# Public Sector Processes support by Cognitive Analytics – secured in the Blockchain

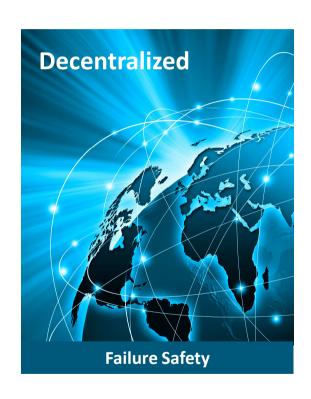
### **BRZ** as an Enabler

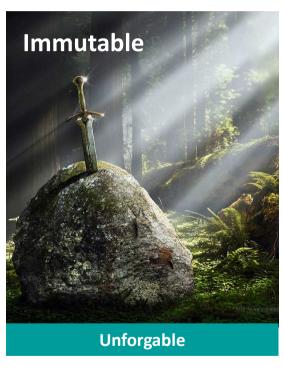
Matthias Lichtenthaler, Head of Digital Transformation Bundesrechenzentrum GmbH

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## **BRZ**

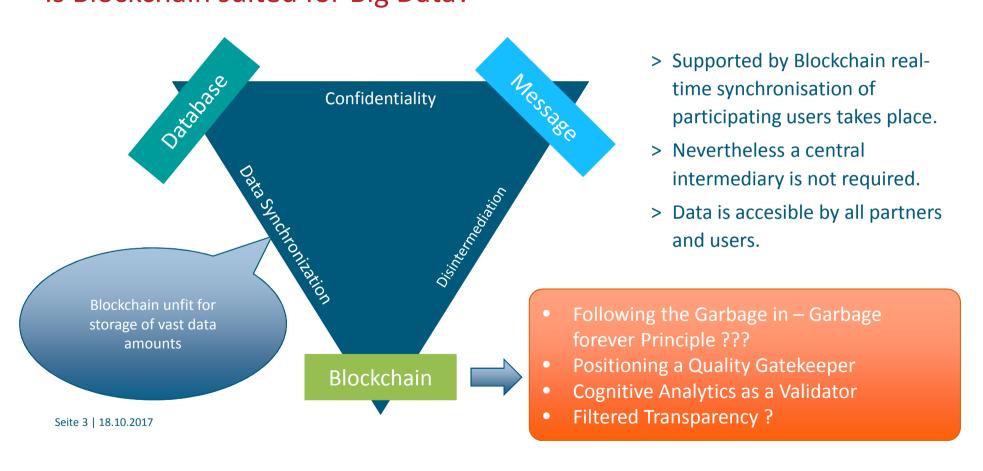
## 3 Specialities yielded by Blockchains core values







## Conflict of Objectives throughout Integration of Organisation BRZ Is Blockchain suited for Big Data?



## Potential Blockchain Use Cases for Public Sector with Linkage to Big Data & Cognitive Computing

**BRZ** 

**Asset-less Blockchains** 

Asset-related Blockchains



- Food Origin "Steak secured by Blockchain"
- Securing a process e.g.: "eZustellung"
- Local/ EU-wide fault proof register "Das Blockchain-Grundbuch"
- From eParticipation to eVoting
- Controlling by Analytics & Big



- Data Aggregation e.g.: for "Großstrafverfahren"
- International Corporation e.g.: regarding "Multipler juristischer Zuständigkeit"
- Cognitive Analytics for Pre-Screening/ Content Analysis for confiscation



- Integration of refugees and/or longterm unemployed via "Social Coins"
- Helpdesk Ticket Systems
- Analytics & Big Data for Controlling
  - Analysis of payment flow
  - Audit proof

