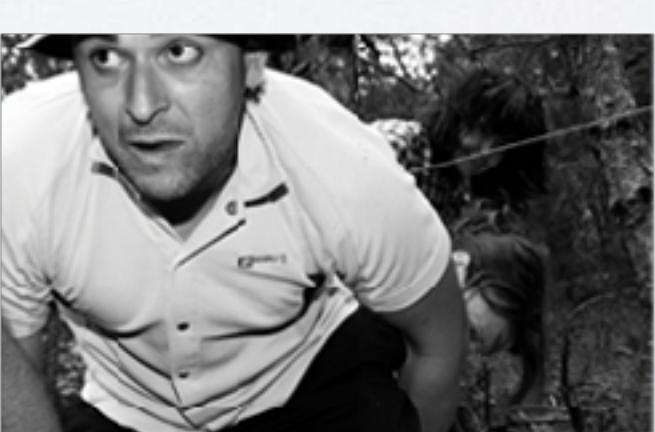
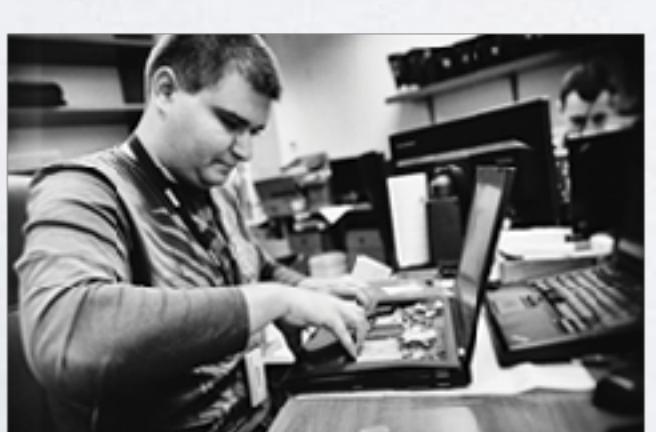
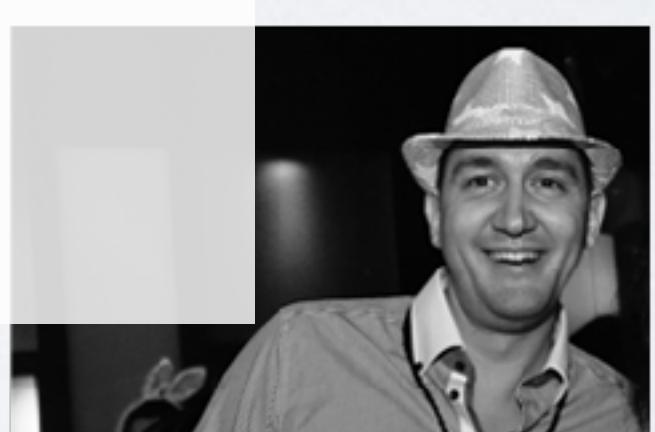
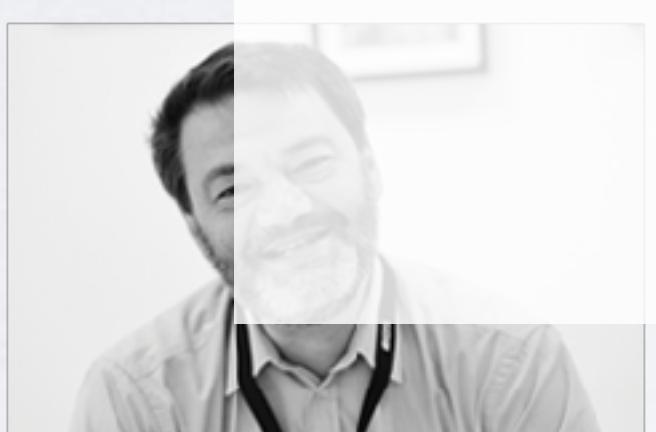
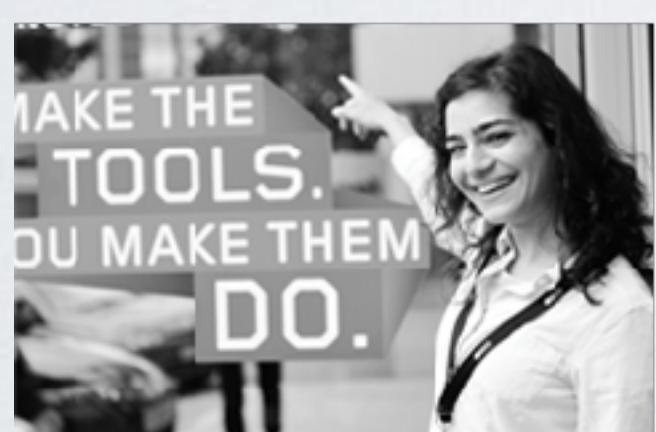
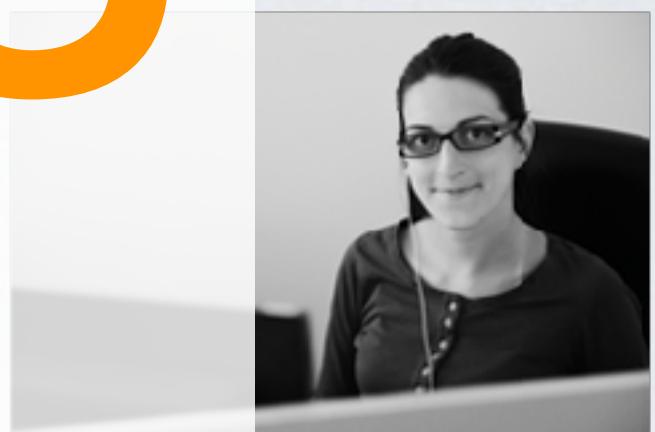
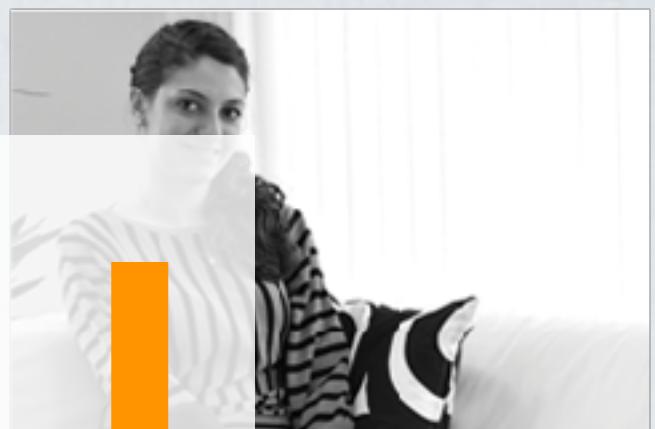




IBS IT COMPASS 2016

**THANK  
YOU**

**THANK YOU**  
**for great**  
**2016**





MAKING YOUR DAY

---

WHEN ONE OF YOU HAS A PROBLEM



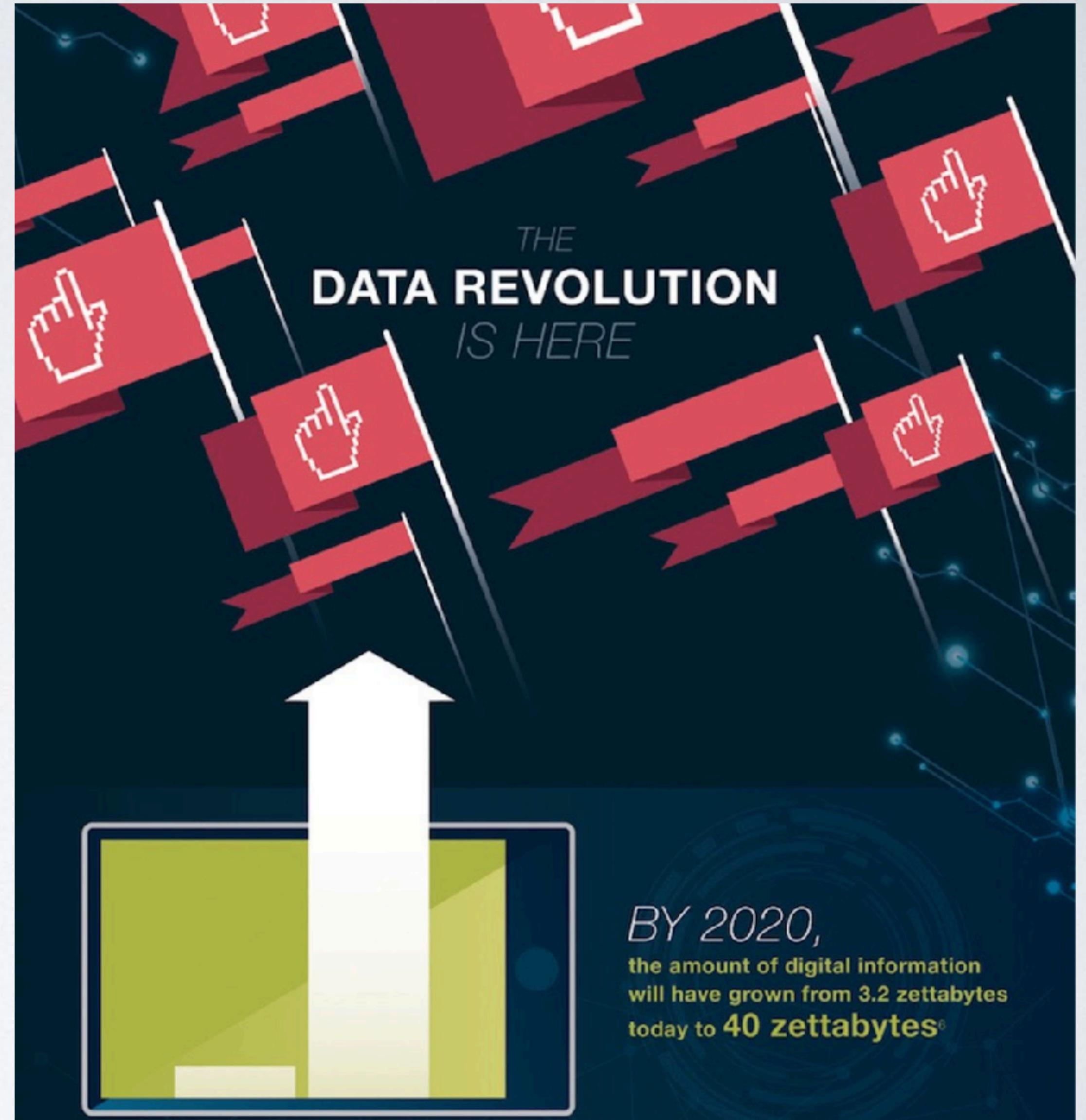
# INFORMATION AND ANALYTICS

“Information is the **oil** of the 21st century, and Analytics is the combustion **engine.**”

—Peter Sondergaard, SVP Gartner, 2011

# ЕКСПОНЕНЦИАЛНО НАРАСТВАНЕ

Данните нарастват с непрекъснато увеличаваща се скорост. Ако днес в света има 3-4 zettabytes дигитална информация, през 2020 тя ще е близо 40!



