



# MDM – Master Data Management



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- Dados um dos principais ATIVO da empresa
- SMACT
- Obtendo dados relevantes & confiáveis
- Otimizando o desempenho dos dados
- Cases - Q&A



Redução de  
riscos/fraudes

Cloud & App's

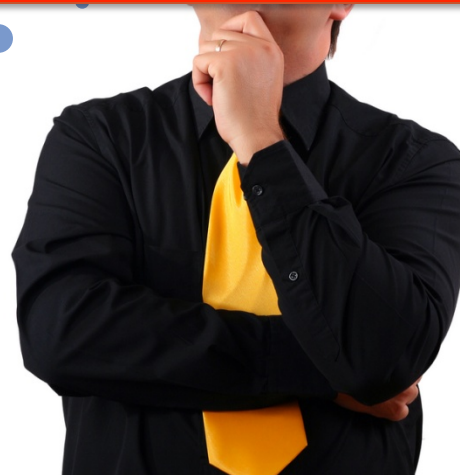
Mobilidade/Mídias  
sociais

Eficiência

**Dados relevantes e confiáveis**

Diversas  
fontes de  
dados

Compliance &  
Governança





# Contexto atual e de futuro

## Big Data Access & Analytics



## SaaS Silos e Legacy App



## Proliferação de Apps

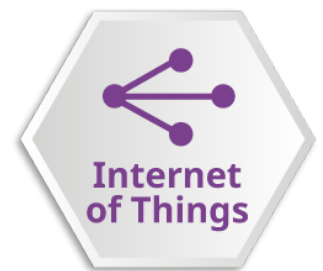


## Internet das coisas... sociedade conectada



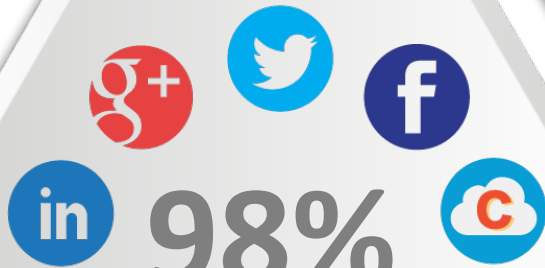
## Por que os CIOs estão sendo impactados por SMACT?

Os analistas da indústria prevêm que dentro de 5 anos o CMO vai gastar mais em TI do que o CIO. Com a adoção do Social, Mobile, Analytics e Big Data, Cloud Computing e Internet das coisas, aqui estão algumas das razões por que os CIOs estão sendo impactados SMACT.





## Social



98%

of 18-24 year olds currently  
use social media

**facebook.**  
ingests approximately

**500**

more data than the New  
York Stock Exchange (NYSE)  
each day

**100**  
hours of videos  
are uploaded to

**You Tube**

every minute



## Mobile



By 2019, the global bring your own device (BYOD) market is expected to grow to

**\$266.17 billion**

from \$86.55 billion in 2014 at a CAGR of 25.2%

In January 2014, mobile devices accounted for



of Internet usage in the United States

By 2016, wired devices will account for 46% of IP traffic, while Wi-Fi and mobile devices will account for 54% Of IP traffic







## Anayltics

By 2017, more than

# 50%

of analytics implementations will make use of event data streams generated from instrumented machines, apps or individuals

By 2018 the US could face a shortage of between



people with deep analytical skills

The global Hadoop Market is estimated to reach \$50.2 billion by 2020.

**2012** | \$1.5 billion  
**2020** | \$50.2 billion

It was valued at \$1.5 billion in 2012 and is expected to grow at a CAGR of 58.2% between 2013 to 2020



## Cloud

As of April 2014, the  
Average large company uses

**759**

cloud services, a jump of  
21% from previous quarter  
measurement

By 2017, enterprise  
spending on cloud will reach

**\$235.1**

**B I L L I O N**

Triple the \$78.2 billion spent  
in 2011

**80%**

of line of business employees  
admit to using non-approved  
SaaS applications  
in their jobs



## Internet of Things

**69%**

of consumers are planning to buy an in-home device in the next five years

The Internet of Things will result in

**\$1.9 Trillion**

in global economic value-add through sales into diverse end markets

By 2020, there will be over



connected things, with over 200 billion with intermittent connections

# Missão da TI para o Negócio – CIO como ator



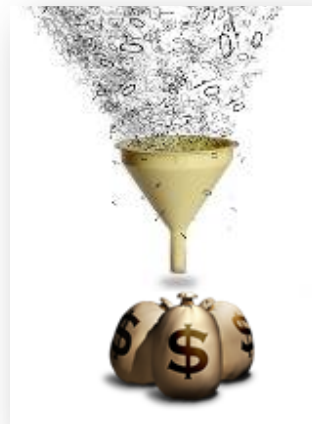
Big Data e Analytics



Proliferação de Apps



Internet das Coisas



**Dados relevantes &  
Confiáveis**

# Otimizando o desempenho de seus dados



## **Integrar, qualificar, enriquecer & antecipar**

- › Dependência e necessidade de dados mais detalhados cada vez mais frequente – Dados internos e externos
- › Melhor qualidade de dados necessários para evitar perdas de receita e ganho de competitividade. Reduzir riscos/fraudes



## **Master Data Management/Governance**

- › Unificar os ativos de negócio
- › Centralizar conceitos e Informações para todas as App's
- › **Prover o 4 v - Veracity**



## **Data Governance**

- › Políticas de governança  
Políticas de acesso/consumo....
- › Compliances & Aditoria

