IBM BusinessConnect
Realize the art of the possible.

From BIG data to FOCUSED data

KPMG Advisory – Management consulting
21/11/2013

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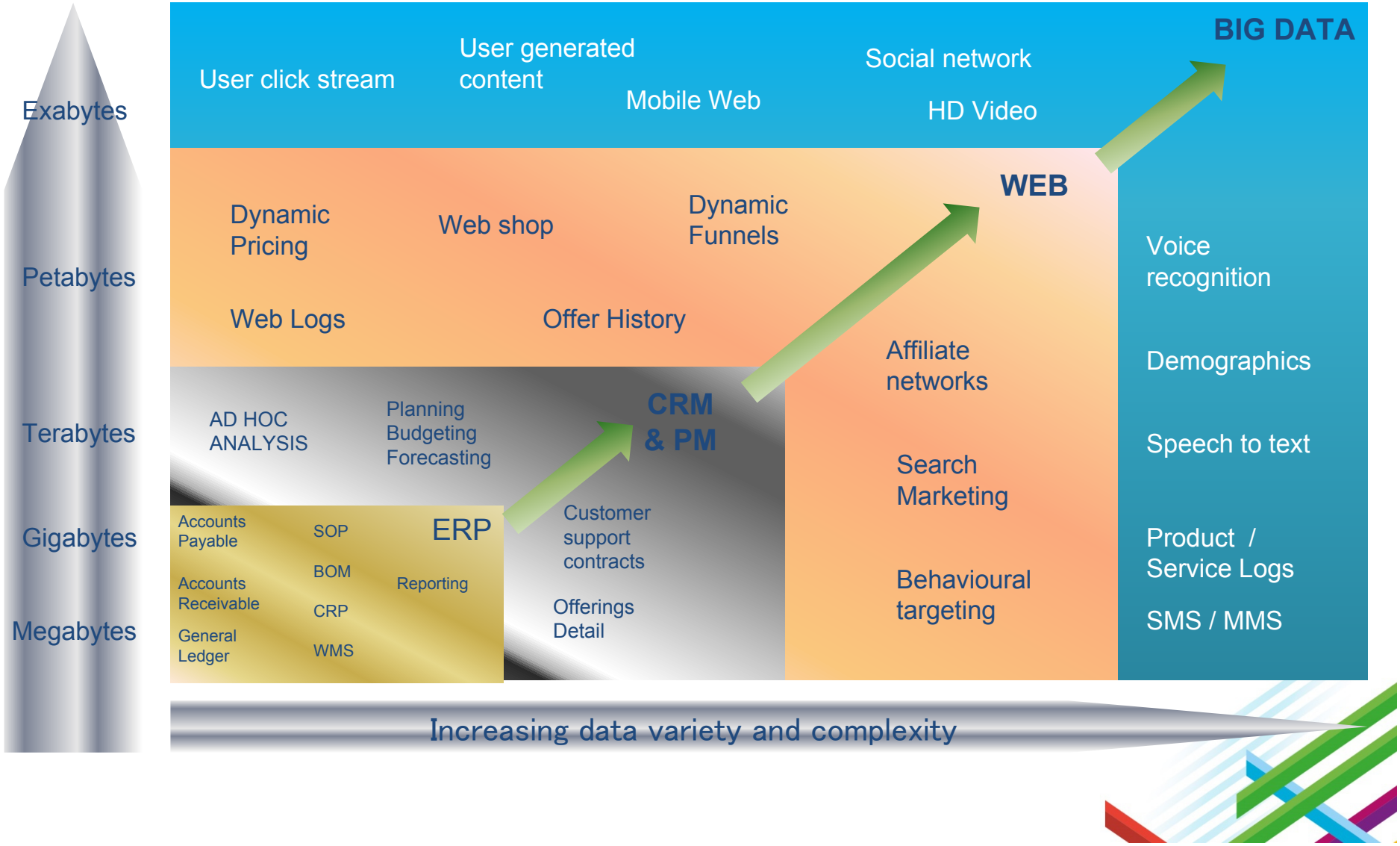
Agenda : FROM BIG DATA TO FOCUSED DATA

