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LEUPHANA
UNIVERSITÄT LÜNEBURG

JKU
JOHANNES KEPLER
UNIVERSITÄT LINZ

Digital platforms

Global Classroom Course

Goals of this lecture

- Gaining insight on crowdsourcing (crowdsourcing processes are integral part of platforms)
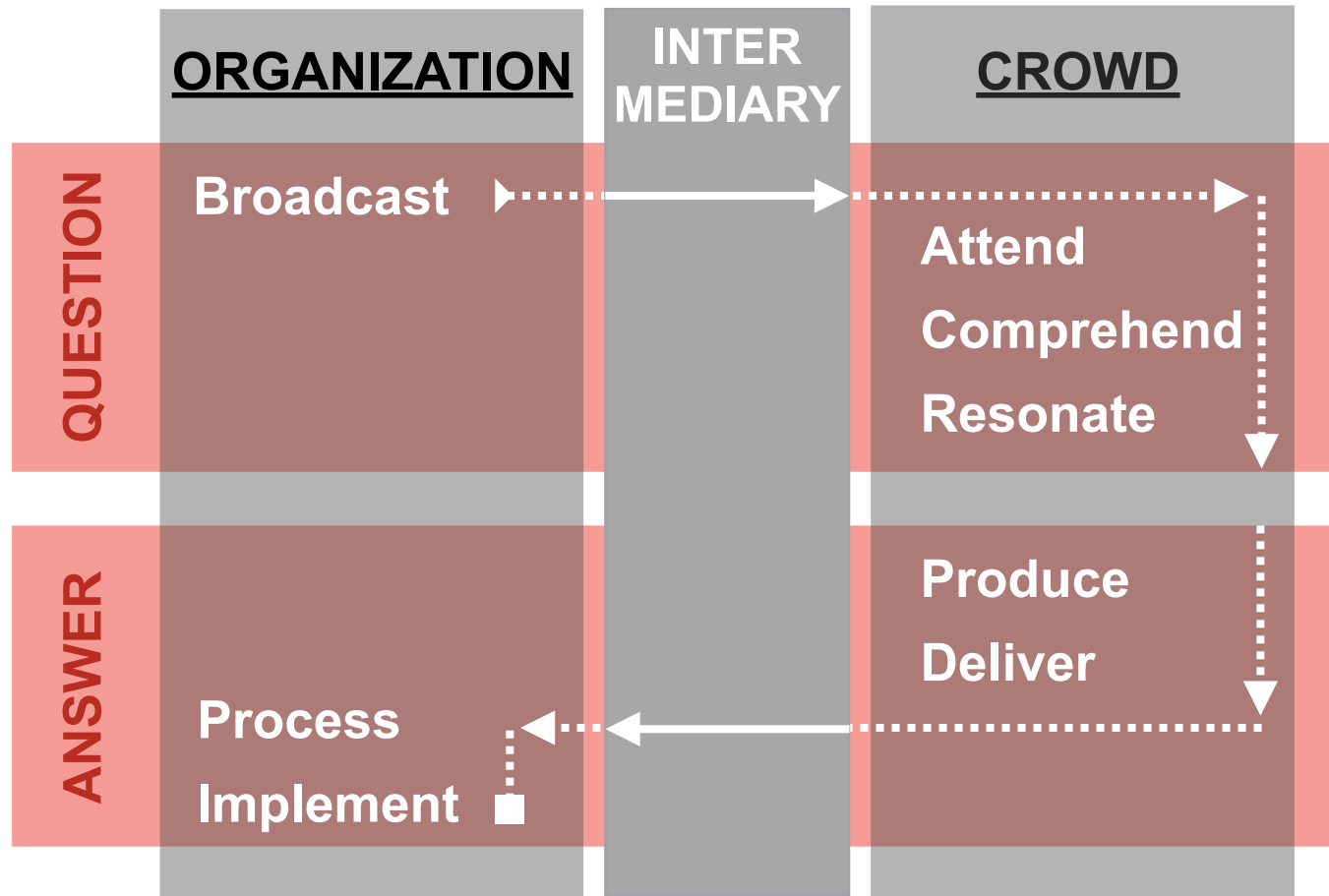- New forms of organizing: platforms and their consequences

(Afuah and Tucci 2012; Jeppesen and Lakhani 2010; Morgan and Wang 2009; Sobel 1995)

