CREATING VALUE FROM DATA SHARING

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Data are all aware in our surrounding and assumed to be of great value – which companies still fail to unlock

Produced data[1]

7x increase in the global volume of available data (4 bns of sensors in 2012 vs. >30 in 2016)

Unmonetized data[1]

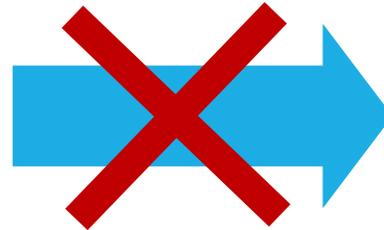**50-60%** location-based data

30-40% US retail data

20-30% manufacturing data

[1]as evaluated by McKinsey & Company, Inc. *(McKinsey Quarterly, 2018, p.1)*

Data ownership as crucial precondition for value creation does not imply that data sharing destroys value

Data ownership is typically understood as crucial prerequisite for value ownership

Consequently, lacking data ownership implies lacking value ownership

On the converse, the present project argues that the inherent value of data is actually enlarged by data sharing

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These new possibilities can be exploited and enlarged if data access is assured – e.g., by data sharing

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New, scalable technologies enable performant & secure data mgmt. & use case application
(Abolhassan, 2016, p. 19)

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Ray Kurzweil's law of accelerating returns diagnoses exponential technological change
(Kurzweil, 2001, p. 1)

Research and academia attribute great value creation potential to data sharing, while challenges remain

Scientific community…

… **agrees that data sharing is of outstanding importance for scientific progress.**

(Stanley & Stanley, 1988, p. 178)
(Tan, 2016, p. 525)
(Son, et al., 2014, p. 447)
(Van den Eynden, et al., 2011, p. 1)

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Remaining challenges…

… **are less about technological issues,**

… **and more about defining standards, rules and agreements on data sharing conditions.**

However, the business world has not fully operationalized the advantageousness of data sharing yet

Economic principle...

... **describes the rational exploitation of available resources to maximize a company's profit**
(Schaumberger, 2011, p. 1)

Companies...

... **rather keep their data for their own benefit**

... **are lacking tools to generate value**

... **haven't defined data sharing conditions yet**

Looking at their business model, the startup Quemey is a role-model for creating value from data

Environmental challenges

Customers
- have changing demands
- are considered the capital of (trading) companies (if loyal)

(Cole, 2010, p. 105)

Competition
- is getting stronger than ever
- increases the need to anticipate & solve relevant problems in advance

(Johnson, 2010, p. 26)
(Abolhassan, 2016, p. 17)

Technological progress
- is accelerating rapidly
- brings new platforms & possibilities to improve value chains & customer interaction

(Gansky, 2010, p. 5)
(Rogers, 2017, p. 17)

Quemey's answer

Quemey
- helps air passengers to make better use of their flight time by participating in rewarded surveys
- helps companies to access valuable customer insights

**By picking up the trends of their environment,
Quemey is able to bring together the interests of data supply and demand**

For the future, Quemey aims at realizing their data sharing vision with a systematically developed business model

Quemey's current business model

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Findings from empiric validation (airport interviews & survey)

- High general user acceptance identified
- Personalized product design preferred (rewards & survey topics)
- Huge potential for service improvement & customer experience recognized

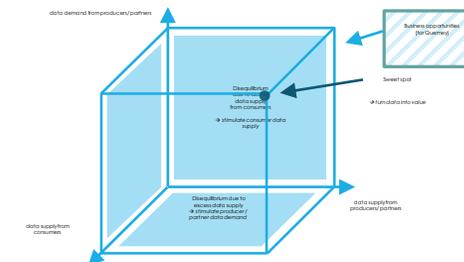**Likelihood to fill in surveys before boarding**
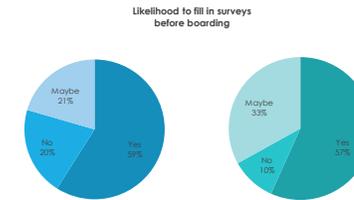
Current challenges (scenario analysis and 16 expert interviews)

- **Stakeholders:** not enough, poor understanding
- **Value Prop.:** no powerful values transported & realized
- **Transactions:** no clear design
- **Core/ M.:** no data sharing

