

# The South African EA Forum



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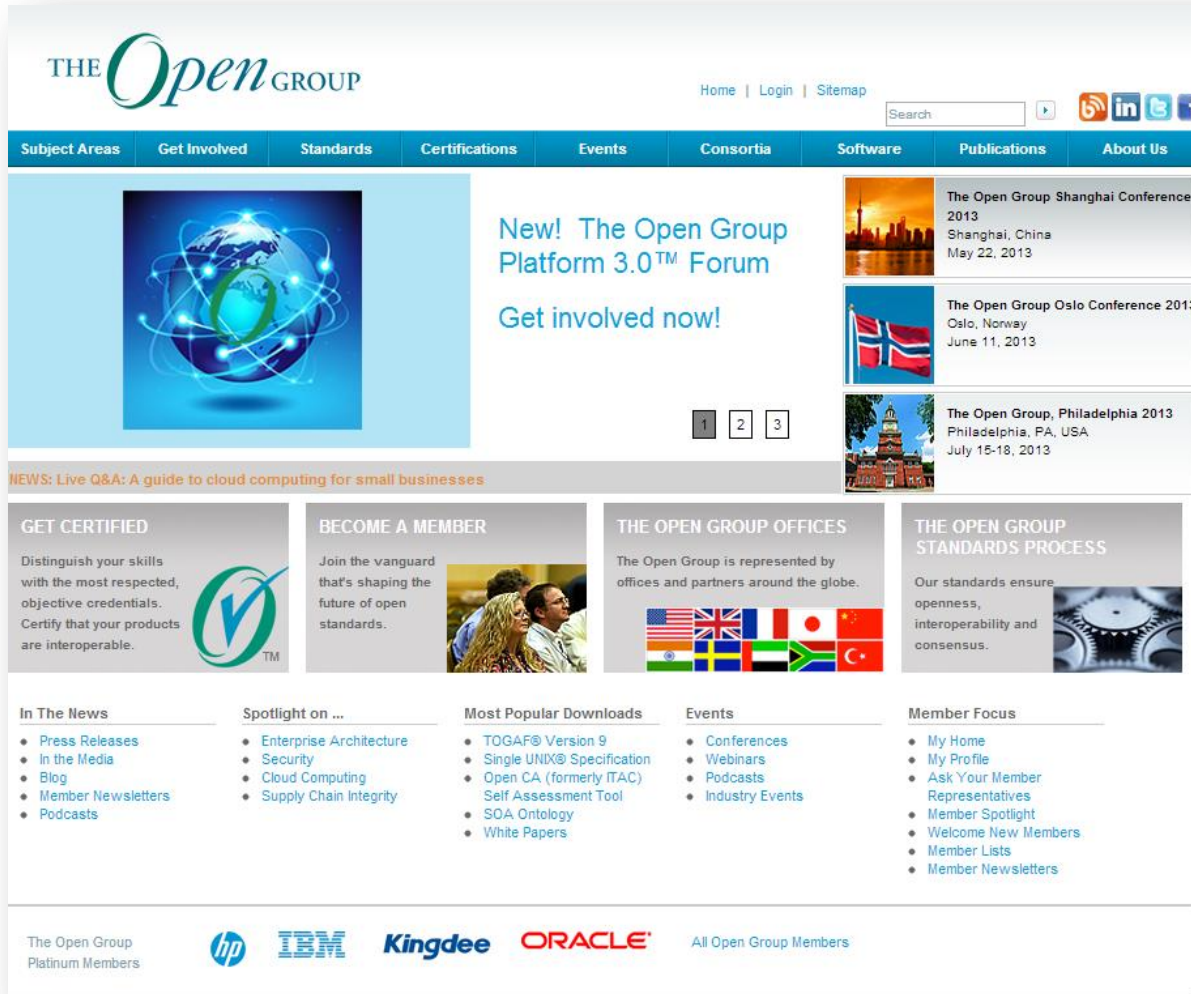
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THE *Open* GROUP

# Leading the development of open, vendor-neutral IT standards and certifications



The screenshot shows the homepage of The Open Group. At the top left is the logo "THE Open GROUP". To the right are links for "Home | Login | Sitemap" and a search bar. Below this is a navigation menu with categories: "Subject Areas", "Get Involved", "Standards", "Certifications", "Events", "Consortia", "Software", "Publications", and "About Us". The main content area features a large blue graphic of a globe with network lines, followed by the text "New! The Open Group Platform 3.0™ Forum" and "Get involved now!". To the right of this are three event listings: "The Open Group Shanghai Conference 2013" (Shanghai, China, May 22, 2013), "The Open Group Oslo Conference 2013" (Oslo, Norway, June 11, 2013), and "The Open Group, Philadelphia 2013" (Philadelphia, PA, USA, July 15-18, 2013). Below the main content is a "NEWS" section with a link to "Live Q&A: A guide to cloud computing for small businesses". The bottom section is divided into four columns: "GET CERTIFIED" (Distinguish your skills with the most respected, objective credentials. Certify that your products are interoperable.), "BECOME A MEMBER" (Join the vanguard that's shaping the future of open standards.), "THE OPEN GROUP OFFICES" (The Open Group is represented by offices and partners around the globe.), and "THE OPEN GROUP STANDARDS PROCESS" (Our standards ensure openness, interoperability and consensus.). Below these columns are five sections: "In The News" (Press Releases, In the Media, Blog, Member Newsletters, Podcasts), "Spotlight on ..." (Enterprise Architecture, Security, Cloud Computing, Supply Chain Integrity), "Most Popular Downloads" (TOGAF® Version 9, Single UNIX® Specification, Open CA (formerly ITAC) Self Assessment Tool, SOA Ontology, White Papers), "Events" (Conferences, Webinars, Podcasts, Industry Events), and "Member Focus" (My Home, My Profile, Ask Your Member Representatives, Member Spotlight, Welcome New Members, Member Lists, Member Newsletters). At the bottom, it lists "The Open Group Platinum Members" with logos for hp, IBM, Kingdee, and ORACLE, followed by the text "All Open Group Members".

## Forums

- Architecture Forum
- ArchiMate® Forum
- Identity Management Forum
- Jericho Forum®
- Management Forum
- Platform
- Real-time & Embedded Systems Forum
- Security Forum
- Trusted Technology Forum (TTF)

## Industry Forums

- Exploration, Mining, Metals & Minerals Forum

## Work Groups

- Business Architecture
- Cloud Computing
- Quantum Lifecycle Management (QLM)
- Semantic Interoperability
- Service Oriented Architecture

# Platform 3.0 Forum - First Web Meetings

## 30 May 2013 for members of The Open Group

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- A. 8 AM UK time, **9 AM CET and South Africa**, 11:00 AM UAE, 12:30 PM India, 3:00 PM China, 4:00 PM Japan, 5:00 PM Australia (Sydney)
- B. 9 AM Pacific time, noon EDT, 5 PM UK time, **6 PM CET and South Africa**.

### Agenda (both meetings)

1. The Platform 3.0 Forum
  - o Why it is needed
  - o What it will do
  - o How to take part
2. The Forum Work Program.
  - o How it will be established ...
  - o Discussion of where new work is needed
  - o Call for volunteers

### Platform 3.0™

#### What is Platform 3.0?

Platform 3.0 is broadly centered around four to six technology trends converging on each other to form new business models and system designs.

These themes include:

- mobility
- social networks and social enterprise
- big data
- cloud computing
- devices
- and application architectures

These convergent forces – united by the growing consumerization of technology and the resulting evolution in user behavior – offer the potential to create new business models and system designs. However, they also pose architectural issues and structural considerations which will need to be overcome in order for businesses to benefit.

The Open Group Platform 3.0™ Forum will advance The Open Group vision of Boundaryless Information Flow™ by helping organizations take advantage of the convergence of a number of modern technologies.



There is a recognized convergence of technologies by industry analysts and practitioners creating the opportunity for a new federated architecture model. Gartner identified this as a 'Nexus of Forces', while IDC is calling it the 3rd Platform. At The Open Group, we are referring to the convergence as Platform 3.0

<http://opengroup.org/subjectareas/platform3.0>

# Information Architecture at Eskom

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- ❑ At this month's EA Forum, Shannon Naidoo will discuss information architecture at Eskom including a look at how master data management and data quality moved from being IT-specific, back-office initiatives to becoming frontline business initiatives with C-suite visibility. He will also describe the need for a common information model and how this shaped their approach to information architecture and the role of the information architect.
- ❑ Shannon Naidoo is an Enterprise Architecture (EA) practitioner with 13 years experience in establishing, running and transforming EA teams within the utility sector. Currently he is Business, Information & Data Architecture Manager at Eskom, and has also worked as Chief Integration Architect and EA manager there for several years. Shannon serves on the Global Advisory Council of the Smart Energy Reference Architecture (SERA) group.