Crowdsourcing

Crowdsourcing [crowd + outsourcing]

= problem solving or task execution through
tasking external sources (outsourcing)
identified through broadcast search (1:$\forall$ communication)

Afuah and Tucci, 2012; Bauer und Gegenhuber, 2015, Jeppesen and Lakhani, 2010

Crowdsourcing communication chain:
a necessary condition

based on Bauer & Gegenhuber (2015)

NASA

INNOCENTIVE®

CHALLENGE SPECS

CHALLENGE
Data–Driven Forecasting
of Solar Events

DISCIPLINES
Aerospace & Defense, Data,
Government

CHALLENGE AWARD
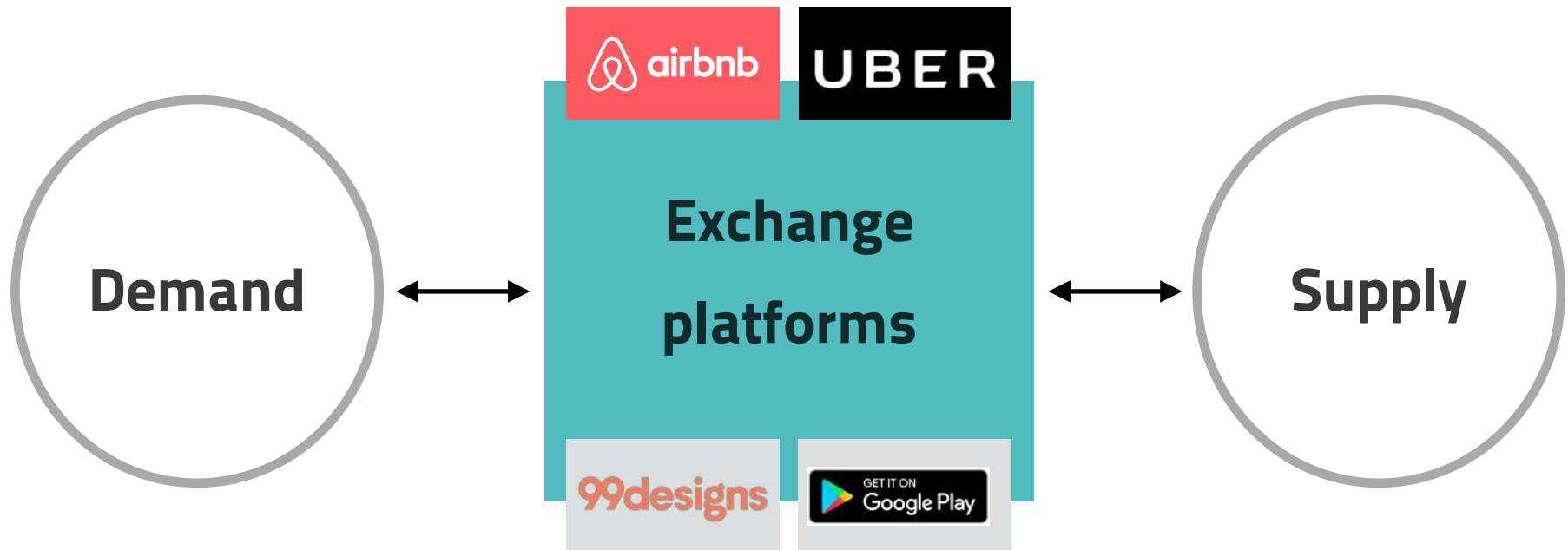$30,000

SOLVERS ENGAGED
579

SOLUTIONS
11

PROGRAM DURATION

Solar flares have destructive effects on infrastructure on Earth, and also put astronauts at risk when in space. For many years, physicists have been trying to understand solar flares and their effect on the Earth. A major barrier to progress has been the lack of easily available data. Researchers at NASA challenged InnoCentive's solvers to build a predictive algorithm that would accurately model solar particle behavior.

Challenge

- "Solar particle events" are dangerous to astronauts, who have to take cover in specially-protected areas of space stations when they occur; for this reason, they can also seriously hamper missions.

- Despite a lot of work, until now there has been no available method to predict the onset, intensity or duration of such events.