# Qualidade de dados – Local & Cloud

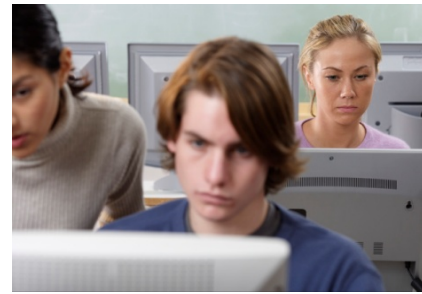


Análise e validação  
Auditoria & monitoramento  
Compliance & Integridade

Criação da regra de negócio  
Regras Out-of-the-box  
Testes e Ajustes

Integração e **enriquecimento**  
Gestão de Processos  
Implantação da Produção

Quantificação  
Avaliação / pontuação  
Monitoramento & relatórios



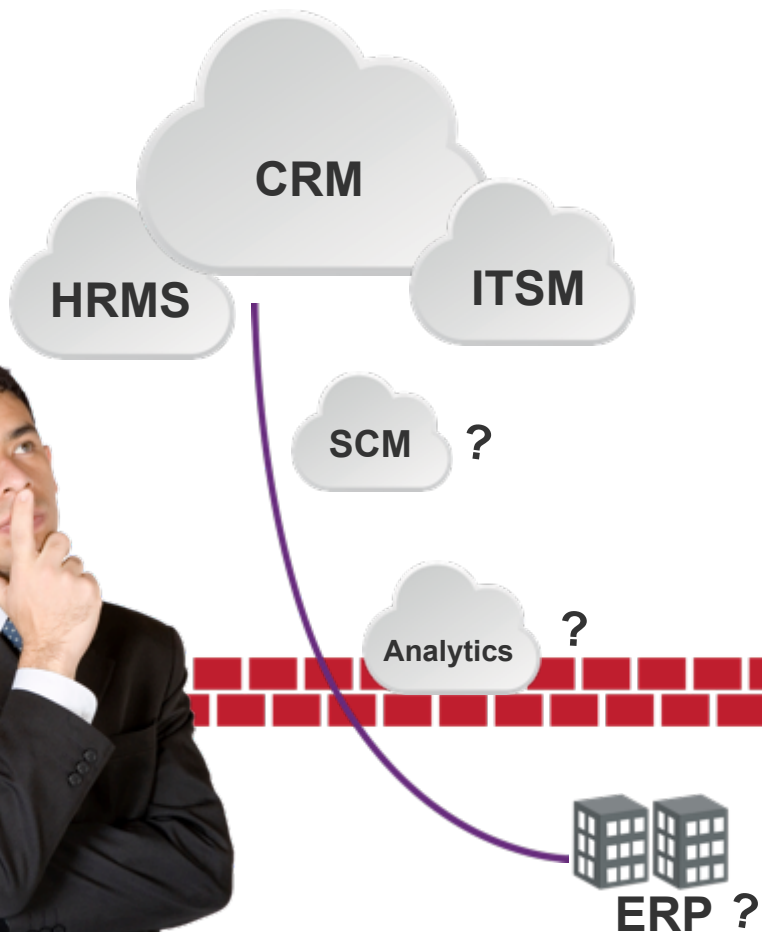
REVISÃO & RETORNO



# Unificação dos dados....qualidade dos dados

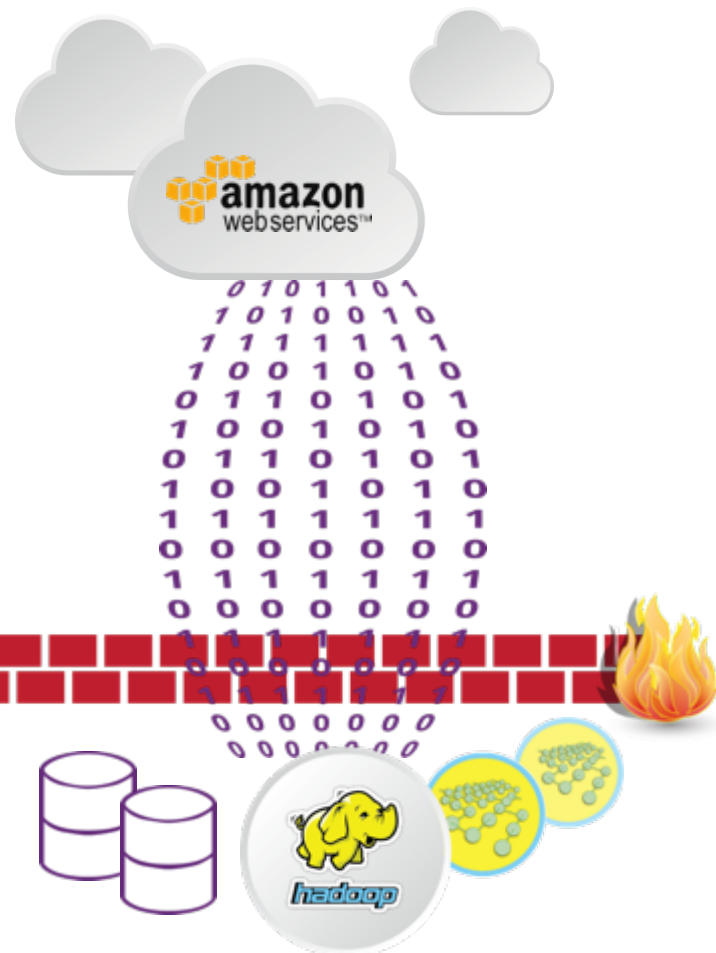
## “Cloudification”

Quais aplicações mover para o Cloud e quando?



## “Data Gravity”

Os dados ficaram atrás do firewall ou no Cloud?