Open Group EA Forum  
May 2013

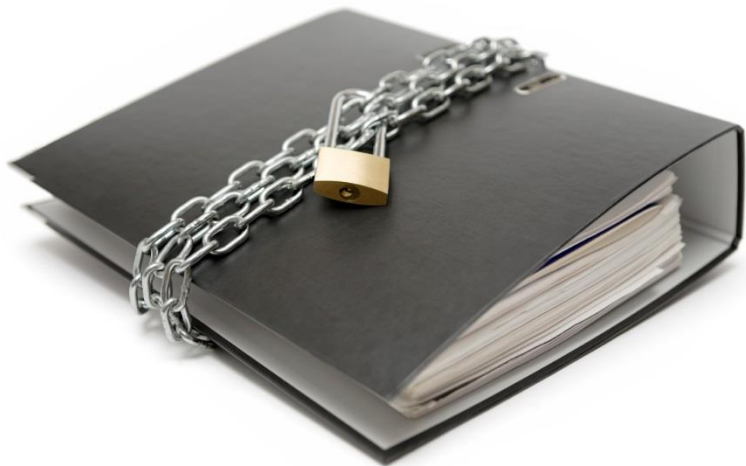
# Evolving Information Architecture in Eskom

Shannon Naidoo

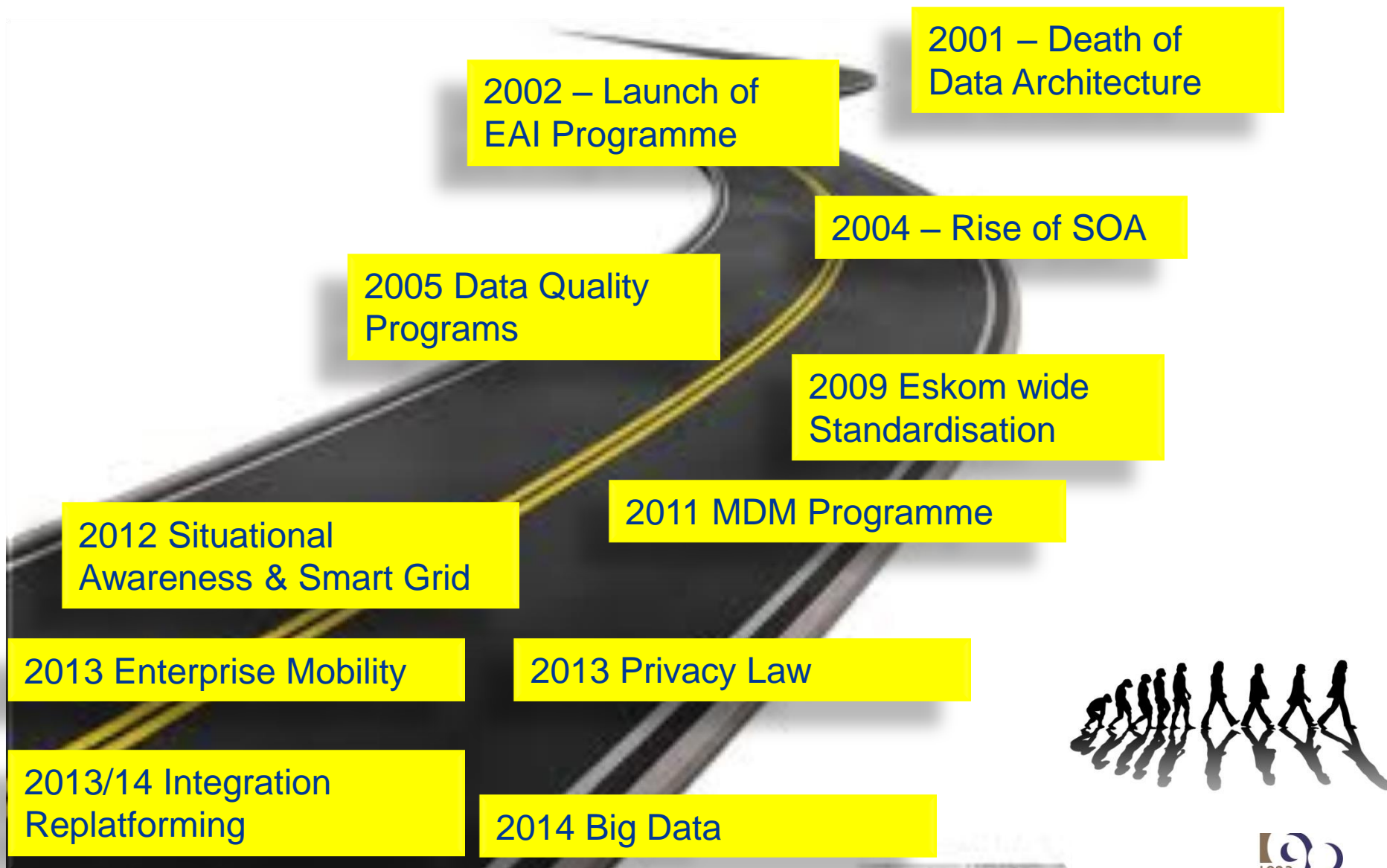
Information, Data & Business Architecture Manager  
Powering your world



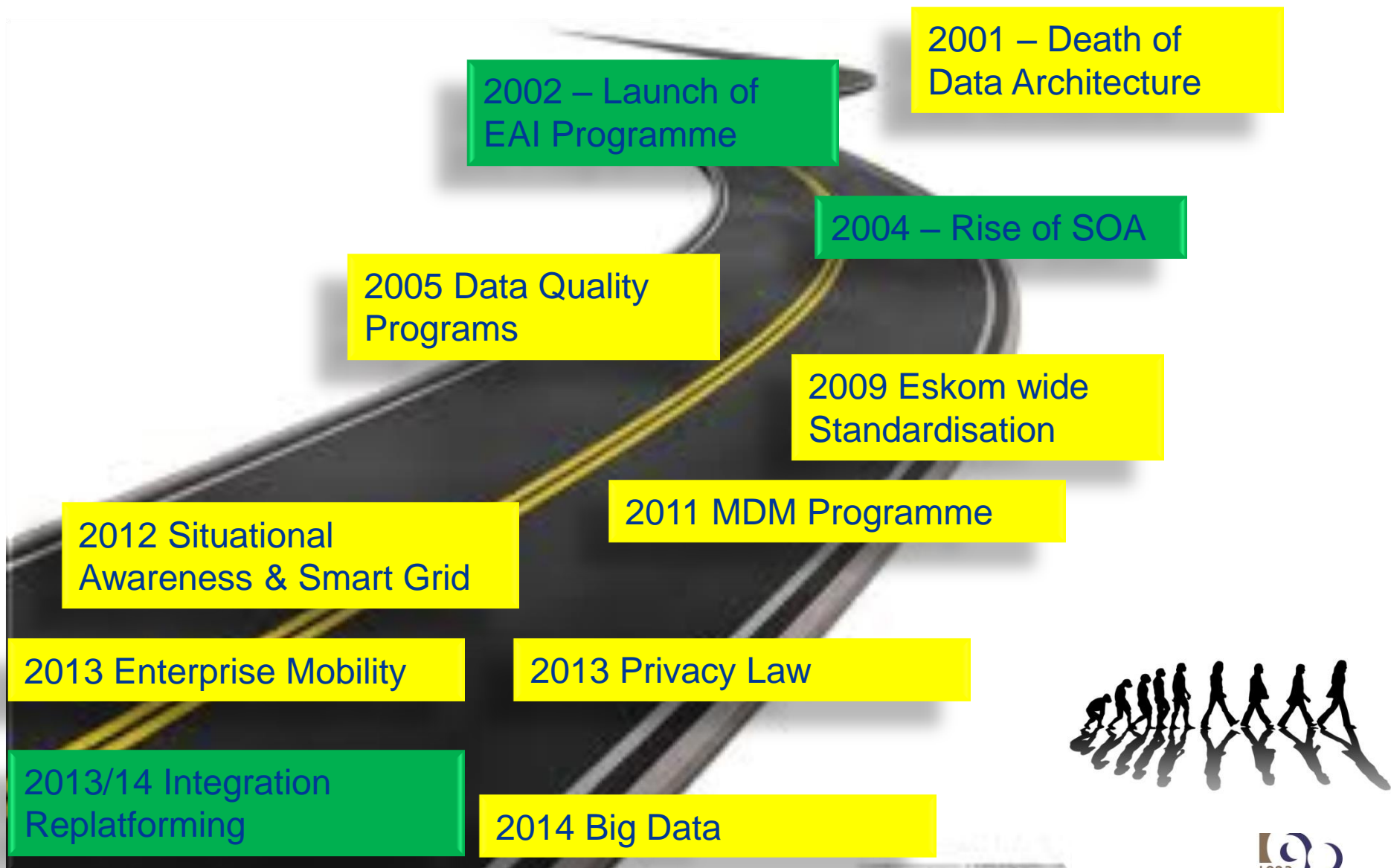
- *Gartner defines "enterprise information architecture" as that part of the enterprise architecture process that describes — through a set of requirements, principles and models — the current state, future state, and guidance necessary to **flexibly share and exchange information assets** to achieve effective enterprise change.*