- The challenge was to build a predictive algorithm to say with confidence

"If the industrial revolution was organized around the factory, today's changes are organized around (...) digital platforms" (Kenney and Zysman, 2016: 62)


Demand ↔ Exchange platforms ↔ Supply

Bauer & Gegenhuber, 2015; Baldwin, 2017; Sundararajan, 2017

Most valuable firms leverage platforms

2000	Market Cap ($B)
General Electric	474
ExxonMobil	302
Pfizer	290
Citigroup	287
Cisco	275
Wal-Mart Stores	287
Microsoft	231
AIG	229
Merck	216
Intel	202
Johnson & Johnson	181
Coca-Cola	164

2015	Market Cap ($B)
Apple	**710**
Alphabet/Google	**449**
Microsoft	368
ExxonMobile	334
Wells Fargo	297
Johnson & Johnson	274
Facebook	**272**
General Electric	259
JP Morgan Chase	255
Amazon	**247**
Wal-Mart Stores	230
Procter & Gamble	218

2018	Market Cap ($B)
Apple	**896**
Alphabet/Google	**782**
Microsoft	682
Amazon	**629**
Tencent	**540**
Facebook	**521**
Berkshire Hathaway	519
Alibaba	**467**
Johnson & Johnson	395
JP Morgan Chase	389
Exxon Mobil	371
Wal-Mart Stores	310

Valuations of Market Capitalization in Billion USD, Source: Bloomberg, January 2018

Lonely Planet — Greek Islands

Local secrets
Best planning advice
100% researched & updated
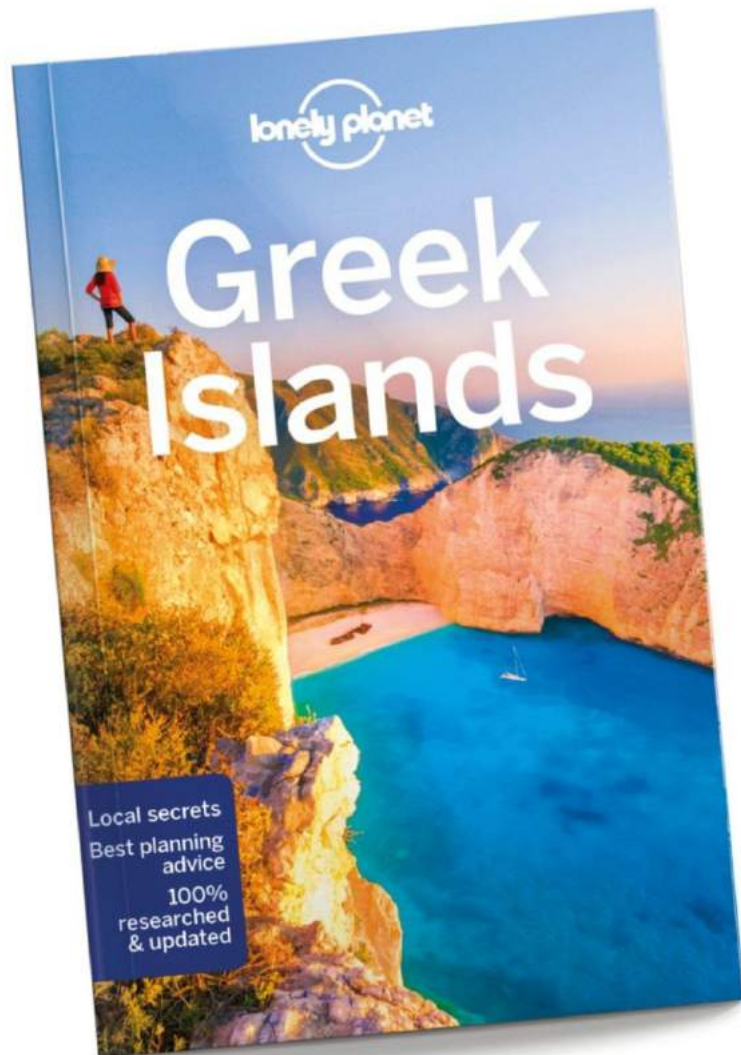
Reise-Feed: Athen   Hotels   **Aktivitäten**   Restaurants   Flüge   •••

Europa > Griechenland > Attika > Athen > Sehenswürdigkeiten und Aktivitäten in Athen > Parthenon