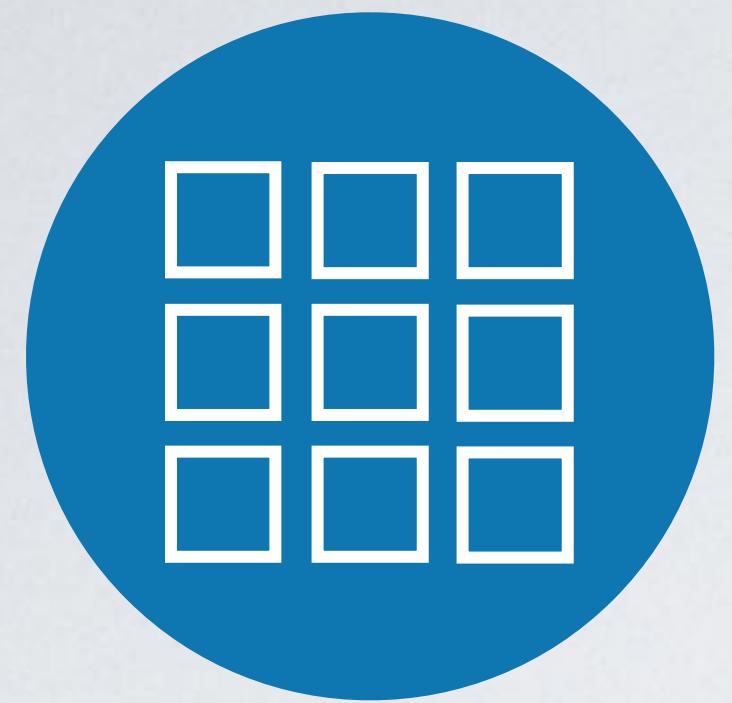
# MORE DATA CREATES MORE OPPORTUNITIES

..., но

Чрез подходящ анализ данните могат да ни помогнат да вникнем в човешкото поведение, да вземаме по-информирани решения, да сме по-иновативни и да намалим риска.

Само, че има доста предизвикателства, пред това да започнем да използваме практично толкова много информация.





**Structured**



**Unstructured**



**At Rest**



**In Motion**

# BIG DATA PROBLEMS

3..4xV

1. Volume (Обем)
2. Variety (Разнообразие)
3. Velocity (Скорость)
4. Veracity (Истинность)

# ИЗВЛИЧАТЕ ЗНАНИЕ ОТ ГОЛЯМ ОБЕМ, РАЗНООБРАЗНИ ПО ВИД И СКОРОСТ ДАННИ **ЕФЕКТИВНО И БЪРЗО**

- **Variety:** Управлявате и извличате полза от различни видове данни и структури
- **Velocity:** Анализирате едновременно стрийминг от данни и големи обеми от вече налични данни
- **Volume:** Скалирате от terabytes до zettabytes
- **Veracity:** Постигате качество на данните, което да ви дава увереност в откритите факти



# ИМА РЕАЛНИ ПРЕЧКИ, КОИТО ВЪЗПРЕПЯТСВАТ БИЗНЕСА ДА СЕ ВЪЗПОЛЗВА ОТ ANALYTICS РЕШЕНИЯТА

**80% от времето не отива за аналитикс, а за подготовка на данните**

“up to **80%**, is spent cleaning, aggregating and organizing it prior to performing any visualization or analytics”

– [information-management.com](http://information-management.com)

“business professionals spend more than **40%** of their time fixing and validating data before they use it”

– Forrester

## Дефицит на опитни **DATA SCIENTISTS**

“There are only **200,000** legitimate **data scientists** worldwide while there are 15 – 30 million **Business analysts** or Excel power users” – [information-management.com](http://information-management.com)

**Разнообразието на данните ги прави трудни за откриване, съчетаване и анализ.**

“This complexity necessitates discovery and transformation of data into a consumable format to enable the kind of insightful analysis that uncovers patterns.” – Gartner

**Дори традиционният ETL изисква умения, които са в ограничени количества**

“**59%** of business and technology decision makers say it takes months or years to meet new complex requests to turn data into business intelligence insight”

– Forrester

# NEW KIDS ON THE BLOCK

## chief data officer (CDO)

A chief data officer (CDO) is a corporate officer responsible for enterprise wide governance and utilization of information as an asset, via data processing, analysis, data mining, information trading and other means.

## DATA SCIENTIST: The Sexiest Job of the 21st Century

### Who are they?

Think of him or her as a hybrid of data hacker, analyst, communicator, and trusted adviser.

**The combination is extremely powerful—and rare.**

## DATA STEWARD

A data steward is a person responsible for the management and fitness of data elements - both the content and metadata.

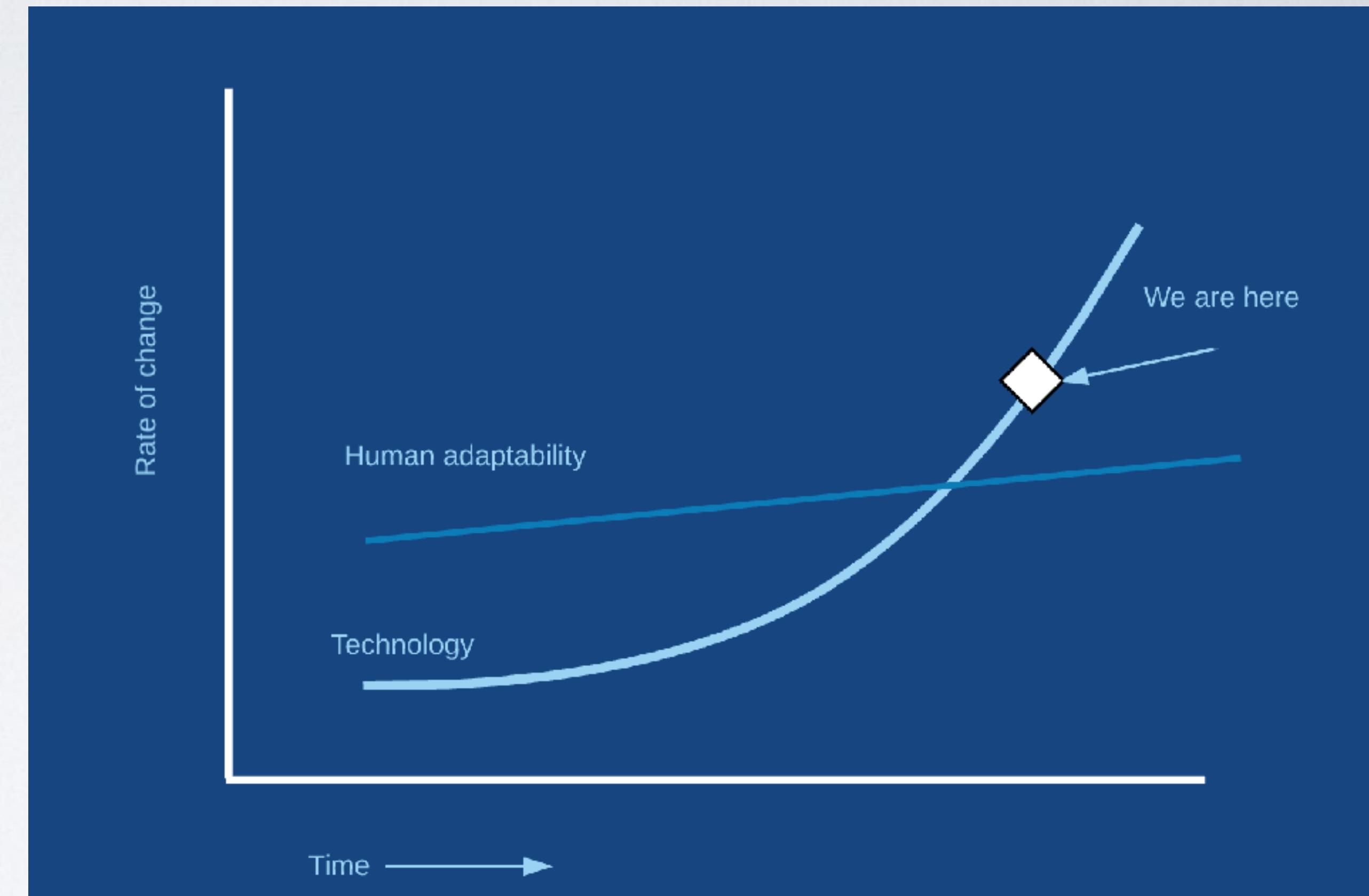
The overall objective of a Data Steward is Data Quality

**“Data is the new oil.** It's valuable, but if **unrefined** it cannot really be used. It has to be changed into gas, plastic, chemicals, etc to create a valuable entity that drives profitable activity; **so data must be broken down, analysed for it to have value”**

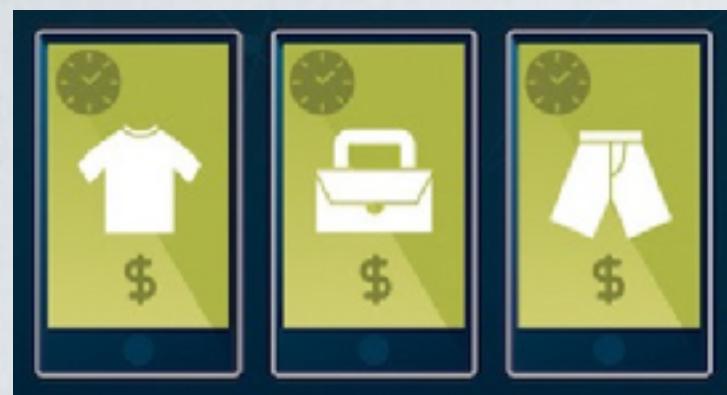
–**Clive Humby**, UK Mathematician and architect of Tesco's Clubcard, 2006

# AUGMENTED INTELLIGENCE

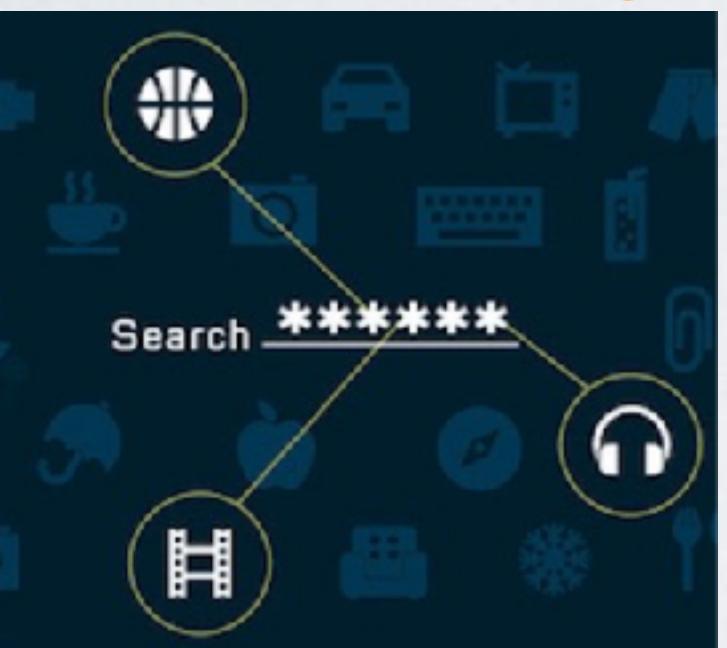
Днес, нормалната човешка интелигентност не стига. Тя трябва да се подпомогне (аугментира) с изкуствена такава.



# И ВСЕ ПАК НЯКОИ ГО ПРАВЯТ



Macy's коригира почти в реално време цените на над **73 милиона артикула**, чрез анализ на наличности и търсене.



