Innovative Anwendungsfälle für die Datenanalyse

„Von Datenflut zu neuem Wissen – Neue Geschäftsmodelle in einer digitalen Welt“
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The public discussion on data analytics is frequently influenced by fear and lack of transparency for the users. A dialogue between all parties will help acceptance.
Provisioning of information – whether as pure-play service or as attachment to an existing product – takes an increasing part of value creation across many industries.

--- GS1 – Data products along the Supply Chain ---

- Global product classification standards
- System for global synchronization of product catalogues
- Supply chain tracing
- System of bar codes & identification
- Database Services/Information Registry

--- NIKE plus – Data as Part of the Consumer’s Benefit ---

- Participate in virtual challenges
- Share running routes online on a digital map
- Mashup with other communities
- Users track their runs through a micro chip
- Direct connection to Apple iTunes
- Personal training schedules
- Join teams & community, find running mates
- Share music favorites

Pure Data Services ("Pure-play")

Products with a Data Sphere ("Hybrid")
Data analytics has to cover and integrate both external and internal information sources. The results can be used internally or monetized in the external market.
Analytics is one step in the overall information value chain. Linking all elements creates new business models, applications and value propositions.

Example: Tesco Supermarkets

Virtual store in subway where commuters can buy groceries out of a virtual wall.
Most market participants perceive analytics as the key step of value contribution in information-driven services and business models.

Source: Detecon Study
The transformation of business and social life towards digital IT-based processes leaves various data traces requiring new capabilities to handle and analyze data.

**The future digital world**

- Fully IT-based business processes in all industries
- Web-based and mobile customer interaction
- Social life via social media networks
- Ubiquitous Internet-of-Things
- Closed-loop real-time decision making

**Required new data capabilities**

- Handle data with...
  - huge volumes
  - high velocity
  - large variety

**The big data triangle**
New big data analytics applications impacting core business processes can be found in all industry and services sectors.

Utilities
Analyze energy data to improve demand and supply forecasting

Telecommunication
Perform customer analytics to retain existing customers

Media
Analyze social media data for market research.

Insurance
Make free-text analysis of claim reports.

Financial services
Use event-processing for trading and risk management

Health care
Determine efficacy of pharmaceuticals by insurance data analysis

Manufacturing
Analyze machine data from sensors for preemptive maintenance

Logistics
Optimize logistics by analysis of location data from transport vehicles
Customer data is perceived as being the most valuable data domain. A domain of growing interest is sensor data – representing the progress of the Internet of Things.

Data in domain X entails “very high” value contribution.

Source: Detecon Study
Customer analytics has been the focus of many innovative start-ups. Both historic and real-time data is being used to support enterprise decision making and new services.

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<th>'Offline' (historic)</th>
<th>'Realtime'</th>
<th>Location enabler (pure providing of data)</th>
<th>Data management</th>
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<td>Indirect actions / support decision making</td>
<td>Direct customized actions</td>
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<td>Marketing audit (reference data)</td>
<td>Customized pricing</td>
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**Source:** Telekom Innovation Laboratories, Detecon Analysis
Bid my Bill establishes a new business model: it provides an exchange platform and acts as intermediary between mobile operators and potential customers.

- Customized mobile tariffs
  - Reversed mobile phone buying process: phone companies bid for the user’s contract based on historic billing data
  - Extensive analytics on historic minutes, text and data usage
  - User can add personal requirements (e.g. phone choice, network preferences, etc.)
  - Launch: October 2011
Glympse leverages the possibilities of retrieving location data. It addresses data privacy issues by leaving the decision – when to share his location and to whom – to the user.

- Users can share their own location data with friends in real-time.
- Friends receive a link to a map where they can “follow” the current location, and see the estimated arrival time at a certain location.
- The location information can also be propagated to Facebook.
- Launch: 2008
Correlation analysis of IPTV-infrastructure

- Trouble-shooting in IPTV-networks involves complex combinations of devices, protocols and environmental conditions.
- Data from different device vendors and from different protocol levels have to be integrated, leading to a high variety of data sources and large data volumes.
- With end-to-end correlation analysis of log-data Deutsche Telekom could significantly increase its trouble-shooting capabilities. Accordingly, IPTV call center volumes dropped by 30%-50% within one year and customer satisfaction increased.
Immoscout24 uses its real-estate listings to derive market prices and offers these information as a paid service to home owners.

- The real estate is a market known to its high degree of information asymmetry, giving rise to a high big data value potential.
- The Deutsche Telekom subsidiary Immoscout24 is market leader (67% of visitors in 2010) among real estate portals in Germany.
- Immoscout24 derives real-estate market prices based on its listings with a high level of granularity in regard to location, size, condition, features, etc.
- For a fee, value estimation based on the market prices is offered to real-estate owners.
Deutsche Telekom’s media portals (Musicload, Entertain, Videoload, …) use both product and customer-derived data to improve user experience and enhance sales.

A multi-tenancy and scalable recommender solution for the Deutsche Telekom portals.

- Basic Knowledge and R&D from T-Labs. Integration and commercialization by CID and YOOCHOOSE
- Patented stereotype algorithm developed at T-Labs
- Semantic content based filtering and metadata enrichment is implemented for Entertain in Germany.
- In use at Musicload, Gamesload and Entertain, future use at TV-Archive, Videoload and Erotic Lounge

Source: Telekom Innovation Laboratories
Trust and value are key to data analytics. Openness and win-win situations create benefits and acceptance.

1. **Data analytics covers numerous applications fields**
   Customer data is an important but only one of many fields.

2. **Only value for the customer is true business value**
   Use analytics to improve your product and customer service.

3. **Data has market value**
   All analytics initiatives should look to monetize data assets.

4. **Data likes to interact**
   The combination of internal and external data yields maximum benefits.

5. **Machine data from the Internet of things will grow significantly in the next years**
   Connecting remote assets and products to internal IT systems.

Summary:
Trust and value are key to data analytics. Openness and win-win situations create benefits and acceptance.