Parthenon

◐◐◐◐◐ 14 384 Bewertungen   **Nr. 2** von 285 Aktivitäten in Athen   Sehenswürdigkeiten & Wahrzeichen, Wahrzeichen & S

📍 Acropolis | Top of Dionyssiou Areopagitou, Athen 105 58, Griechenland

EINTRITTSKARTEN (1)

Akropolis von Athen Skip The Line Eintrittskarte   Ab **€ 13,00***
Überspringen Sie die langen Schlangen und besuchen Sie die...**mehr lesen**   **Verfügbarkeit prüfen**

TOUR BUCHEN   Alle anzeigen (67)

Rundfahrt durch Athen, Piräus und Strandtour im Hop-on-Hop-off-Bus   Ab **€ 20,00***
HOP-ON HOP-OFF-TOUREN   **Weitere Infos**

Akropolis-Tour in Athen   Ab **€ 29,00***
ARCHÄOLOGISCHE TOUREN   **Weitere Infos**

🏅 Zertifikat für Exzellenz

📷 Alle Fotos (7 280)

https://pixabay.com/photos/hotel-guest-room-new-1330846/

https://pixabay.com/photos/airbnb-air-bnb-apartment-3399753/
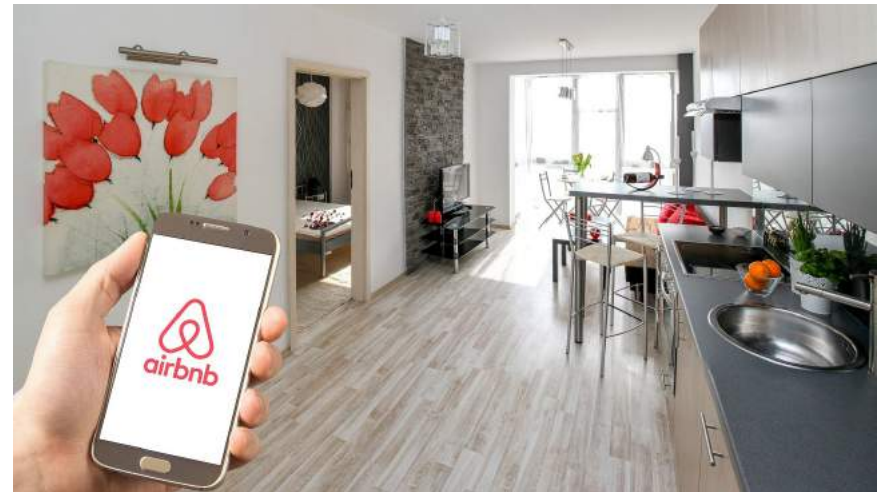
Exchange platforms

|	
Purpose	Facilitating interaction between a supply and demand-side
Resources	Resource orchestration (mobilizing, sorting, evaluating)
Control	Prediction through probabilities; algorithmic governance, interface design (i.e architecture), rules
Strategy	Increase network effects (e.g. subsidies, incentives), quality of interaction (i.e. trust, match), adding additional interactions
Management	Management as network-, market- and community organizing

Ansari and Munir, 2010; Baldwin, 2017; Bauer and Gegenhuber, 2015, 2017; Orlikowski and Scott, 2014; Kornberger 2017; Kornberger et al., 2017; Mair and Reischauer, 2017; Sundararajan, 2017; Van Alstyne et al., 2016

