

# Soziale Netzwerke

Detlef Schoder

Vortrag anlässlich des Fest-Kolloquiums

**NETT**  
**Neueste Entwicklungen in der**  
**Informationstechnologie**

für Prof. Dr. Günter Müller,  
Universität Freiburg, 28. November 2008

# Soziale Netzwerke

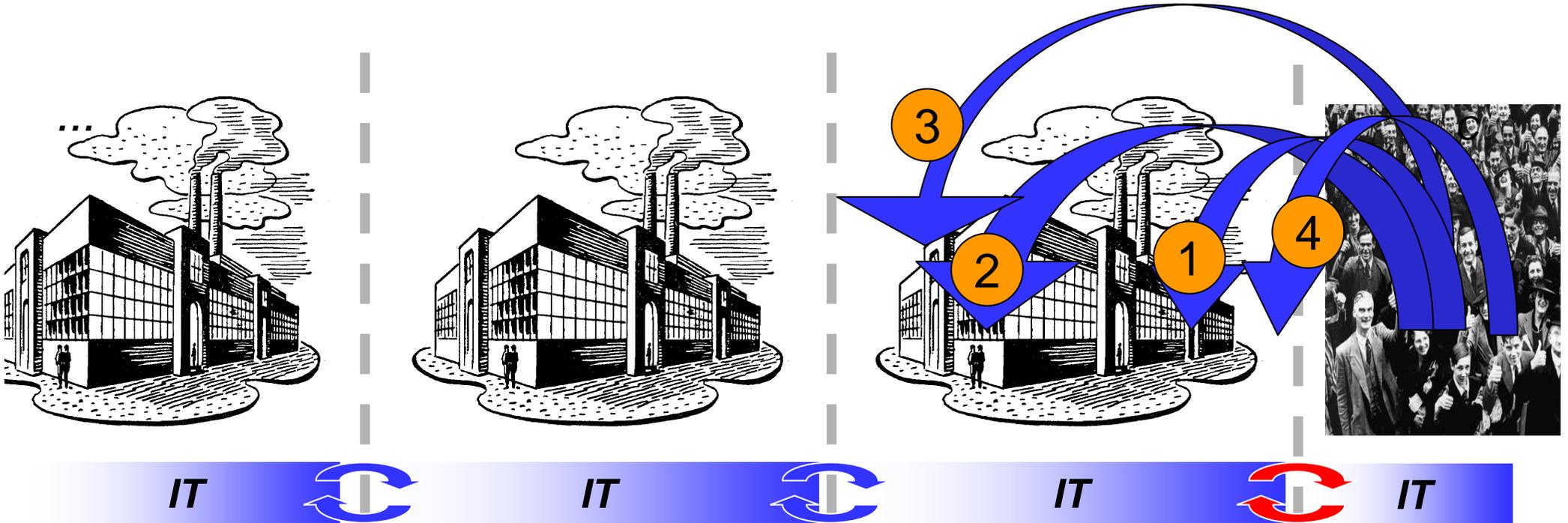
## • Vernetzte Unternehmenswelt

## • Perspektiven

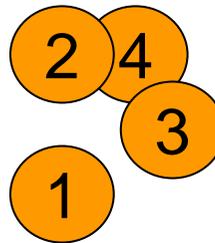
- Wertschöpfungsstrukturen → Electronic / Social Commerce
- Wissensarbeit → Knowledge Worker Productivity
- Soziale Dynamik → kollektive Intelligenz, Trend-Erkennung

## • Schlußbemerkungen

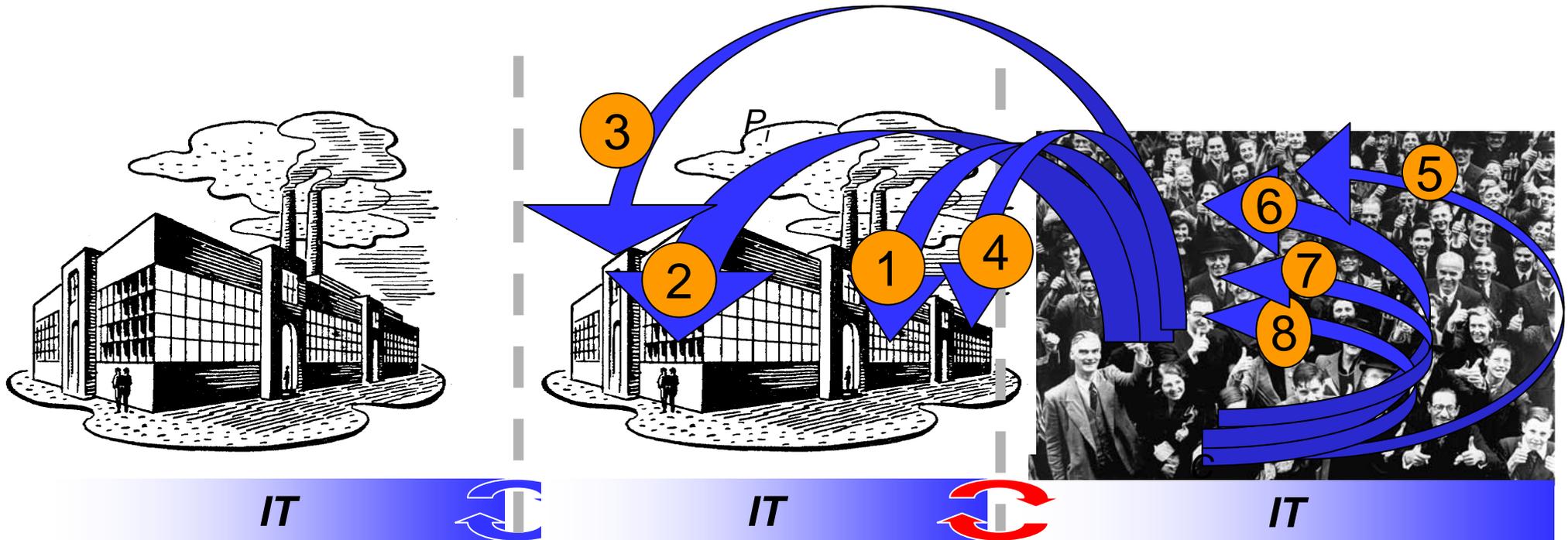
# Zunehmende Einbindung von (End-) Kunden in vorgelagerte Wertschöpfungsstufen