Търсенето на [walmart.com](http://walmart.com) включва семантичен анализ, машинно самообучение и анализ на синонимите, за да осигури по-подходящи резултати.

Walmart твърдят, че са подобрili с **15%** завършването на транзакциите, което им е донесло **милиарди приходи**.



LOS ANGELES POLICE DEPARTMENT



Въз основа на алгоритъм за предвиждане на земетресения построяват такъв за престъпления. Софтуерът предвижда следващия инцидент до 150 кв.м. Резултат - **33%** намаляване на дребните престъпления и **21%** намаляване на тежките.

# НАШАТА ГЛЕДНА ТОЧКА

## Данните са основа за нови конкурентни предимства и нови бизнес модели

*лидерите в бизнеса ще могат да:*

### Управляват бизнес резултатите

Като подлагат на аналитикс повече източници на данни и в повече сектори от дейността си.

### Използват стойността “време”

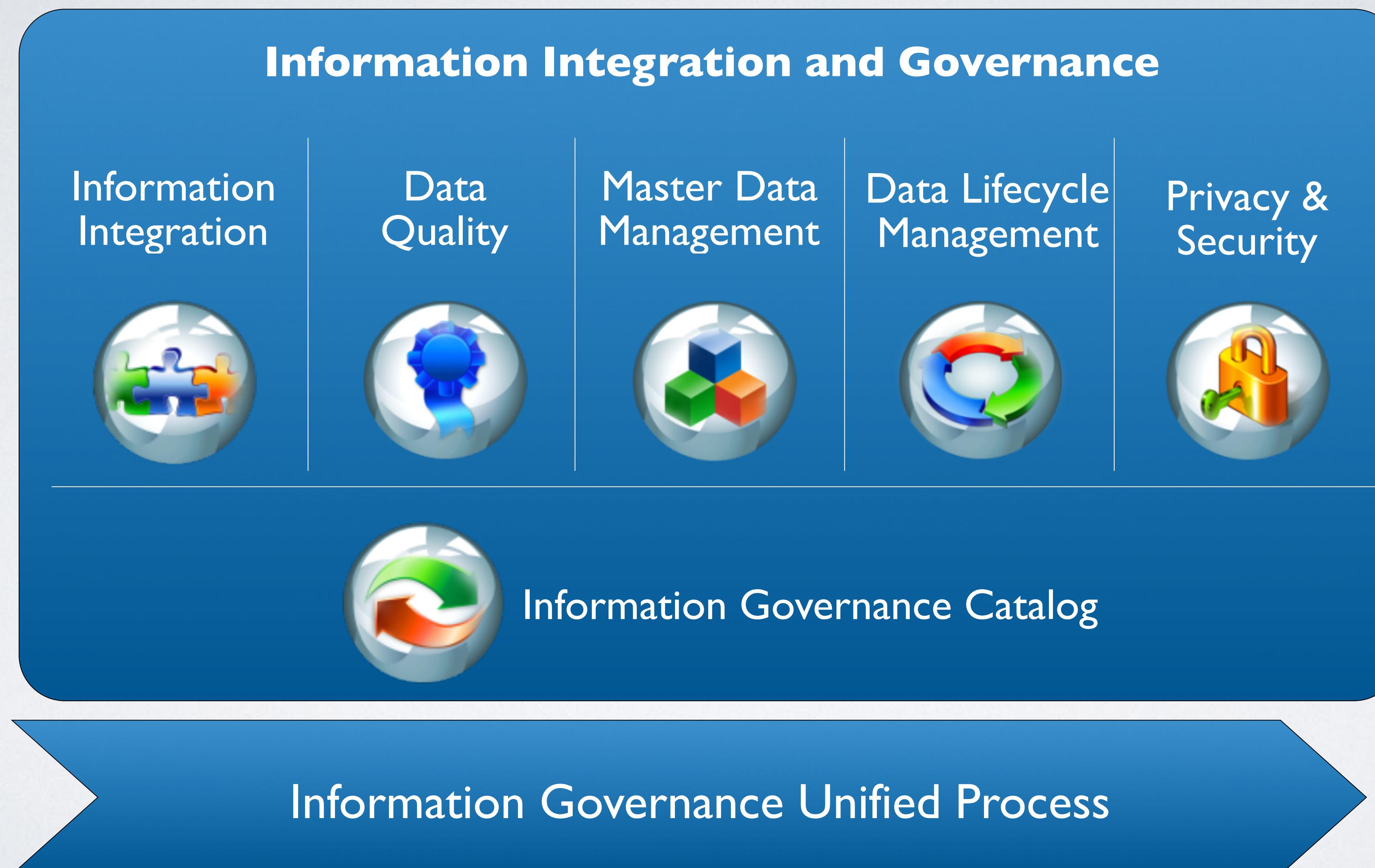
Чрез развитие на “скоростта на откриване на фактите” и “скорост на реакцията си” като основни предимства пред конкуренцията.

### Променят правилата на играта

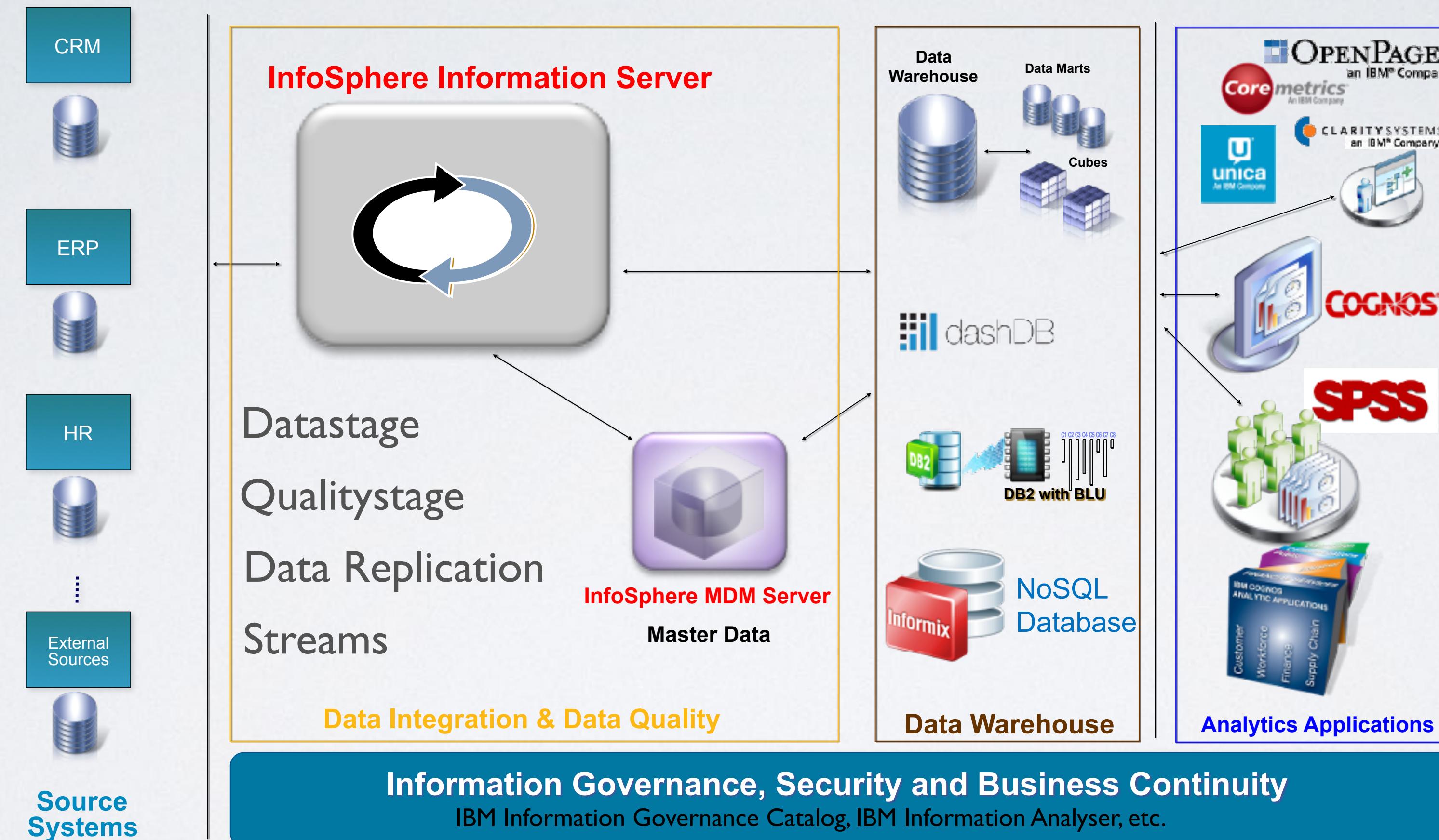
Чрез интегриране на аналитикс във всеки аспект на дейността и професията си и чрез откриване на нови бизнес модели.

# КАК СЕ РАФИНИРА НЕФТ (ДАННИ)

# КАК СЕ РАФИНИРАТ ДАННИ



# КАК ИЗГЛЕЖДА ИВМ РАФИНЕРИЯ

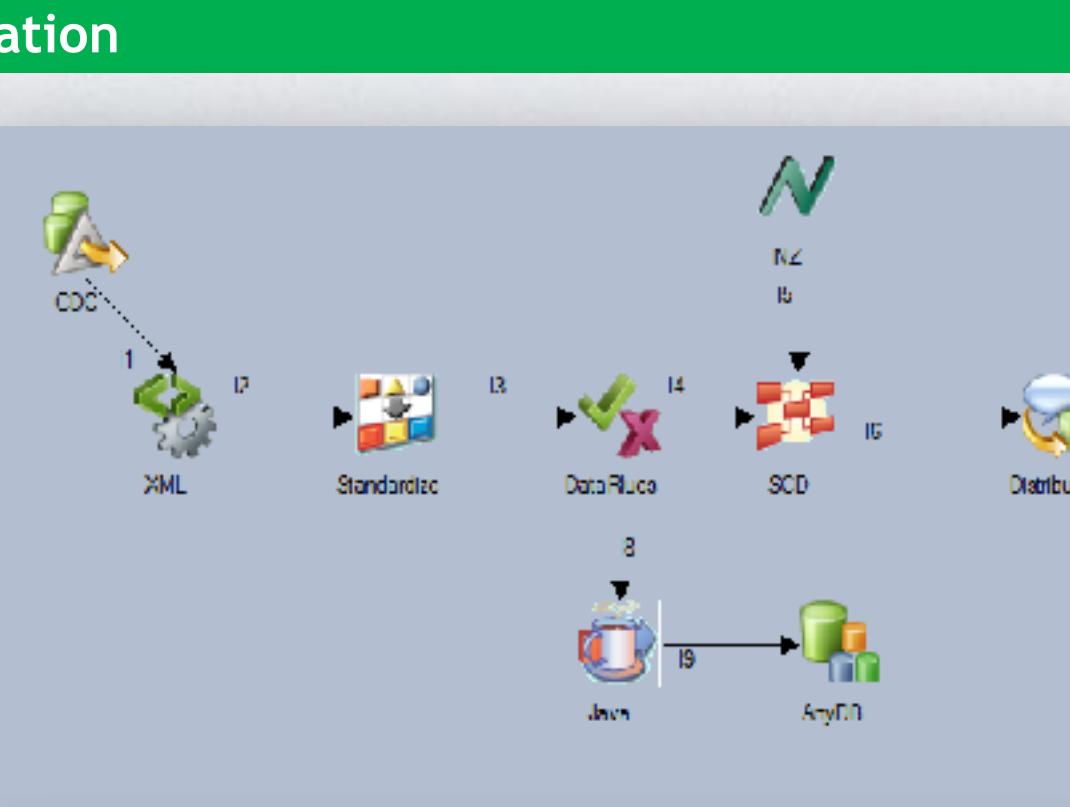


# DATA INTEGRATION

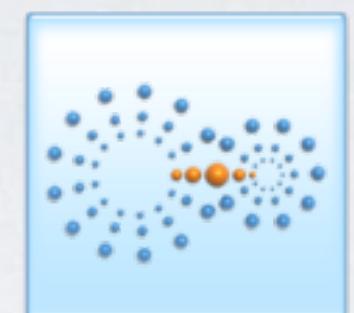
## Data Integration with Infosphere DataStage *Transform & Deliver Data To Any System*