- Introduction
- KPMG Survey & Results
- What's in for the CFO offices ?
- KPMG workshop framework & benefits

cutting through complexity™

FROM BIG DATA TO FOCUSED DATA

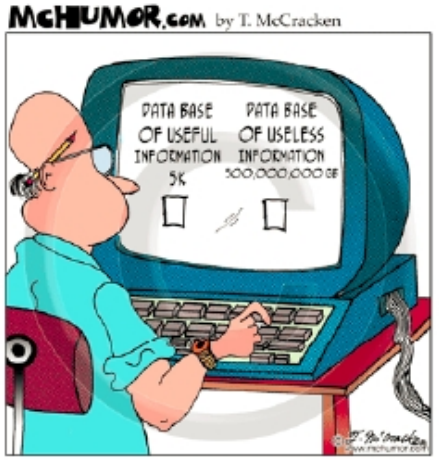
From Big data to focused data
Unlock unknown value from " sparse " data



Why sudden increased interest ?

Technology increasing the number and variety of data sources that generates large quantities of data

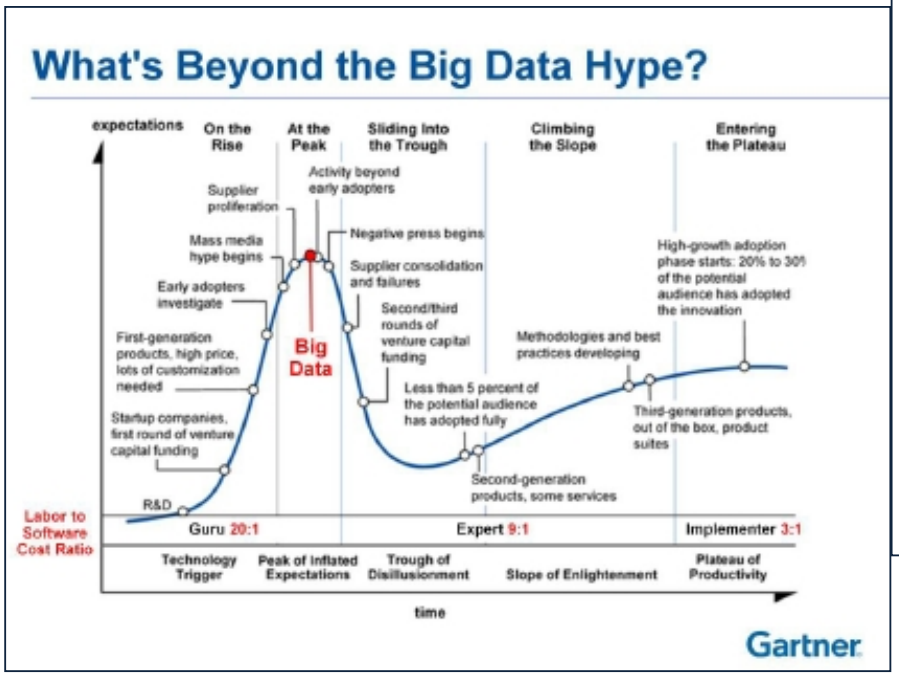
- *Web 2.0 (Twitter , Facebook , Blogs)*
- *Sensors (Location , GPS , RFID , ..)*
- *Mobile devices*
- *Detailed transaction recording*

