

Business Concept for a Social Network based on P2P-Technology

Studienarbeit



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How to make money as a social network startup company?

What are the competitors' strategies?

What should be offered to the users?

How to reach the critical mass of users?



Overview



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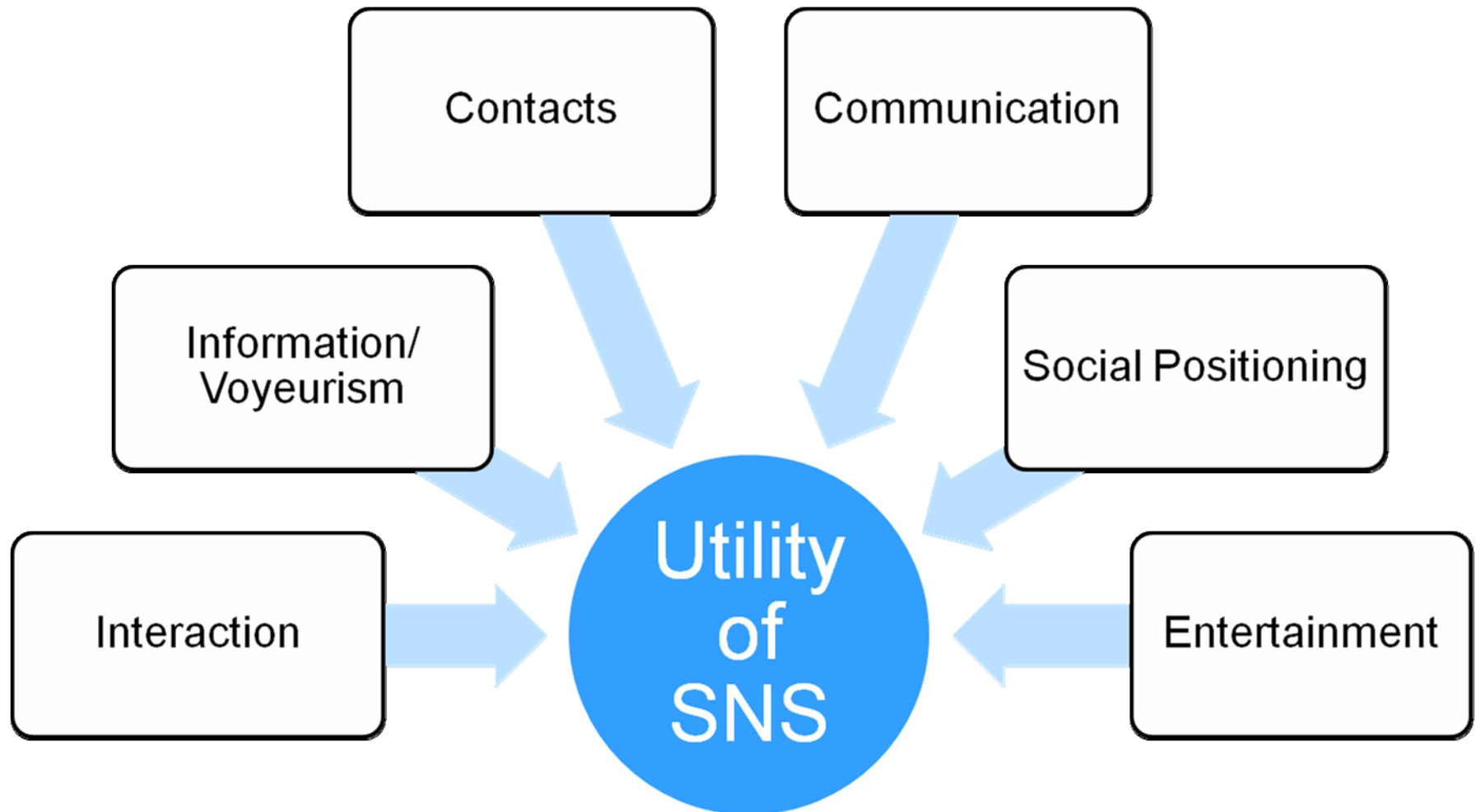
1. Business Idea
2. Market Analysis and Selection
3. Market Study
4. User Segments
5. Competitor Analysis
6. Best Practices
7. Product Concept
8. Business Concept
9. SWOT Analysis



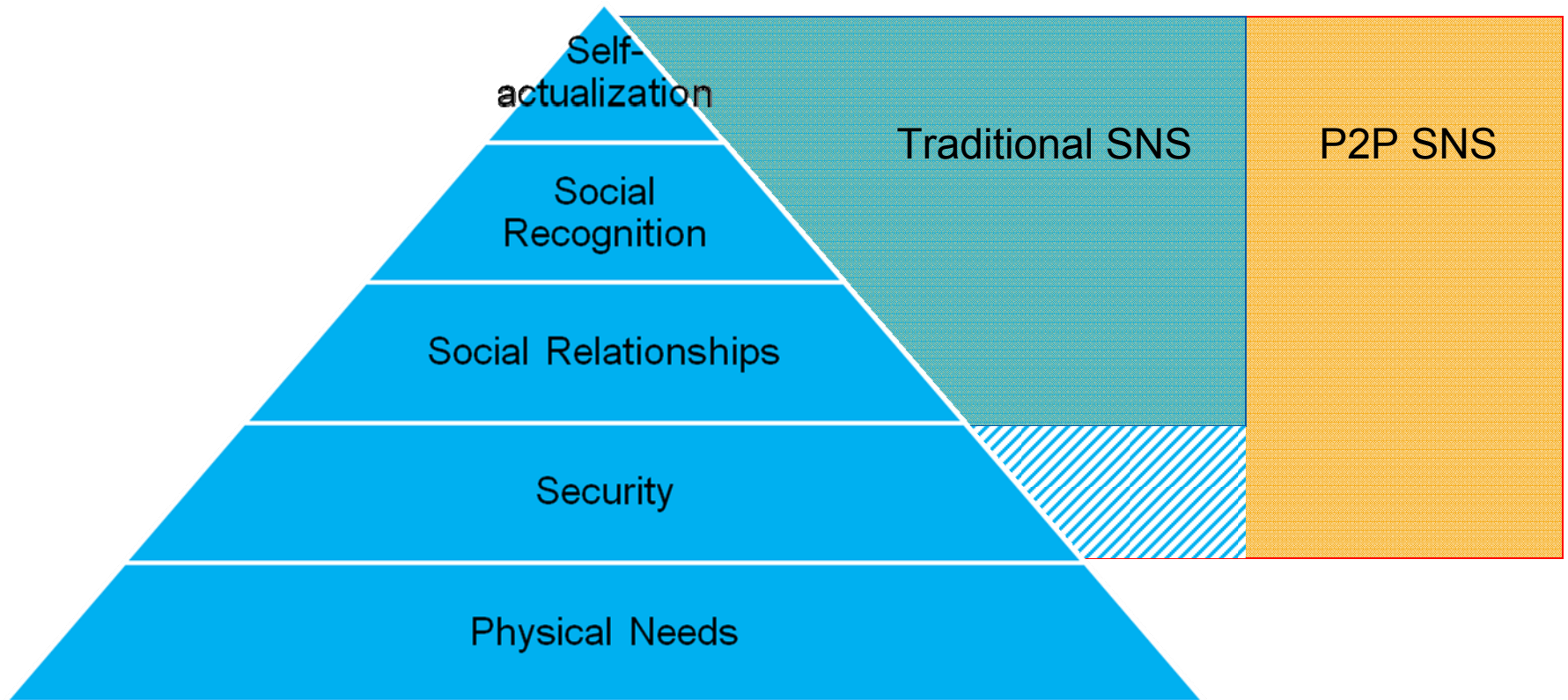
BUSINESS IDEA



Utility of Social Network Services (SNS)



Maslow's Hierarchy of Needs




Anytime/Anyplace Matrix

Social Network based on Peer-to-Peer Technology

→ What can P2P do better?

	„Same Time“	„Different Time“
„Different Place“	<div>Telephone conversations Video Conference ----- Chat Instant Messaging</div>	<div>E-Mail Private Messaging Voice-Mail Fax</div>
„Same Place“	Face-to-Face Conversations	<div>Bulletin Boards</div>

Traditional SNS



Source: O'Hara-Devereaux / Johansen (1994)

Project “LifeSocial”

- **Social Network Service with P2P-Layer as foundation**
- **Modular Approach**
- **Web-interface and stand-alone application**

→ **Technology Advantage**

- **Disruptive Technology?**
 - Centralized Twitter service is overloaded
 - Microsoft: 200.000 new servers per year
 - Facebook: 10.000 servers and 1.800 mysql servers in 2008;
\$100 million for another 50.000 Facebook servers
- **Better medium to reproduce structure of private conversation (no central server)**
(Instant Messaging, Video Chat)

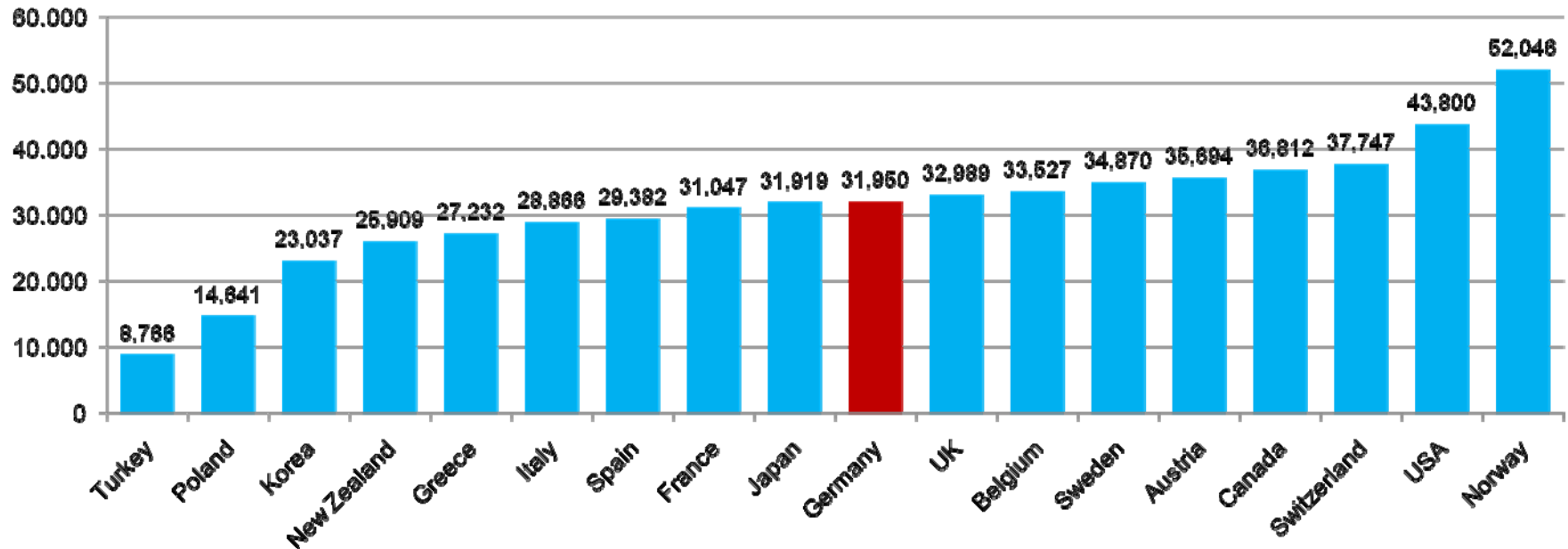
→ **Cost Advantage**

→ **Security Advantage (e.g. DRM)**



Market Analysis

- 1.229 Billion Internet Users worldwide in 2007
- GDP per capita in selected countries (US\$)