# Key Business Triggers affecting Information Architecture Evolution

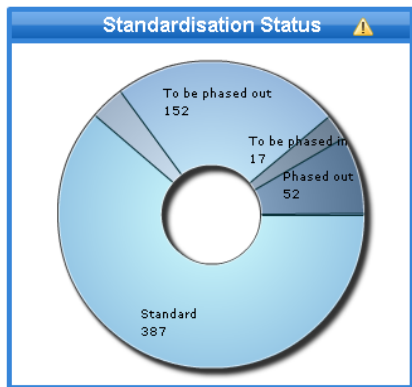


# Key Business Triggers affecting Information Architecture Evolution





## Eskom Application Portfolio Analysis



### Select Landscape

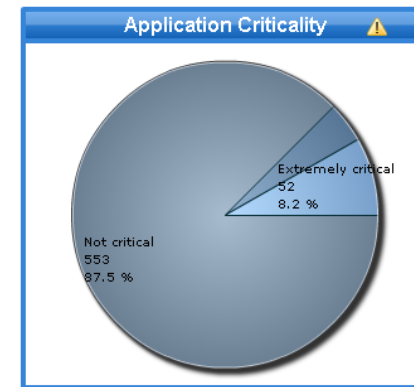
Eskom

### Select Sub-Landscape (where applicable)

No selection

No of Active Applications: 563

Standard:	387	Standard - Limited use	1
To be phased out:	152	Status unknown	23
17	To be phased in:	52	Phased out:



### Application Details

Name	Description	UID	Number of users
2nd Line	nd Line Reconciliation Vending Tool compares and reconciles the sales and banked figures from prepaid vendors with the...	101-184	
ABB oil DB	performance and testing database for lubrication oil.	101-585	
ABB P13	BB P13 SCADA implemented at Kendal Power Station		
ABB P14	BB P14 SCADA implemented at Arnot Power Station		
ABB SETA	BB Scada used at Komati Water Scheme		
ACE	ash Book & Petty Cash	101-35	
Achiever Plus	SO 9000 Quality Management System	101-294	
ACNAC Workflow	he ACNAC Workflow System extends the minor process workflow that has been utilised for many years to now include fi...	101-36	
ADMS	dvanced Distribution Management System		
AFAS	utomated Fault Analysis on Circuit Breakers		
AFIS	FIS displays field fires in the proximity of Tx lines as their happend in 15 minute intervals against a geographical backdro...	101-455	
AIDSInSite	IDSInSite is an Eskom initiative and is aimed at supporting the development of a high level of HIV/AIDS literacy, intuitio...	101-211	
AIM/Directa	IM provides management of documents and drawings associated with the plant and the business as well as BMS related ...	101-45...	
Alarm Beeps Database	skom	101-20	





IT 700 Message Designs, 20 Million p.a

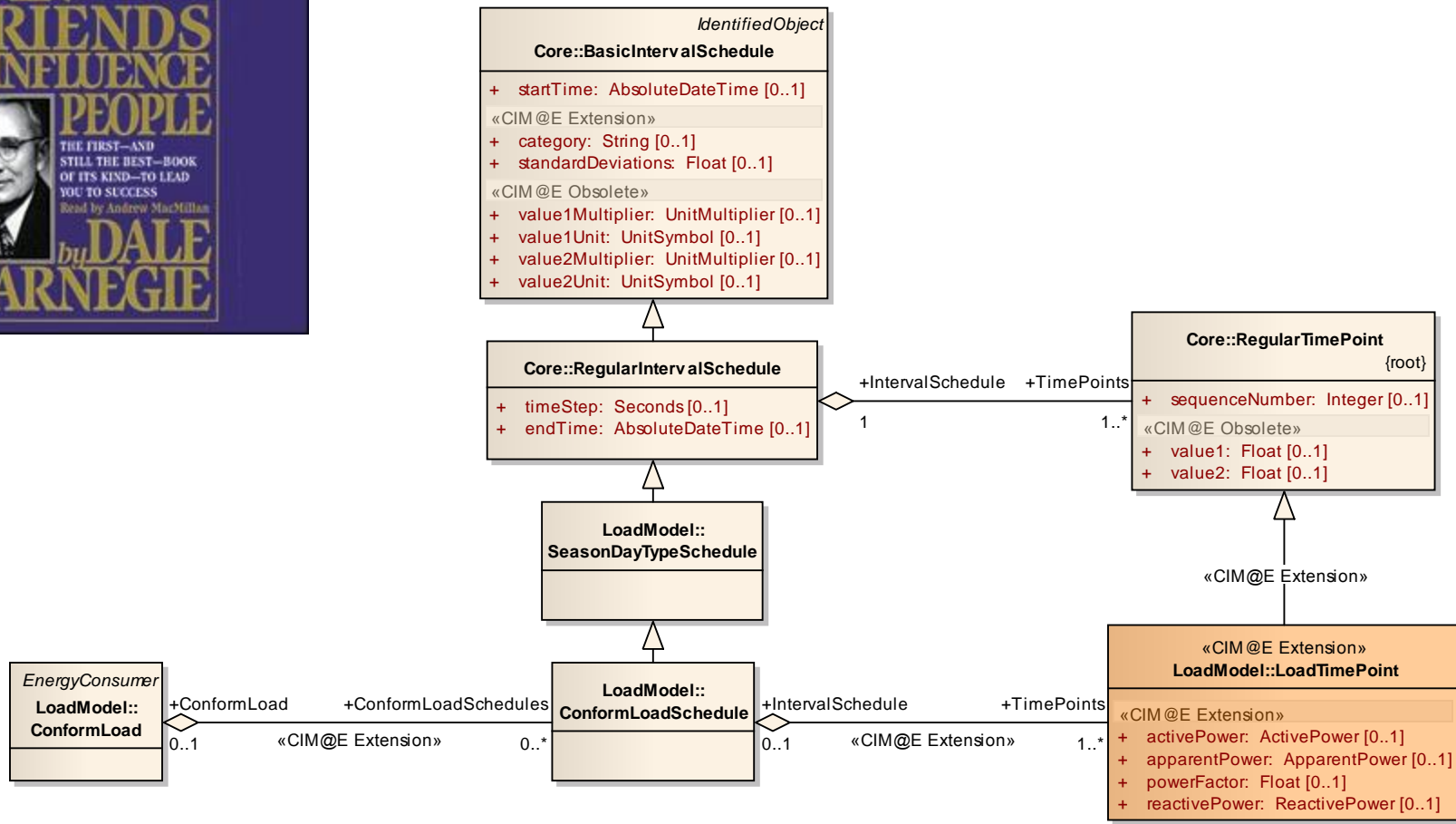
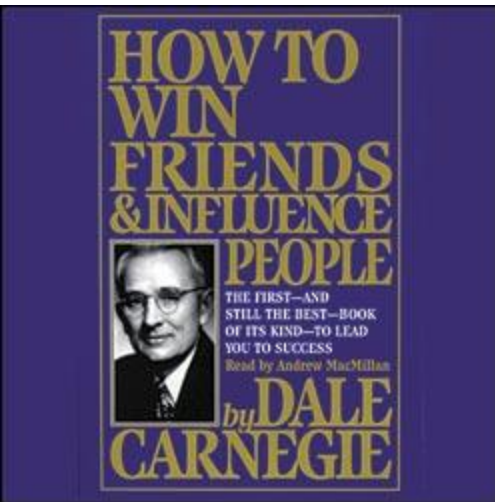