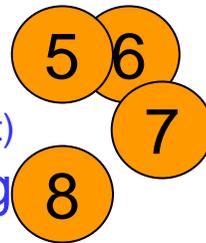
Mass Customization  
 Open Innovation, User Innovation  
 Crowdsourcing,  
 ...



# Zunehmende **Vernetzung** zwischen (End-) Kunden führt zu neuen Wertschöpfungsstrukturen



Peer Production  
 Open Innovation (nicht unternehmensintegriert)  
 Kollektive Intelligenz, Social Shopping  
 ...



# Soziale Netzwerke

## 🌐 Vernetzte Unternehmenswelt

## 🌐 Perspektiven

➤ Wertschöpfungsstrukturen → Electronic/ Social Commerce

➤ Wissensarbeit

➤ Soziale Dynamik

## 🌐 Schlußbemerkungen

Rolle des (End-)Kunden als

➔ Shopbesitzer

➔ Berater

➔ Dienstleister für Gleichgesinnte

➔ Konfigurator

➔ Innovator

➔ Hersteller



DER KONVENTIONELLE HANDEL  
COMMERCE



IT  
E-COMMERCE



INTERAKTION & KOMMUNIKATION  
SOCIAL COMMERCE

# (End-)Kunden werden zu Shopbesitzern (in Minuten!)



Ähnlich:  
APIs von Ebay, Google,  
Facebook...

# (End-)Kunden werden zu Beratern

Yahoo! My Yahoo! Mail Make Y! your home page Search:

**YAHOO! SHOPPING** Sign In  
New User? Sign Up

HOME CLOTHING ELECTRONICS COMPUTERS HOME & GARDEN

SHOP FOR: \_\_\_\_\_ in all departments

YOU ARE HERE: \_\_\_\_\_ BETA

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**User Reviews: Apple iPod Video 30GB White**

Overall:	★★★★★	<b>Overall I really like my ipod</b> By Weeties Dec 28, 2005   43 out of 47 review helpful
Features:	★★★★★	
Quality:	★★★★☆	<b>Pros:</b> Awesome for just sitting around that the new ipod is so small and
Support:	★★★★☆	<b>Cons:</b> It scratches very easy. The to replace the battery every year.
Value:	★★★★★	

ProductWiki is the web where people share information about consumer products. All of the content the wiki is written and maintained by people just like you. To learn more about our vision click here... »

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Quelle: Titelbild der Studie des Gottlieb Duttweiler Instituts, Schweiz, „Vertrauen 2.0“, 2007

# (End-)Kunden werden zu Beratern und verdienen dabei Geld



Empfehlung bei shoppero schreiben



Besucher lesen die Empfehlung



Autor erhält 20% der Einnahmen



# (End-)Kunden werden zu Dienstleistern für Gleichgesinnte

... etwa zur gemeinsamen Preisjagd



# BiddingForTravel.com

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Author	Comment
<b>debovico</b> Registered User (6/16/07 3:57 pm) Reply	<p>4* MTW Hilton Times Sq 6/21-6/23 \$150</p> <p>MTE, 4* \$150 rejected MTE,MTW 4*, \$150 accepted</p> <p>This was after several bids trying to get 6/20-6/23 but 6/20 just isn't available as other posters here have noted.</p> <p><i>Edited by: debovico at: 6/16/07 3:59 pm</i></p>
<b>nancysue</b> Registered User (6/16/07 4:22 pm) Reply	<p>Re: 4* MTW Hilton Times Sq 6/21-6/23 \$150</p> <p>Nice win, debovico! The Hilton TS is sold out also for 6/20. Rack rates for your dates are \$359 a night! You got well over 50% off.</p> <p>Thanks for adding your win &amp; have a great weekend 😊</p>

