.36	-0.18
Filter Preis	0.48	-0.41
Filter Komfort	0.41	-0.31
Filter Öko	0.29	-0.13

Conclusion

A customized travel planning app should include:

▶ Personal profile

▶ Footpaths

▶ Street maps

▶ Car park

▶ Filter «price»

▶ Filter «convenience»

Expendable features:

o Bikesharing

o Carpooling

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Outloook: Study 2

Context:

- Customization of airline and rail transportation services
- Unbundling of existing products/services
- Add-on services

Methodological approaches:

- Kano
- Hedonic Regression Analsysis

Back up

Zufriedenheitsstiftung

Beitrag zur Zufriedenheit :

- Koeffizient der Zufriedenheitsstiftung nahe bei 1 → hoher Einfluss auf Zufriedenheit

- Koeffizient der Zufriedenheitsstiftung nahe bei 0 → geringer Einfluss auf Zufriedenheit

Beitrag zur Unzufriedenheit :

- Koeffizient der Unzufriedenheitsstiftung nahe bei 0 → geringer Beitrag zu Unzufriedenheit

- Koeffizient der Unzufriedenheitsstiftung nahe bei -1 → hoher Beitrag zu Unzufriedenheit

$$\text{Koeffizient der Zufriedenheitsstiftung} = \frac{\text{Leistung + Beigeisterung}}{\text{Basis + Leistung + Begeisterung + Indifferent}}$$

$$\text{Koeffizient der Unzufriedenheitsstiftung} = \frac{\text{Basis + Leistung}}{[\text{Basis + Leistung + Begeisterung + Indifferent}] \cdot (-1)}$$

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