OT 200 Message Designs 20 million p.d



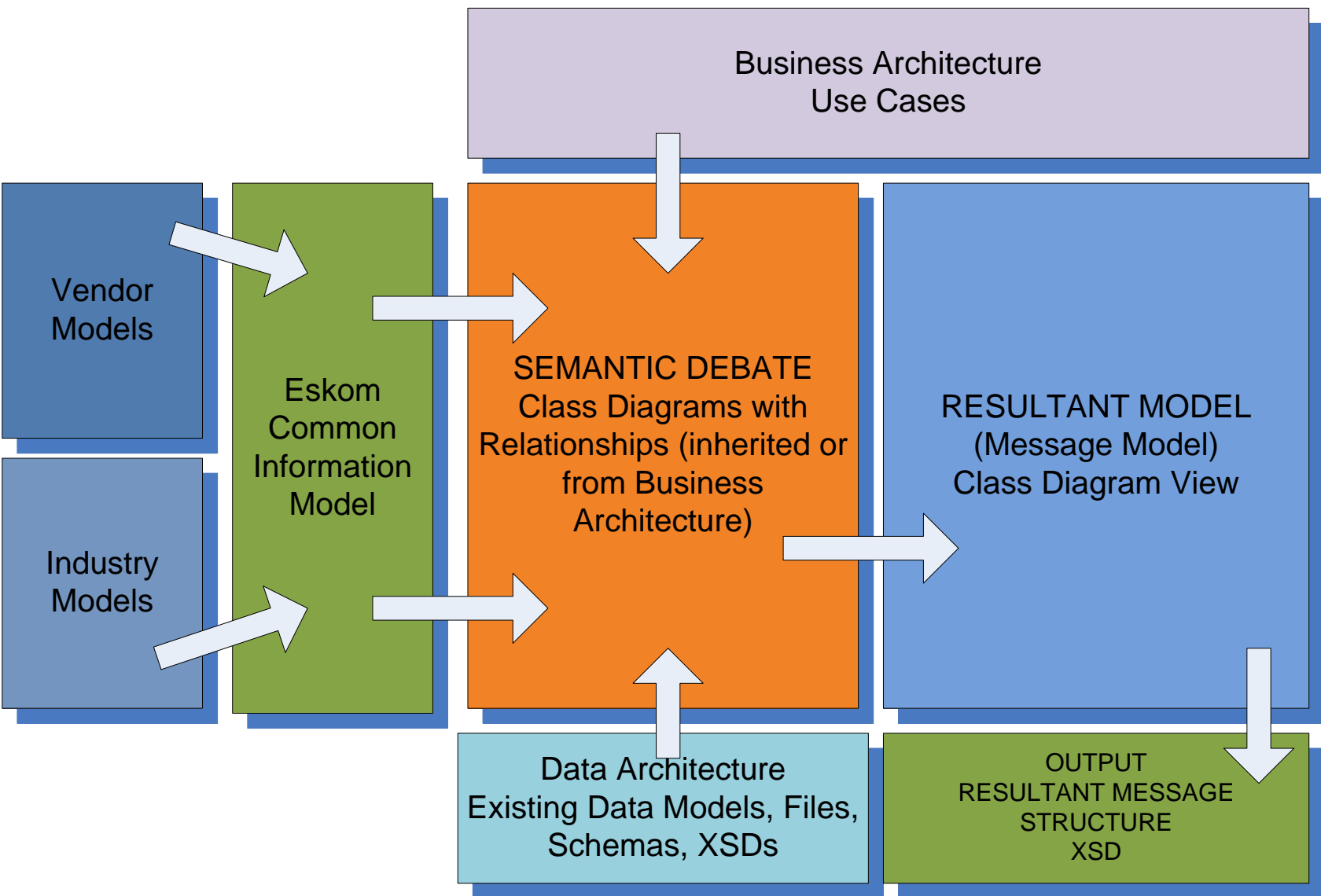


# How to confound the toughest Data Architects!

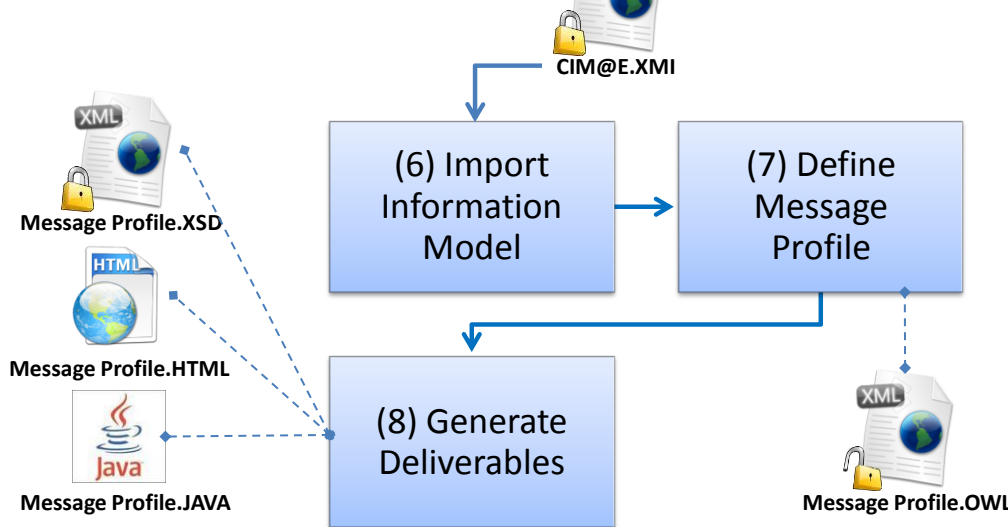
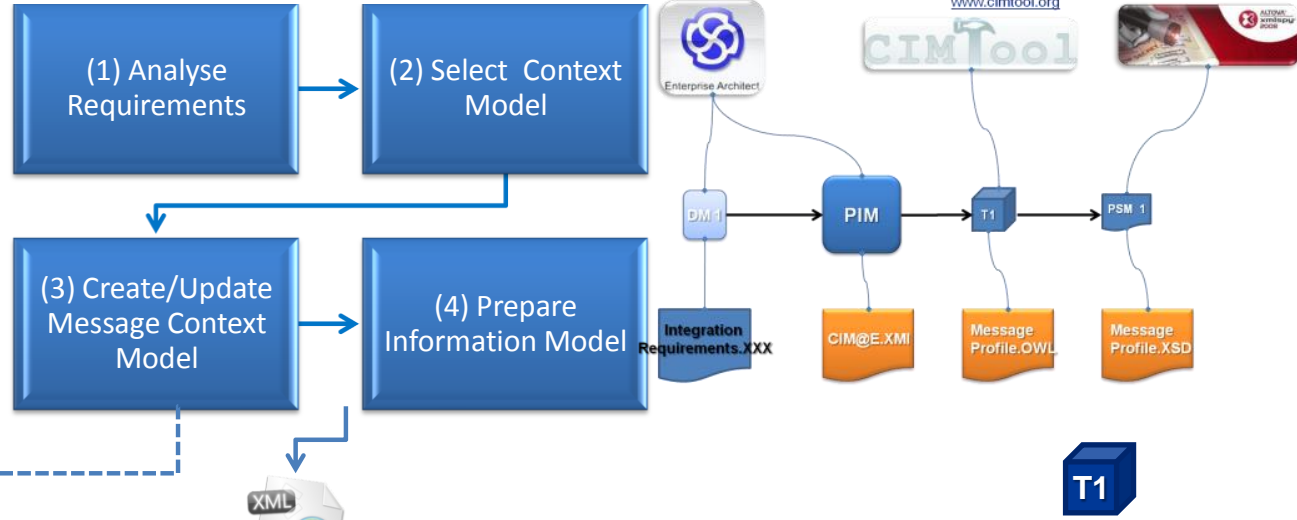