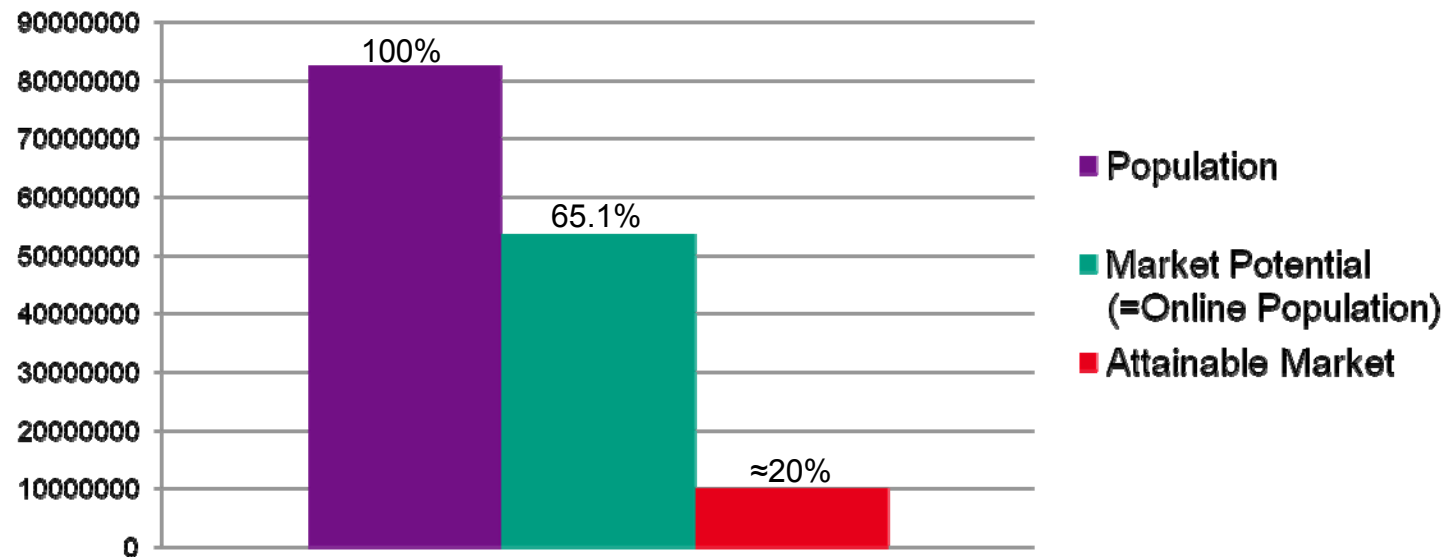


Source: OECD (2008)

German Market

- More than $\frac{3}{4}$ of households have at least one PC
- 50% of the German population owns a computer
- Computer knowledge above the European average

▪ Estimate of Market Capacity



Market Selection

→ German Market

- Smaller market compared to U.S.
- Lower GDP per capita

But...

- Still room for growth
- Myspace and Facebook have not found traction, yet.
- Cultural differences in usage (example: “QQ” in China)

→ Better accessibility



MARKET STUDY

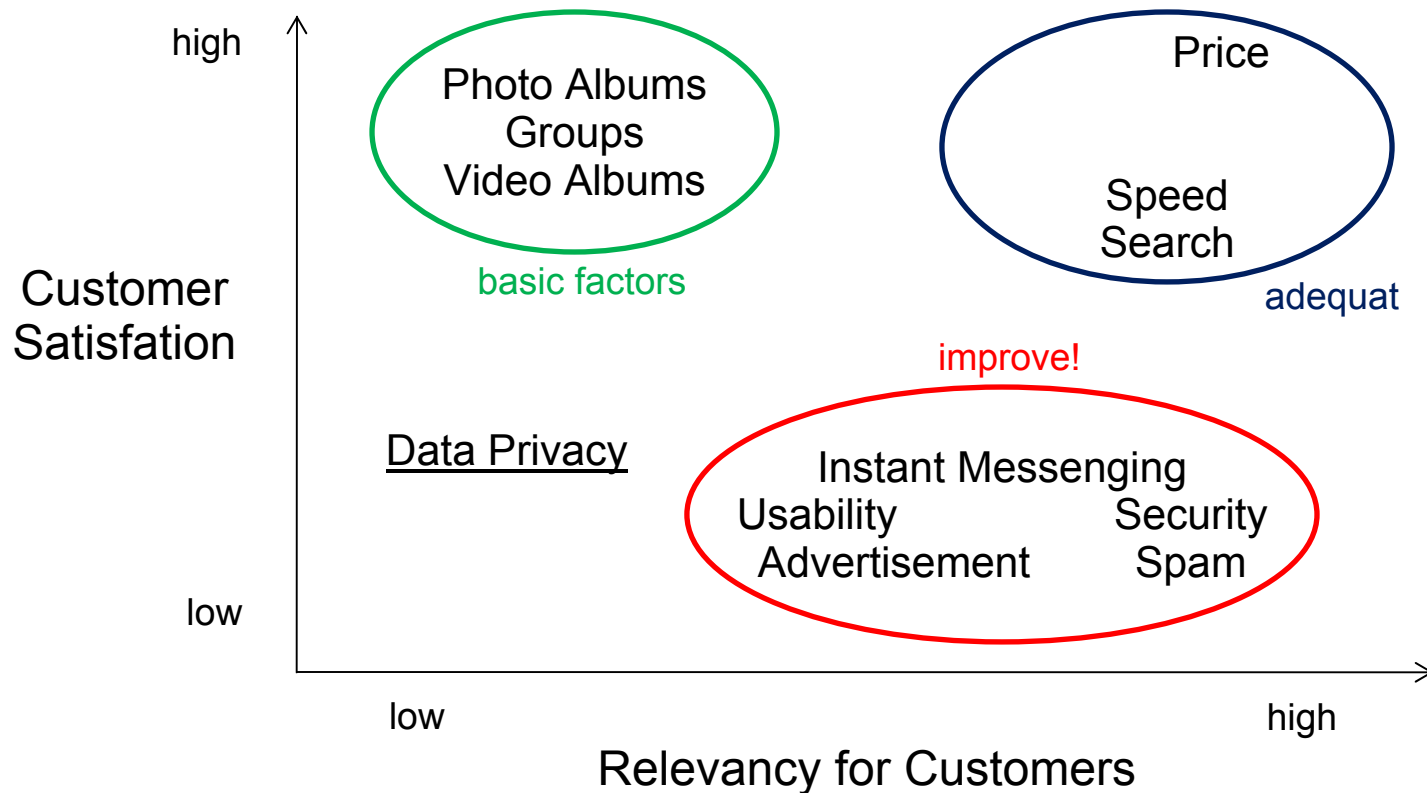


Preliminary Survey



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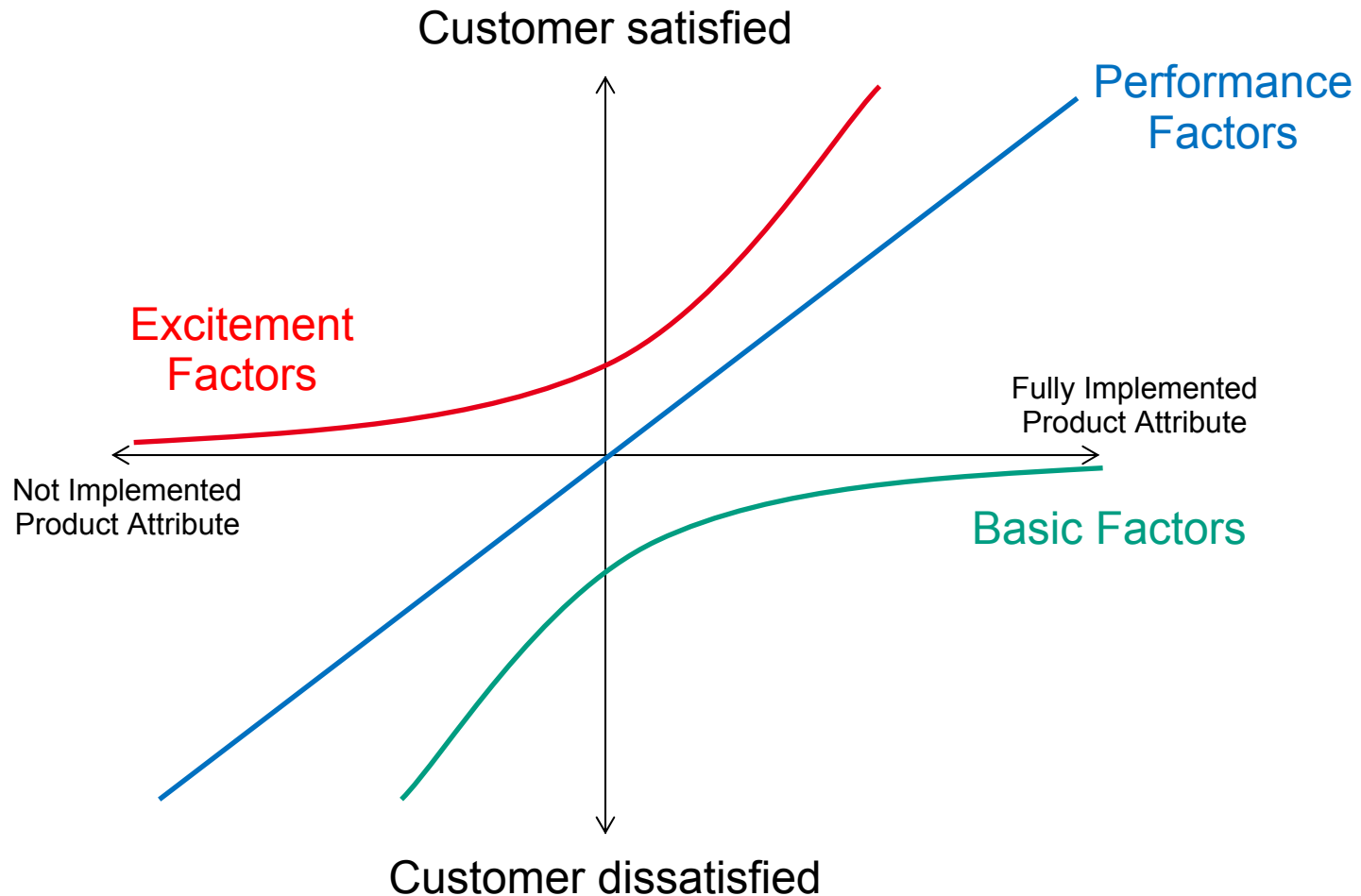
▪ Interviews with 20 Social Network Users



