What are data products and why are they different from other products?

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What do these people have in common?

Alphabet, Amazon, PayPal, Tesla
What do these people have in common?

They build their businesses around “data products”.

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Growing market for „data products“
Hypothesis

Data product <> traditional product

› Should the product management process be adapted to the special needs of data products?
› Is there a need for new product management methods or should product managers apply existing methods in a different way?

Research foundations

› Interviews with employees from Otto, Xing, mobile.de, Eventim, … (n ~ 10)
  › Roles of the interviewees: Product Owner, Product Manager, Data Scientist
› Bachelor thesis written by Aaron Humm at Technische Hochschule Stuttgart
› … Experiences from our projects ;-)}
Definition of data products
Data products: types

Type 1: Data as a Service
- Weather data

Type 2: Data-enhanced Products
- Autonomous driving

Type 3: Data as Insights
- Marketing planning

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Interview results
Differentiation between types of data products

› Minor differences in the interpretation of insights
› Distinction in general is seen as very helpful

Recommendation
Definitely useful, as the distinction supports the explanation of different revenue sources. Furthermore it supports the creative process when searching for new ideas for data products (product discovery)

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Data products
Processes and methods
Data product – management process

3 phases*

- **Strategic data product management**
  - Identify
  - Analyse
  - Check
  - Strategy
  - Consolidate

- **Technical data product management**
  - Build Team
  - Plan
  - Maintenance

- **Go-to-Market**
  - Build Team
  - Delivery
  - Control

* See http://www.pro-produktmanagement.de/open-product-management-workflow.html
Identify problem

Classical product management

Problems of any kind are in scope

Data product management

Restricted to value drivers with
  › rational utility
  › social utility
Value proposition and readiness to pay
Readiness to pay grows with value of supported decision

Quelle: Laura Dorfer: Datenzentrische Geschäftsmodelle als neuer Geschäftsmodelltypus ..., 2016.
Interview results

Value proposition

› All interviewees have data products in place which build on the decision support value proposition
› The social aspects of data are less systematically analysed
› As a motivation to trigger a feedback loop social aspects are currently not systematically deployed

Recommendation

Both, rational and social, value propositions should be considered. The later is particularly helpful to foster user interaction with the service.
Positioning

Classical product management

Customer Value Proposition oriented

Add-on: Service provider becomes customer of the user (Inversion of the value proposition perspective)

Data product management
Part of the Business Model Canvas

Find a USP: Value Proposition Design

1. Value Proposition Design*

* Osterwalder A.: https://strategyzer.com/books/value-proposition-design
Transaction data: basis for the USP

Master data

Transaction data

Bsp.: Google Maps
feed
BACK

🔄
Method proposal
Inversion of the Value Proposition Canvas

* Osterwalder A.: https://strategyzer.com/books/value-proposition-design
Interview result

Feedback Loop, USP and positioning

› User interaction data with a service are currently not systematically used in order to define the value proposition of the product
› A/B-tests are a first step
› The inversion of the Value Proposition Canvas was discussed controversially
› No common agreement on separation of master data and transactions data

Recommendation
It is sensible to reuse the user interaction data in order to enhance the value proposition of the product. The inverted Value Proposition Canvas can support this process.

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Data Security

Classical product management

Data product management

- Personally identifiable information,
- Country specific laws,
- Ensuring availability, etc.
Identify Data

Classical product management

Data product management

› Identify relevant data objects
› Evaluation of internal available data sources and identification of gaps
› Definition of the data creation strategy (Buy, Build, Partner)
Further processes with a need of adoption

› Pricing Strategy
› Portfolio Strategy
› Market Strategy
› Identify Persona
Conclusion

Data products are different

› Categorisation of data products supports the business model and product definition

› Distinction between different value drivers for data products supports defining the best customer approach

› Product managers currently do not actively design feedback loops. Methods are still under construction
Vielen Dank

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