Choose a notation. Do not pass Go. Do not collect Architecture Approval

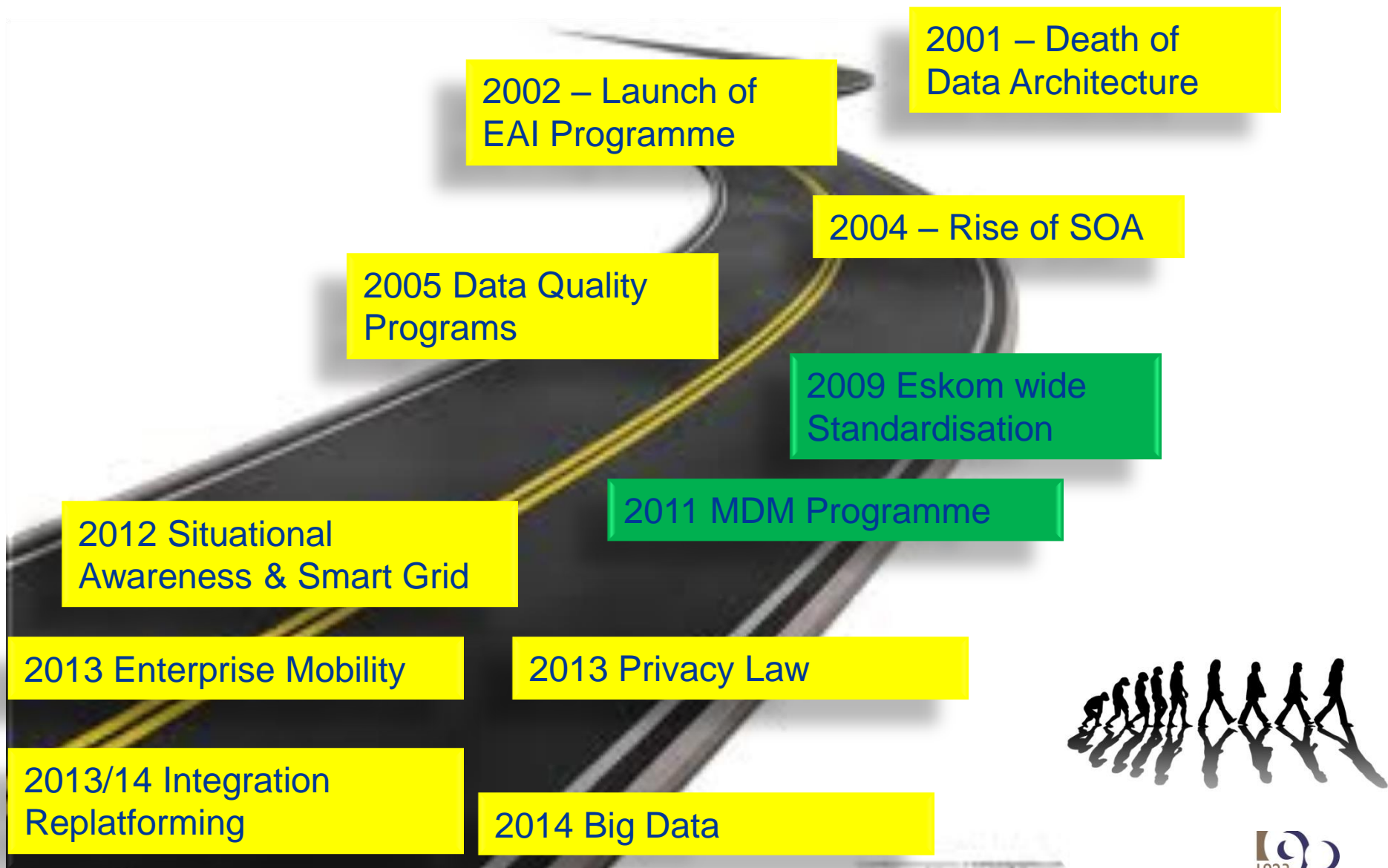
# How we apply CIM to Integration



# XSD Payload Generation Process



# Key Business Triggers affecting Information Architecture Evolution



- Processes – adopted a High Performance Utility Model
- People – Jobs reviewed and reorganized
- IT
  - Data ownership changed hands
  - Data programmes faltered initially
  - BI programmes faltered
  - KPI ownership confusion
- **Business reclaimed data accountability**

**STANDARDIZE**

**OPTIMIZE**

**SIMPLIFY**





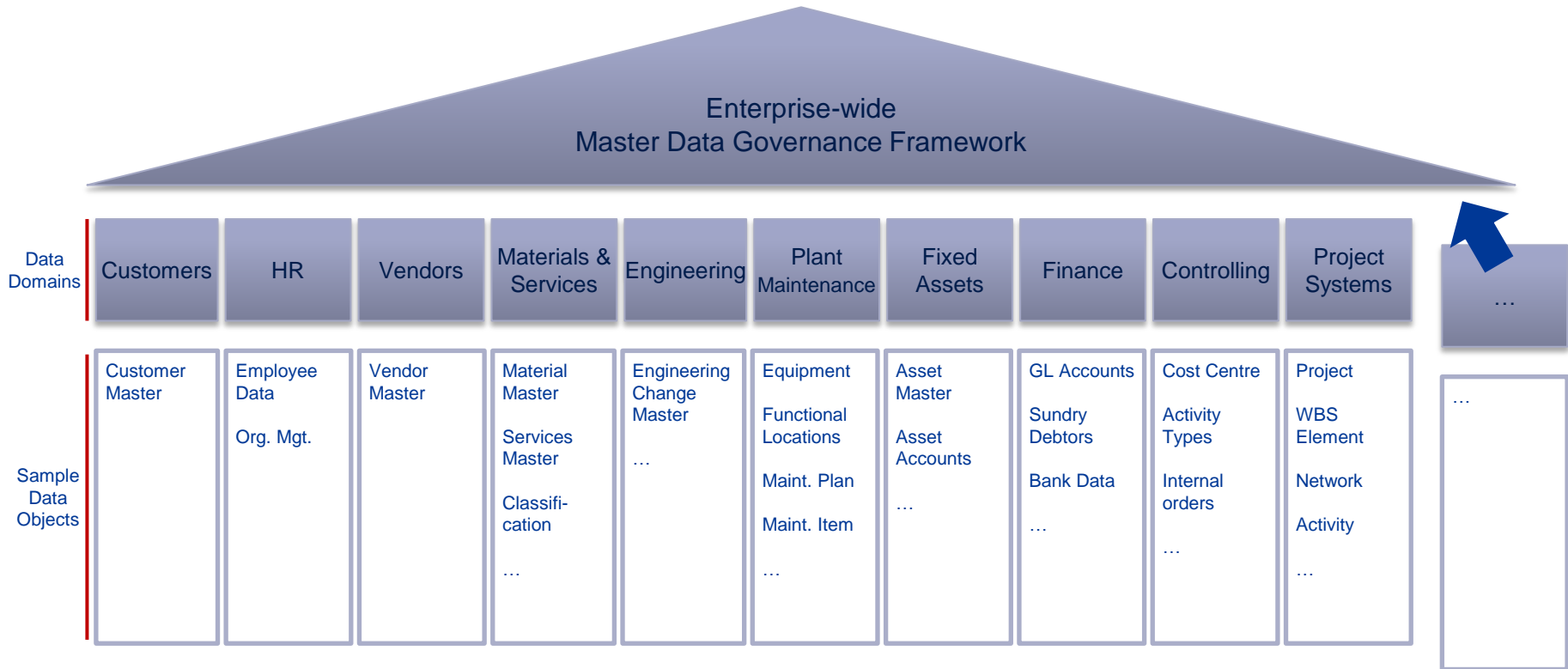


# Master Data Domains

Ten domains have been defined for the initial implementation, and others can be added under the same framework in the future