### Agile Integration

- Productivity**  
rich user interface features simplifies the data integration design process through a metadata driven approach
- Transformation**  
benefit from 100s of built-in functions to transform & enrich data
- Connectivity**  
native access to databases, hadoop, xml, flat files, mainframe and many more
- Performance**  
runtime engine providing unlimited scalability through all objects tasks in batch/real-time, ETL/ELT/DV/SOA
- Collaboration**  
Manage your requirements for transformation activities to align with the business
- Operations**  
Use a simple, web-based dashboard to manage your runtime environment



## IBM InfoSphere Data Replication Capabilities *Efficient Capture and Delivery of Changes to Enterprise Data*



### High Speed Bi-Directional Data

Low-latency capture of real time information



### Non Invasive Record Capture

Read data from transactional database logs, distribute data to any target – including Big Data Streams, ETL for Warehouses, or Big Insights



### Analyze a Variety of Information

Analyze a variety of data in its native format – streaming audio, video, spatial, among others



### Analyze Extreme Volumes of Information in Motion

Terabytes per second, petabytes per day.



### Application Transactions

### InfoSphere Data Replication

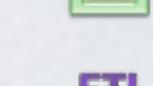
Hadoop



RDBMS



Message Queue



ETL



Files



Appliance



# DATA QUALITY

## Data Quality with Infosphere Quality Stage: Cleanse & Monitor Quality

*...to measure and support Data Governance objectives*

### Sustainable Quality

- Discover and Classify**

- use data source profiling analysis to understand the data form and values
- automated discovery of critical data and hidden data relationships

- Assess and Validate**

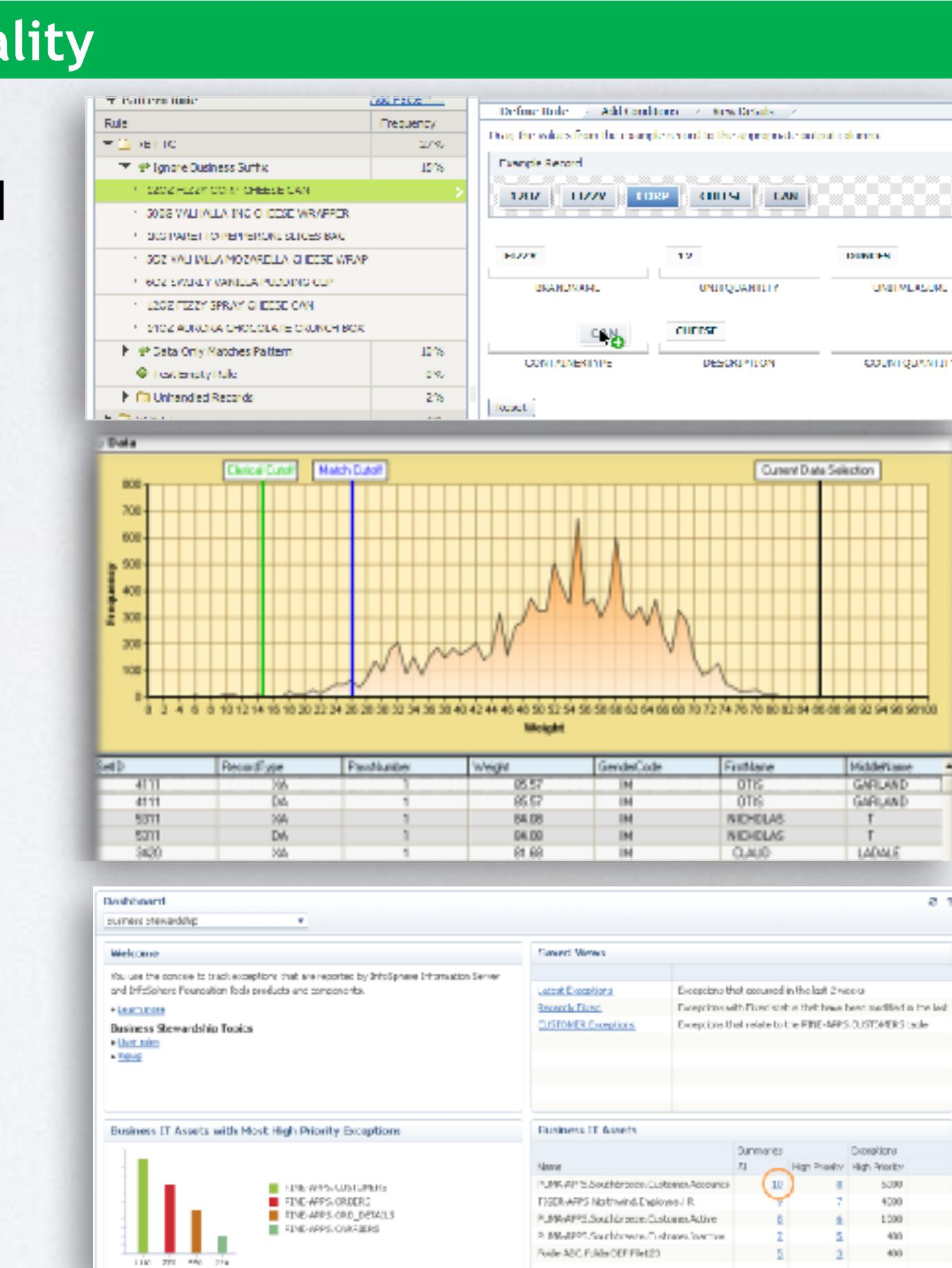
- leverage pre-built rules and construct new rules that check key business elements to ensure they align to business expectations

- Cleanse and Enrich**

- standardize, match and survive data
- most comprehensive & customizable solution

- Monitor and Act**

- assess and monitor the quality of your data in any place (database/or data flow) and across systems
- unique capability to align DQ metrics with business & governance objectives



# ИНСТРУМЕНТИ ЗА ВСЕКИ АНАЛИТИК

Descriptive

Какво се е  
случило?



IBM  
**COGNOS**  
Better Decisions Every Day™

Predictive

Какво ще се  
случи?



**SPSS**  
Spark  R 

Prescriptive

Какво да  
правим?



IBM Decision  
Optimization

**SPSS**  
IBM i2

Planning

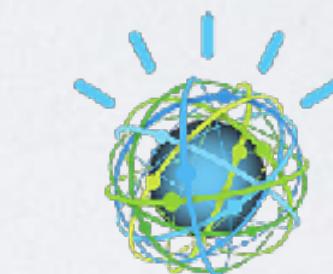
Как  
планираме?



**COGNOS**  
**TM1**

Exploration

Какво имаме в  
данните?



IBM Watson

Watson  
Analytics  
Watson  
Explorer

Cognitive

Динамично  
самообучение



IBM Watson

Watson  
Explorer  
Watson Industry  
Solutions

# COGNOS ANALYTICS

a.k.a. Cognos 11

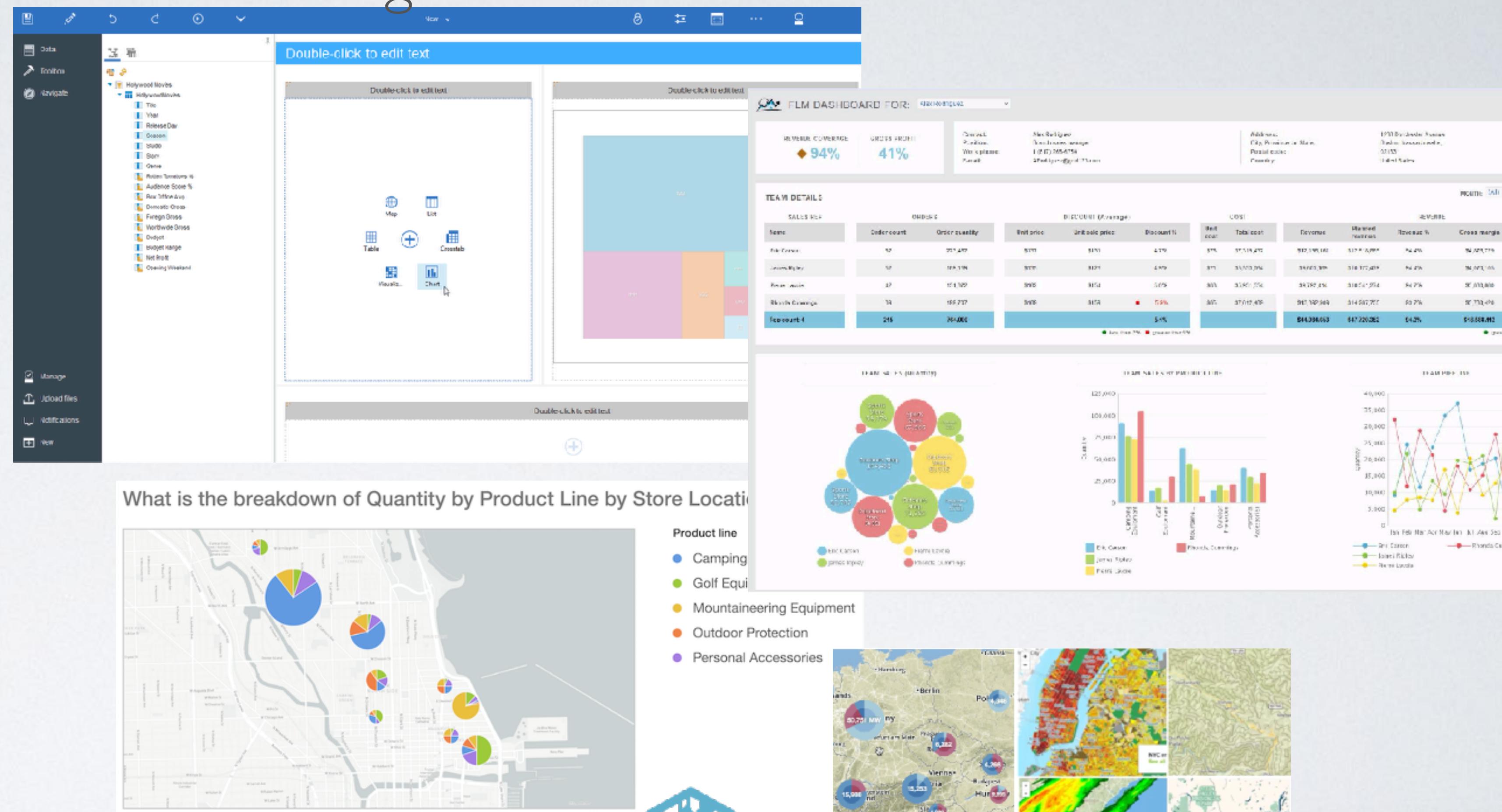
Нов изчистен интуитивен  
потребителски интерфейс