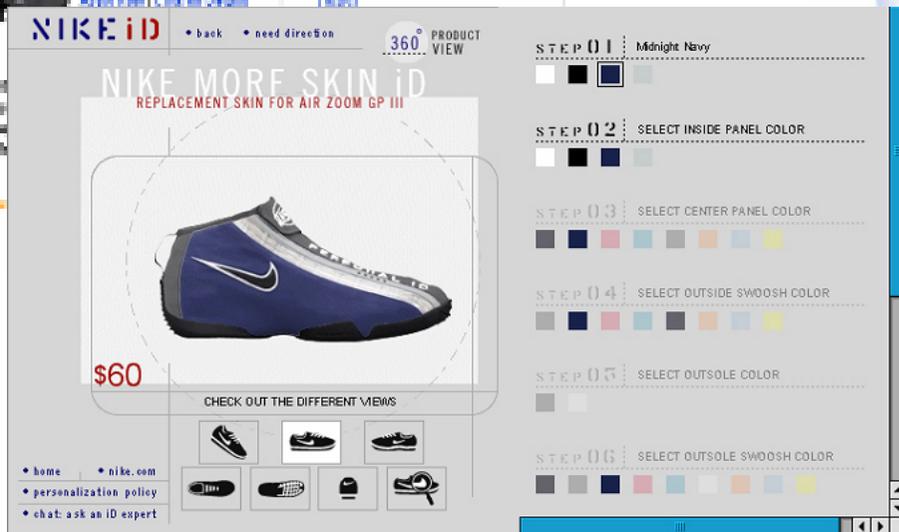
Share This Thread  



members  
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# (End-)Kunden werden zu „Konfigurierern“

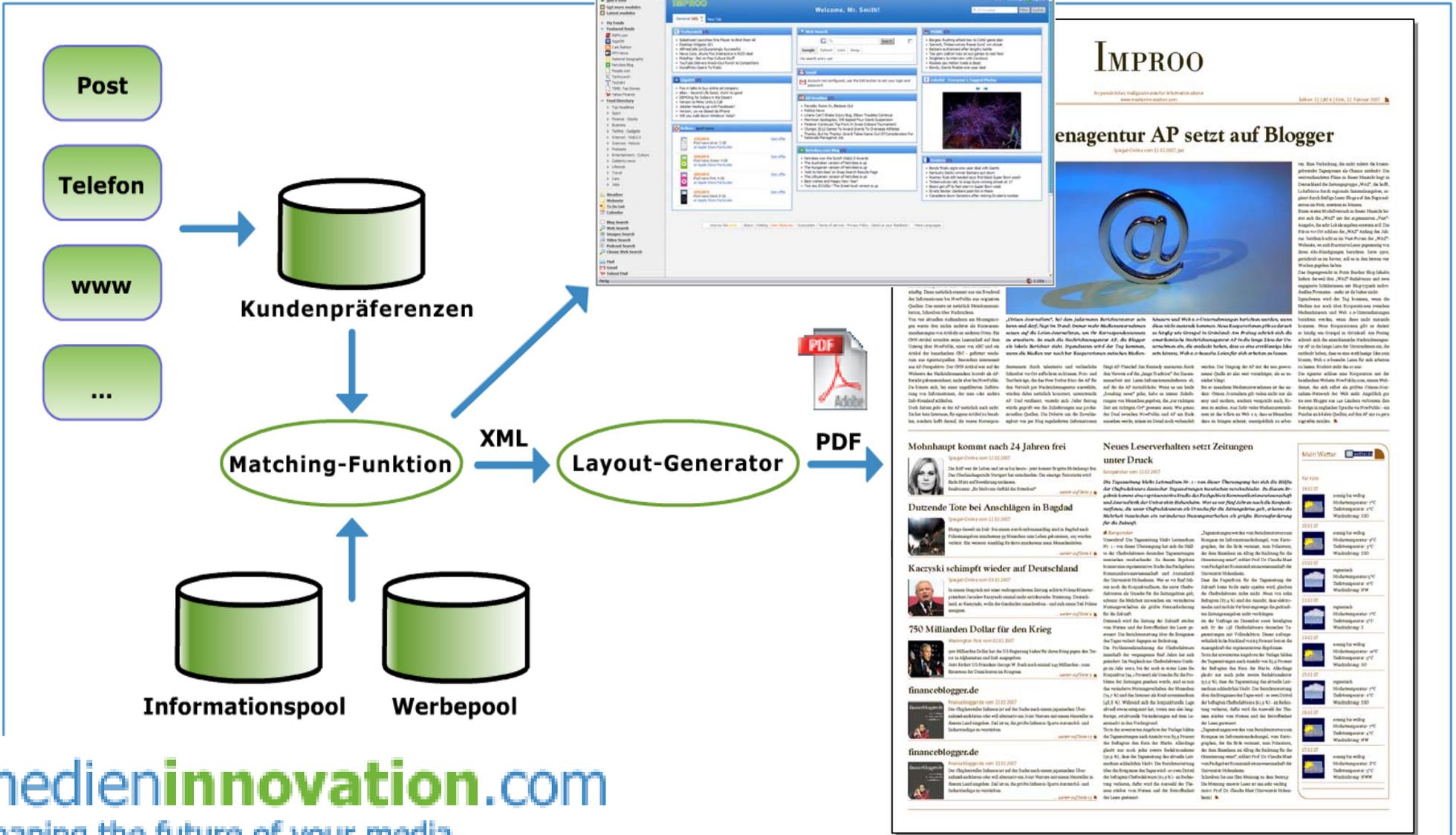
**K**undenindividuelle Massenfertigung (*Mass Customization*): hochattraktive da kundenzugeschnittene Produkte