Platforms and the firm
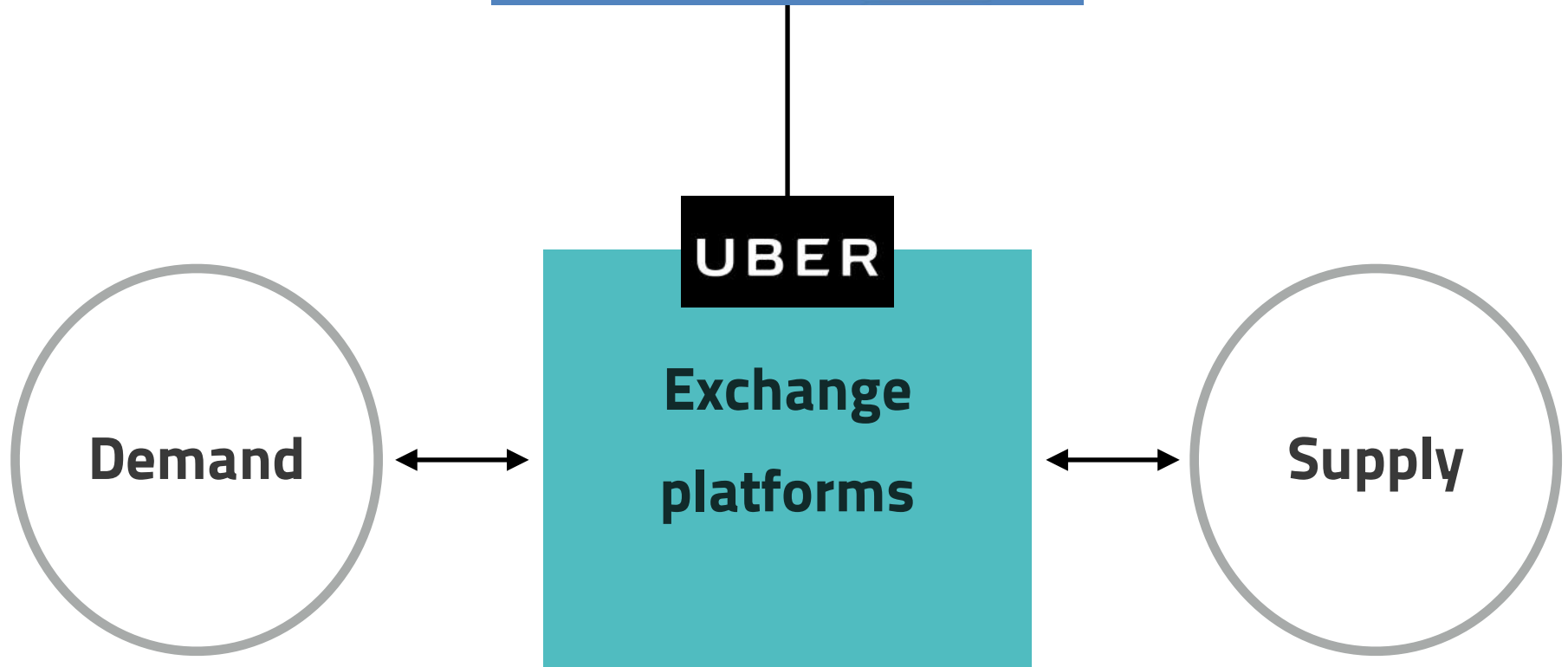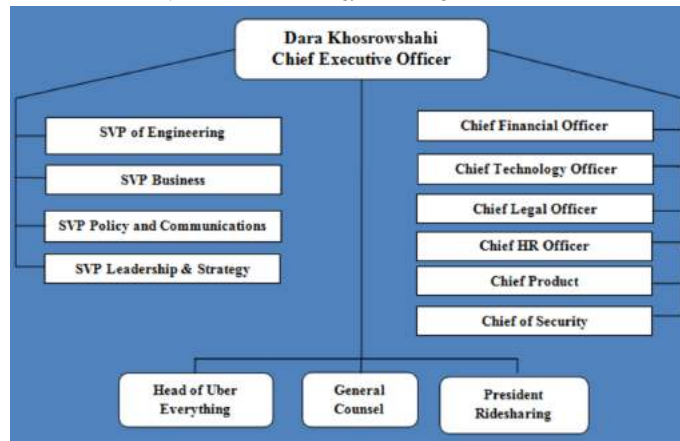
Purpose	Facilitating interaction between a supply and demand-side	Producing and selling goods and services
Resources	Resource orchestration (mobilizing, sorting, evaluating)	Resource control (controlling certain steps of a value chain, e.g. commanding assets)
Control	Prediction through probabilities; algorithmic governance, interface design (i.e architecture), rules	Prediction through hierarchical control, e.g. stable employment)
Strategy	Increase network effects (e.g. subsidies, incentives), quality of interaction (i.e. trust, match), adding additional interactions	Increase economies of scale (i.e. lower costs, reduce price), product quality, user experience
Management	Management as market- and community organizing	Management is (caring) commanding