Kano's Model of Customer Satisfaction



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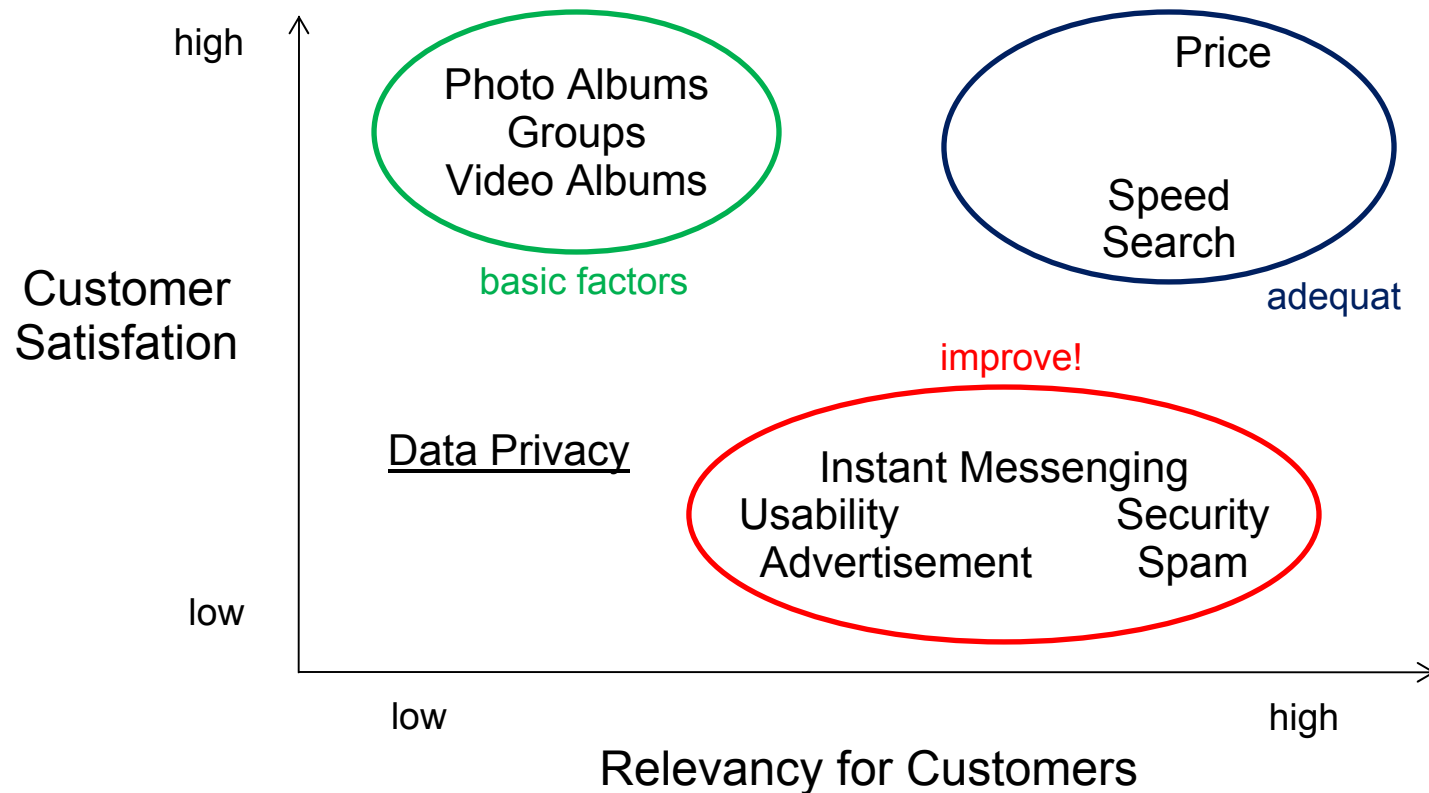


Preliminary Survey



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▪ Interviews with 20 Social Network Users

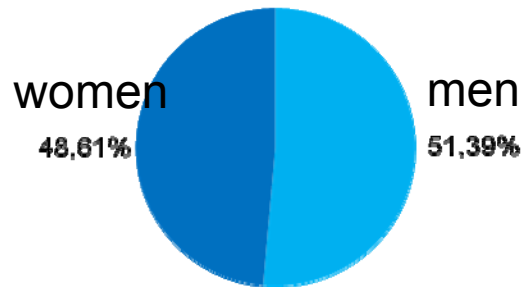


- **Online Survey Software EFS Survey (www.unipark.de)**
- **German users of social networks**
- **Age 14+**

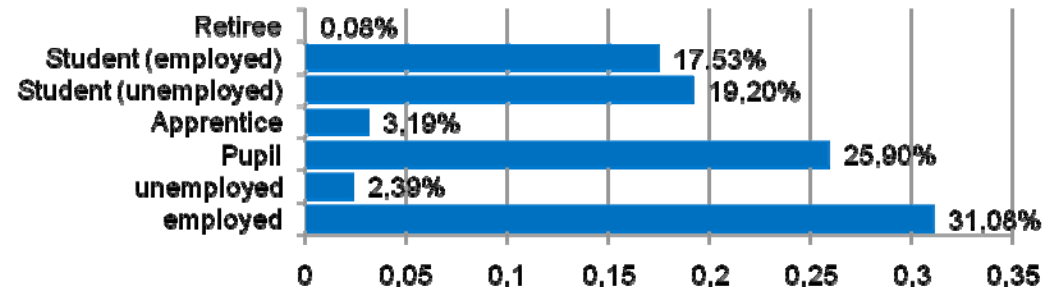
- **Survey advertisement on Facebook and Myspace**
 - 2,371,057 Ad Impressions
 - Click-Through-Ratio of 0.04%
 - 892 visits to survey
 - 251 finished surveys
 - 247 consistent results

Demography

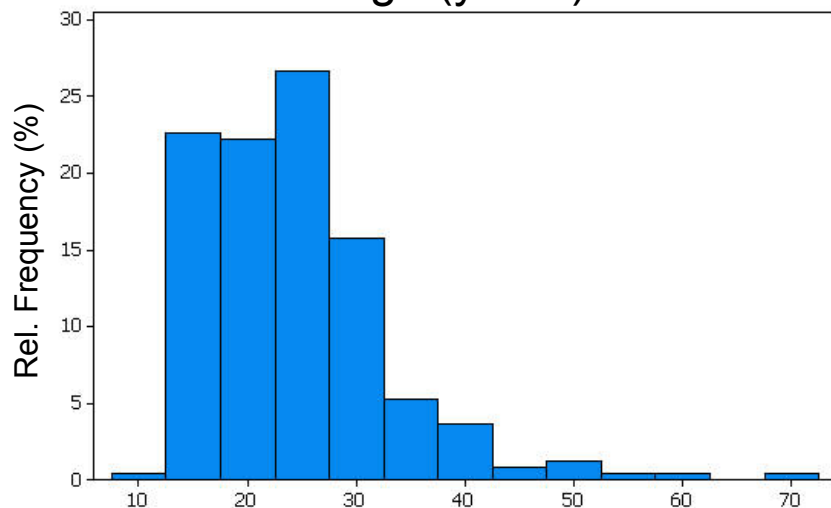
Gender



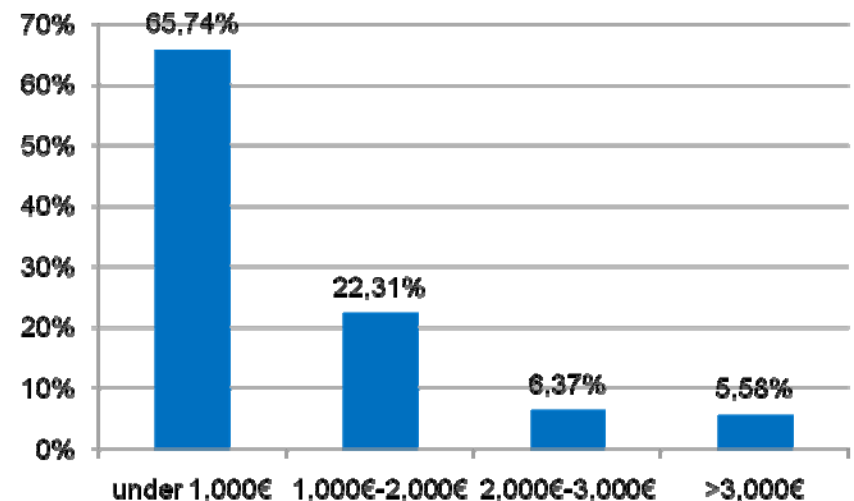
Work Status



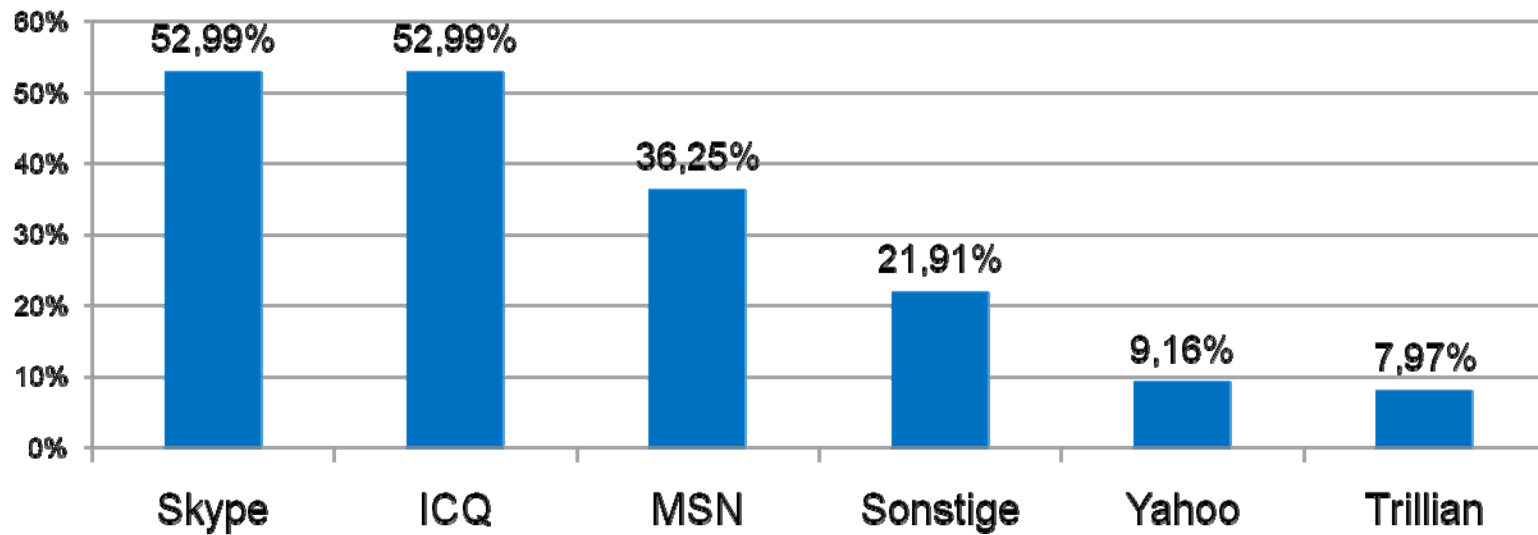
Age (years)