**B**islang noch wenig erkennbare, vergleichbare Innovation im PRINT-Zeitungsmarkt.

# (End-)Kunden werden zu „Konfigurierern“ Beispiel: Informationen/News [www.nilter.com]

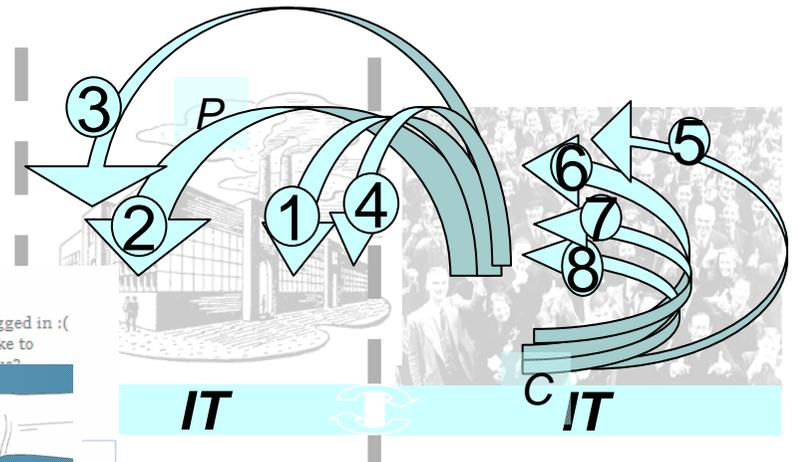
Patent No. WO03052648



medieninnovation.com  
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# (End-)Kunden werden zu Innovatoren (1/2)

- Unternehmen sehen Nutzer als Mitentwickler, Co-Designer, Ideengeber und sogar Problemlöser



Das Konzept von **A better tomorrow**: Design-Contests, Community und ein Online-Shop für Designprodukte.

# (End-)Kunden werden zu Innovatoren

(2/2)

- Beteiligung an gemeinschaftlichen [Open Source-] Projekten

- z.B. Open Source Filmprojekte
- z.B. Auto-Entwicklung



A screenshot of the Oscar website. The header features the Oscar logo (a green car wheel) and the tagline 'reinvent mobility'. A quote by Walter Röhrl reads: "You can't treat a car like a human being - a car needs love." Below this is a sketch of a car. The main content area is titled 'Oscar - Release 0.2' and includes a 3D rendering of a small, futuristic car. A sidebar on the left lists navigation options like Home, Idea, Concept, Forums, Documents, Links, and Contact. A 'Login User' section is visible on the right.

A screenshot of the Valkaama website. The header features a sunset over a forest and the title 'Valkaama'. Below the header is a navigation bar with links for Home, Film, Media, Team, and Forum. The main content area is titled 'über Valkaama...' and contains text about the project: 'Valkaama ist ein kollaboratives Open Source Filmprojekt. Die Filmszenen wurden schon abgedreht und werden bald auf dieser Seite veröffentlicht. Jeder, der zur Postproduktion des Filmes beitragen kann und möchte, ist willkommen bei uns mitzuarbeiten. Mit Deiner Hilfe werden wir unsere digitale Kultur um einen weiteren Creative Commons lizenzierten Film bereichern. Hilf mit den Film fertig zu produzieren, zu teilen und zu remixen.' A 'Free Cultural Works' logo is visible in the bottom right corner.

# (End-)Kunden werden zu „Herstellern“ (1/2)

## → User Manufacturing / Rapid Manufacturing

### The Hand



**Properties**

<b>Category:</b>	Architecture
<b>Height:</b>	250 mm
<b>Width:</b>	116 mm
<b>Depth:</b>	71 mm
<b>Material:</b>	Polymeric Plaster
<b>Item Nr.:</b>	00001
<b>Status:</b>	Public

The images show rendered 3D data.  
Printout objects may differ in appearance and colour.

★★★★☆ 240,54 € [Add object to your cart](#)



**rapidmanufacturing**  
INTERNATIONAL CONFERENCE

**conference**  
Wednesday 9 July &  
Thursday 10 July 2008

Sir Dennis Rooke Conference Centre  
hollywell park  
loughborough university  
united kingdom