Ansari and Munir, 2010; Baldwin, 2017; Bauer and Gegenhuber, 2015, 2017; Orlikowski and Scott, 2014; Kornberger 2017; Kornberger et al., 2017; Mair and Reischauer, 2017; Sundararajan, 2017; Van Alstyne et al., 2016
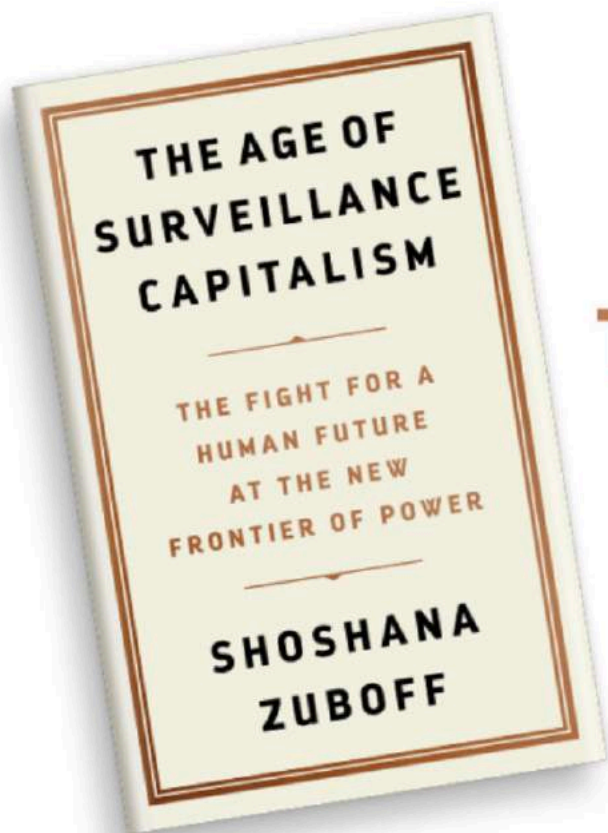
Profiting from a growing customer base

For traditional product and service businesses, gaining additional customers does not continue adding commensurate value after a certain point. However, many platform businesses (Amazon, Facebook, and the like) become more and more valuable as more people and companies use them, connect with one another, and create network effects.
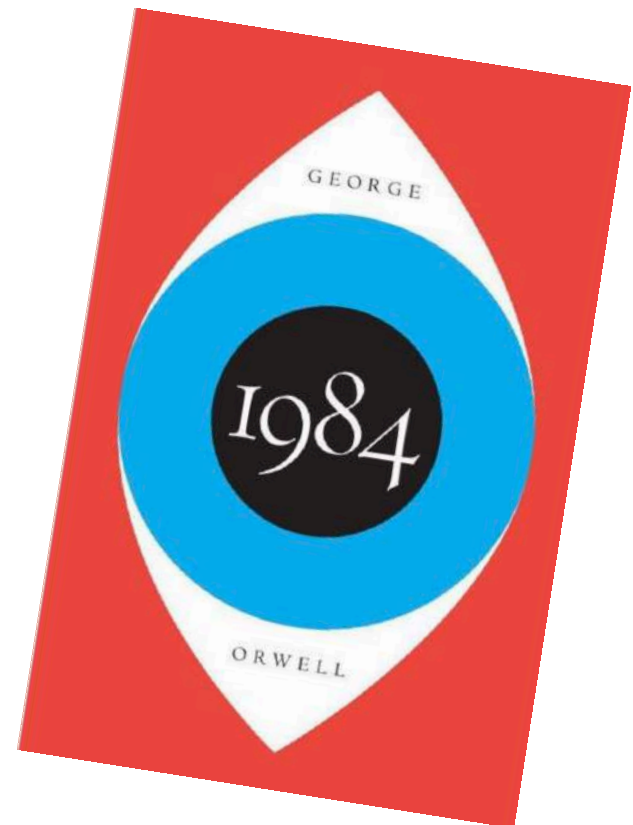
Digital platform with strong network effects