- Environment challenge
- Implementation challenge
- Scaling challenge
- Uniqueness challenge
- Business case challenge
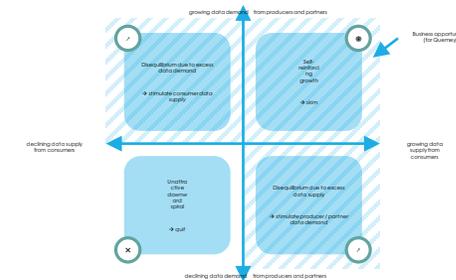
Future perspectives (scenario analysis and 16 expert interviews)

- **Stimulate producer/ partner data demand**: Show value, increase contacts, grow data base & business, eliminate barriers
- **Stimulate consumer data supply**: Show benefits, personalize, establish trust, reach more consumers, eliminate barriers
- **Stimulate producer/ partner data supply**: show value, increase contacts, encourage mindset, eliminate barriers
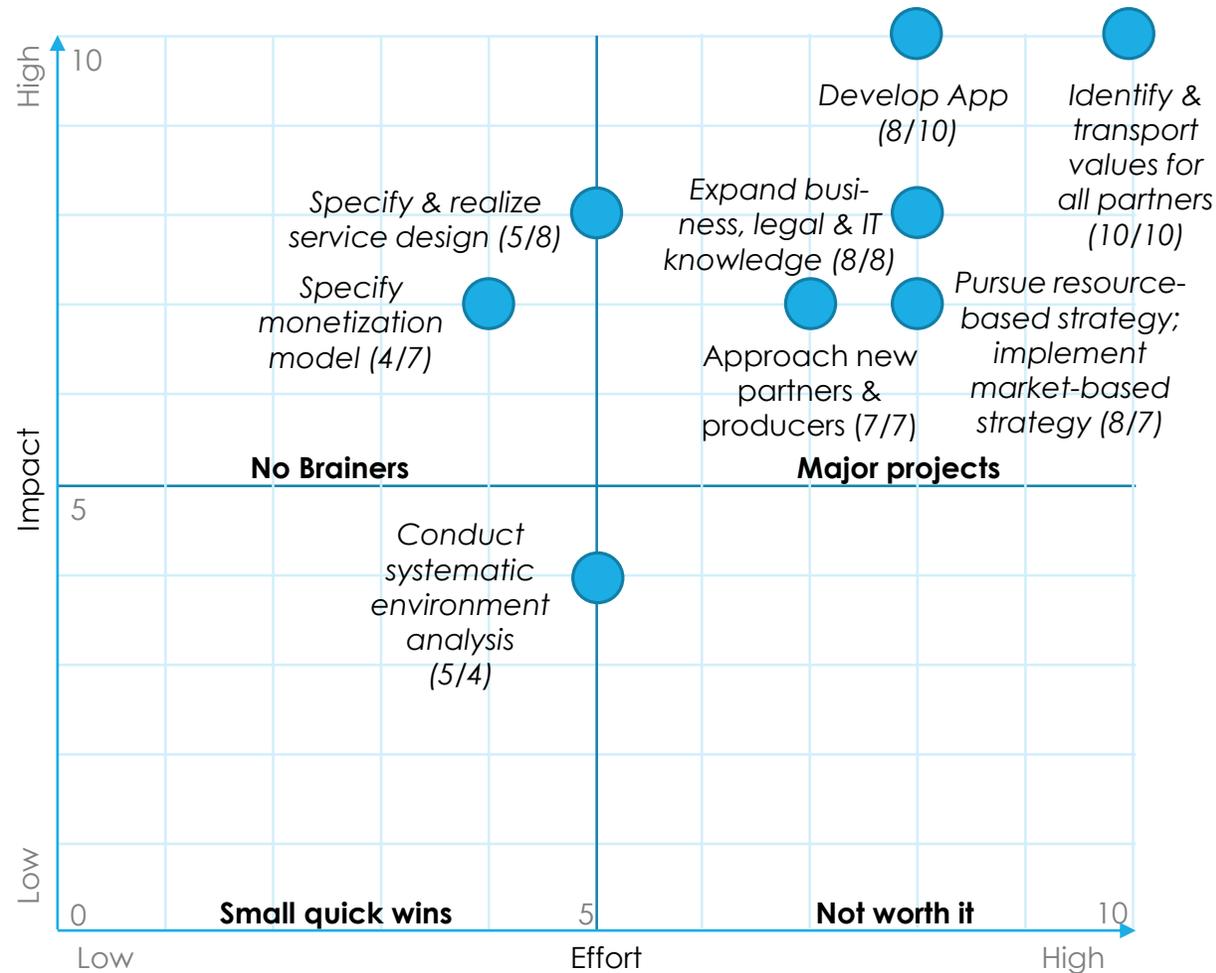