**rapidobject.com**



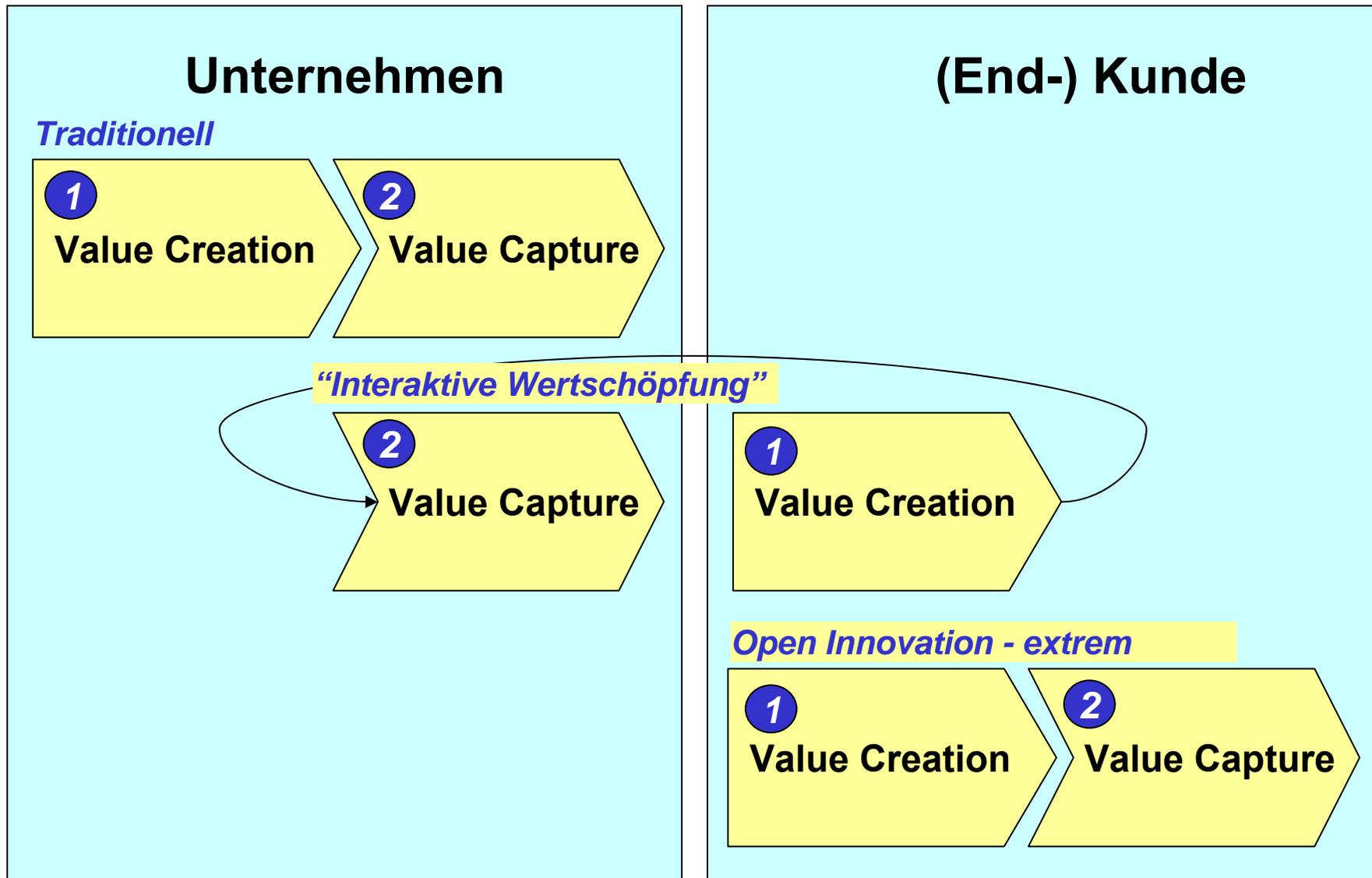
**eMachineShop.com**  
Machine your custom parts online

# (End-)Kunden werden zu „Herstellern“ (2/2)

The screenshot shows the Google SketchUp homepage. At the top left is the Google SketchUp logo. To its right, it says "Welcome to Google SketchUp". Below the logo is a navigation menu with links for Home, Products, Downloads, Buy, Community, Customers, Training, and Help. A "Recent News" section lists several articles with blue underlined titles. The main content area features a green heading "Google SketchUp is 3D for everyone" followed by a paragraph: "Google SketchUp is software that you can use to create, modify and share 3D models. It's easier to learn than many people are already using." Below this is a link to "Learn more about Google SketchUp". A 3D architectural rendering of a brick building with balconies is shown. At the bottom of the main content area, there is a section for "Google SketchUp Pro 6" with the text "3D for professionals. Create, export and present 3D models."

The screenshot shows the website of Ronen Kadushin. At the top is the name "Ronen Kadushin" in a large, grey font. Below it is a navigation menu with links for Portfolio, Open Design, News, Design Education, Media Relations, Biography, Contact, and Links. The main content area is titled "Open Design" and features a large, 3D rendered graphic of a bicycle wheel hub with spokes. To the right of the graphic is a stylized logo consisting of the Hebrew words "פנ" and "אד" in a bold, black font. Below the logo, the text "OPEN DESIGN Ronen Kadushin" is displayed. At the bottom of the page, a paragraph reads: "The products presented here were designed and produced using an alternative design and development method that frees a designer to pursue creative expressions, realize them as industrially repeatable products and have the ability to globally distribute design."