Self-Service Analytics

Тест и валидация на  
моделите в една среда

Автоматичен избор на най-  
добра визуализация

Интегрирани GeoSpatial  
възможности - MapBox  
(включен в лиценза)



MapBox

# ADVANCED ANALYTICS IN ACTION

**Клиентите  
Искат?**

Търгувай с мен

Намери ме

Опознай ме

Вдъхнови ме

Научи ме

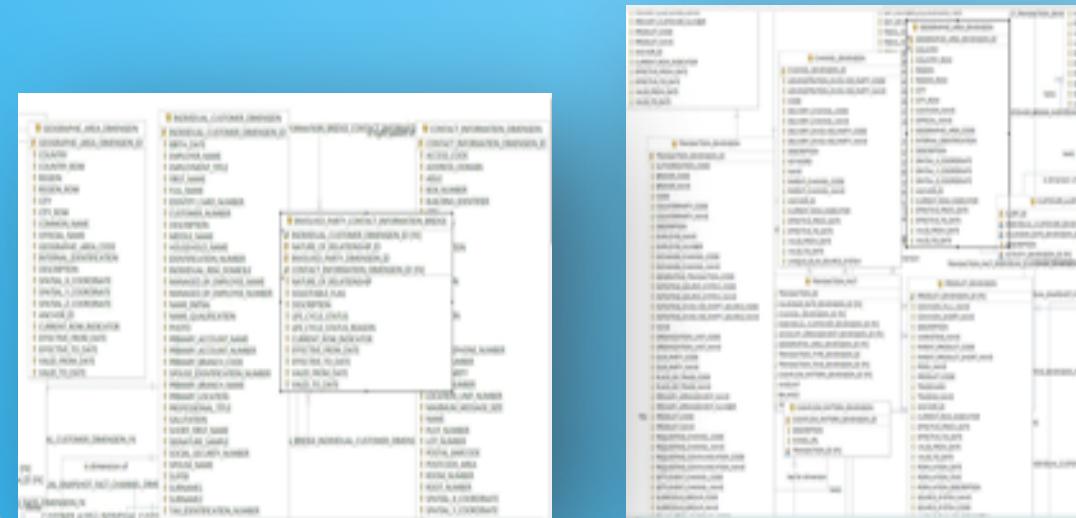
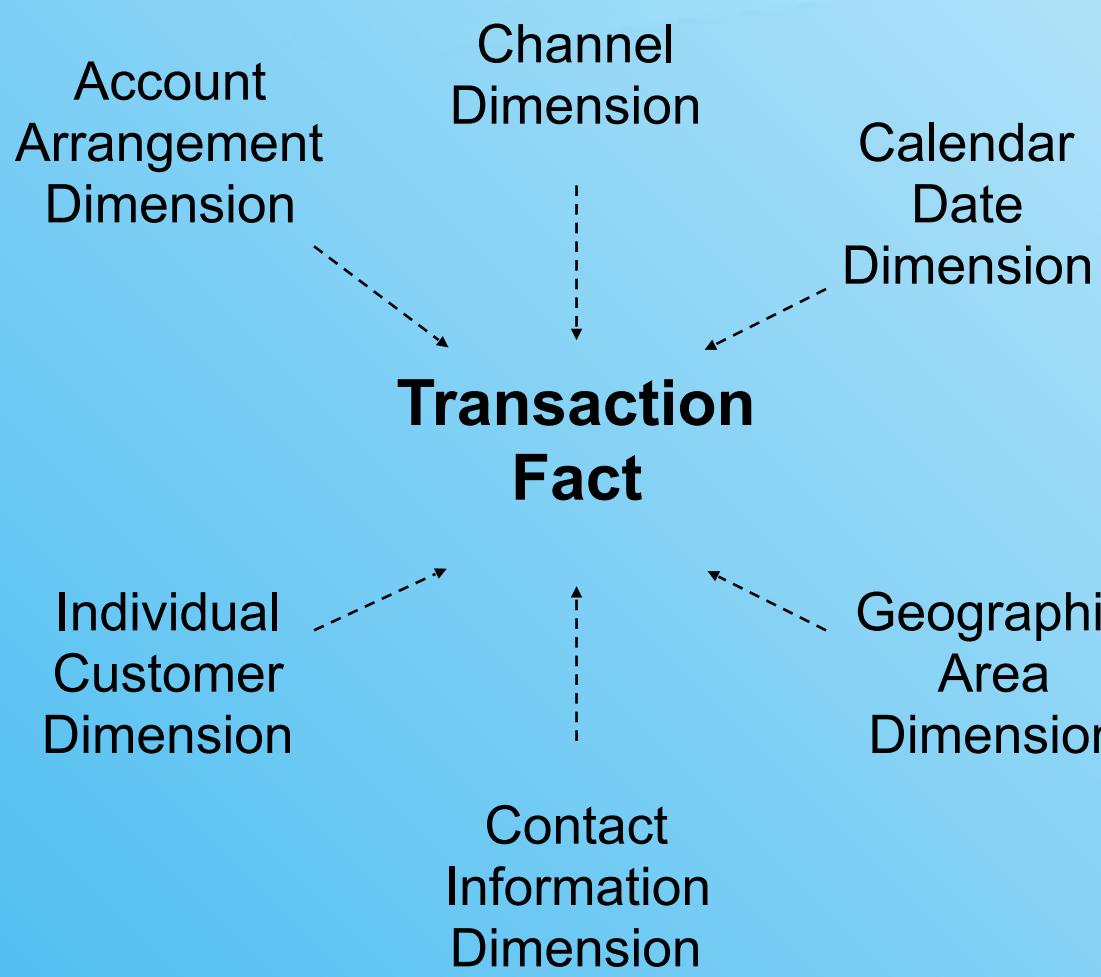
Порасни заедно с мен

Нека Аз избера

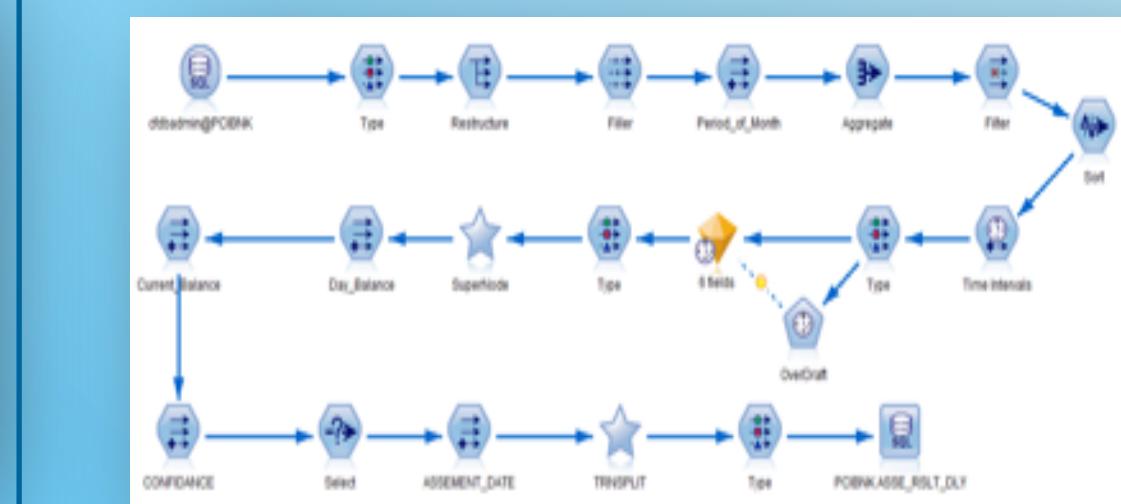
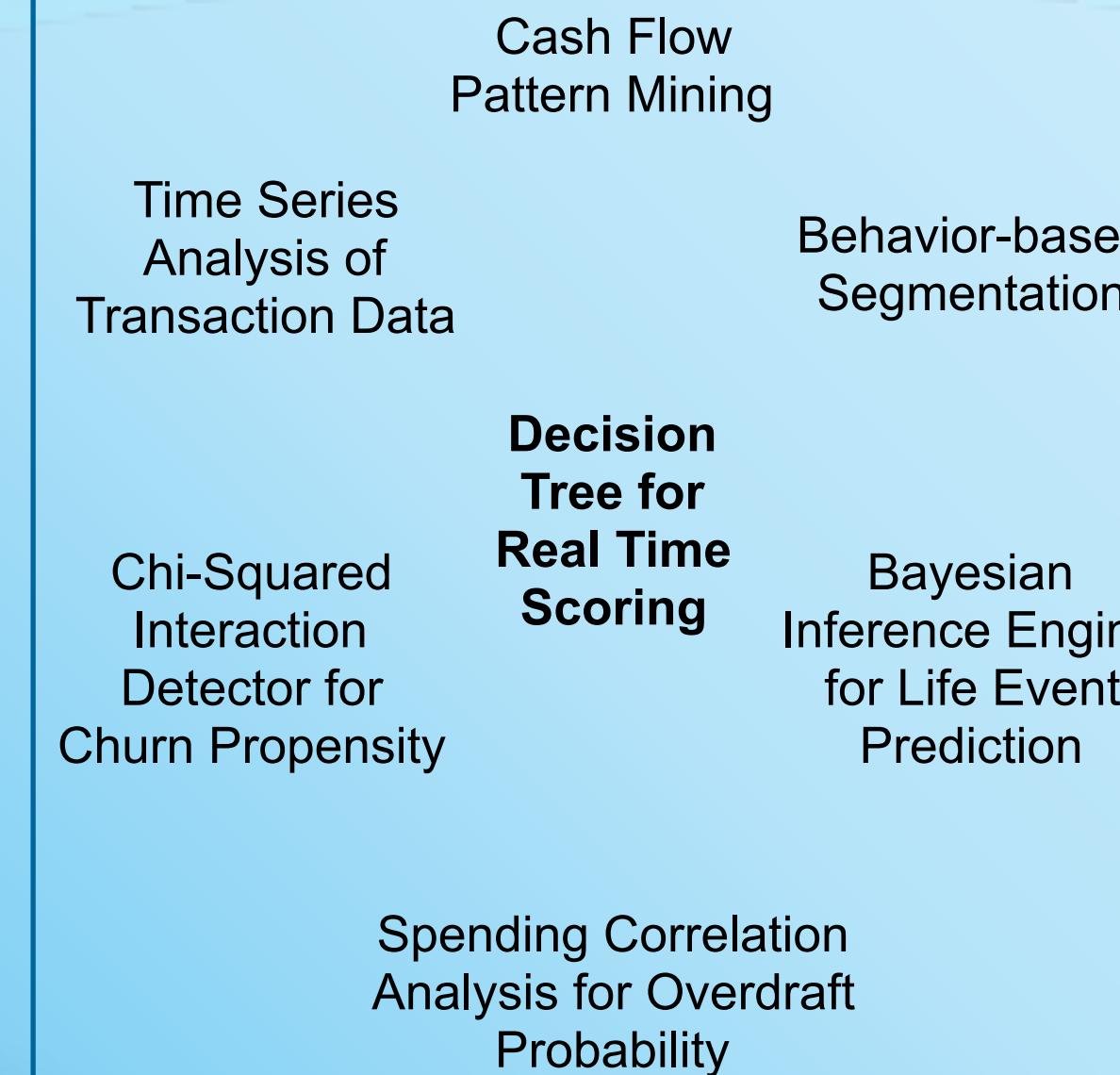
Да бъдете до тях  
Винаги и Навсякъде