Traditional product or service business

Economic value

Number of users

+
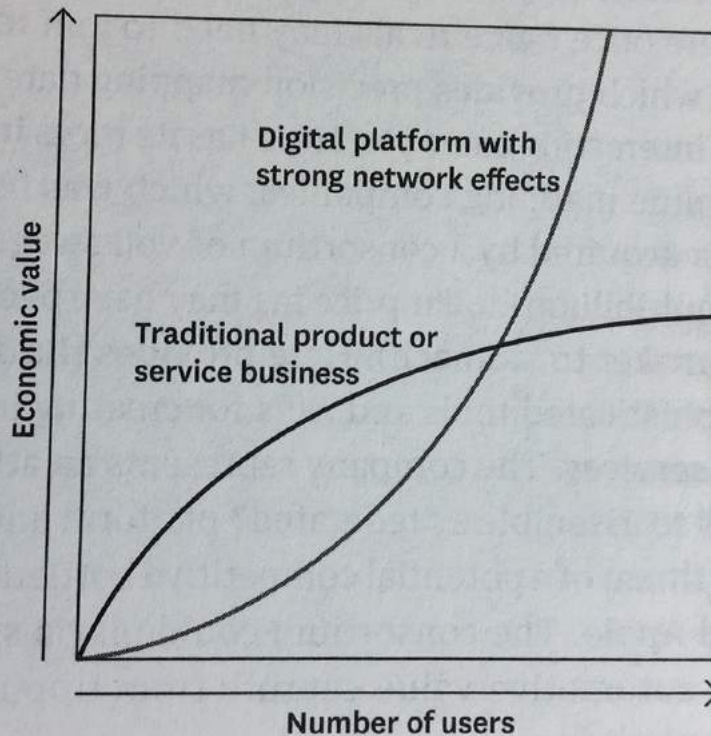
Reinforced effects from Big Data (making use of data traces to increase efficiency and effectiveness)

Iansiti and Lakhani (2019: 126)

Demand ↔ **Exchange platforms** ↔ **Supply**

Bauer & Gegenhuber, 2015; Baldwin, 2017; Hinings et al., 2018; Sundararajan, 2017

The dark sides of platforms:

taking, planting, surveillance....

THE AGE OF
SURVEILLANCE
CAPITALISM

THE FIGHT FOR A
HUMAN FUTURE
AT THE NEW
FRONTIER OF POWER

SHOSHANA
ZUBOFF

THEY'RE WATCHING YOU...
WITH YOUR FULL CONSENT.

GEORGE

1984

ORWELL

Technology

Is Amazon Unfairly Copying Products? EU Quizzes Merchants

By Natalia Drozdiak, Aoife White, and Spencer Soper
27. September 2018 19:58 MESZ *Updated on 28. September 2018 16:18 MESZ*

▶ Regulators ask for details, dates, documentation about Amazon

▶ EU requesting info from merchants as part of preliminary probe

ART+TECHNOLOGY

17.08.2015 | 14:34 Uhr

Eigenmarken von Supermärkten im Vergleich: Lidl, Aldi Nord und Rewe vorn

🐦 Twittern   👍 Gefällt mir 17   Teilen   ✗ Teilen ⟨1⟩   ✉ E-Mail   🖨 Drucken

Discounter-Eigenmarken:
Welcher Supermarkt liefert im Durchschnitt die beste Qualität?

Instagram Followers & Likes in Minutes

Social media is exploding and a revolution is going on that's changing the way consumers interact with businesses.

https://buzzoid.com

Buy Followers   **Buy Likes**   **Buy Views**

2,500 **Followers**

~~$29.⁹⁹~~

$14.99

Quality Followers

No password required

Fast delivery

24/7 support

BUY NOW

The Observer
Tripadvisor

Twitter campaign takes aim at fake restaurant reviews on TripAdvisor

Restaurateurs and food critics back #noreceiptnoreview campaign to deter fraudulent posts

t | Jul 27 2015, 4:15pm

s Phantom Cabs

em of imperfect information and ntives shapes the Uber experience and passengers.

watchers.com

Choose your eBay Watchers Package

| 30 Watchers | 50 Watchers | 100 Watchers | 250 Watchers | 500 Watchers | 1,000 Watchers | 2,000 Watchers |