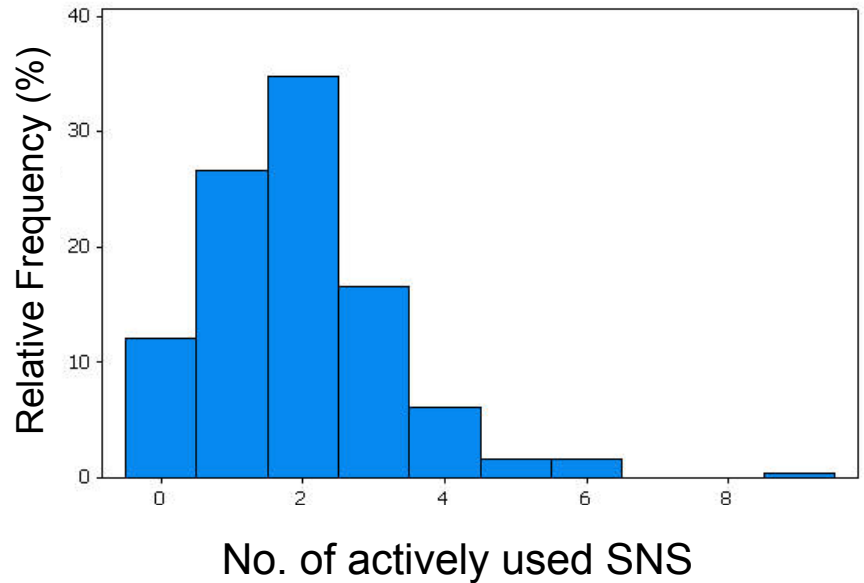
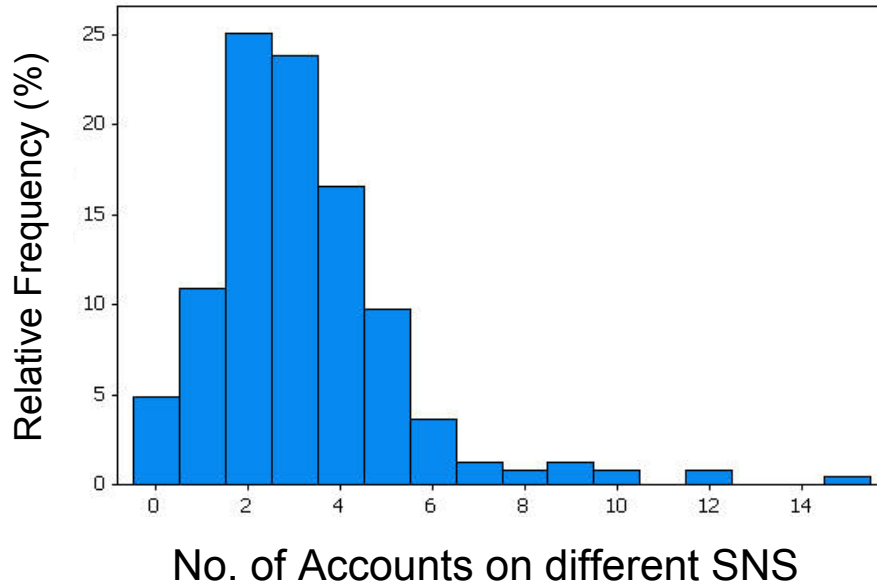
Disposable Income



Instant-Messenger Usage



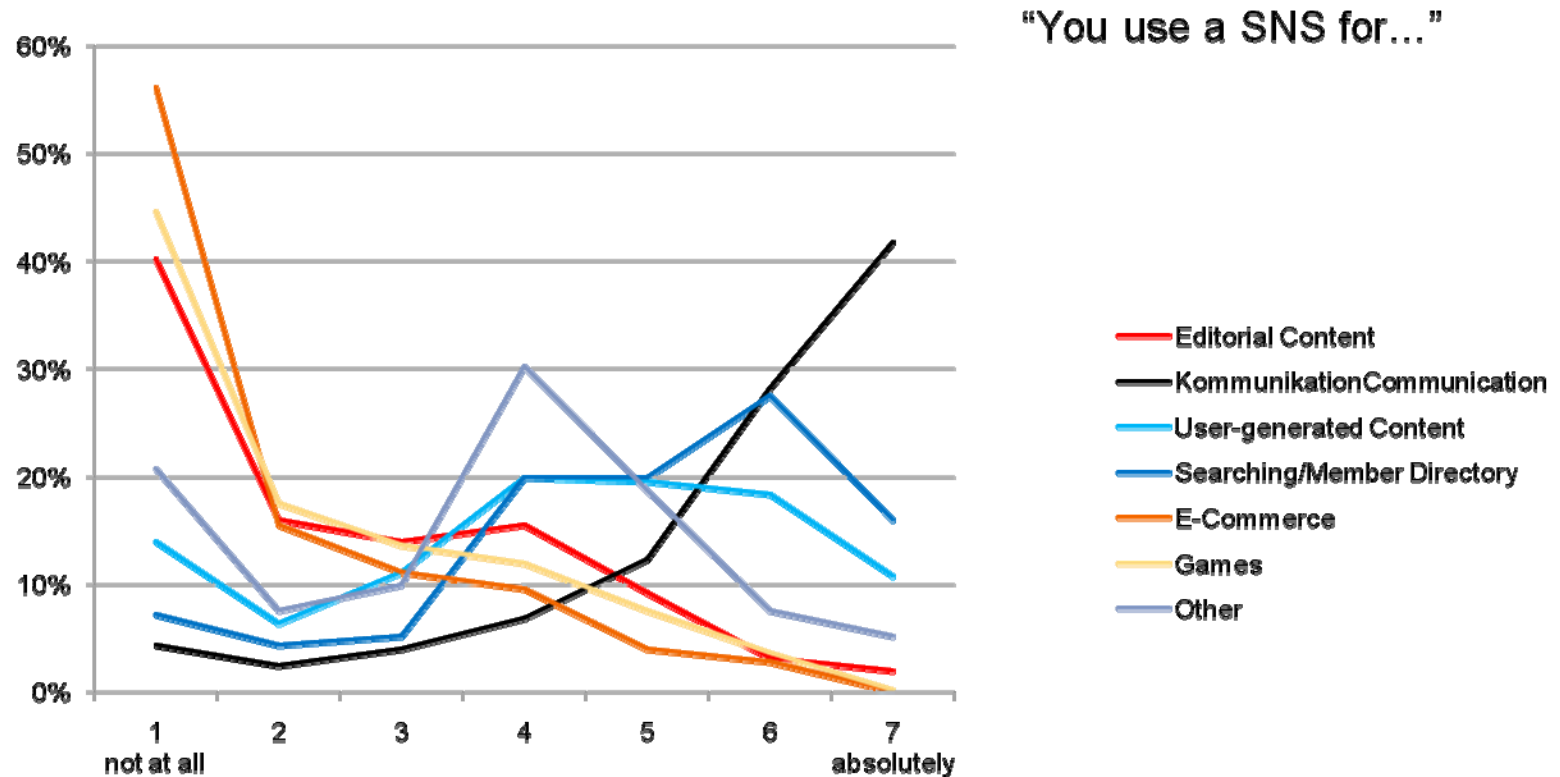
Social Network Usage



Filesharing Usage

- **One in three persons in the sample uses filesharing networks**
- **About 30% are women**
- **About 15 hours a week**
- **About 7GB in shared folder**