**One View. Better Decisions.**

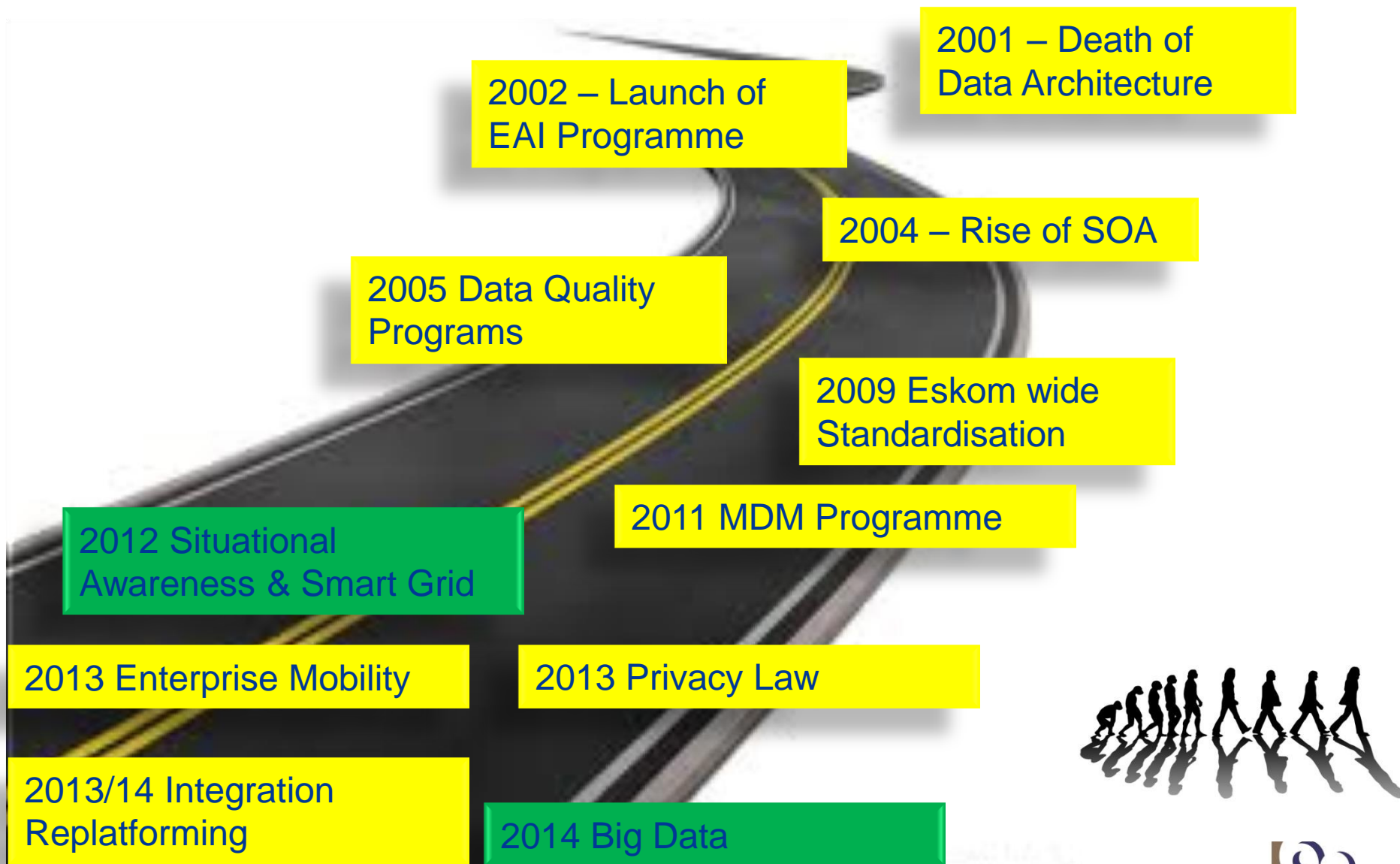


- How do I align the top down CIM with a bottom up Master Data Management programme?

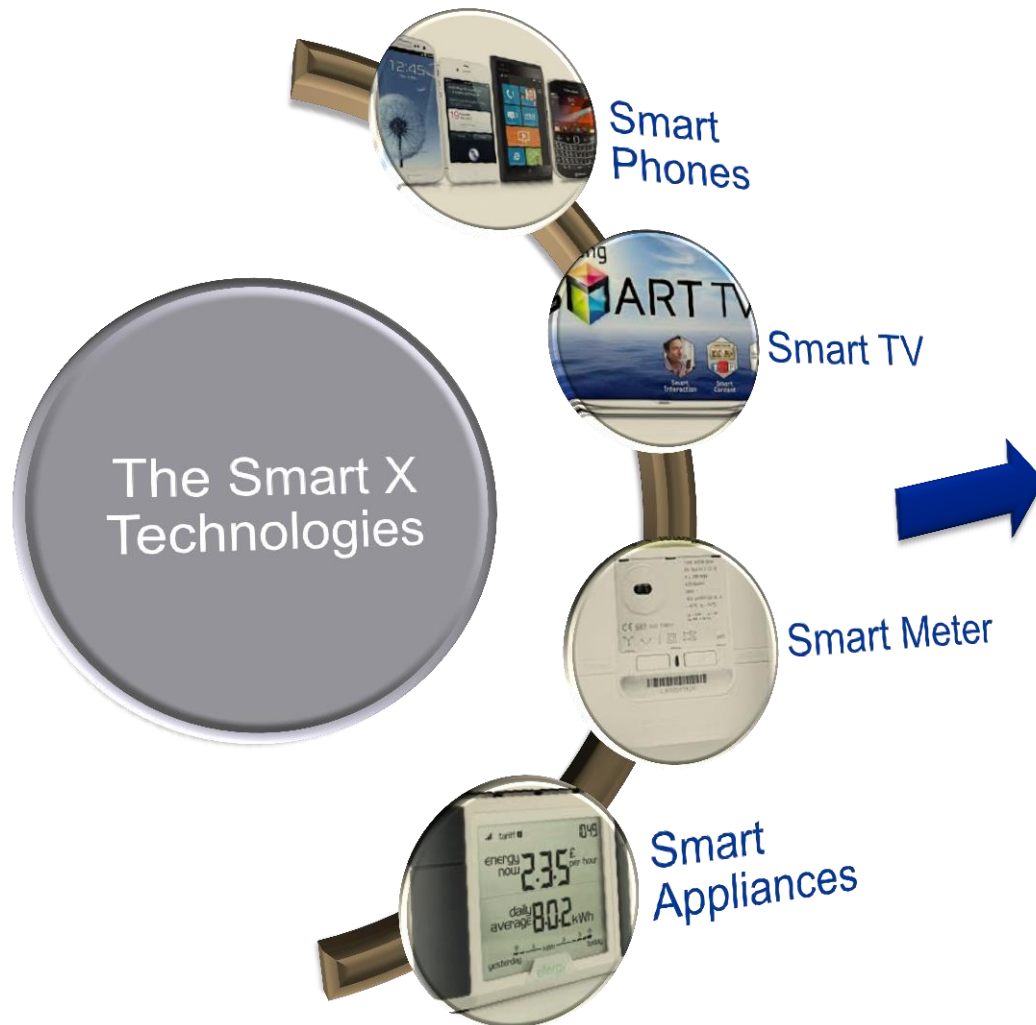


- Which MDM vendors support that approach?