Program: **MSc Management & Business Development**

Class: **Lehrforschungsprojekt ‚How do crowd-based platforms operate? Leveraging organization theory to inquire into platforms' organizing processes'**
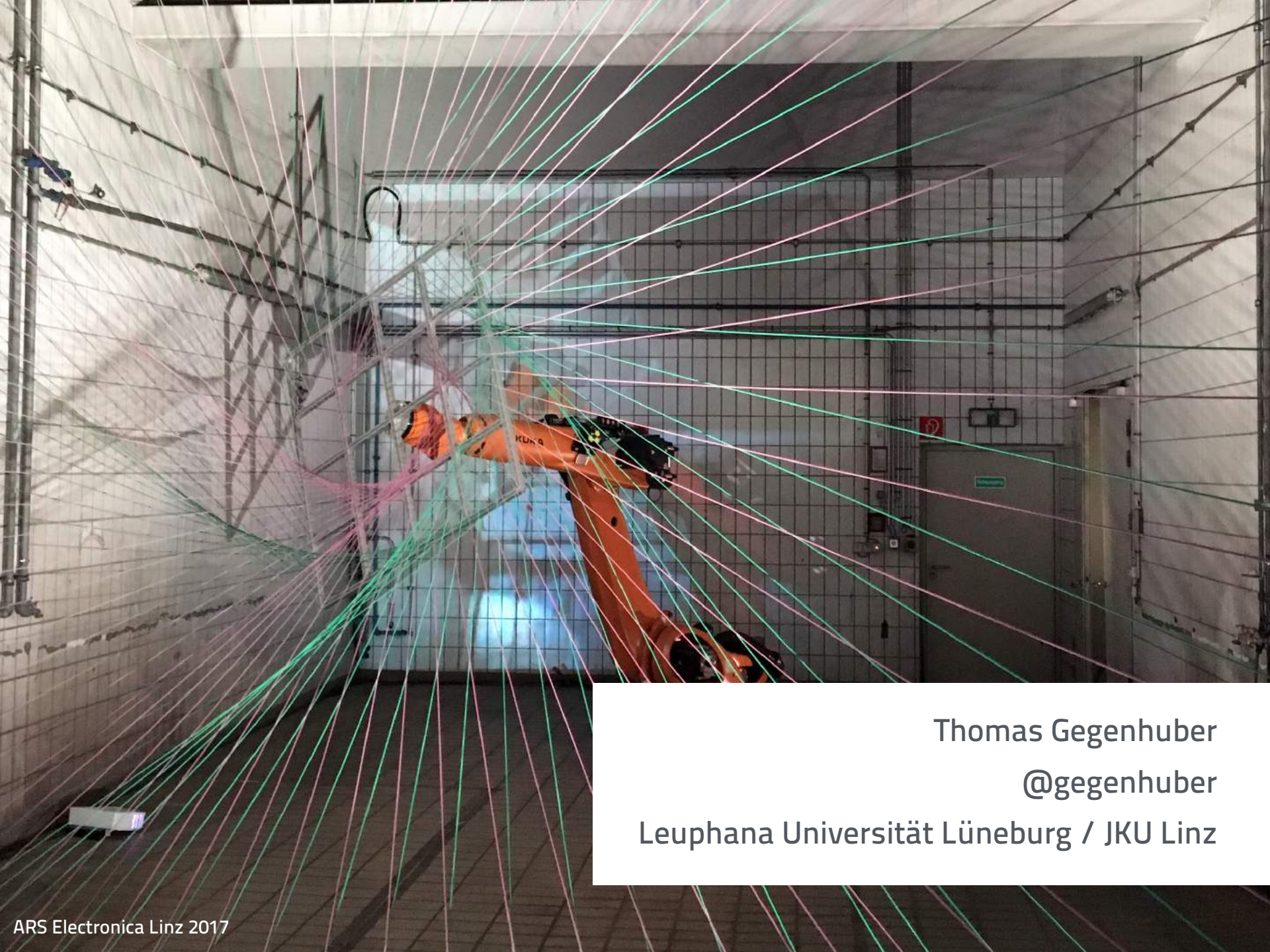
Professor: **Prof. Dr. Thomas Gegenhuber**

Students: **Pascal Debert (3035509)**

Viktoria Desirée Schmeding (3035521)

Svenja Katharina Schulenburg (3035540)
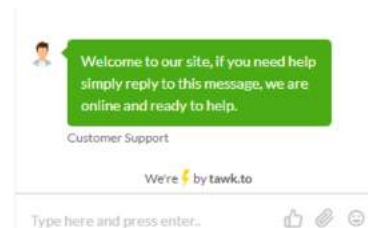
"Yes, It is a greyzone for sure, but eBay doesn't do anything because more sells on a listing = more money for ebay. They know this. Almost 90% of all eBay-shops use services like ours."

"No, only views and watchers for a better shop-ranking and/or better listings. Reviews are not a greyzone. This is really fake." – EB#3

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ARS Electronica Linz 2017