# BEHAVIOUR BASED CUSTOMER INSIGHT

## Подготовка на данные



## Предефинирани аналитични модели



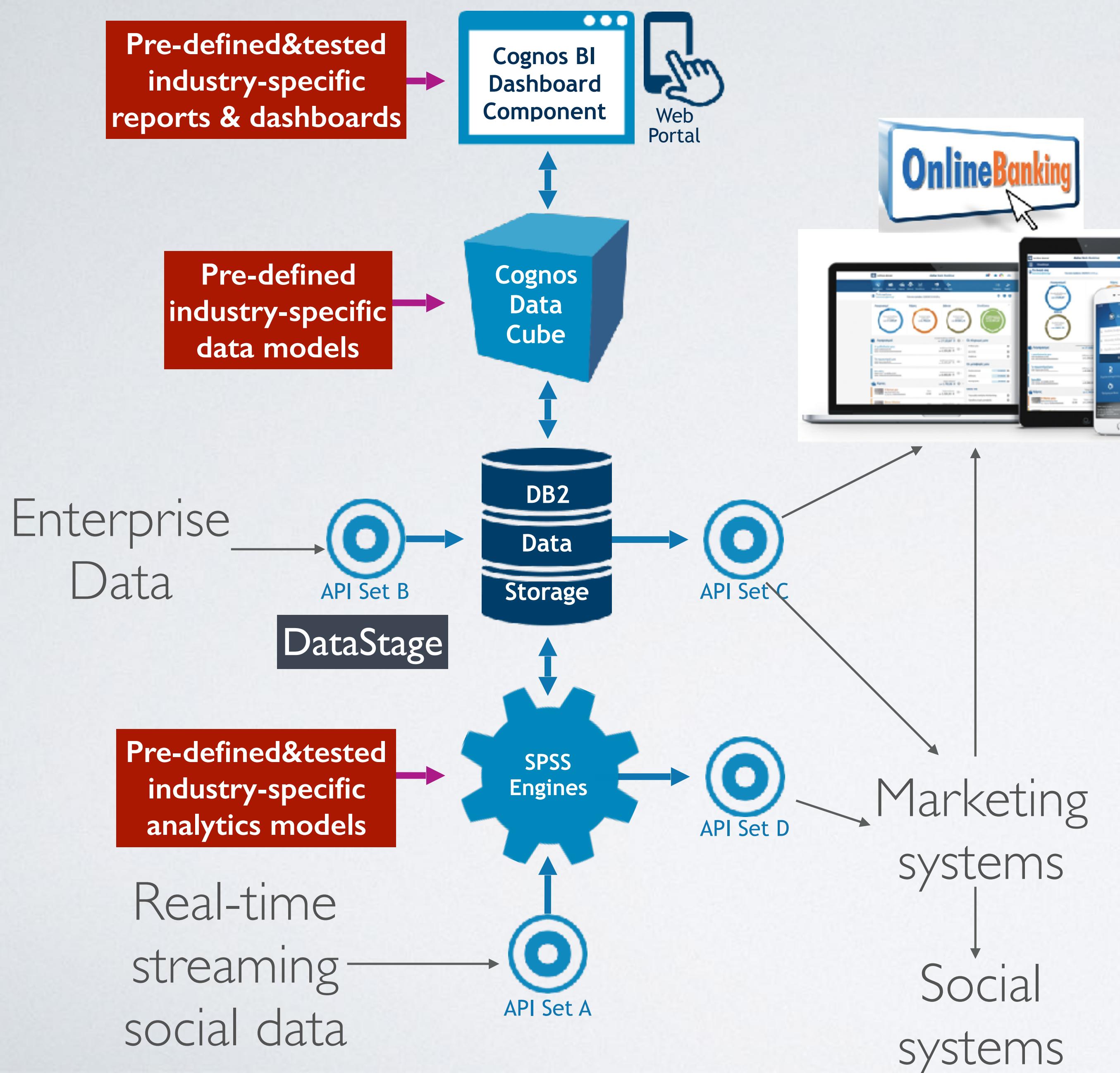
## Готови дашборди



- Регионален Мениджър Dashboard
- 360 градуса на клиента
- Web & Mobile App Modules
- Главен Мениджър Dashboard
- API Интеграция с уеб и мобилно банкиране



# Components & APIs



- SPSS Engines will read data from DB2 and insert insights back into DB2.

Example | Behavior-based segmentation type for a customer, life event prediction

- API Set A can be used to inject real-time data into the SPSS engines.

Example | Real-time claim data

- API Set B can be used to inject enterprise data into the appliance.

Example | Policy data, customer data

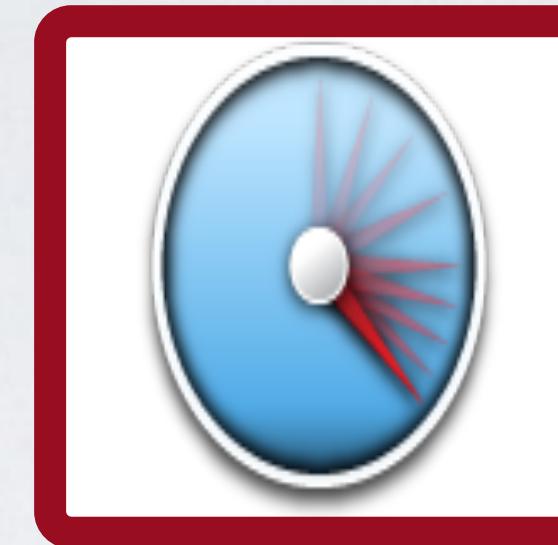
- API Set C can be used to make the insights consumable for external systems.

Example | Segmentation type insight, life event prediction insights

- API Set D can be used to integrate with Unica Interact to provide scoring & real-time prioritization of marketing offers.

# КАКВА Е СТОЙНОСТТА НА IBM BBCI?

4x



Ускорено време до реален  
результат

6\*w

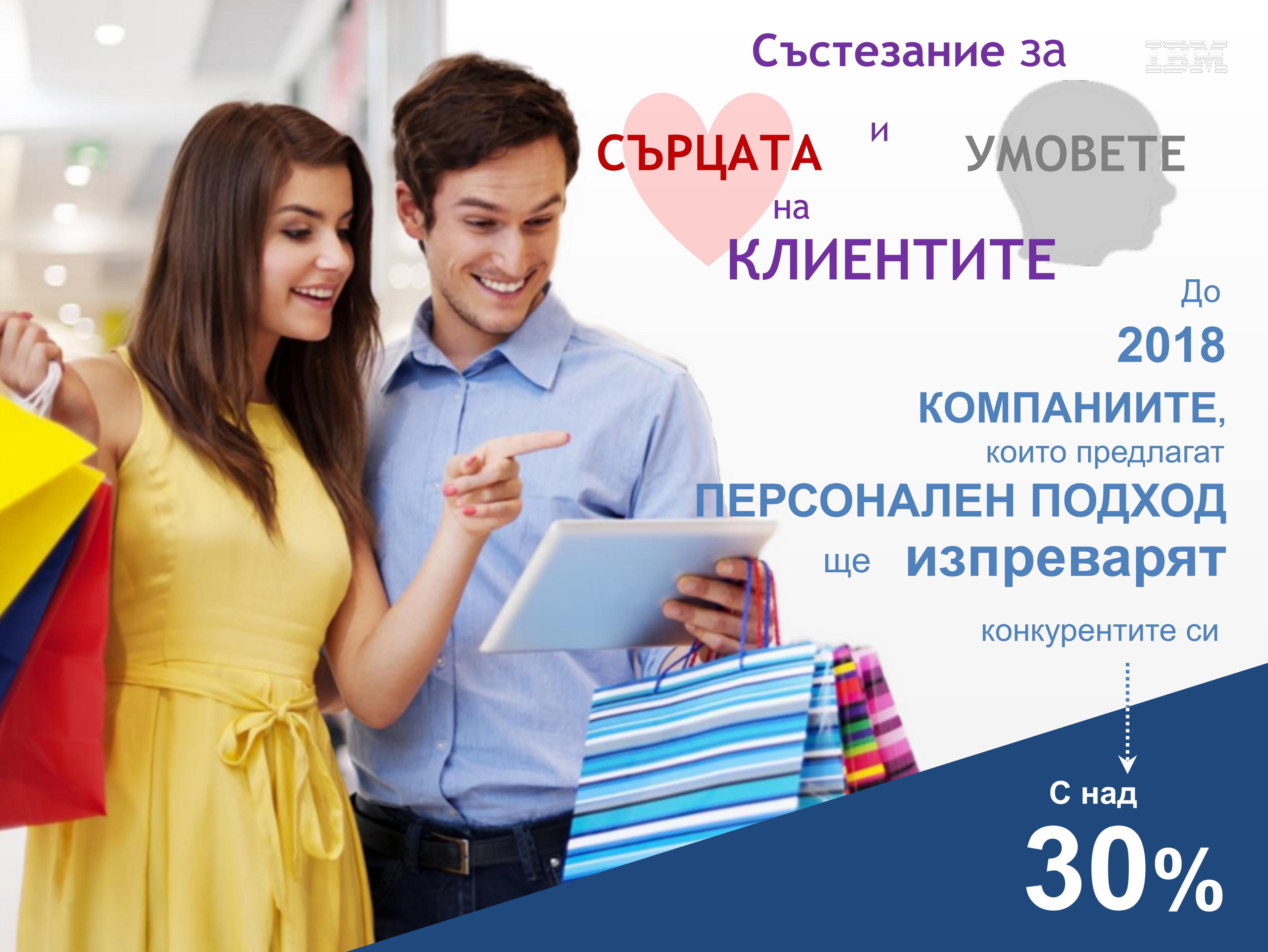


Имплементация в рамките на 6  
седмици, а не с години

6\*m



Нормално е да имате 100% ROI в  
първите 6 месеца



**Състезание за**  
**СЪРЦАТА** **на** **клиентите** **и** **умовете**

до  
**2018**

**компаниите,**  
които предлагат  
**персонален подход**  
ще изпреварят  
конкурентите си

С над  
**30%**

**БАНК**

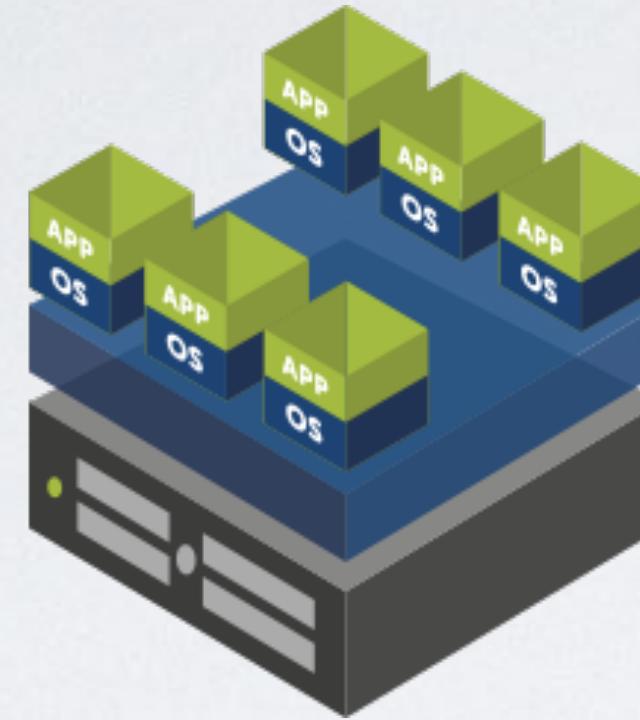
# INFRASTRUCTURE MATTERS

...и най-доброто решение е  
излишно, когато не е дошло  
навреме!

