Enabling Intelligent Action
From carbon to diamonds: Business cases of data value

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Outline

Abundance of Data and its value

Enabling intelligent action in:

• Security
• Health
• Finance

Challenges of the new paradigm

3 Simple rules
Who we are

Software house established in 1989

Enterprise software for banking, telecoms, hospitality

130+ people

Vision

transform the costly and complex enterprise software industry – making it simple, accessible and exciting.
Innovation at EXUS

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Continuous improvement

4 Islands of Excellence

Security

ICT

Creativity & Learning

Data Technologies

Provide new paths for product and business development
Abundance of data
The Diamond Process

- Process Data
- Visualization
- Mining
- Model building
- Results and Optimization
- Validate Results

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Extracting value “hidden” in Data

1. Process and filter data
   - ensure data matches business goals

2. Visualization
   - use visual aids to identify relationships and build hypotheses

3. Mining – identifying patterns
   - Leverage data predictively
   - Find clusters
   - Gain insight
From Carbon to Diamonds

Extracting value “hidden” in Data

4. Creating models
   - different perspectives of data
   - decision trees, neural networks, etc.

5. Results optimization
   - establish functions to produce actionable results
   - select appropriate method (think variables, functions)

6. Validate results
   - Give time to assess results vs. business decisions
Applications in Healthcare
From Carbon to Diamonds

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Personalized Healthcare

**Fact:** Healthcare costs key cost-driver in an aging EU

**Changes:**
> Digitized medical records
> Transparency and openness of data

**Opportunity:**
> Leverage data to build next-gen. health services
> Achieve economies of scale
> Limit variability in healthcare quality
> New paths to innovation and growth
From Carbon to Diamonds

Personalized Healthcare

Opportunities for Innovation

- **Health claims and costs**
  - **Datasets:** Cost estimates, resource utilization

- **Clinical Data**
  - **Datasets:** Electronic medical records

- **Medical/Pharma R&D Data**
  - **Datasets:** Clinical trials, libraries

- **Patient behavior**
  - **Datasets:** Patients preferences, exercise data
Applications in Security
From Carbon to Diamonds

Secure Societies

Goals:
> Enhance the security of citizens
> Safeguard Europe’s Cis

Facts:
> Operations and procedures are data-centric
> “Need to know” Who, What, When, Where
> Public Protection and Disaster Relief operations become data-intensive
> Diverse sources of information

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Secure Societies

Legacy Infrastructure
Datasets: monitoring systems, CCTV, Hyper-spectral, Wireless Sensors, Simulators

Adhoc Systems
Datasets: Satellite imagery, positioning, UAVs, UGVs

Wearable/Portable
Datasets: First responder operation, police forces, medical crews

Crowd-sourced content
Datasets: Free text, pictures, sounds, videos, location

Big Data
Aggregation of Smart Spaces

Roaming of Entities

Situation

Sequence

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Applications in the Financial Sector
From Carbon to Diamonds

Financial Services

Fact: Advances in mobile Internet and cloud services

Changes:
> Financial institutions are rethinking the way they do business

Opportunity:
> Ability to perform scalable data analytics
> Customer data monetization
> New products and services
From Carbon to Diamonds

Financial Services

Customer data monetization
- Centricity
- Risk Analysis
- Retention

Transactions & Operations
- New products and Services
- Trading and analytics
- Organizational Intelligence

Risk management and Regulations
- Enterprise risk
- Capture unstructured data sources
- Efficient regulatory response
# Enterprise Banking

The diagram illustrates the integration layer for Enterprise Banking, focusing on key components such as credit bureaus, legal infrastructure, call center bailiffs, and law offices. It also highlights various channels and agents involved in the process.

### Identification Layer
- **Credit Bureaus Legal Infrastructure**
- **Call Center Bailiff Law Offices**

### Channel Management
- **CTI & Portal**
- **Agents**
- **Mobile**
- **Field Agents**
- **SMS Gateway**
- **SMS**
- **Printing Mgmt.**
- **Letters/Legal Docs**
- **Self-Service Portal**
- **Customer**

### Integration Layer
- **Precollection**
- **Early**
- **Restructuring**
- **Legal**
- **Write off & Sales**

### Key Components
- **(Scoring Engine)**
- **Segmentation Engine**
- **Strategy**
  - Timeline
  - Workflow
- **Operational**
  - Campaign Mgmt.
  - Vendor Mgmt.
- **Analytics**
- **Champion Challenger**
- **Document Mgmt.**

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**Diagram Highlights**

- **Credit Bureau Legal Infrastructure**
- **Call Center Bailiff Law Offices**
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**Incorporation of Core Elements**

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**Integration of Key Components**

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**Champion Challenger**

- **Document Mgmt.**
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**Strategy**

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**Operational**

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**Analytics**

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**Document Mgmt.**

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**Early**

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**Restructuring**

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**Legal**

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**Write off & Sales**

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**Field Agents**

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**SMS Gateway**

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**SMS**

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**Printing Mgmt.**

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**Letters/Legal Docs**

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**Self-Service Portal**

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**Customer**

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Challenges of the new paradigm

Establish an “information culture”:

- What data do we really need?
- Validity and trustworthiness of data
- Ethics, security and privacy
- What are the competences needed?
- Integration with organizational processes
3 Simple Rules

Abundance of data becomes an opportunity for your organization when you:

- Ensure data-sets' quality and blend
- Get the right expertise i.e. Data Scientists
- Enforce strict operations and governance