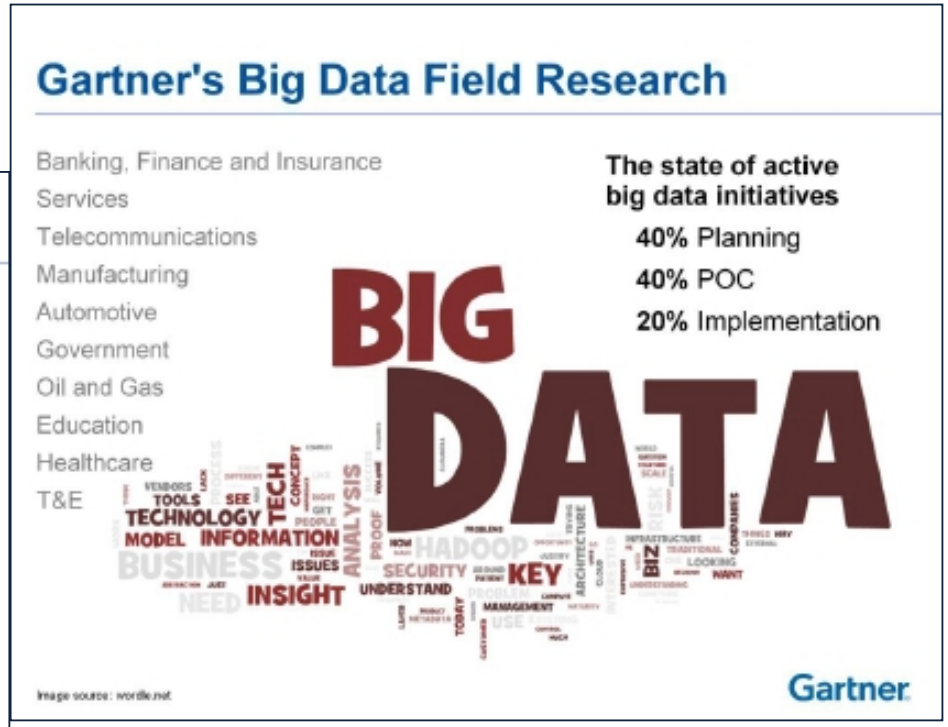


Dramatic decline in cost of hardware , especially storage

Realization that analysis of internal and external data drives the business

FROM BIG DATA TO FOCUSED DATA
Where are we , who is ready ?





FROM BIG DATA TO FOCUSED DATA
Where are we , who is ready ?

- Many chief financial officers say big-data technologies—which use high-performance computing to organize and analyze impossibly large volumes of information—would make their jobs more complicated and might not be worth the extra cost. They say their existing tools, mainly sophisticated financial dashboards that can crunch an organization's numbers in real time, are adequate for their financial-planning needs.

- But experts say the CFOs who haven't embraced big data are missing out on opportunities to speed up and improve some of their more difficult and time-consuming tasks. With the power of massive data sets and advanced analytics, they say, financial executives could better anticipate customer and supplier demand, predict sales and profits under hundreds of different scenarios, detect fraud and drastically cut the time it takes to close the books at the end of each quarter.

FORESTER RESEARCH

FROM BIG DATA TO FOCUSED DATA
What is necessary ?

Fully exploiting data and analytics requires three mutually supportive capabilities.

Ability to identify, combine, and manage multiple sources of data.

Capability to build advanced-analytics models for predicting and optimizing outcomes.

Courage and muscle to transform the organization so that the data and models actually yield better decisions.

Two important features underpin those competencies: a clear strategy for how to use data and analytics to compete and the deployment of the right technology architecture and capabilities.

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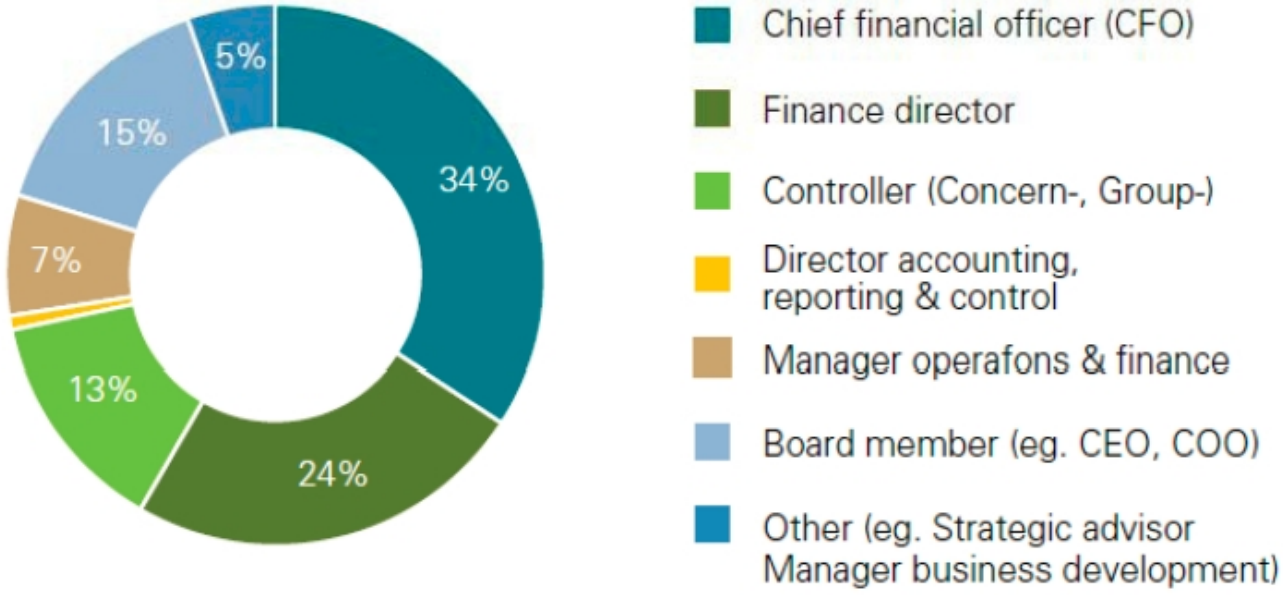
KPMG Big Data & Analytics Survey 2013