# Key Business Triggers affecting Information Architecture Evolution

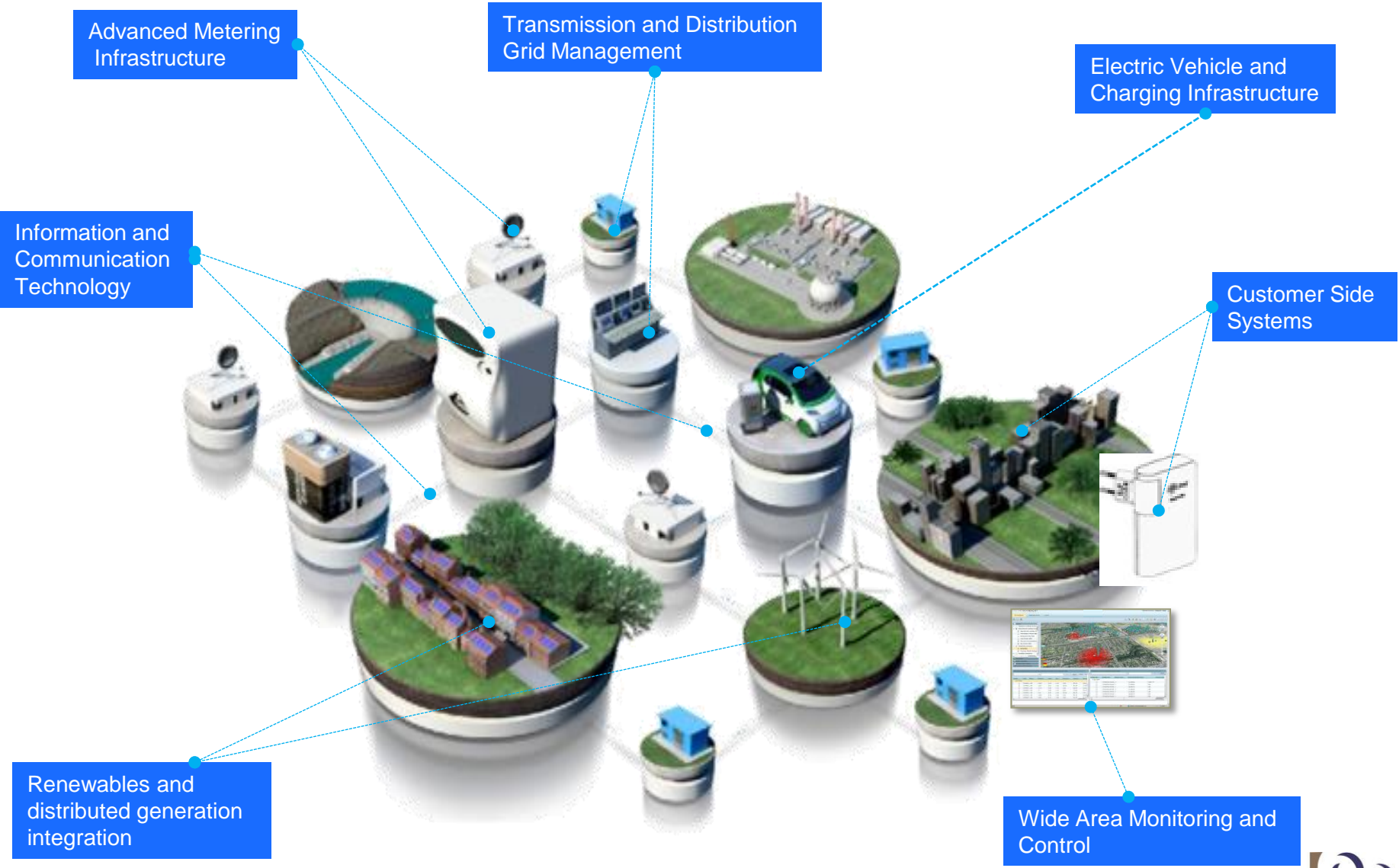


# The Emergence of Smart 'X' Technologies

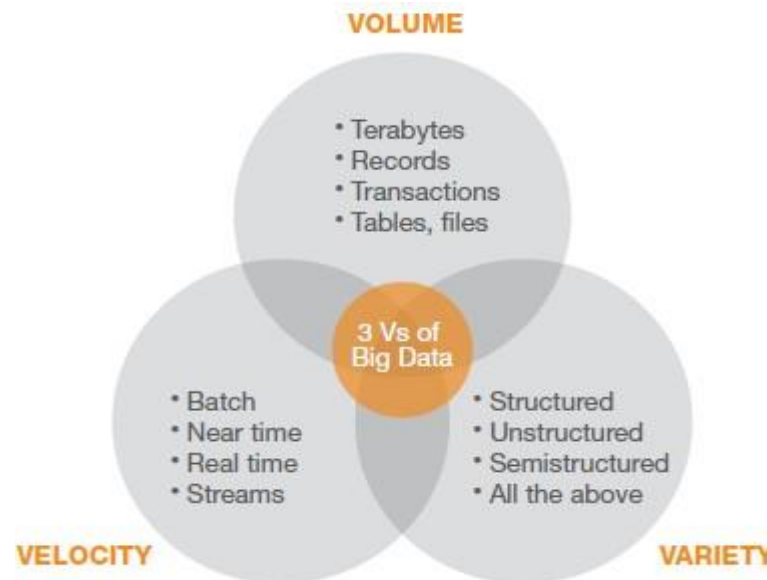


Key Characteristics
Connected to a Network
Auto Discoverable
Interoperability
Visualization
Modular

# Smart Grid Ecosystem

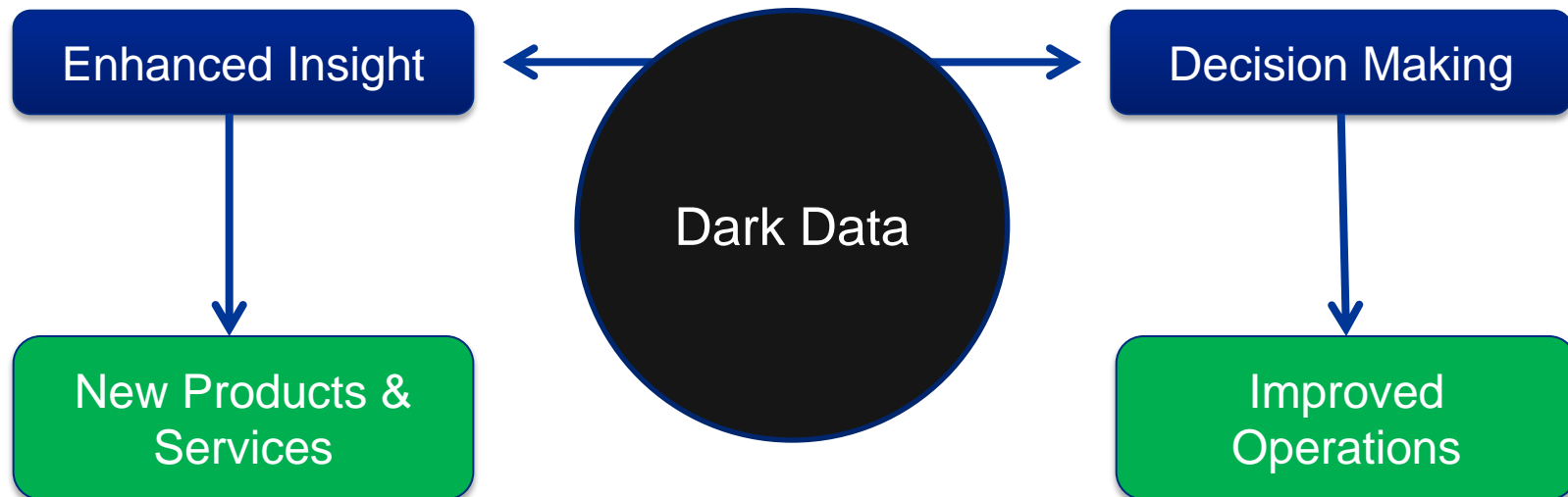


- “Data that **exceeds** the processing capacity of conventional database systems” - O’Reilly, 2012
- “Data that is so large and unwieldy to manage” - Anonymous
- “Big data” is **high-volume**, **-velocity** and **-variety** information assets that demand cost-effective, innovative forms of information processing for enhanced insight and decision making.” - Gartner, 2013



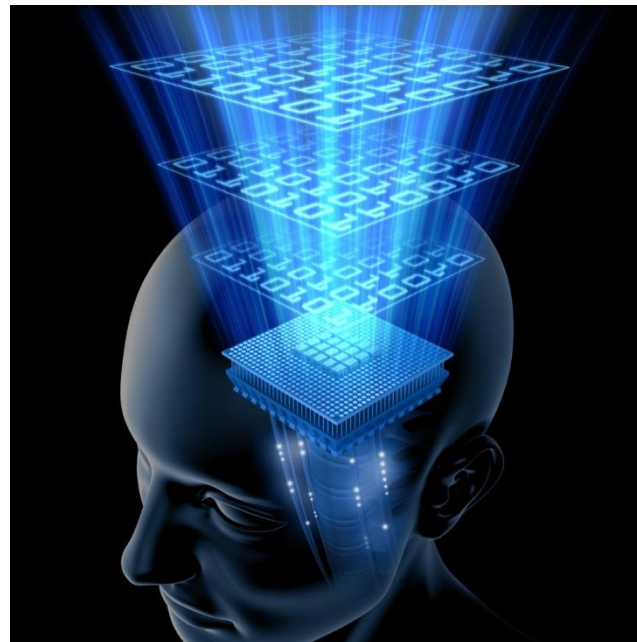
*“Big data really is about having insights and making an impact on your business. If you aren’t taking advantage of the data you’re collecting, then you just have a pile of data, you don’t have big data.”*

- Facebook VP of Technology, 2012

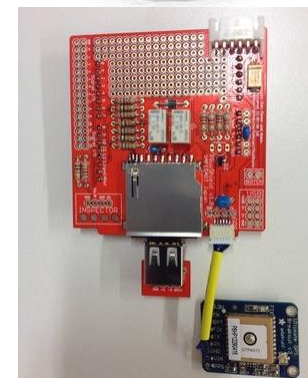




- “Big” processing of “small” data
- Juxtapose, correlate, invert thinking
- Augment existing tools with Big Data Thinking



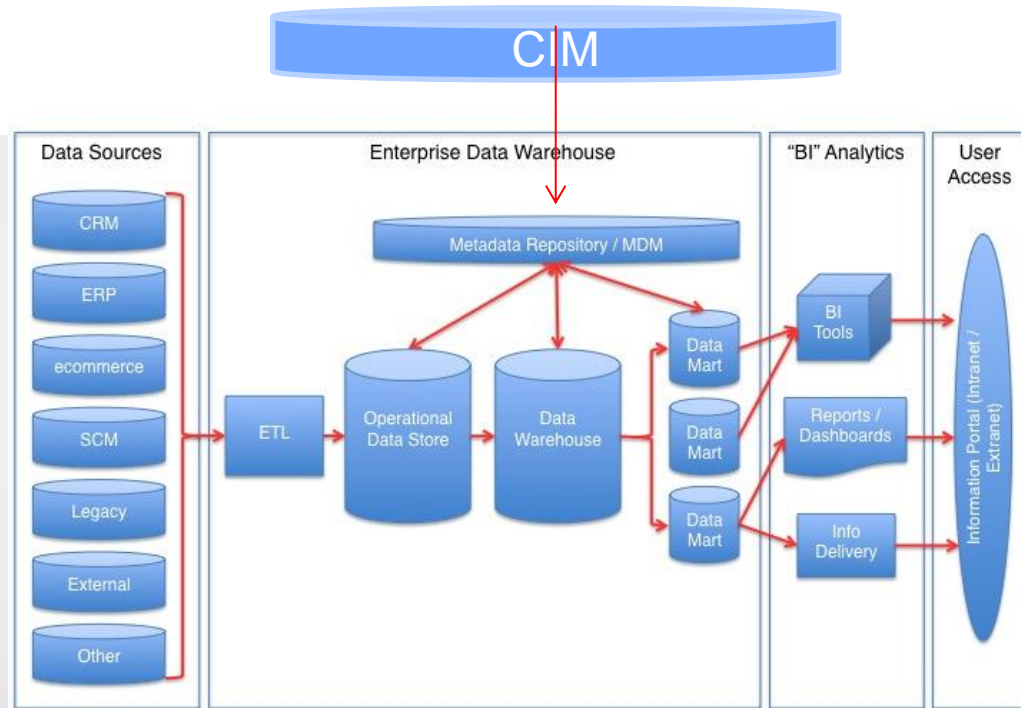
- Power Station Event Monitoring
  - 6000 Events per second
  - 4 **Petabytes** of DATA p.a.
- Smart Meter Deployments
  - 5 million meters
  - 5 **Terabytes** of DATA p.a.
- Grid Monitoring (Dx, Tx)
  - 500 000 devices
  - 39 million measurements/sec
  - 180 **Gigabyte** DATA p.a.