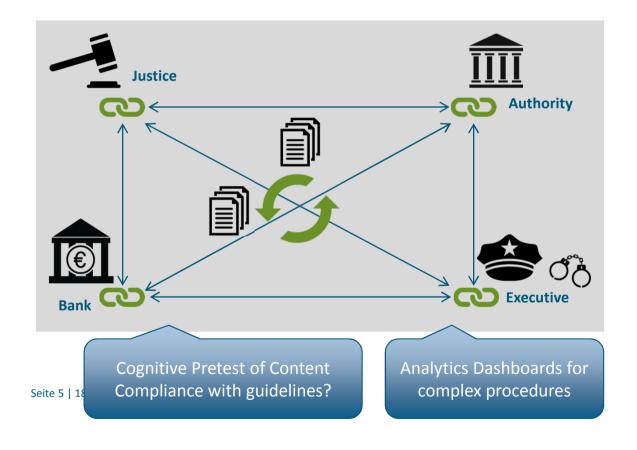


- Deployment in Customs: "BC Zertifikat" 'for valuable export goods, art, export documents etc.
- Analytics & Big Data for Controlling
  - Dashboards for Tracking
  - Audit proof

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## **Real Time-Aggregation of Data**

New Findings regarding Major Criminal Procedure



#### **Key Facts**

- Usage: Asset-less Blockchain
- Distribution: Community Blockchain

#### **Procedure**

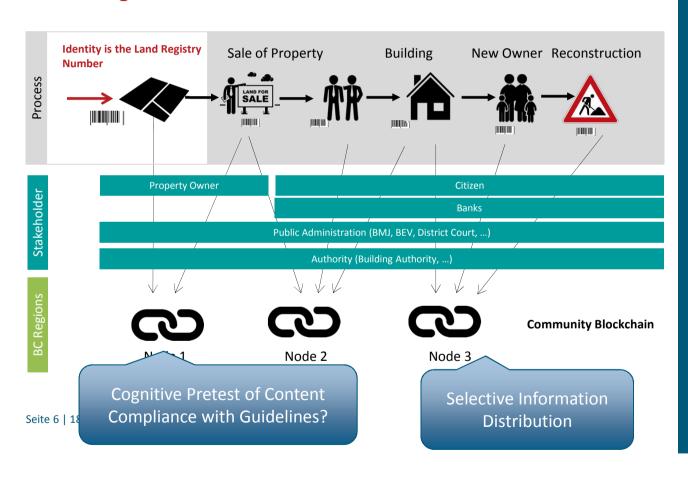
- banks, public institutions, justice, etc. are using Blockchain for real timesynchronisation of data and information
- Background: single activities are often not punishable or can not be identified as crime (without context)
- Potential Node-Holder are banks and insurances, authorities and ministries

#### **Business-Benefits**

- Data-Aggregation determines correlations (including their chronological order)
- Identification of criminal activity, and therefore their prosecution becomes easier

## **The Blockchain Land Register**

Redefining the Real Estate Business



#### **Key Facts**

- Usage: Asset-less Blockchain
- Distribution: Community Blockchain

#### **Procedure**

- Property recieves an ID, which is trackable throughout the entire life cycle
- Relevant information and documents regarding change of ownership, reconstruction, mortgage, rights of lien, etc. are written into the Blockchain

#### **Business-Benefit**

• Digital counterfeit proof Land Registry

What's next?

BRZ

### Inform - Analysis - Test

#### Deep-Dive Workshop

Duration: 0,5-1 day

- > Technical Foundation (BC Types, Methods of Consensus, Blockchain from DB-view, etc.)
- > Added value of Blockchain from a business perspective
- > Interactive Development of Use Cases

#### **Proof of Concept**

Duration: at least 4-8 weeks

- Detailed analysis of an Use Case regarding Process, Stakeholder, Parameters and crucial success factors
- > Technical basic concept and ideation of business cases

#### Pilot Run of Use Cases

Duration: at least 8-12 weeks

- > Technical Realisation of an Use Case with the Open Source Product Multi Chain
- Subsequent Pilot Operation incl.
   Operational Test

> Heads of Digital Transformation

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