- **In April 2013, KPMG Advisory conducted a survey involving the finance departments of 170 Dutch companies. Main objective was to find out how financial experts perceive Big Data & Analytics in terms of the potential to gain insights from large amounts of data.**

Figure 1
Function within the company of respondents



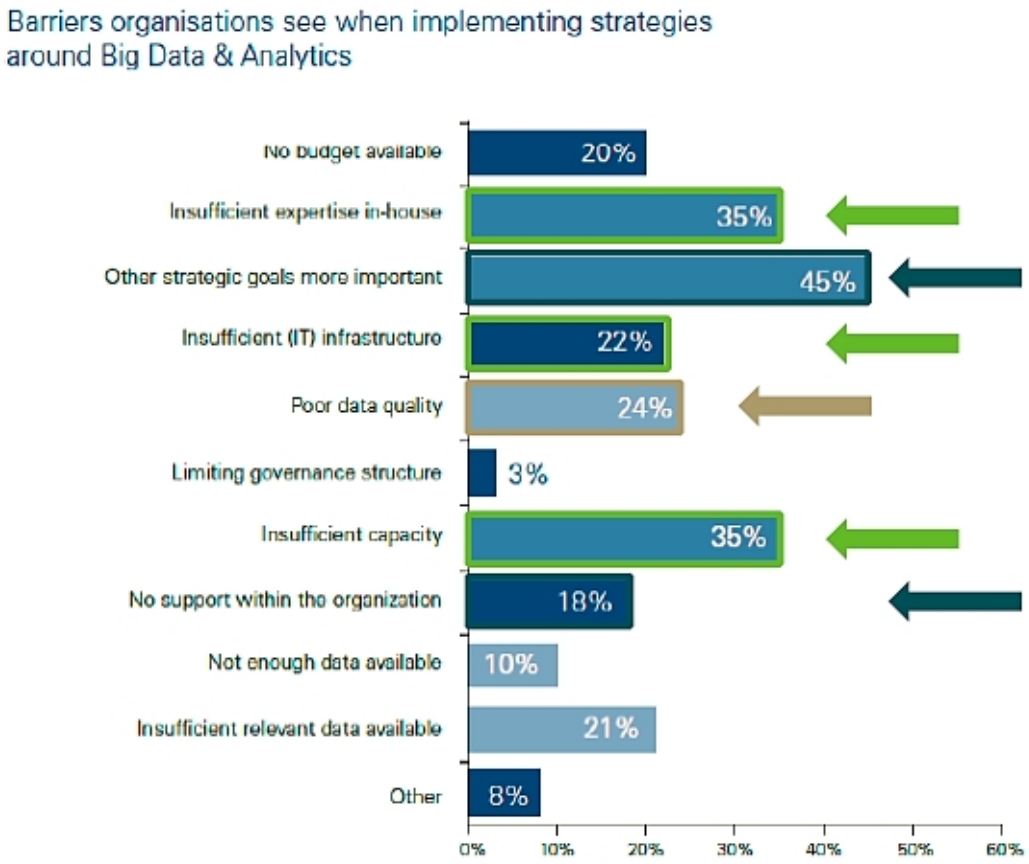
FROM BIG DATA TO FOCUSED DATA
Key Findings Big Data & Analytics KPMG Survey 2013

- CFOs have the ambition of playing a central role in setting up and maintaining Big Data & Analytics' strategies. In their vision, the finance function – not the IT department – should be taking the lead in this field
- CFOs believe in Big Data & Analytics' potential to gain competitive advantage – both in business terms as well as in creating a finance function that is fit for future purposes. CFOs also acknowledge however, that they do not have the proper knowledge and competencies at their disposal to achieve this.
- More than one third of the respondents currently do not believe that they have the right capabilities in-house to analyze Big Data & Analytics.
- Surprisingly, CFOs hardly see any role for Big Data & Analytics in connecting the data of their own organization with external sources, thereby missing the profound changes Big Data & Analytics

