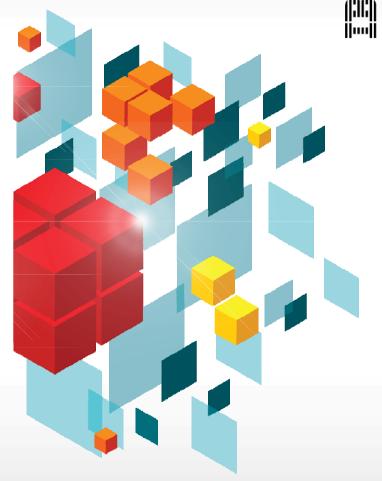


# **IBM Performance 2011**

In-Memory & Real-Time – Hype vs. Reality:

Tailored IBM Business Analytics for SAP Customers

Frank Sattler ERP Market Strategist IBM Germany





# **Unprecedented Data Growth...**





> 4.6 Billion

Mobile Phones, Smart Phones, & Tablet Computers

1.3 Billion RFID Tags 2005;

> 30 Billion RFID Tags 2011





twitter

Twitter processes > 7 Terabytes daily

Capital market data:

>2.000% increase since 2003





Facebook grows to > 580 Millionen users in 2011

Statetti



## ...Drives New Buzzwords...



**Messaging Systems** 

**Unstructered Data** 

Collaboration

**MapReduce** 

Cloud Appliance

**BigData** 

**In-Memory** 

**Real-Time** 

**IBM BigInsights** 

ETL

**Data Democracy** 

**SAP HANA** 

Hadoop

**Oracle Exadata** 



## ...And Asks for New Views:



# Big Data\*

#### ...concerns

- Companies of all legal forms, sizes, industries
- NPOs
- Public Sector

#### ...is

- not a question about the "if", only about "when" and "how"
- Enables new business modells
- Basis for competitve edge

#### ...will be

- play an important role for most companies
- and broadens the scope for...

**Business Analytics** 

\* Management of huge data quantities & purpose driven use in companies



# **Use Mass Data Efficiently...**



#### **Performance**

- High performance→ In-Memory?
- Replication 24x7

#### Relevance

- Store & combine external & internal data
- Specify, process and provide relevant data

#### Access & Use

- Line of Business specific data
- When it is required
  - → Real-Time?





## Focus: Performance & Real-Time

# 

#### **Examples for performance optimization:**

#### **In-Memory Appliance**

- Columnar database technology
- Data storage in RAM
- Cheaper RAM
- 64bit architecture with up to 2 TB of addressable RAM
- Caching of complete databases
- Requires disaster recovery & back-up

#### **Real-Time Analytics**

- Analysis in real-time instead of hours or days
- Use of all necessary internal & external data sources
- Flexible, dynamic analysis
- Based upon continuous data replication (24x7)

#### **Customer Specific**

or

- Tailored to the need of the various Lines of Business
- Analysis of your existing hardware & software
- Customer specific optimization



# **And...Business Analytics?**



In-Memory & Real-Time

Big Data / Structured & Unstructured

Predictive Analytics

Social Analytics

Mobile Analytics



# Lines Of Business: In Memory & Real-Time as Answer to All Business Needs?



- How fresh is the data?
  - Real-, Near-, Right-Time
  - Daily, weekly, monthly
- Other requirements?
  - Simulation, predictive analytics
  - Planning
- Access?
  - Mobile
  - Online, Offline

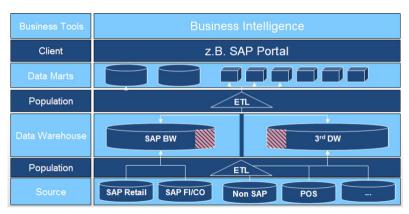


### **Relevance for SAP Customers**



#### **Conventional Systems**

- Traditional instruments
  (ETL, BI, Business Warehouses)
  reaching their limits
- Lengthy batch-runs at night
- High load for transactional system
- Real-Time applications not always deployed as required by the business





# ...Optimize SAP Systems



Predict potential threats and opportunities

Spot and analyze trends and anomalies



Compare "what-if" scenarios

Assemble and interact with relevant information

Plan, budget and forecast resources

#### **Business Analytics**

Business Intelligence Predictive & Advanced Analytics Financial Performance & Strategy Management

Governance, Risk & Compliance Analytic Applications

Integrate Data from vour SAP Systems

Ensure organizationwide insight

Combine external with SAP & non-SAP data

Improve query performance

Align reporting, planning, predictions with other PM applications

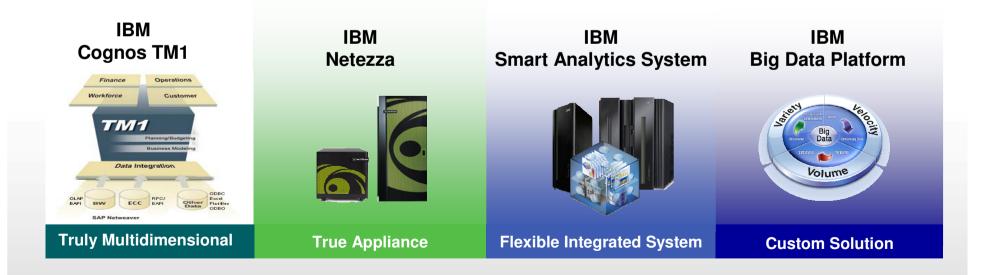


# ...SAP Systems: Complement & Substitute



- Business Analytics Strategy
- Integration
- Cost / Benefit

# Define the right mix - Simplicity and Flexibility





# **Optimization of Existing SAP Systems**



#### **Customer Specific**



- Optimization or replacement of SAP BW
- Alternative ETL scenarios, data quality (e.g. IBM InfoSphere)
- Replication of data-marts (instead of entire databases) for realtime scenarios

# Lines of Business

- Holistic corporate business analytics strategy
- "Right-Time": provision of data when it is really needed
- Drive application adaption by the business user



# Thank You