# “The Integrator’s Dilemma”

## • EAI CLÁSSICO

- Not built for the web
- On-prem ESB
- Baseado em códigos



## ■ ETL CLÁSSICO

- Feitos para linhas e colunas
- Batch-oriented
- Problemas com real-time



“ Organizations are increasingly turning to iPaaS offerings because of their close affinity with SaaS and the anticipated greater ease of use, lower costs and *faster time-to-integration than traditional integration platforms.* ”

**Gartner**

# Unificação dos dados: usar a integração classica?

## Legacy Integration

Linhas & colunas

Batch or Real-time

Machine Scale

Atrás do firewall

Client/Server

VS

## Elastic Integration

Any Data Type

Any Time

Any Scale

Any Location

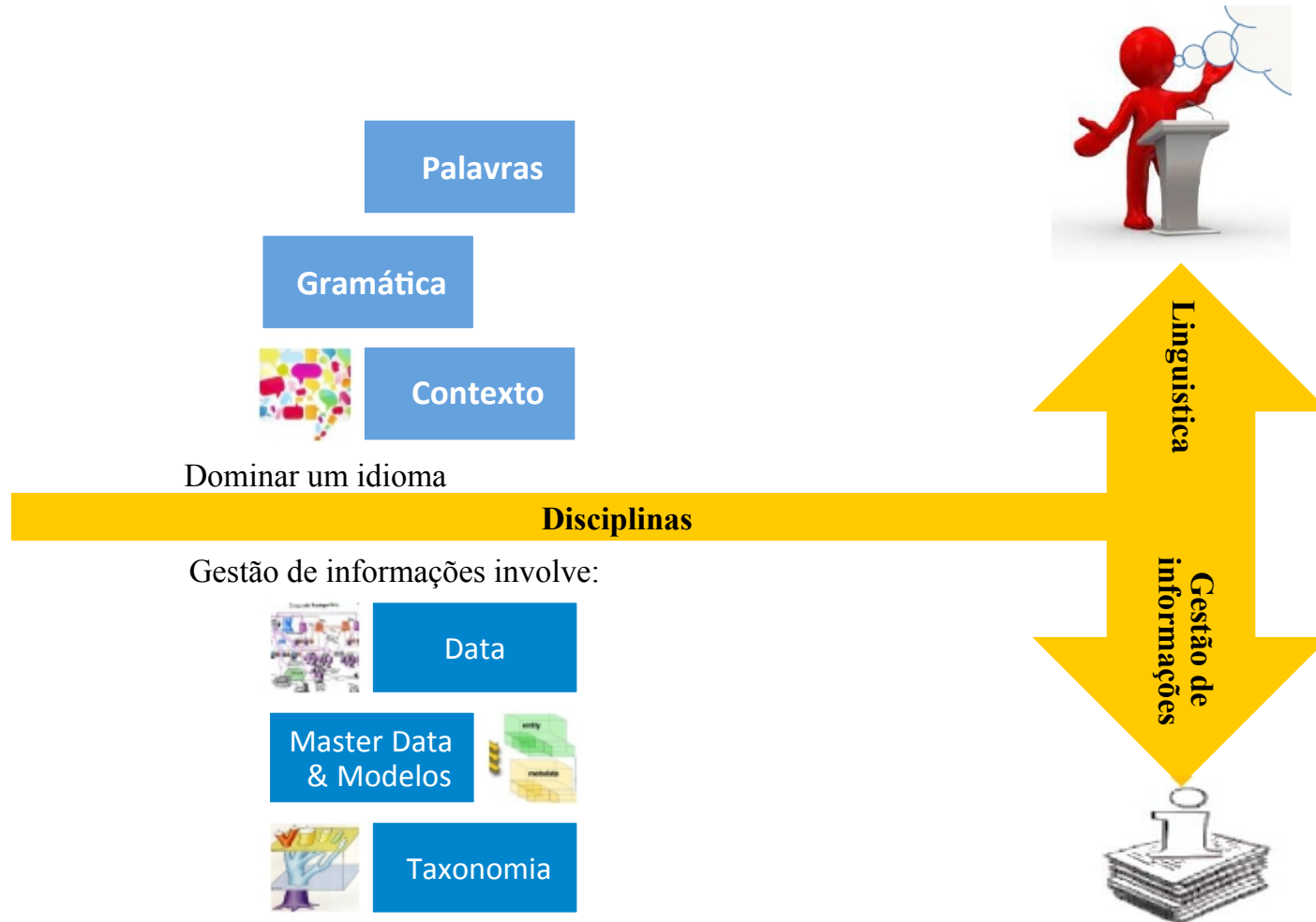
Any Device





- ❑ Palavras apropriadas combinadas com gramática correta produzem “Frases”, mas o significado é só precisa quando o sentença é proferida dentro do contexto
- ❑ Dominar uma nova língua, é mais do que apenas aprender seu vocabulário e gramática

# Master Data Management/Governance



"Mastering an organization's information, similar to a spoken language, requires the management of some key components" **Cohanpour Scott**

MDM fornece a conexão  
necessária para ligar e aumentar a  
inteligência adquirida com Big Data em  
suas soluções

MDM

Big Data



1

Master Data cria contexto para o Big Data

2

Big Data enriquece Master Data e que pode ser facilmente alavancado &

**Data Veracity**



## Big Data é o suporte para inovação

- Big Data, como Hadoop e bases de dados Nosql endereçam<sup>1</sup> **Volume**, **Velocidade e Variedade** e com o MDM podemos endereçar perfeitamente o **Veracity** do Big Data