FROM BIG DATA TO FOCUSED DATA
Key Findings Big Data & Analytics KPMG Survey 2013

- 53% of the respondents perceive Big Data & Analytics as mainly being the responsibility of the finance function. Furthermore, 69% of respondents see a connection with the IT department as a technical facilitator of Big Data & Analytics, indicating the necessity of close collaboration between both departments.
- Placing Big Data & Analytics in the finance domain is in line with the trend to transform finance functions from scorekeepers to value creators.
- 82% of the respondents believe that Big Data & Analytics will result in more valuable business insights.
- Respondents indicate that the need for business insights has risen much faster than finance departments' ability to produce them. Big Data & Analytics can provide a tremendous boost in this respect:
  - *Reporting will increasingly be aligned with business strategy;*
  - *Value drivers within the organization will be measured more accurately;*
  - *Management focus will be on the issues that really matter;*
  - *Decision-making can be based on actual information instead of past performances.*

FROM BIG DATA TO FOCUSED DATA
Barriers



From Big Data to focused data

How Target Knew a High School Girl Was Pregnant Before Her Parents Did

In Charles Duhigg's piece for the New York Times, a father finds himself in the uncomfortable position of having to apologize to a Target employee.

Earlier he had stormed into a store near Minneapolis and complained to the manager that his daughter was receiving coupons for cribs and baby clothes in the mail.

Turns out Target knew his daughter better than he did. She really was pregnant.

Go Figure

You know more about your customers than ever before. But how much of your data is actually helping your bottom line?

"Facebook, Twitter and the like are creating enormous amounts of information – infinitely more market and brand research than you could ever possibly need.

But there are much more possibilities for Big Data analytics. For example, by analysing Tesco's six million transactions a day, a comprehensive picture can be build of the preferences of customers and their shopping habits.

Source: KPMG Consumer Currents, issue 13 – Jan 2012

POS systems, ERP systems, online portals and external market reports are providing businesses with tons of data.

But how much of this data is actually helping your bottom line?

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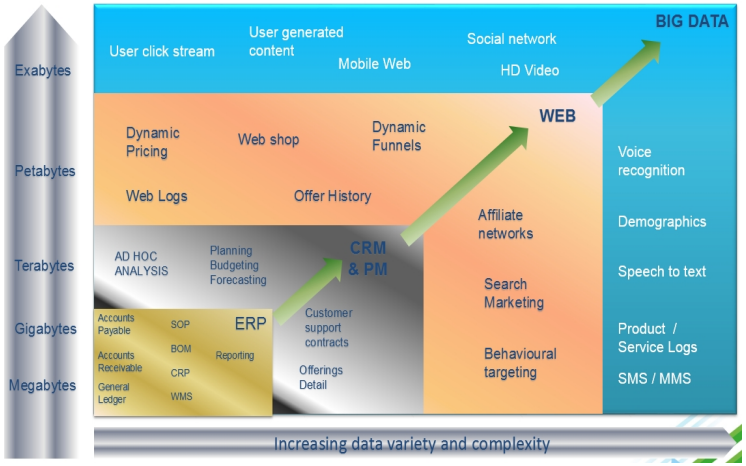
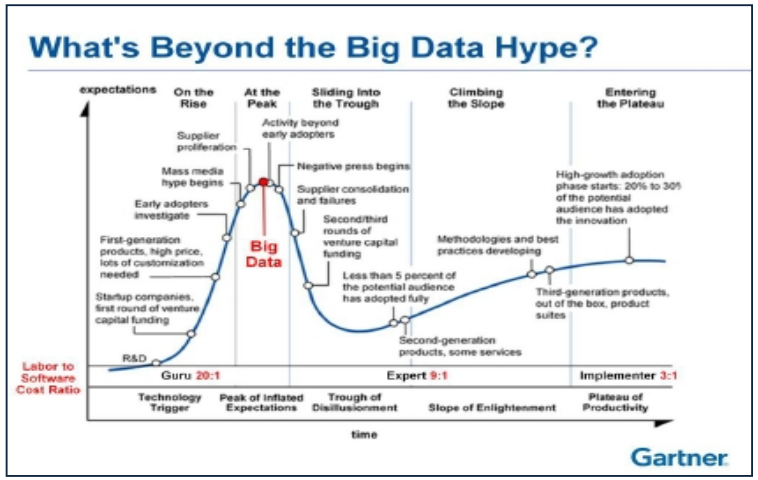
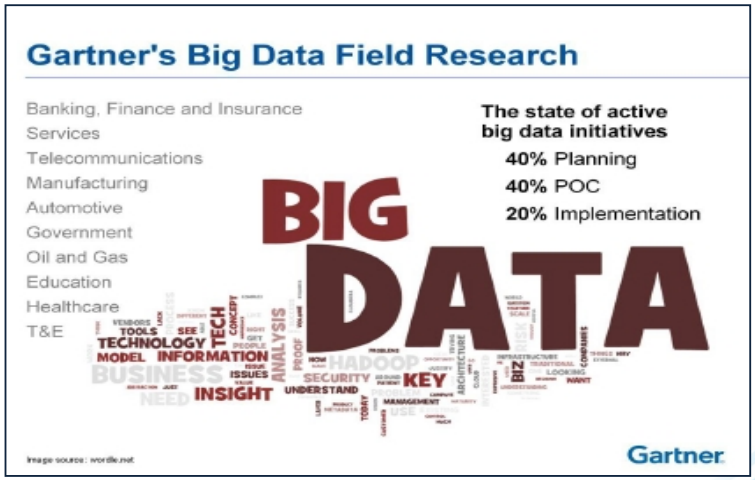
FROM BIG DATA TO FOCUSED DATA
Focus areas at the CFO office...