Categorization of SNS following IVW

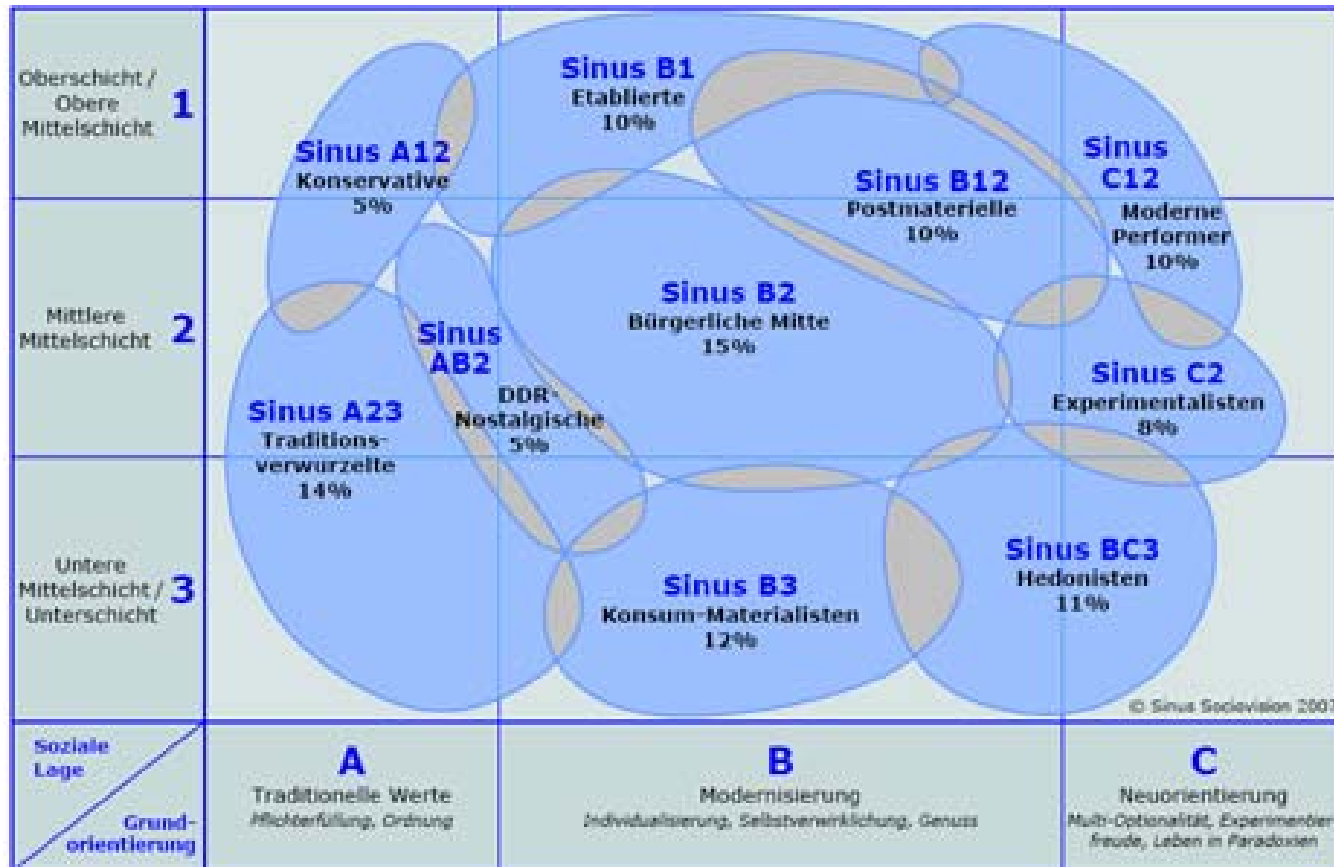




Target Groups



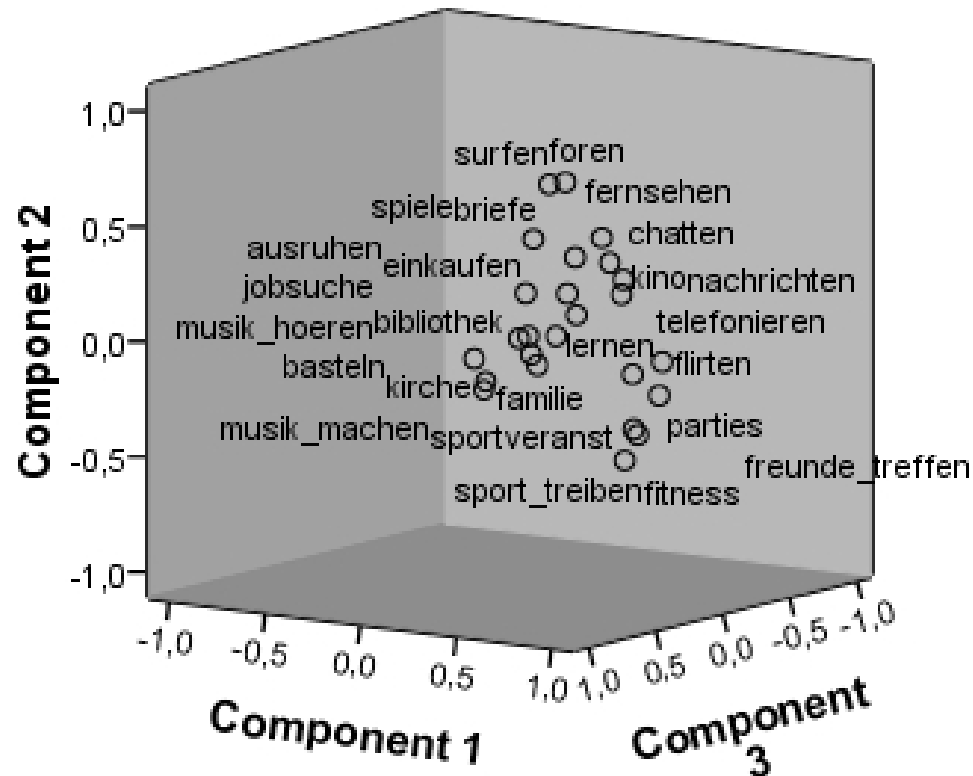
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Source: Sinus Sociovision (2007)

Target Group Analysis

- Online User Typologies: ARD/ZDF, Forsynth
 - Are there **different user types of SNS**?
- Principal Component Analysis of leisure activities





Evaluating a Company

- Traditional method:

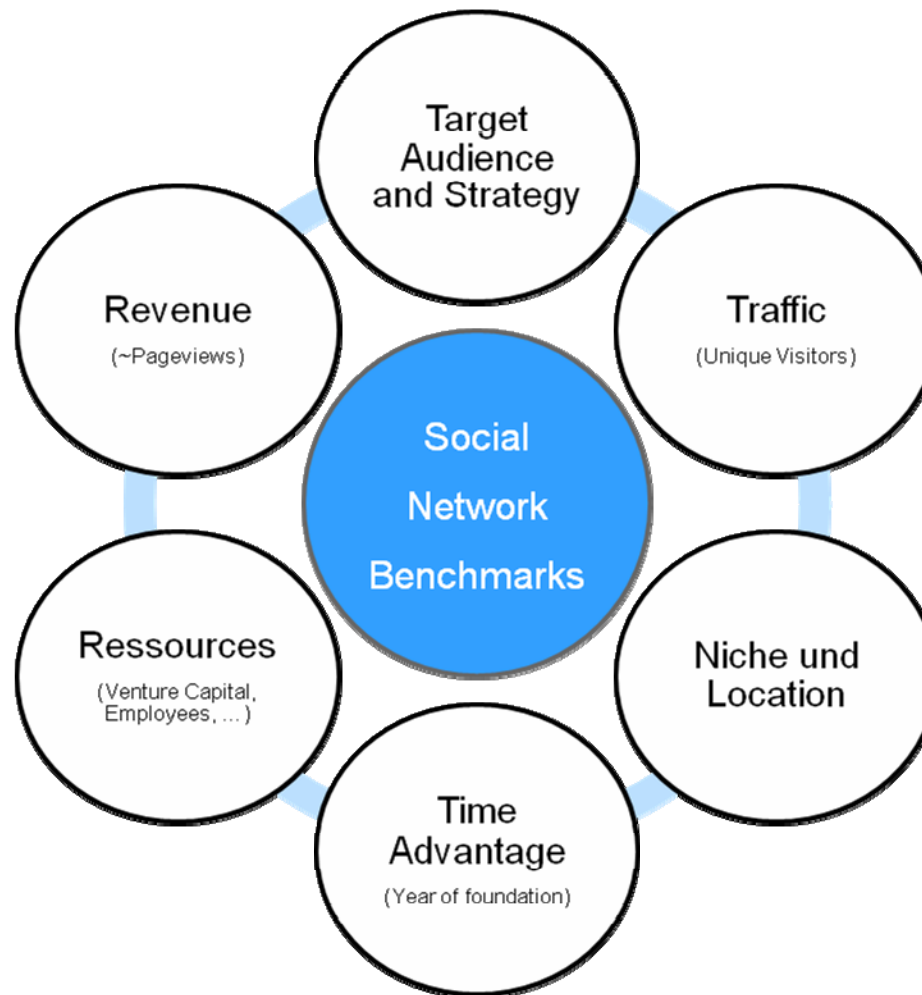
→ Net Present Value Analysis

$$C_0 = \sum_{t=1}^T \frac{R_j}{(1 + \bar{i})^t} + \frac{L}{(1 + \bar{i})^T}$$

Competitor Analysis



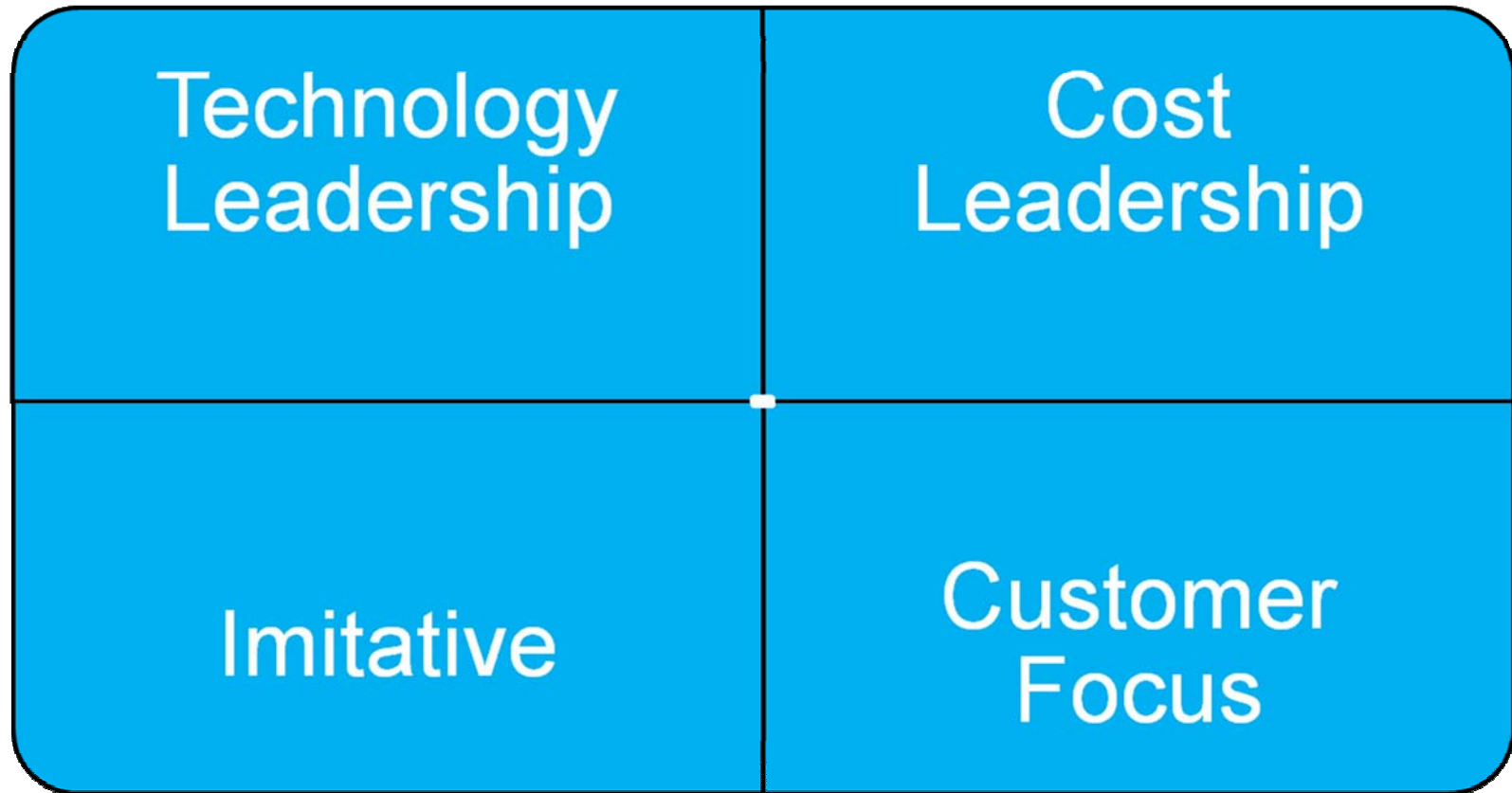
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Competitor Overview (outtake)