<sup>1</sup> Logo, dados estruturados e não estruturados em streaming com alta Velocidade e volume não são desculpas da Ti para não prover informações confiáveis para o negócio

## Conectando o conteúdo do Big Data com MDM é um caminho sólido para comoditizar Big Data

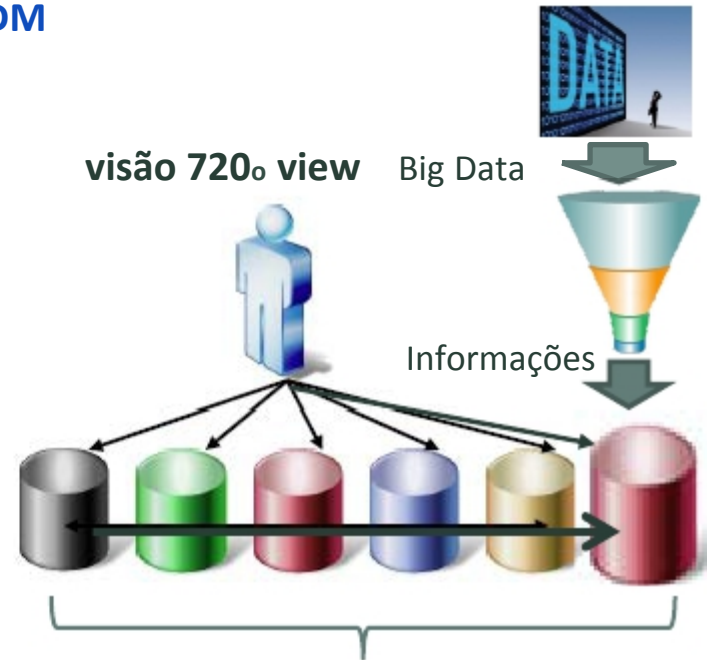
### Integrar Big Data/MDM

- ✓ Sanear
- ✓ Enriquecer
- ✓ Melhorar

Tradicional visão 360°:



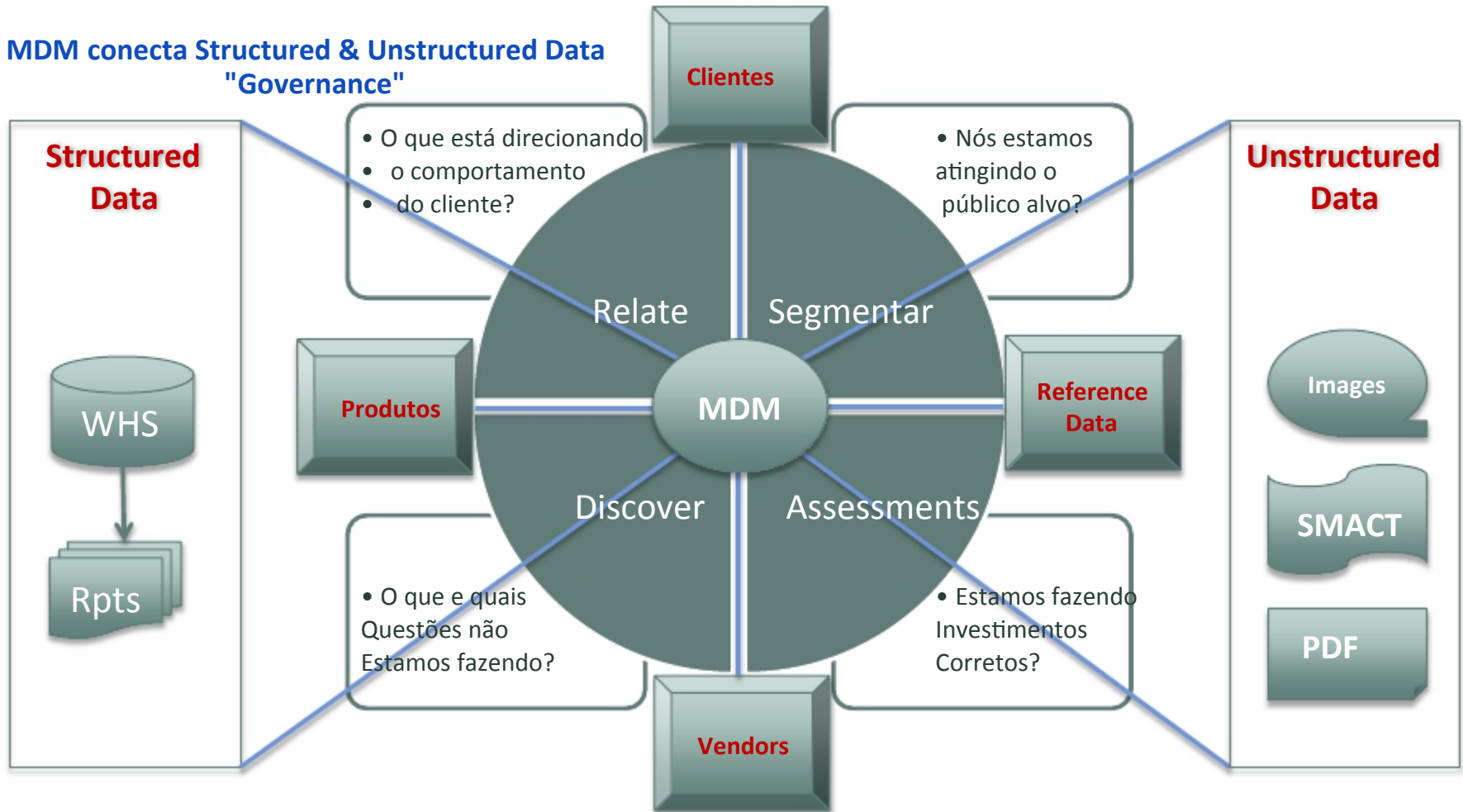
visão 720° view



Proporcionar ao **negócio** uma nova **inteligência**  
(Big Data comoditizado)