**Cloud or On premise****CPU Performance**Lenovo high end  
x86 servers

IBM Power

IBM Open Power

 **POWER8****CPU smart provisioning**

VMware  
RedHat Virtualisation  
PowerVM  
Power KVM  
Hyper-V

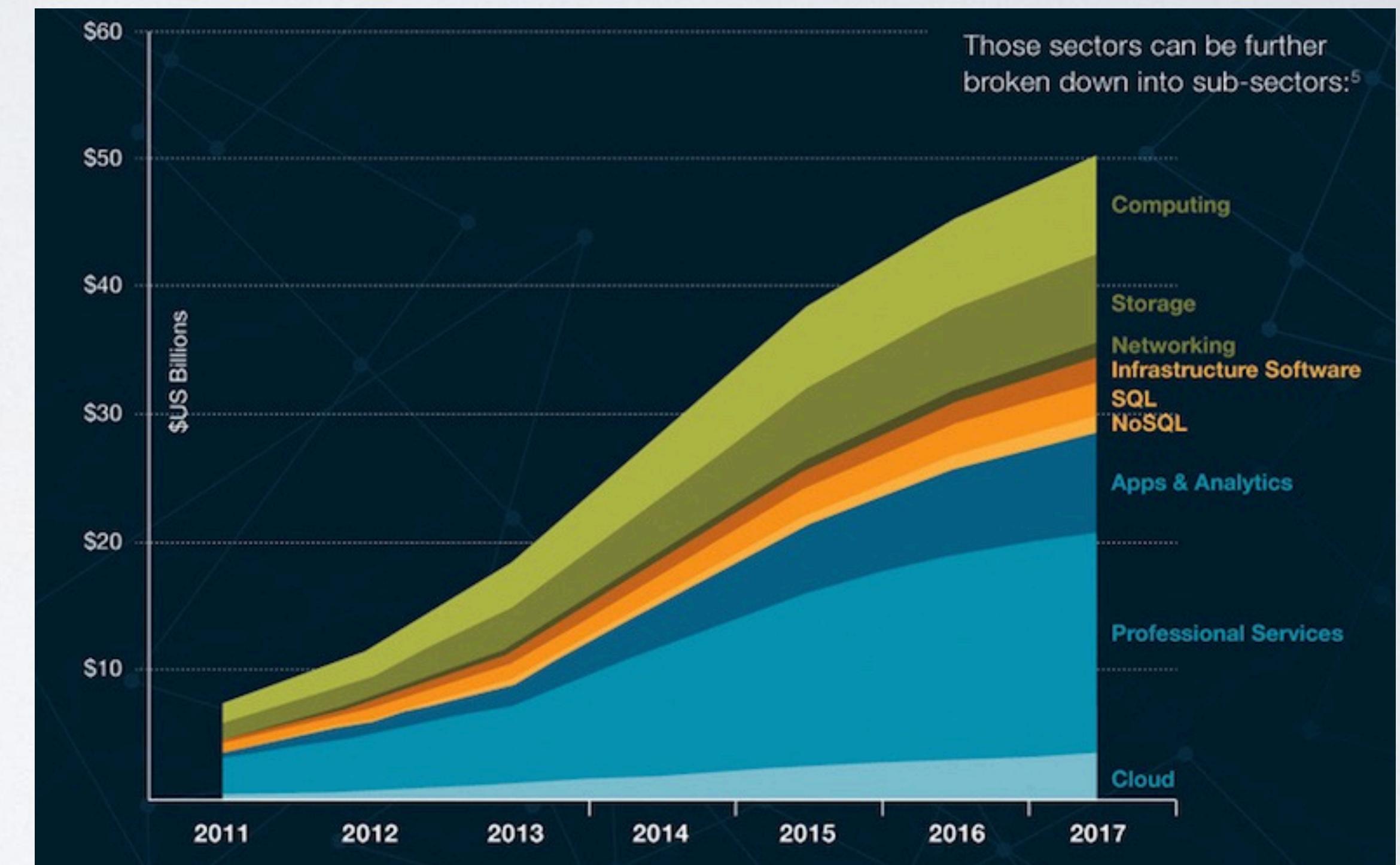
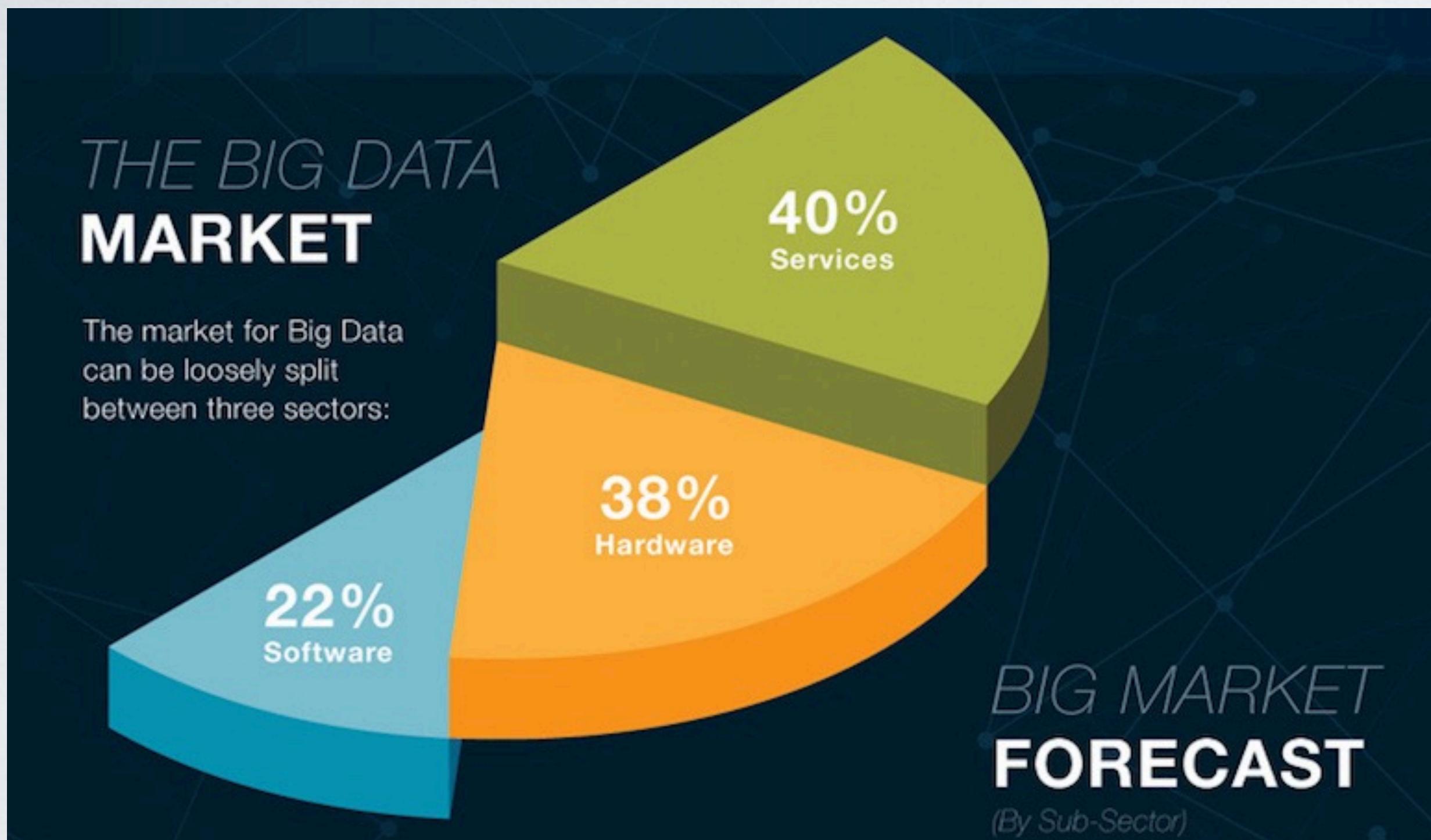
**Storage Performance**

Mid-Range SAN  
High-end SAN  
All-flash  
Distributed storage

**Storage smart provisioning**

Storage Virtualisation  
Compression  
Deduplication  
DataCentre integration

# DATA MARKET



## Strategic Partners & Customers



# STRATEGIC PARTNERS

## CONSULTING SERVICES



*poslovna  
inteligencija*  
Poslovna means Business

## SW APPS AND TOOLS



## INFRASTRUCTURE



redhat.