	Facebook Germany	Myspace Germany	StudiVZ	Wer-kennt- Wen	Xing
Foundation	03/2008	04/2007	10/2005	10/2006	11/2003
German Head Office	-	Berlin	Berlin	Cologne	Hamburg
Target Customers	People over 13, students	Young people over 14, music enthusiasts	People over 18, Students	People over 14	Business People over 18
Niche Network?	No	No	Yes	No	Yes
User accounts	≈920,000 (June 2008)	≈2.24 Mio. (June 2008)	≈5.5 Mio. (July 2008)	≈2.8 Mio. (May 2008)	≈1.9 Mio. (April 2008)
Business Model	Advertisement	Advertisement	Advertisement	Advertisement	Premium Accounts, Advertisement
German Top 100 Alexa Rank (08/2008)	25	13	7	17	-

Competitive Strategies



Source: Ulrich/Eppinger (2003)

Competitors' Strategy?

- **Mark Zuckerberg, CEO of Facebook:**

“Our focus is growth, not revenue.”

Source: Frankfurter Allgemeine Zeitung, 10/08/2008

- **Sheryl Sandberg, Chief Operating Officer of Facebook:**

"Advertisers follow people. We have 70 million active members. Once you have engaged users, the revenue will follow in that order."

Source: USA Today, 05/12/2008

- **Eric Schmidt, CEO of Google**

"The web 2.0 architecture is not necessarily a revenue opportunity. This is not where the money is."

Source: Frankfurter Allgemeine Zeitung, 05/26/2008

Business Concepts of existing SNS

- **Advertising as business model** is predominant
 - Online advertisement market estimated to \$2.1 Billion in 2008
 - Revenue ~ Pageviews
 - Very efficient ad targeting
 - High engagement levels (Bebo: 30 minutes on-site time a day)
 - But: very low Click-Through-Rates
(0.04% compared to about 2% on Google)

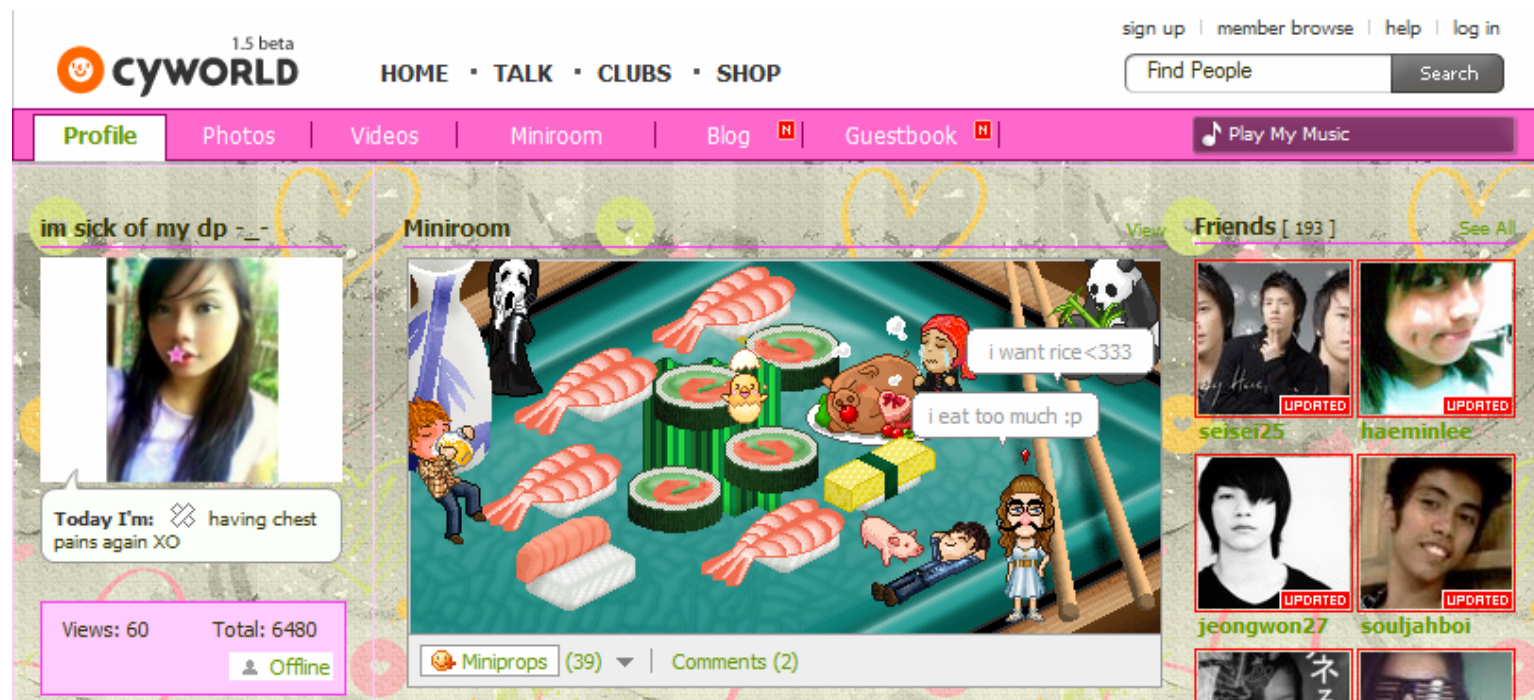
Other Business Models?

- Open Source?
- Commission/Affiliate Marketing
- Selling the Technology
- Selling User Data
- Premium Accounts
- Corporate Sponsorship
- User Sponsorship
- Pay-what-you-want
- Growth and Sale

	Facebook	Myspace	Bebo
Acquirer	(Microsoft)	News Corp.	AOL
Acquisition sum	\$240 Mio. (1.6%)	\$580 Mio.	\$850 Mio.
Date	Oct. 2007	June 2005	March 2008

Paid Premium Features

- **Virtual Products:** Gift Cards, Profile Customizations, Gimmicks, ...
- **Example: Cyworld**
 - 2006: revenue of >\$300,000 a day in South Korea



→ Failed in the U.S. and in Germany because of cultural differences



SNS BEST PRACTICES



SNS Trends

- Localization
- Single Login Systems
- Convergence
- Network Aggregation
- Life Streaming
- White-Label SNS
- 3D Social Networks



Best Practices

- Find the best “**Fit**” of product features and customer needs!

	Myspace	Face- book	Bebo	Friend- ster	Hi5	Linked- In	Ning	Orkut
Myspace		20%	3%	1%	1%	0%	0%	0%
Facebook	64%		4%	2%	2%	2%	1%	1%
Bebo	25%	65%		2%	3%	1%	1%	0%
Friendster	23%	49%	5%		4%	6%	2%	1%
Hi5	24%	69%	7%	4%		1%	0%	2%
LinkedIn	42%	32%	4%	8%	2%		8%	3%
Ning	35%	44%	6%	6%	1%	19%		2%
Orkut	26%	29%	3%	4%	7%	8%	2%	

Source: Patriquin (2007)

- **Value of product for customer increases with user base**
 - Direct
 - Indirect
- **Metcalfe's Law:**
 - Value of communication network is proportional to the square number of nodes.

Network Effects in SNS:

- **No “the winner takes all” paradigm can be observed**
- **But: strong pioneer advantage**
- **Switching costs**

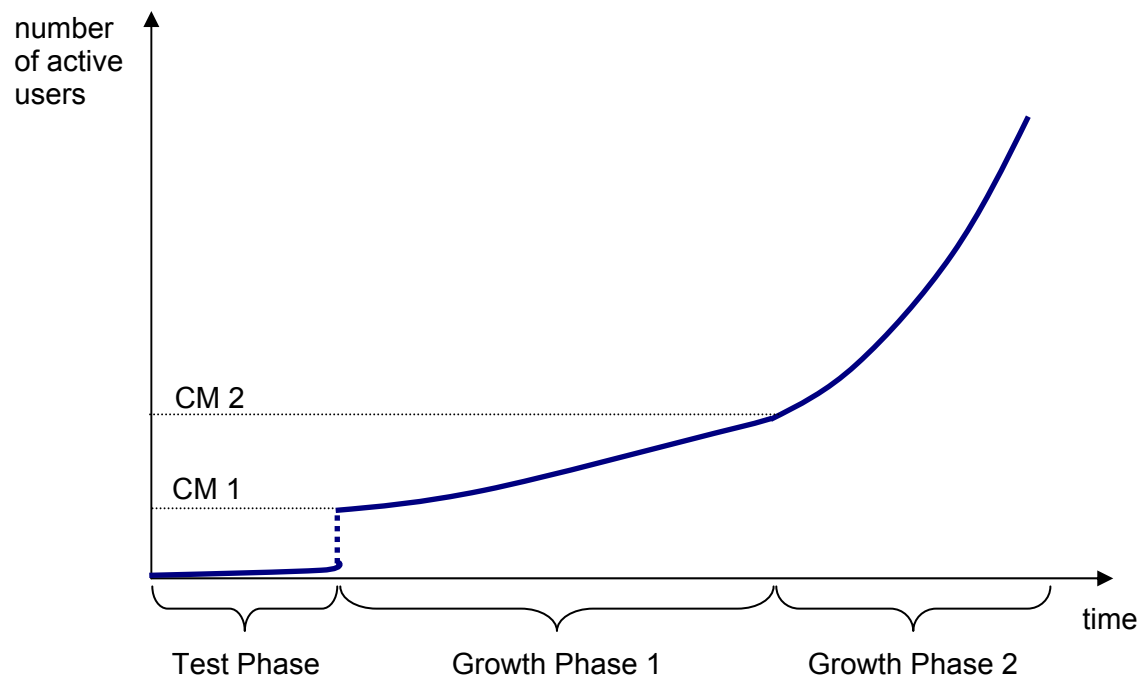
- **Contact Importer**
- **Privacy**
- **Screening of uploaded material**
- **Myspace's "Principles of Social Networking"**
- **Grow fast!**
- **Marketing is viral only (→ no marketing expenditures)**
- **Friend Inviter**