## MDM é core do Big Data Analytics

MDM conecta Structured & Unstructured Data  
"Governance"



# Qualidade & Governança de Dados

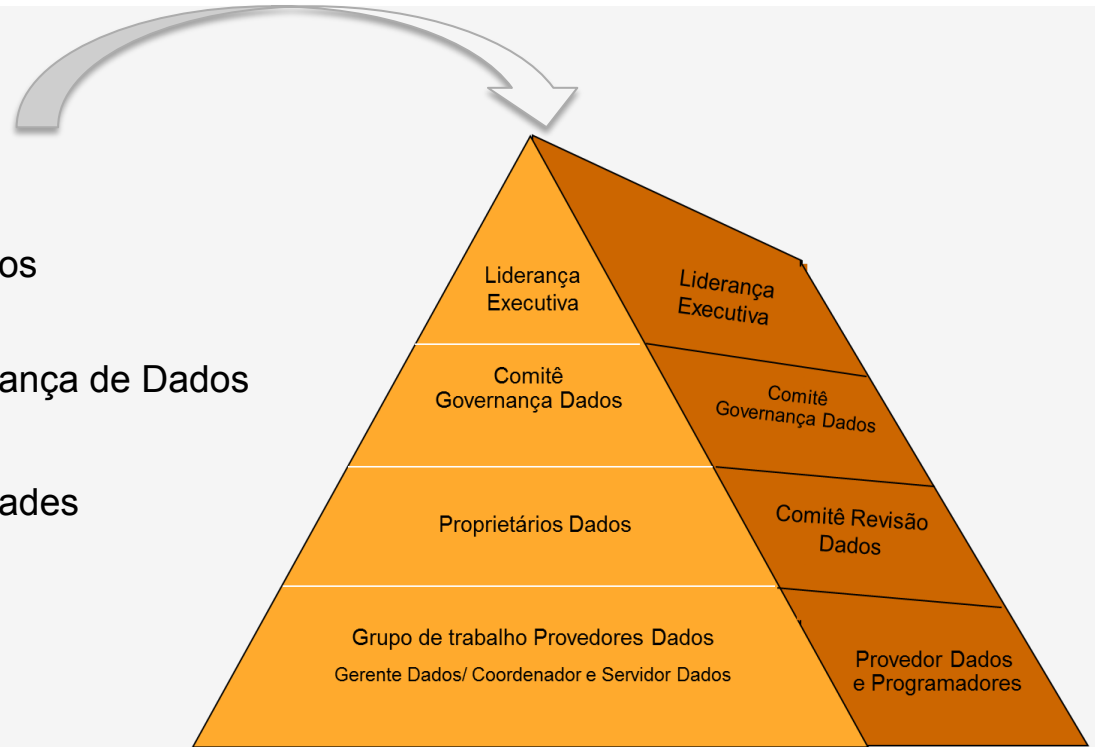
## PRINCÍPIOS

Todos os dados estão sujeitos aos seguintes Princípios de Governança:

- Proprietários dos Dados
- Provedor dos Dados
- Segurança
- Data Quality management
- Lifecycle e Change management

## PROGRAMA

- Estrutura
  - Comitê de Governança de Dados
  - Provedor dos Dados
  - Revisão do Requerimentos de Dados
- Definições
  - Handbook do Programa de Governança de Dados
  - Regras
  - Missão e Escopo de Responsabilidades
- Processo de Trabalho
  - Comunicação
  - Cultura
  - Melhoria Continua



# Framework de governança: Business + TI



Negócios		T.I.	
Gestão unificada de pessoas e produtos	Alinhamento e suporte as necessidades de dados de negócio p.ex. (SLAs, Novas coleções, Multimarcas, regras, direitos de acesso e privacidade, etc.)	Solução MDM multi-domain Unicidade e integridade dos dados em todas as aplicações	Assertividade e Propriedade sobre os dados, controle de qualidade, dicionários, modelos e regras