IBS IT COMPASS



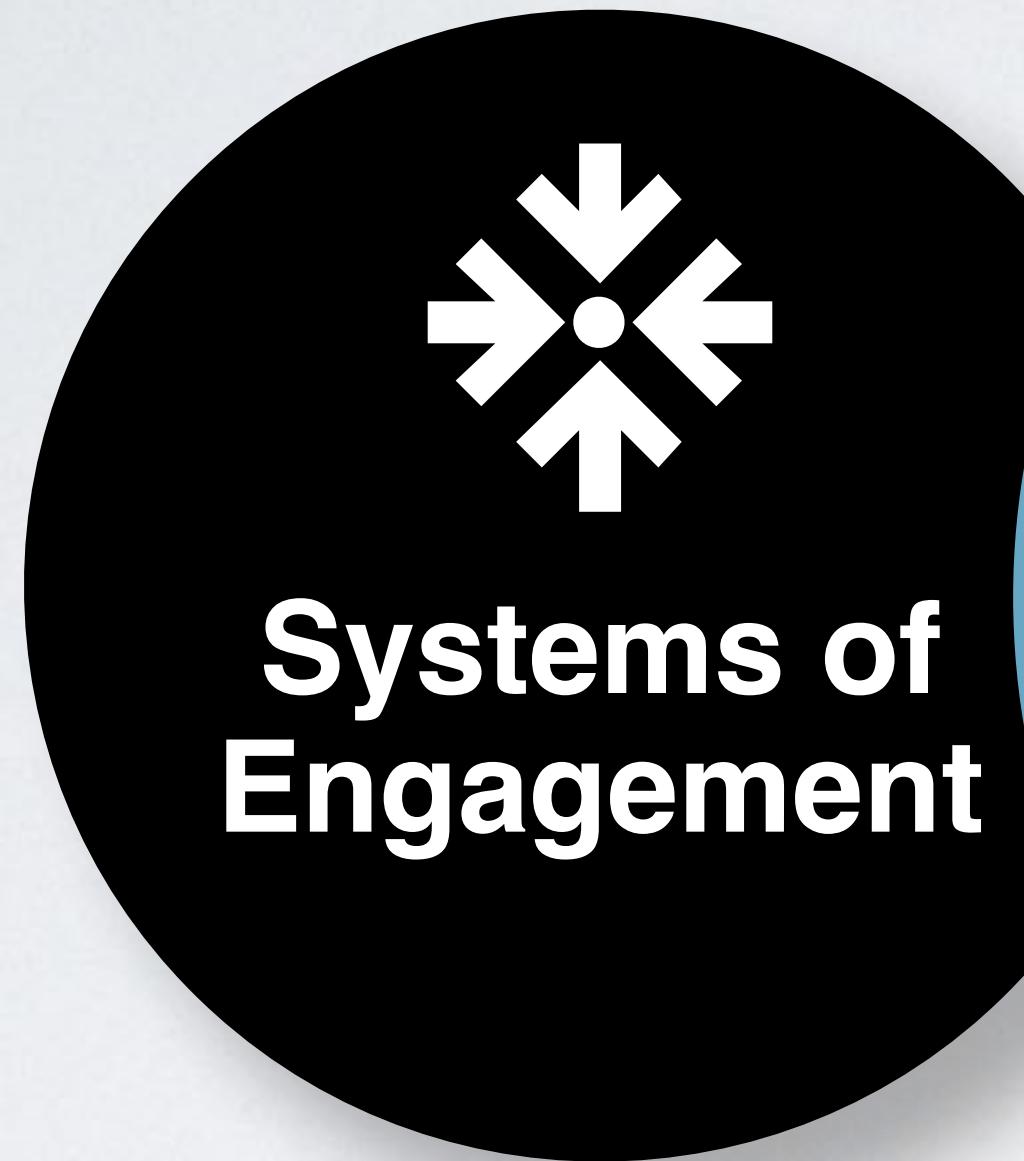
# WHERE IBS STANDS NOW

Сегмент	Какво предлагаме
Apps & Analytics	Cognos базирани приложения, IBM Advanced Analytics Apps, Industry Data models (IBS/Poslovna)
Professional services	Консултации в целия процес на Data Governance (IBM/Poslovna/IBS), SPSS development (Poslovna/IBS), Data modeling, Cognos Development, Data Integration, Data Quality DBA Expertise - DB2, Informix, Oracle; DataCentre design and implementation, performance tuning, data protection
Computing & Storage	Профессионално обучение (IBM Systems, IBM Software, RedHat)- training, labs, workshops.
SQL & NoSQL	IBM Power, IBM Systems Storage, Lenovo x-servers VMware, Veeam, Microsoft, RedHat DB2, Informix, dashDB.....Domino :-), etc...
Cloud	All apps, software tools, solutions, services and infrastructure are available as: SaaS, PaaS, MSP, IaaS

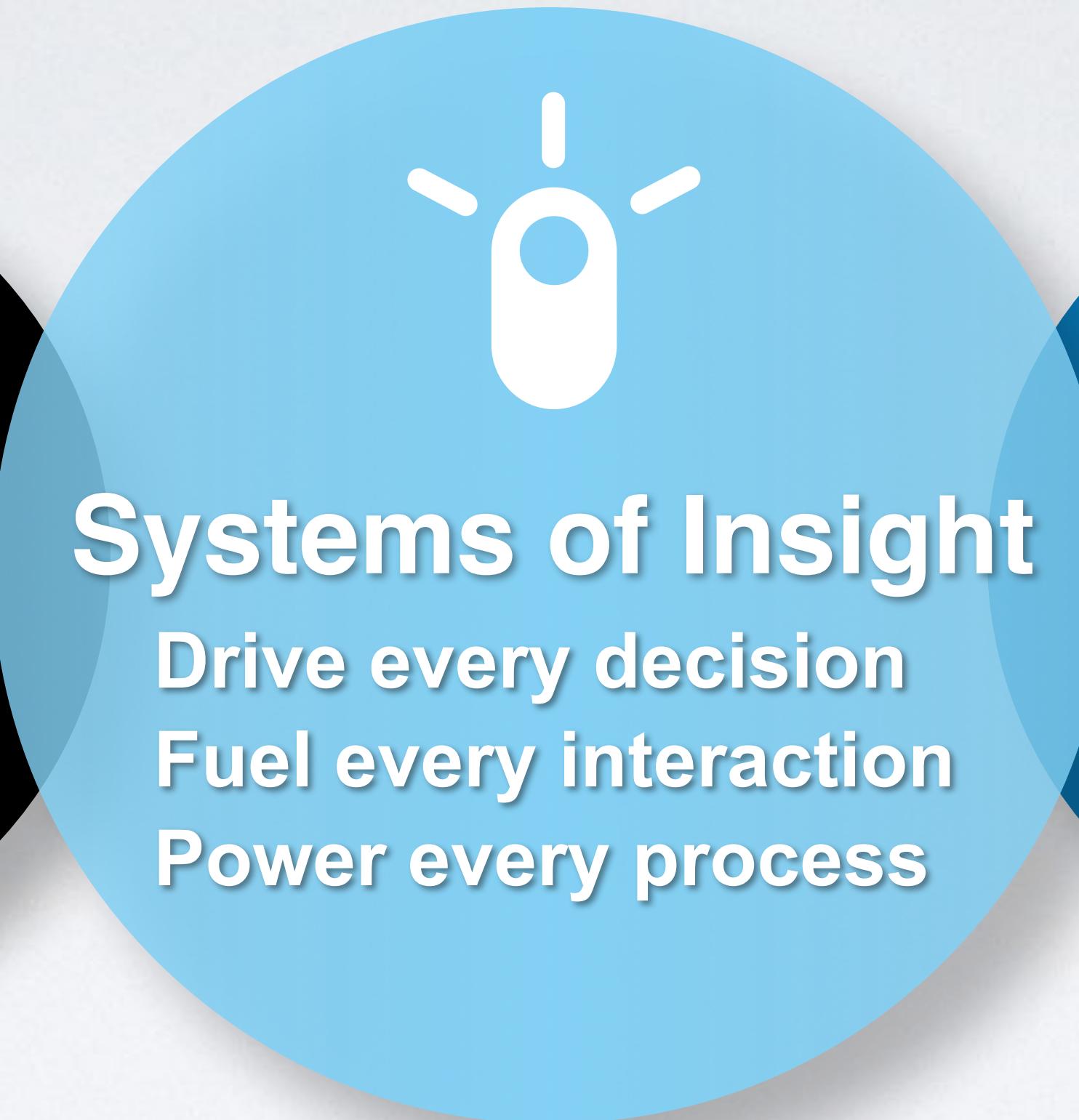
# WHATS COOKING FOR 2017?

- Analytics Apps in cloud on Cognos II
- PoC environment for BBCI for Banking
- New technologies adoption
- New strategic partnerships

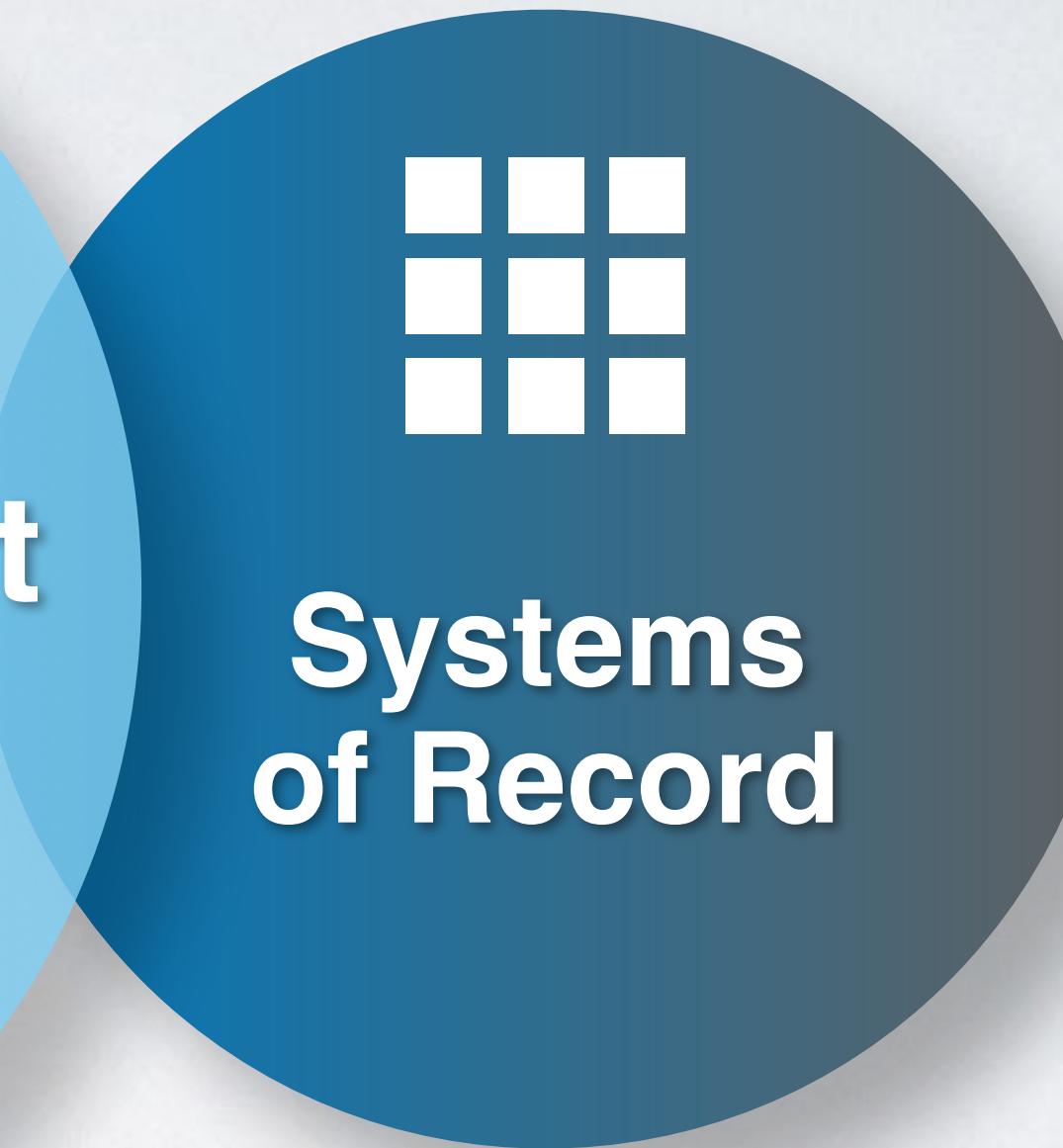
# КАКВО СЕ ПРОМЕНИ ЗА ИТ БИЗНЕСА?



**Systems of  
Engagement**



**Systems of Insight**  
Drive every decision  
Fuel every interaction  
Power every process



**Systems  
of Record**



# SO...WHAT TO DO NEXT?

LEARN MORE

TRY & EXPLORE

TAKE A RIDE

[www.ibmbigdatahub.com/](http://www.ibmbigdatahub.com/)

[www.redbooks.ibm.com](http://www.redbooks.ibm.com)

[www.ibm.com/developerworks/](http://www.ibm.com/developerworks/)

Join World of Watson 2017

Cognos Analytics

Watson Analytics

Financial Performance  
Management

Talk to us

Do a PoC with your data

Do a Pilot

Launch it

KEEP  
CALM  
&  
CALL IBS

**analytics@ibs.bg**  
**0700 11 444**



Making Your Day