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Quemey's future-oriented data sharing business model

To realize their vision, a future-oriented platform-based data sharing business model[1] is required

A business model in theory is fine, but calls for an implementation plan

Impact / Effort matrix plotting implementation projects:

- **Develop App (8/10)**
- **Identify & transport values for all partners (10/10)**
- **Specify & realize service design (5/8)**
- **Expand business, legal & IT knowledge (8/8)**
- **Specify monetization model (4/7)**
- **Approach new partners & producers (7/7)**
- **Pursue resource-based strategy; implement market-based strategy (8/7)**
- **Conduct systematic environment analysis (5/4)**

Quadrants:
- No Brainers
- Major projects
- Small quick wins
- Not worth it

Axes: Impact (Low–High), Effort (Low–High)

Discussion: how can value from data sharing be extracted in practice?

1 How would you consider the **current mind-set of most companies towards data sharing**?

2 In which data sharing **application areas/ use cases would you see most value creation potential**?

3 Which **challenges are to be mastered**, to unlock the value creation potential from data sharing?

REFERENCES

▪ Abolhassan, F., 2016. Digitalisierung als Ziel - Cloud als Motor. In: F. Abolhassan, ed. *Was treibt die Digitalisierung? Warum kein Weg an der Cloud vorbeiführt*. Wiesbaden: Springer Gabler, pp. 15-26.

▪ Cole, T., 2010. *Unternehmen 2020. Das Internet war erst der Anfang*. München: Carl Hanser Verlag.

▪ Gansky, L., 2010. *The Mesh. Why the Future of Business is Sharing*. New York: Portfolio Penguin.

▪ Johnson, M. W., 2010. *Seizing the White Space. Business Model Innovation for Growth and Renewal*. Boston, Massachusetts: Harvard Business Press.

▪ Kurzweil, R., 2001. *The Law of Accelerating Returns*. [Online] Available at: http://www.kurzweilai.net/the-law-of-accelerating-returns [Accessed 02 12 2017].

▪ McKinsey Quarterly, 2018. *The data disconnect*. [Online] Available at: https://www.mckinsey.com/business-functions/mckinsey-analytics/our-insights/five-fifty-the-data-disconnect [Accessed 06 10 2018].

▪ Rogers, D. L., 2017. *Digitale Transformation. Das Playbook. Wie Sie Ihr Unternehmen erfolgreich in das digitale Zeitalter führen und die digitale Disruption meistern*. Frechen: mitp Verlags GmbH.

▪ Schaumberger, K., 2011. *Ökonomisches Prinzip*. [Online]
Available at: https://www.existenzgruender- helfer.de/2011/03/20/oekonomisches-prinzip-wirtschaftlichkeitsprinzip/ [Accessed 06 12 2017].

▪ Son, Y.-H.et al., 2014. Platform Design for Data Sharing. In: J. J. Park, A. Zomaya, H. Jeong & M. Obaidat, eds. *Frontier and Innovation in Future Computing and Communications*. Dordrecht: Springer Science+Business Media, pp. 446-452.

▪ Stanley, B. & Stanley, M., 1988. Data Sharing. The Primary Researcher's Perspective. *Law and Human Behaviour,* 12(2), pp. 173-180.

▪ Tan, C. N.-L., 2016. Enhancing knowledge sharing and research collaboration among academics: the role of knowledge management. *Higher Education,* 71(4), pp. 525-556.

▪ Van den Eynden, V. et al., 2011. *Managing and Sharing Data. Best Practice for Researchers,* Colchester: UK Data Archive. University of Essex.

▪ Walter, M., Lohse, M. & Guzman, S., 2017. *Platform Innovation Kit*. [Online] Available at: http://www.platforminnovationkit.com/innovate/#downloadkit [Accessed 09 12 2017].

▪ For further information see Dreller, A., 2018. *Creating Value from Data Sharing*. Wiesbaden: Springer Vieweg.