## Framework de Governança



# Technip MDM initiative

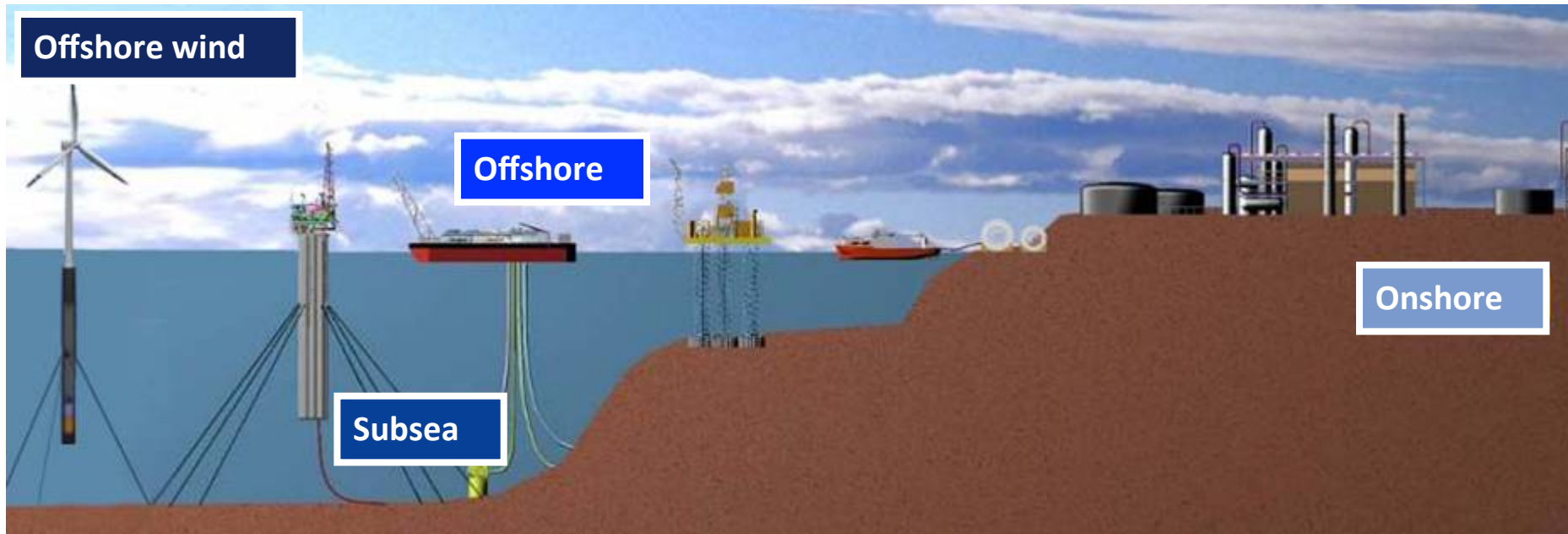
Master Data Management





# Our business

- With engineering, technologies and project management, on land and at sea, we safely deliver the best solutions for our clients
- A regular workforce of 23,000 in 48 countries
- Industrial assets on all continents, a fleet of 20 vessels
- 2010 revenue: €6.1 billion



Energy is at the core of Technip

# Technip path to a MDM solution

## Strategic drivers

### ■ Company growth

- Increasing size
- Operating centers working on multi-site projects
- Transversal business processes

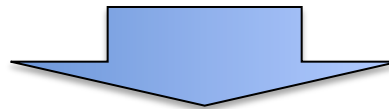
### ■ Company transformation

- 2 majors ongoing ERP programs for Finance and Manufacturing
- Group IT transformation to a Shared Services Organization
- Centralized shared application strategy

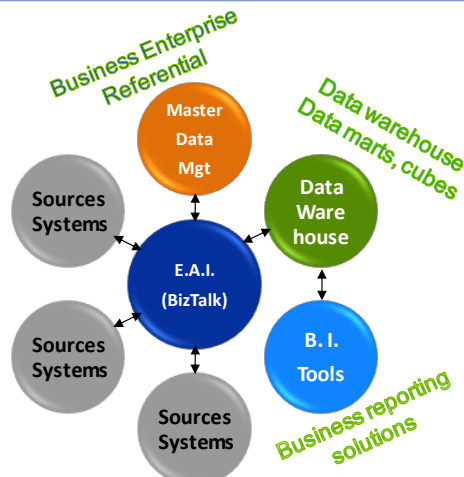
## Business objectives

### ■ Business operations improvement

- Improve the quality of reporting without overloading entities
- Increase IT automation
- Enhance collaboration on projects
- Improve the operations by defining and governing the data



## Proposed Solution: DNA Project



Program aiming to provide to the Group reliable Enterprise performance information and decisional tools, composed of three main components:

- Master Data Management governance and management system
- Enterprise Application Integration
- Data Warehousing and Business Intelligence solutions

# Shared Master Data & benefits within the Group

## Master Data by domain

## Benefits

**Finance Master Data**

- Organization
- Projects
- Operating Centers
- CBS

**HR Master Data**

- Employees
- Geographical zone

**Engineering Master Data**

- Material codes
- Work codes

**Procurement Master Data**

- Suppliers



Domain	Benefits
<b>Manufacturing</b>	Data alignment with Finance
<b>Procurement</b>	Drastic reduction of time to deliver the Spend Map
<b>Engineering</b>	Projects identification and tracking within the Group
<b>Finance</b>	Integrated reporting
<b>HR</b>	Creation of a unique Employee Referential Data alignment with Finance
<b>Quality</b>	KM and Lesson Learnt systems consistency with the Group organization
<b>Risk Mgt</b>	Data alignment with QA, HSE and Projects
<b>HSE</b>	Rationalization of systems with QA
<b>Project Management</b>	Integrated master data management Data alignment with Finance

# Faurecia a global footprint

## 2011 key figures

- 84,000 employees\*
- 270 sites
- 33 countries
- Group revenues: **€16.2 billion**
  
- 40 R&D centers
- 5,000 R&D engineers and technicians
- 300 patents filed in 2011
- Annual R&D budget: **€600 million**  
(excluding programs): 4% of sales

## The world's top automotive equipment suppliers (2011 revenues €bn)



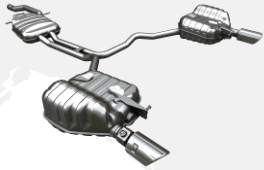
**N°6**  
worldwide  
equipment  
supplier