- **Eric Schmidt, CEO of Google:**
 - “We [...] always put our customers first and are committed to innovating to improve their experience.”
 - **Leadership in innovation** attracts and retains users
- **Developer API**

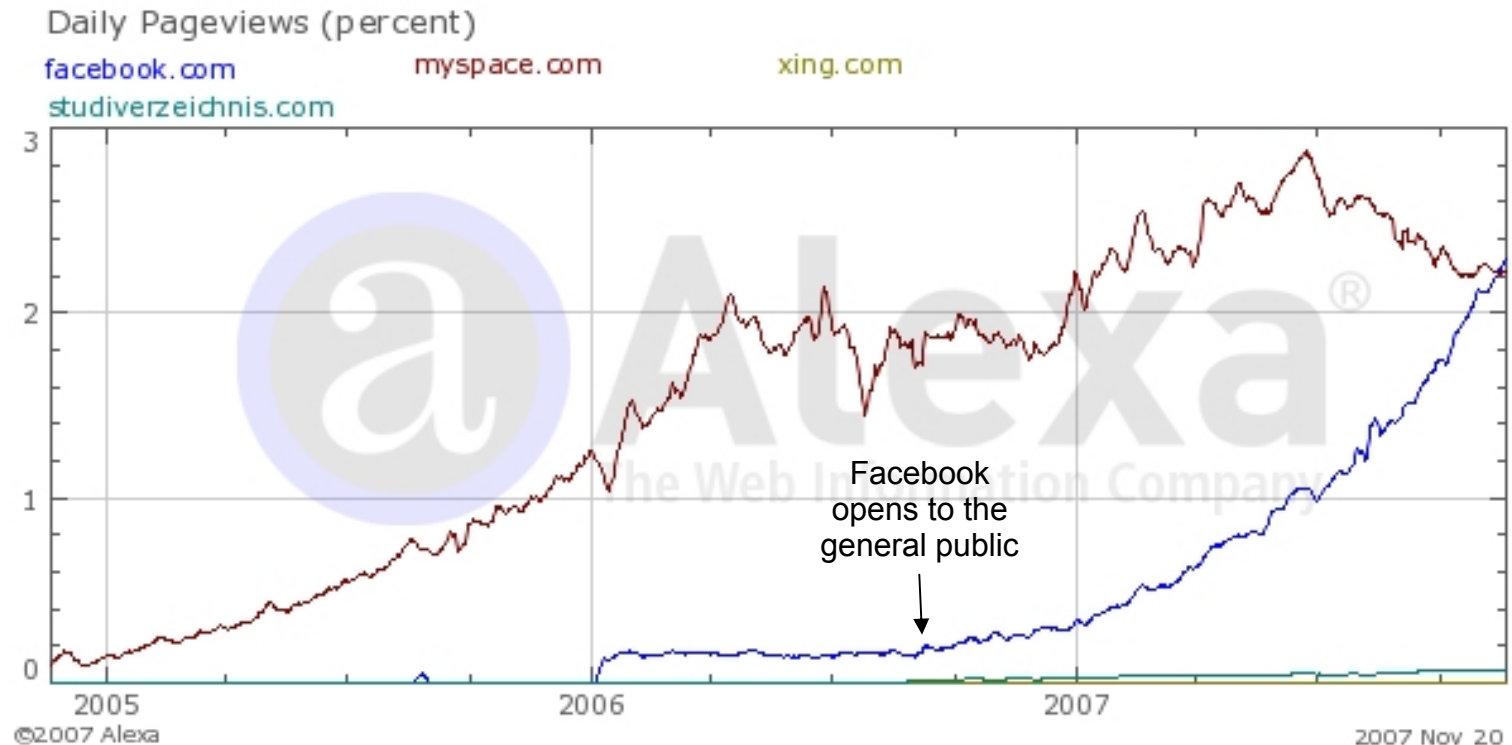
Critical Mass in Social P2P Networks

■ Two barriers:

1. “Technological” critical mass (CM 1)
2. Critical mass of growth (CM 2)



Critical Mass for Facebook



Source: Alexa Internet Inc. (2007)

Critical Success Factors for LifeSocial



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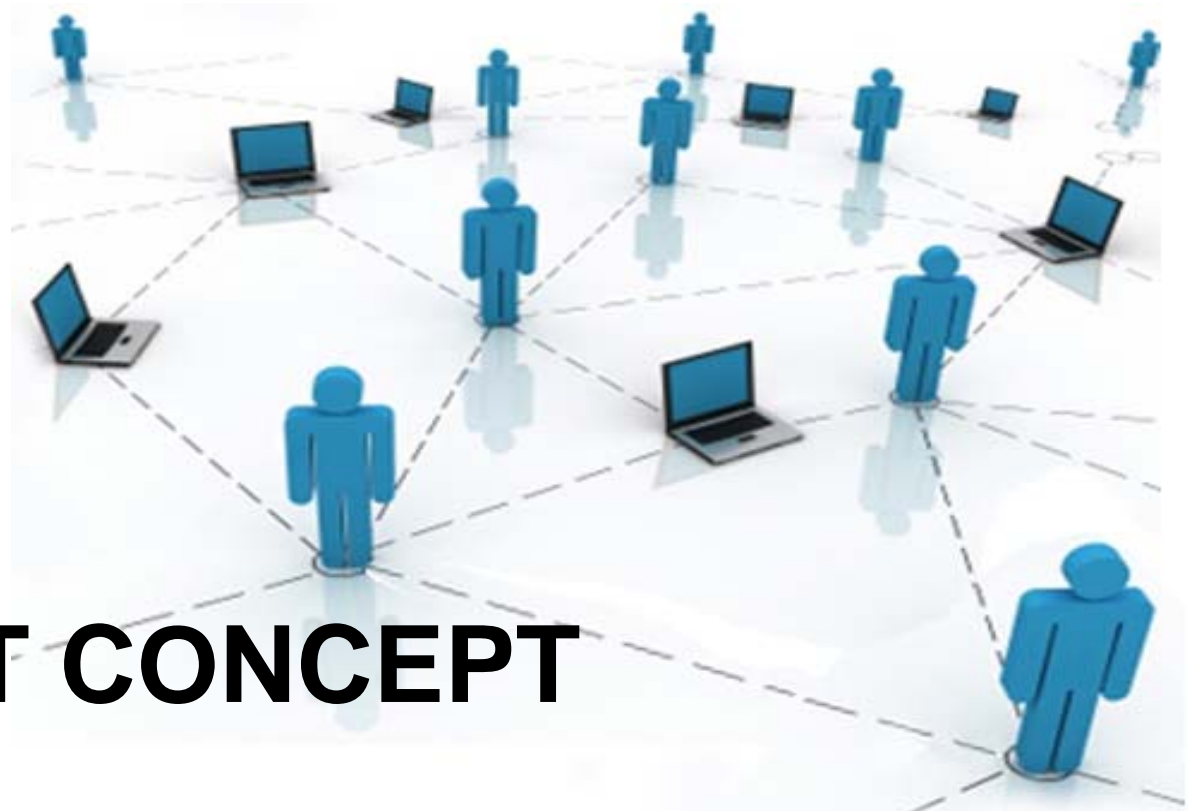


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LifeSocial **PRODUCT CONCEPT**

Product Concept Generation

- **Product Development**
 - Brainstorming
- **Market Research**
 - Preliminary Survey
 - Customer Survey
- **Conjoint Analysis**

Conjoint-Analysis

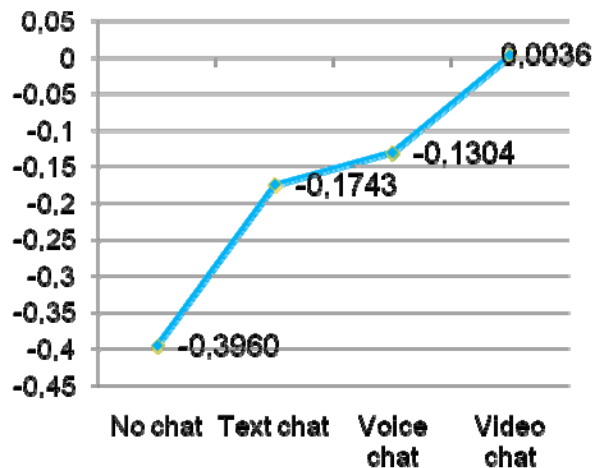
- Analyze potential product features
- Simplified example:

	Social Network 1	Social Network 2	Social Network 3
Video Chat	yes	yes	no
Filesharing	no	no	yes
Instant Messaging	no	yes	yes
Price	free	1.99€/month	4.99€/month

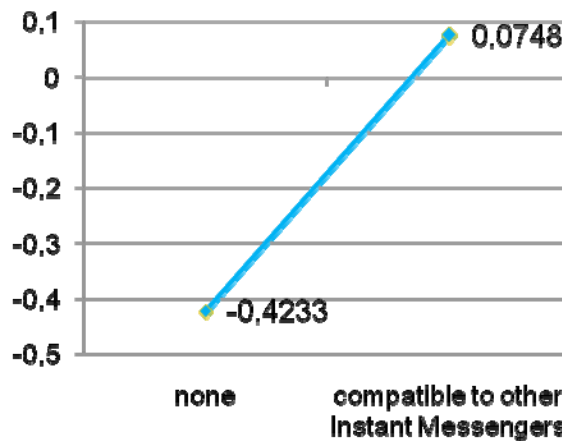
- Result: Partial utility of each product feature
- Problem in the table above? → “Free is a different place”

Results of Conjoint Analysis (1)