# Veränderungen in der Wertschöpfungsaufteilung



# Soziale Netzwerke

## Vernetzte Unternehmenswelt

## Perspektiven

➤ Wertschöpfungsstrukturen → Electronic / Social Commerce

➤ Wissensarbeit → Knowledge Worker Productivity

➤ Soziale Dynamik → kollektive Intelligenz, Trend-Erkennung

## Schlußbemerkungen

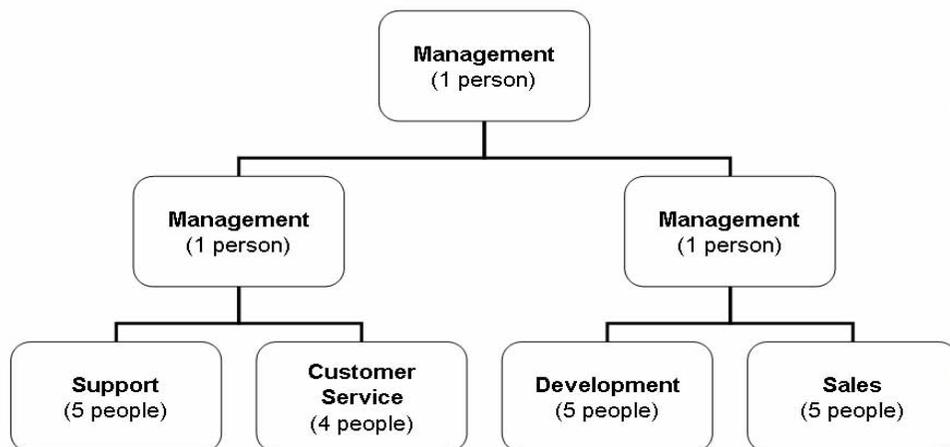
## Fallbeispiel

### Setup: Social Badges

- Abteilung "Neue Medien"
- 22 Akteure
- Dauer: 1 Monat
- Tägliche Erhebung

### Setup: E-Mail-Erhebung

- Dauer der Studie:
  - 7 Monate: April 2006 - Oktober 2006
- Soziales Netzwerk
  - 6 Geschäftsstellen
  - E-Mail Logfiles (anonymisiert)
  - 2,54 GB = ca. 16 Mio. E-Mails
  - Sender, Empfänger und Zeitstempel (keine Inhalte)
- Group performance- Indikatoren
  - Seitens Controlling-Abteilung zur Verfügung gestellt
  - Absatzvolumen, Verträge, Zierlerreichungsgrade
- Selbst-Auskünfte
  - Fragebogen



## „Social Badges“

- Infrarot Sensor
  - Face-to-face Interaktion
- Bluetooth
  - Nähe zu anderen
  - Relative Position
- Beschleunigungsmesser
  - Körperbewegung
  - Physische Aktivitätslevel
- Sprach-Sensor
  - Stimme und Frequenzerkennung

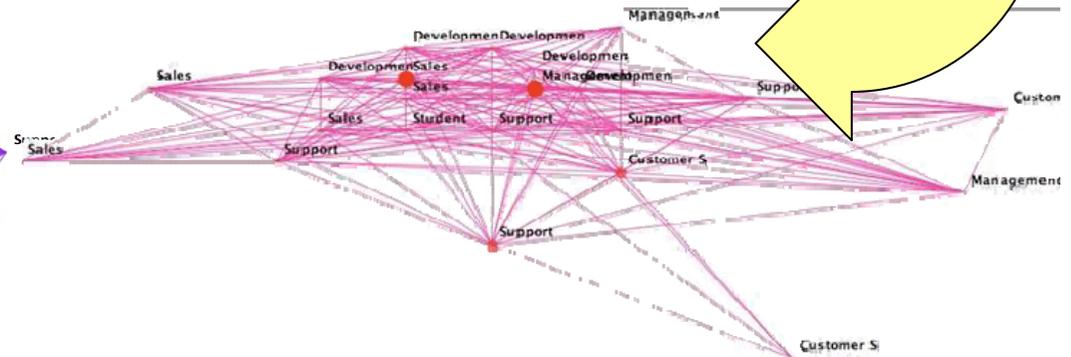
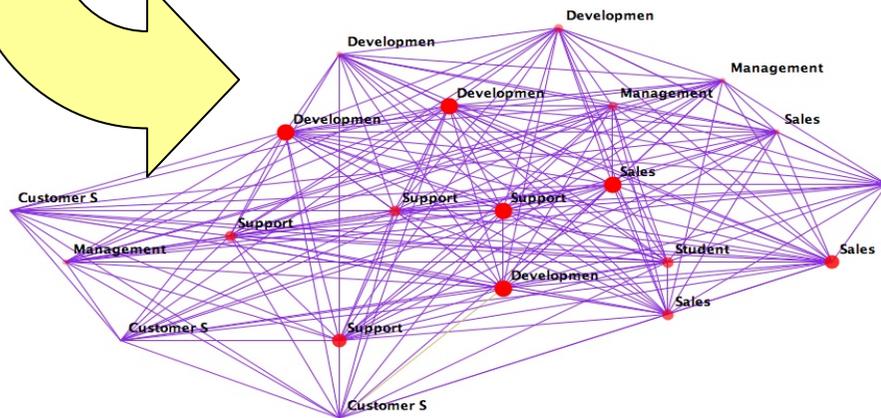
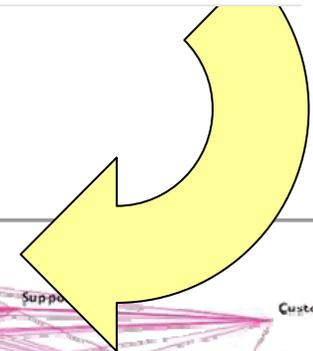
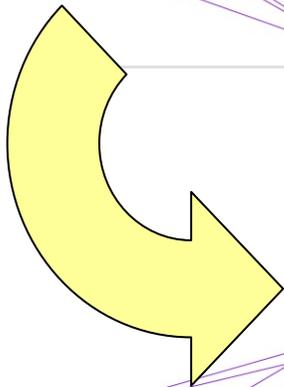
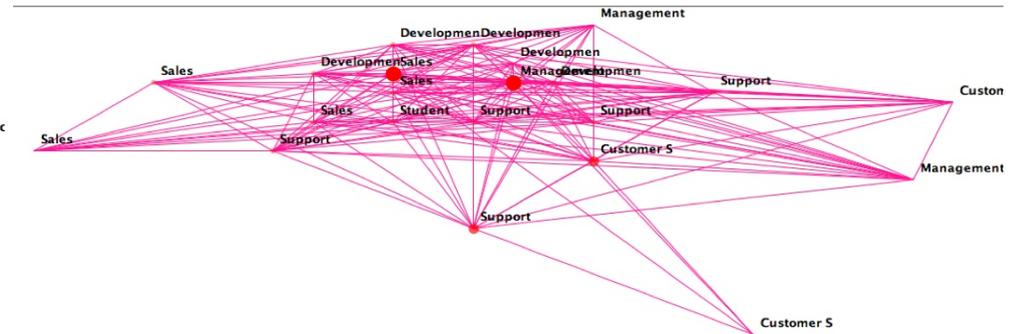
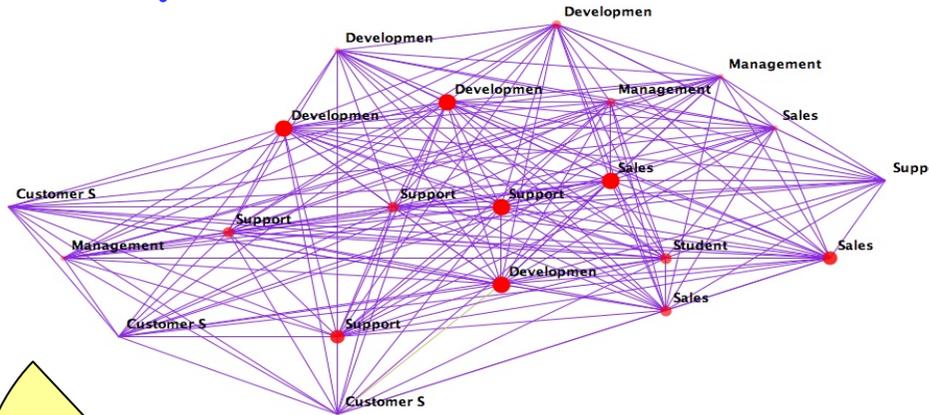