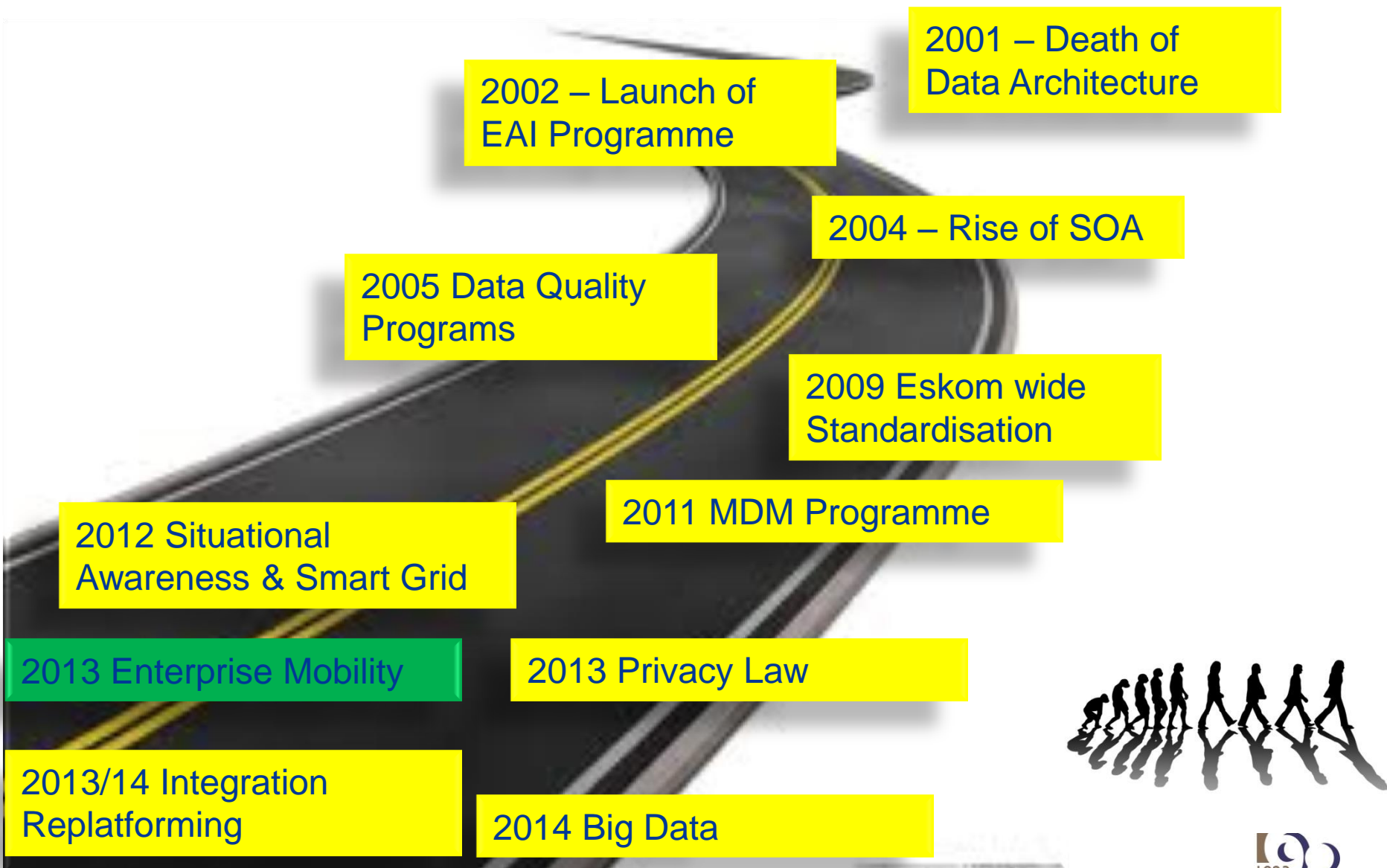
- Business View



- IT View



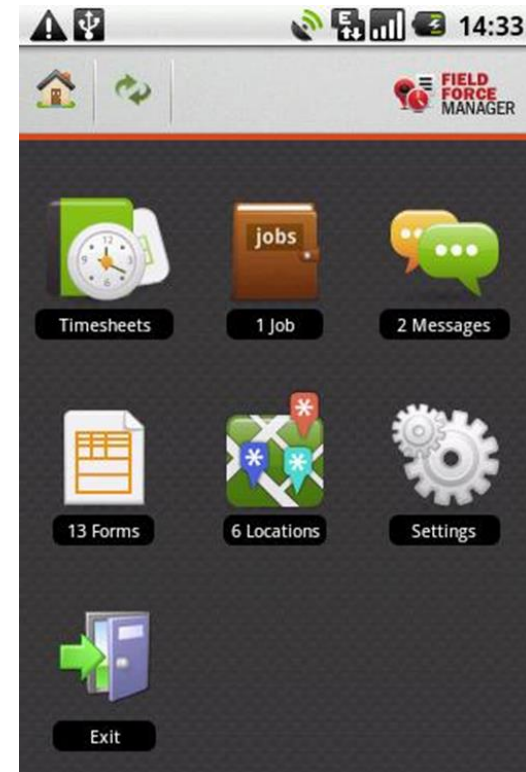
# Key Business Triggers affecting Information Architecture Evolution



# SAIDI (system average interruption duration index)

Using Mobile Devices and Fit-for-Purpose Applications to improve efficiency and immediacy by:

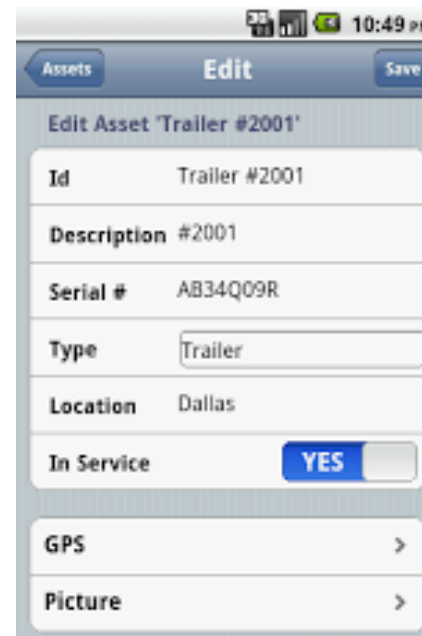
- Work force flexibility, management and boosting productivity
- Fault location, emergency response and trouble shooting resolution
- Dispatching of technicians and Routing
- Field access to mobile documents (Repair manuals etc)
- Customer interaction (Fault reporting etc)
- More effective messaging (communication) between workers, managers and customers
- Reduced vehicle expense



# SAIFI (system average interruption frequency index)

Using Mobile Devices and Fit-for-Purpose Applications to improve agility and purpose by:

- Effective equipment and asset management
- Improved maintenance through Mobile access to documents
- Mobile monitoring of equipment, the environment and raw materials
- Performance and health monitoring and communication between workers and equipment
- More effective communication between workers and decision makers



- Enterprise Mobility demands the availability of data in easily consumable, “byte size” chunks – data services layers
- It also consumes AND generates a massive amount of structured and unstructured data content
- Combining internal and external data sets to create analytical applications
- Data virtualisation MAY help to enable tactical mobile options without disrupting existing architectures

# How do WE evolve Information Architecture?






- Information Architects (IA's) need to **re-establish** their line-of-sight
- Enterprise Architects need to co-opt IA's into creating composite landscapes rich with **information insight**, not just technology
- IA's need to build **Information Maps** of their organisations



- Talented, real people, experts, You, Me, US!
- Two hats – Data & Information Architect
- Access to Information Sources via Data Virtualisation and Catalogues – Release the DARK DATA
- Willingness to ask the “Unstructured Question”
- Passion for our Business!





“A successful man is one who can lay a firm foundation with the bricks that others throw at him.”

— *Sidney Greenberg*

# Thank you

**For more information, please contact:**

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