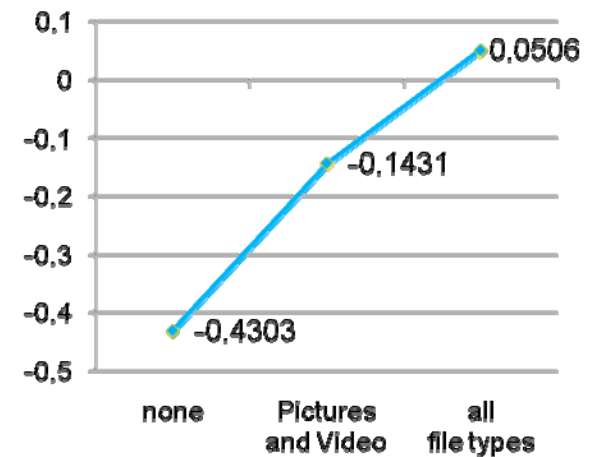
Video Chat



IM Compatibility



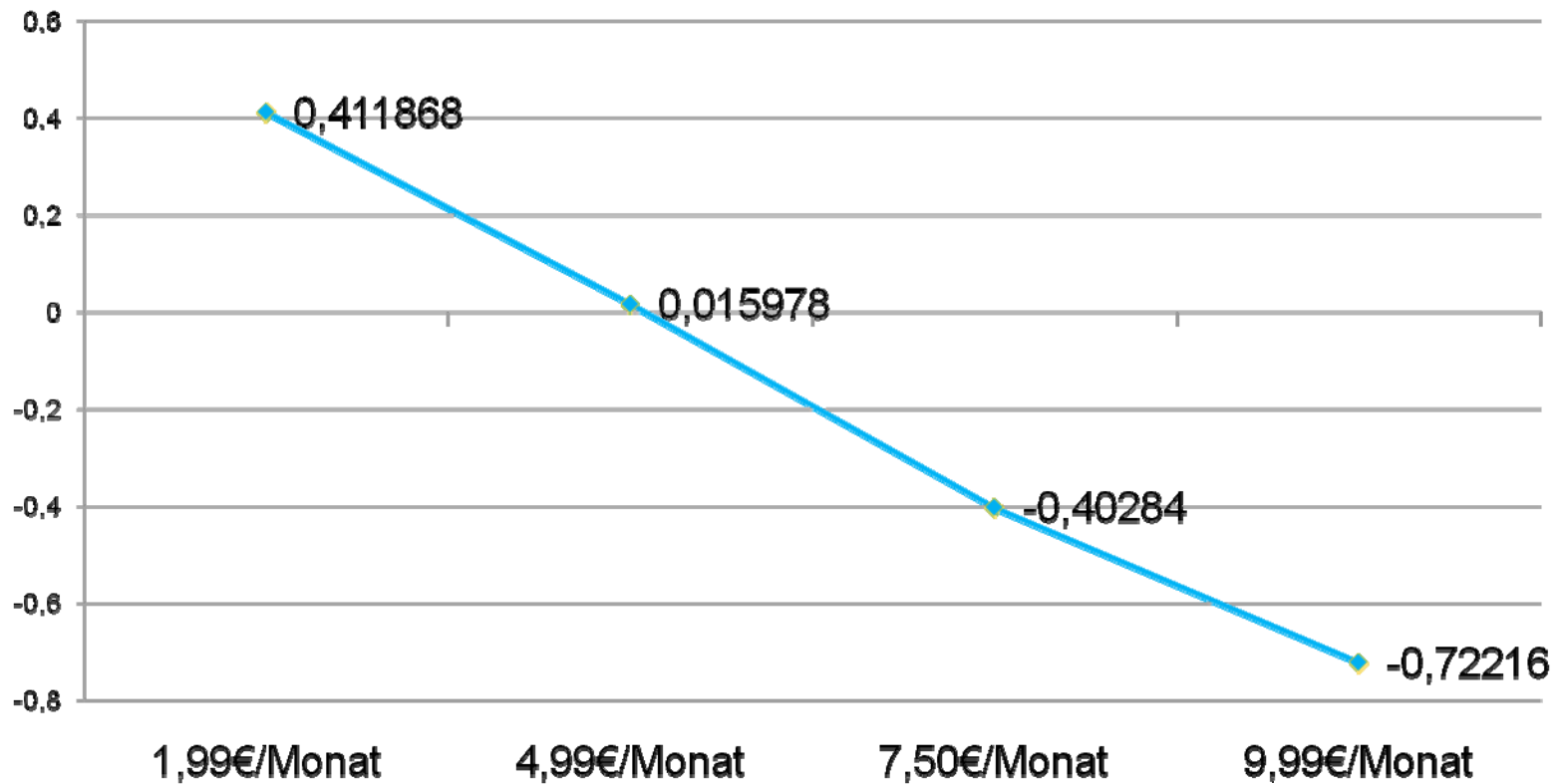
Filesharing



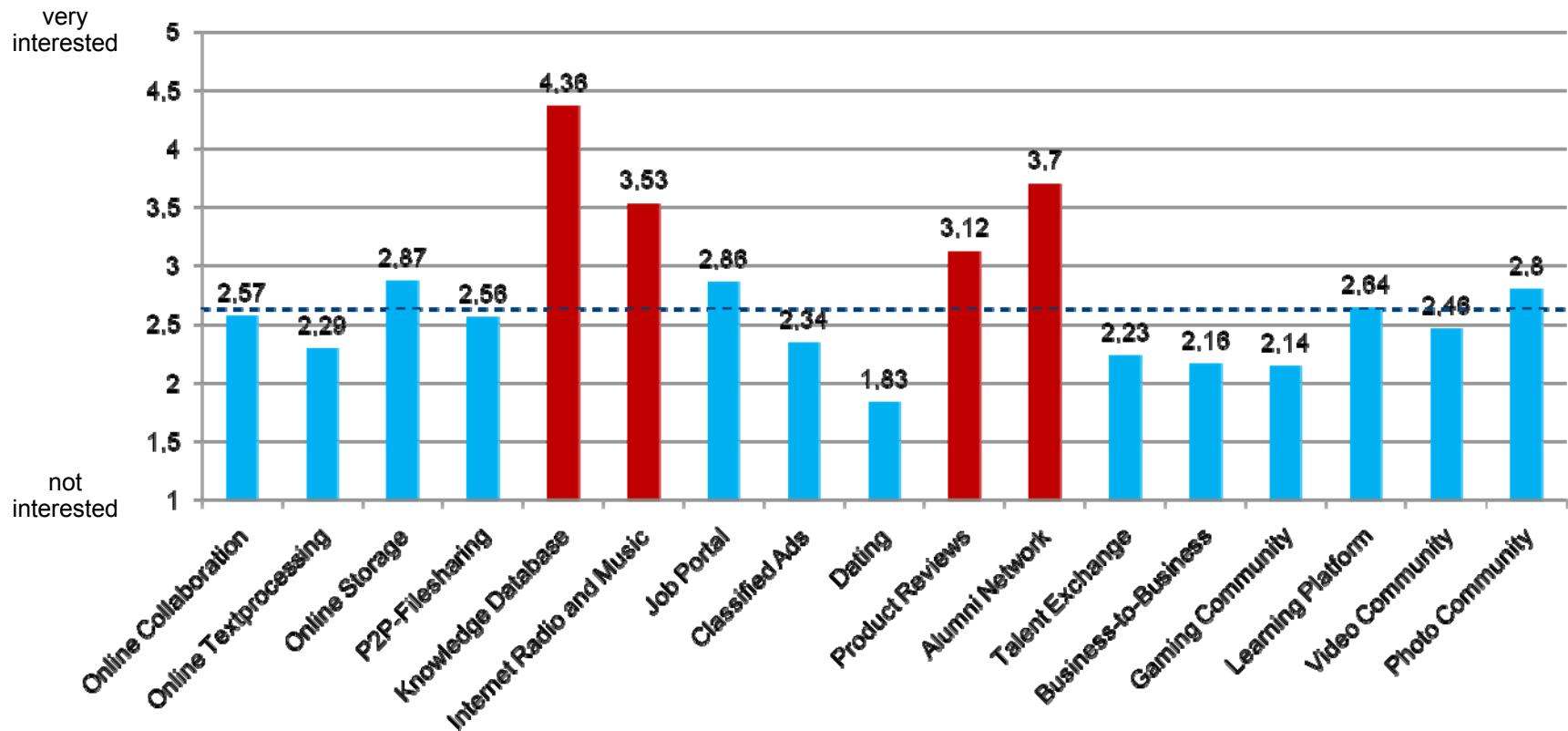
- Results are skewed
- Explanations:
 - Basic factors?
 - Predominance of price feature

Results of Conjoint Analysis (2)

- **Willingness-to-Pay for SNS**, given the selection of positive prices



Product Concept Generation



Product Concepts for LifeSocial

Concept 1: Centralized Online Examination Office	Concept 2: VPN Client	Concept 3: Learning Management System	Concept 4: Alumni Network And Job Portal
<ul style="list-style-type: none">• Online Transcript of Records• University Calendar• Information about examination dates and room allocation• Online registration for examinations• Directory of fellow students and contact details	<ul style="list-style-type: none">• Software to access the university network with integrated social network	<ul style="list-style-type: none">• E-Learning platform as substitute for Clix-platform• Online course material• Course registrations• Videos of lectures• Discussion boards• Appointment calendar	<ul style="list-style-type: none">• SNS to keep in contact with former and current students of the university• Basic functionality of existing SNS



LifeSocial

BUSINESS CONCEPT

- **Central Problem:**
 - Social Networks as a **mass communication medium**
 - Comparable to E-Mail
 - Low Willingness-to-Pay of End-User

- thinking “outside the box” is necessary

- **Possible solutions: Revenue from...**
 1. Corporation (partnership or as customer)
 2. ISP
 3. University

Business Concept for LifeSocial

- **Licensed University software package**
- **Modules for examination management and information management**
- **Problem:**
 - Competitor has established base of customers
 - HIS GmbH's pricing is very competitive

		Price p.a. and per module		
		SOS, POS, LSF, FSV, COB, MBS- UNIX, HBS	SVA, ZUL, KBS	BAU, IVS, MBS- PC, RKA, ZEB, WEBZEB
Number of University students	< 4,000	1,904€	1,523€	762€
	4,000-12,000	2,856€	2,285€	1,142€
	≥12,000	3,808€	3,046€	1,523€

Source: HIS GmbH (2008)



LifeSocial SWOT ANALYSIS



Strengths and Weaknesses

Strengths

- Costs
- Technology
- First-Mover advantage
- Low vulnerability
- Modularity and expandability

Weaknesses

- Reaching a critical mass
- Revenue streams
- Acceptance of commercial nature of network
- Installation of desktop client
- Network effects/Lock-in
- Time-consuming development
- Privacy
- Bad image of P2P networks
- Finding venture capital
- Unsolved technical problems

Opportunities

- Disruptive technology
- New Standard

Threats

- Legal Problems (filesharing)
- Prohibition of P2P networks
- Networks of competitors
- SNS aggregators
- White Label SNS
- Open Source SNS
- Sinking bandwidth costs
- Blocking of P2P-Traffic

- Price is dominant feature of SNS
 - End-Users have no Willingness-to-Pay
 - SNS as mass communication medium
 - Competitors are struggling to find a viable business model
 - “Free is a different place”
- **University as customer**
- Licensed modules
 - Ad-free network
 - Instant messaging client
 - Filesharing (?)

Further Questions ?



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