[Pentland 2004; Pentland 2005]

# Einige Impressionen



# Entsprechen sich E-Mail- und F2F-Kommunikationsnetzwerk?



E-Mail-Network

Face-to-Face Network

# Forschung über das Fallbeispiel hinaus – Anwendungspotenziale der SNA im betrieblichen Kontext

- Identifikation von Hubs, Gatekeepern
- Beurteilung der Äquivalenz von formalen Geschäftsprozessen und informalen Kommunikationsflüssen
- Schwachstellenanalyse im Unternehmensnetzwerk, Hinweise für Reorganisation
- Prognose/ Trend-Erkennung
- Verknüpfung mit „Inhalten“:
  - Ableitung von Wissenslandkarten, Team-Formation, Link-Prediction ...
  - ...



# Soziale Netzwerke

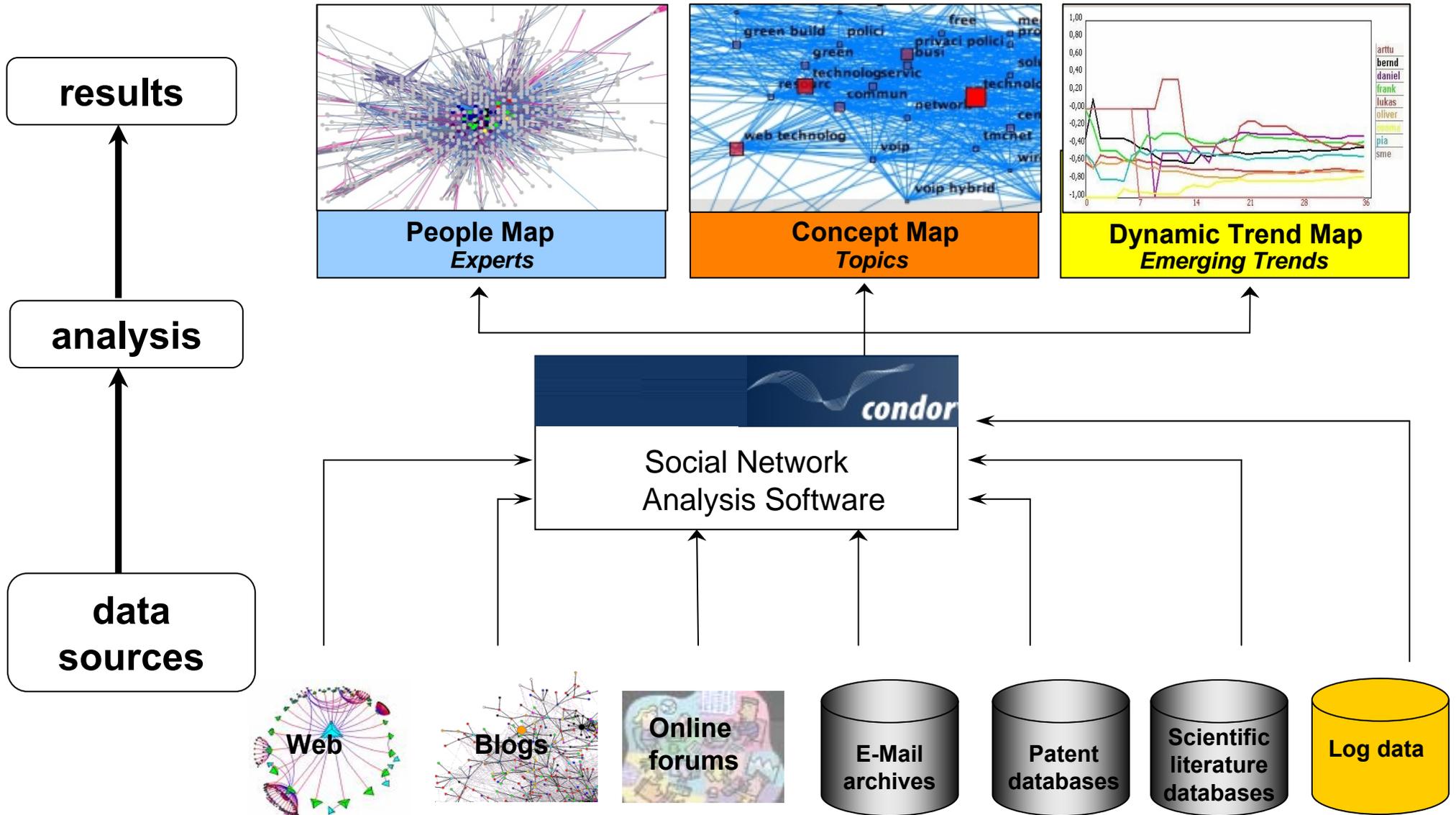
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## Schlußbemerkungen