# Leading market positions in our four core business lines

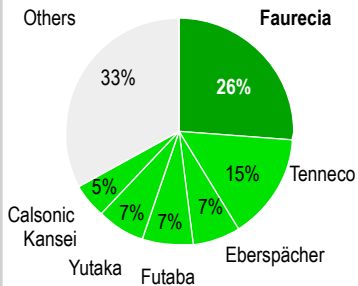
**faurecia**

Emissions Control Technologies

**#1 Worldwide**  
2011 sales: € 5.8bn



**26% global market share**



**faurecia**

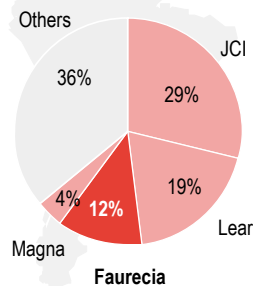
Automotive Seating

**#3 Worldwide** Complete Seats  
2011 sales<sup>(1)</sup>: € 5.0bn

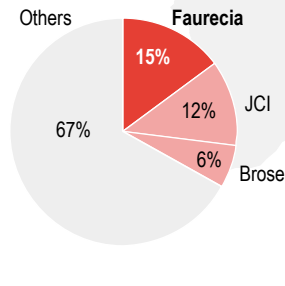
**#1 Worldwide** Frames & Mechanisms  
2011 sales: € 1.6bn



**12% global market share<sup>(2)</sup>**



**15% global market share**



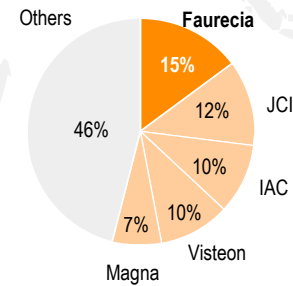
**faurecia**

Interior Systems

**#1 Worldwide**  
2011 sales: € 3.7bn



**15% global market share**



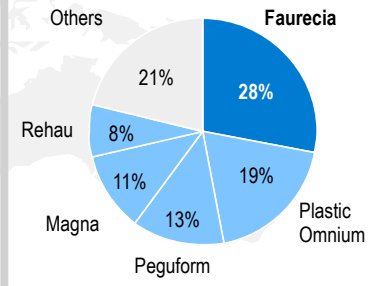
**faurecia**

Automotive Exteriors

**#2 Worldwide**  
**#1 in Europe**  
2011 sales: € 1.8bn



**28% market share in Europe**



(1) "Complete Seats" sales include "Seat Components" sales

Source: Roland Berger analysis

# How did our MDM journey start?



- A first MDM Project was initiated in 2010 based on SAP MDM.
- This initiative did not succeed due to:
  - Poor workflow capabilities or depending on 3<sup>rd</sup> party systems
  - Lack of flexibility in data model evolution
- March 2011, we launched a MDM market assessment
- May 2011, decision is made to launch an RFQ
- July 2011, three editors are short listed
- September, a POC is submitted and final decision made for CGI (fka Logica) as integrator and EBX from Orchestra Networks as MDM software



# Objectives and Foundations

- 1 Create a single “point of truth”
- 2 Share up-to-date Master Data across operational and decisional applications
- 3 Put in place Master Data Governance processes
- 4 Replace CMMS (sure, we also have a legacy Master Data system)

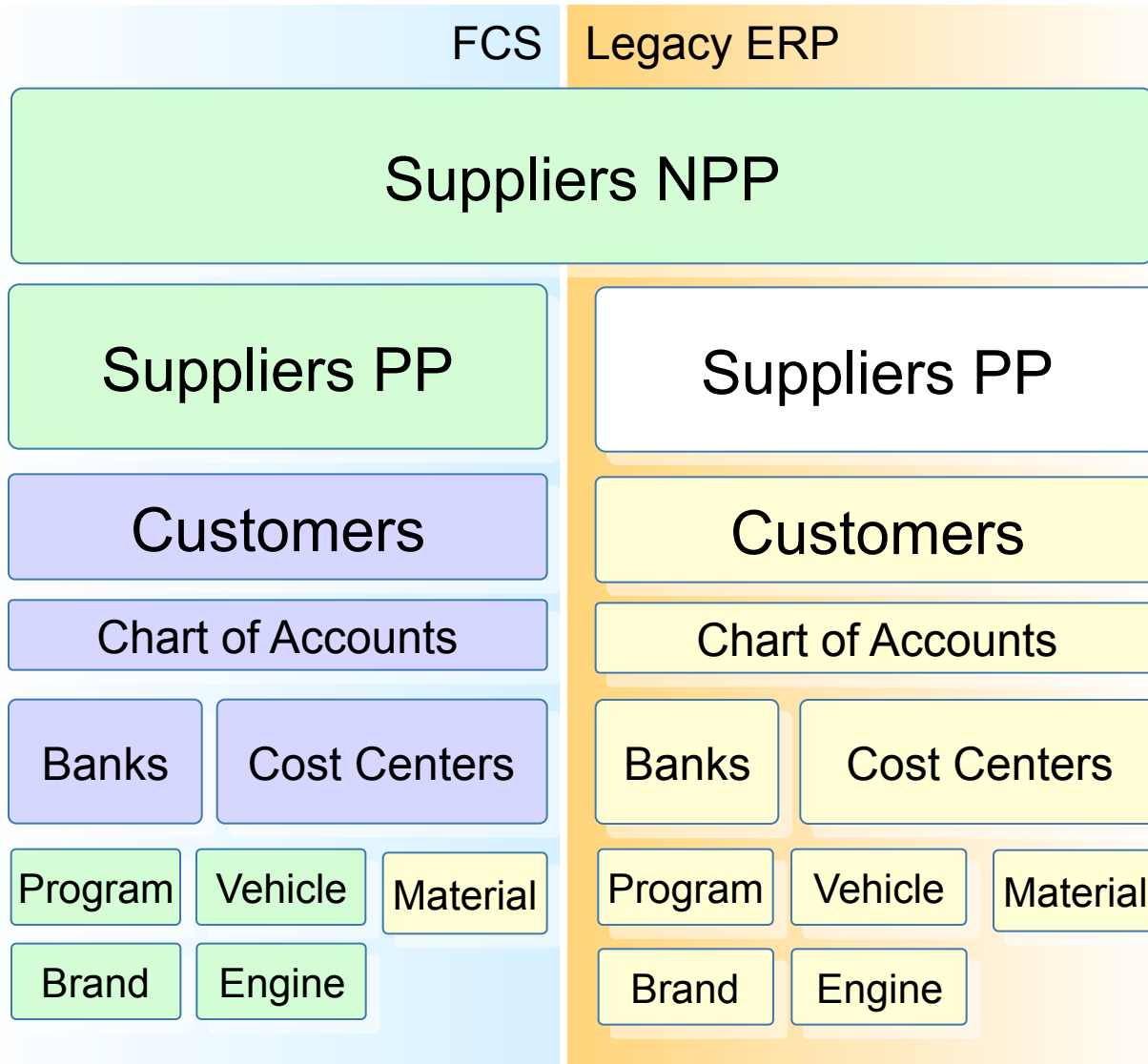
Develop a dedicated enterprise MDM solution