# Analyse sozialer Netzwerke



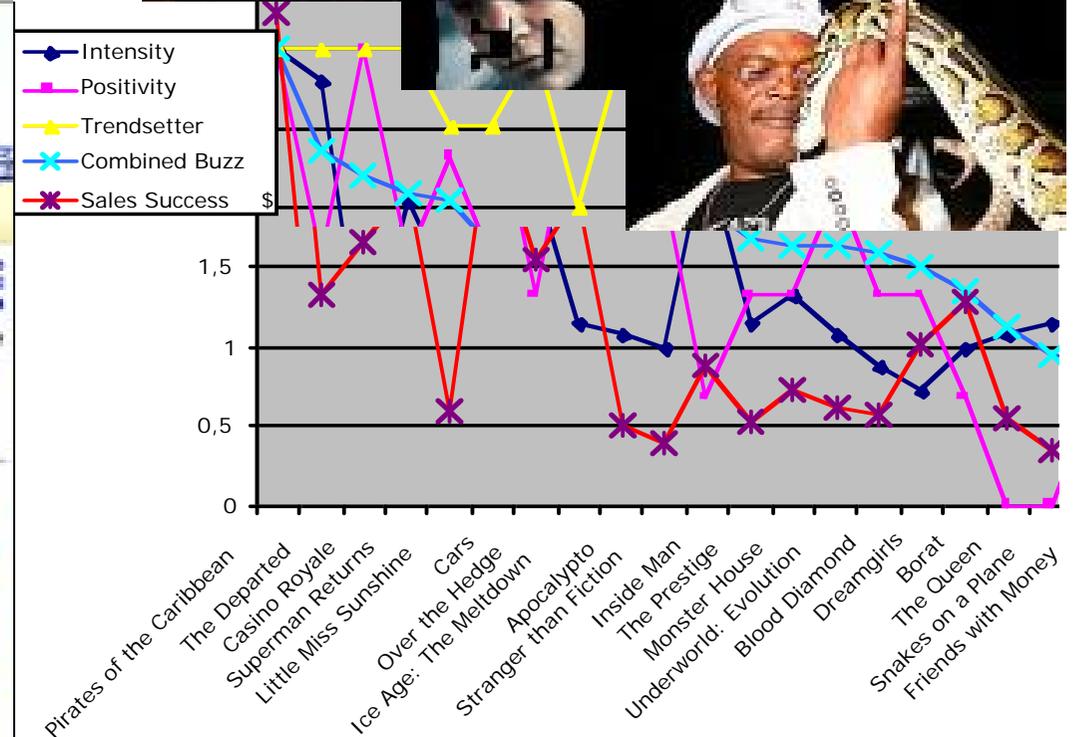
# Vorhersage: Beispiel Kinoerfolg und Oscars

Online-forum Internet Movie Database (IMDb)

- influential people & sentiment analysis
- Predicts success at the box office.

The screenshot shows the IMDb website interface. At the top, there are navigation links for 'HOME', 'TOP MOVIES', 'PHOTOS', 'INDEPENDENT FILM', 'BROWSE', and 'HELP'. Below this is a search bar. The main content area is titled 'Message Boards' and contains a list of forum topics. The table below shows the following data:

Subject	Started by	Replies	Latest Posting
My most ac... in 2007	Liambeckorboos	17	2 hours ago
ON THE LOT	DavidBlaDaddy	6	4 hours ago
Best movie of the year	moosemusic123093	91	11 hours ago
Comic book movies	crbb	19	11 hours ago
The Departed	aldemagnis	1	16 hours ago
Project Upcoming Box Office Failures - January Thru April 2007 Release	Joback90400	72	16 hours ago



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## Schlußbemerkungen

# Soziale Netzwerke

Vielen Dank für Ihre Aufmerksamkeit!