Define & support, with workflow, data management processes

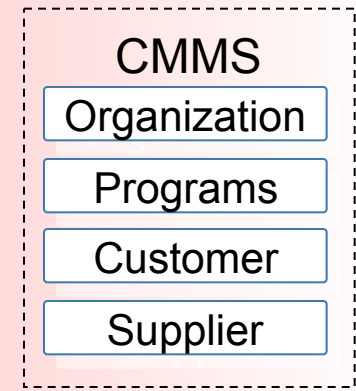
Interface master data referential with key applications

Create a "data stewardship" organization to take care of data quality

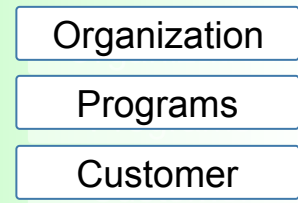
# Multi-domain needs and too many teams



## Corporate Models



## Reporting



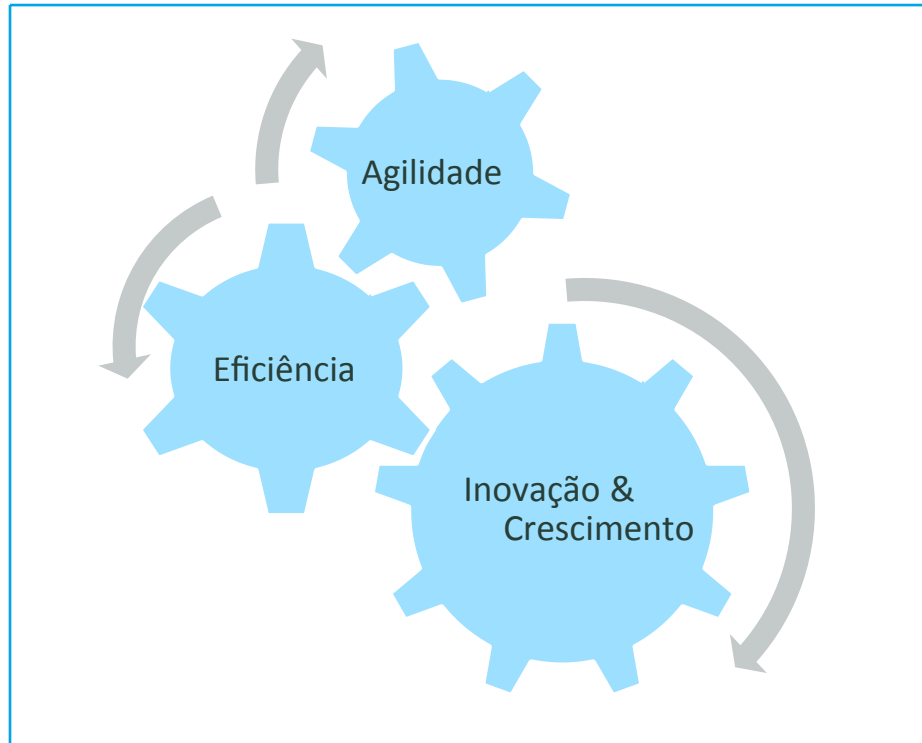
## Legend:

- Data Steward Team
- Central Team
- Local Plant
- Mixed Plant/Shared
- Corporate

- Doing an MDM Project is launching a **continuous improvement** process
- Data Governance defines:
  - Roadmap for data usage and quality improvement
  - Data management rules and procedures
  - People (and their organization) in charge and their roles
  - Data Access Rights
- Data Governance objectives:
  - Control data acquisition, quality and validation
  - Monitors the over all data management process performance

- ✓ Workflow definition and maintenance flexibility
- ✓ Data Model easy to evolve
- ✓ Cornerstone to support corporate projects
- ✓ Reduce errors due to wrong data (payment terms, ...)
- ✓ A tool for process improvement and governance

# Landscape para otimizar o desempenho do negócio



**Agilidade:** precisamos receber informações das necessidades de negócio o mais rápido e de forma mais simples

**Eficiência:** Melhorar significativamente a eficiência de coleta e análise informações de negócios

**Inovação & crescimento:** Use o pleno potencial das informações. Ofereça os usuários de negócios a informação que eles precisam para criar novos produtos e serviços inovadores, suportados por análise preditiva e prescritivas

► **Qualidade dados e MDM, simples e eficaz proporciona uma imediata otimização do negócio**







Soluções:

snapLogic

TRILLIUM SOFTWARE

A Harte Hanks Company

 Orchestra  
N E T W O R K S

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