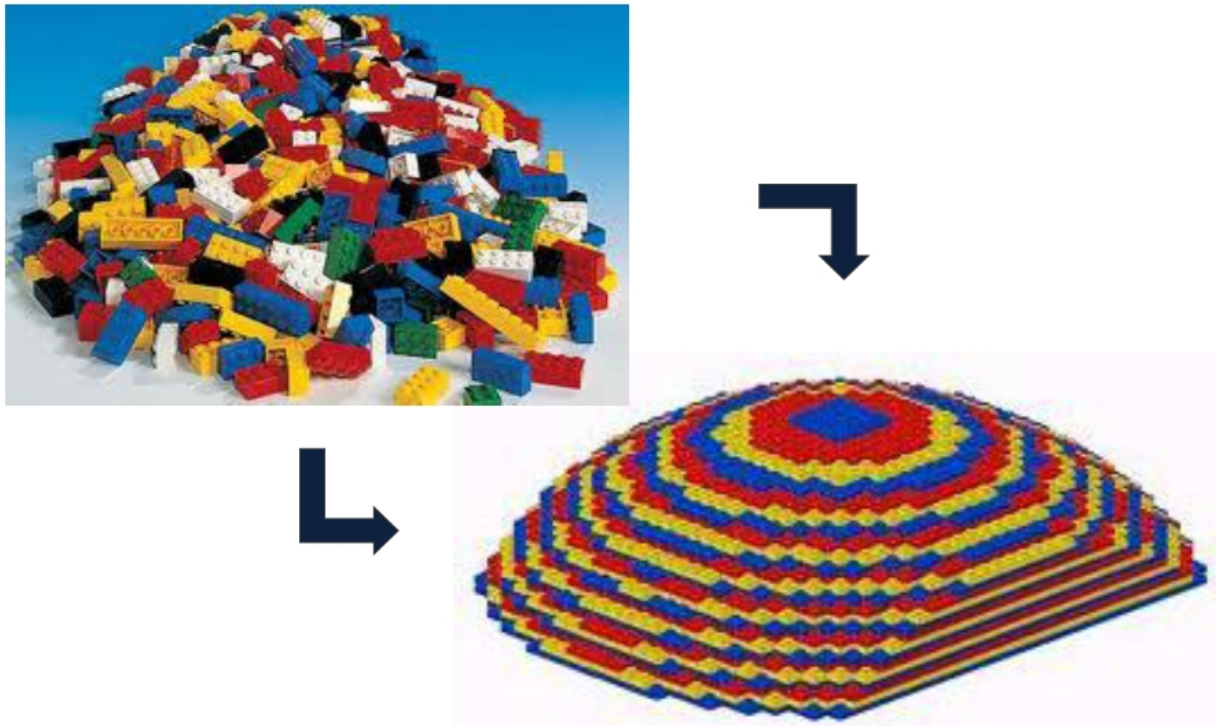






FROM BIG DATA TO FOCUSED DATA
Focus areas at the CFO office...

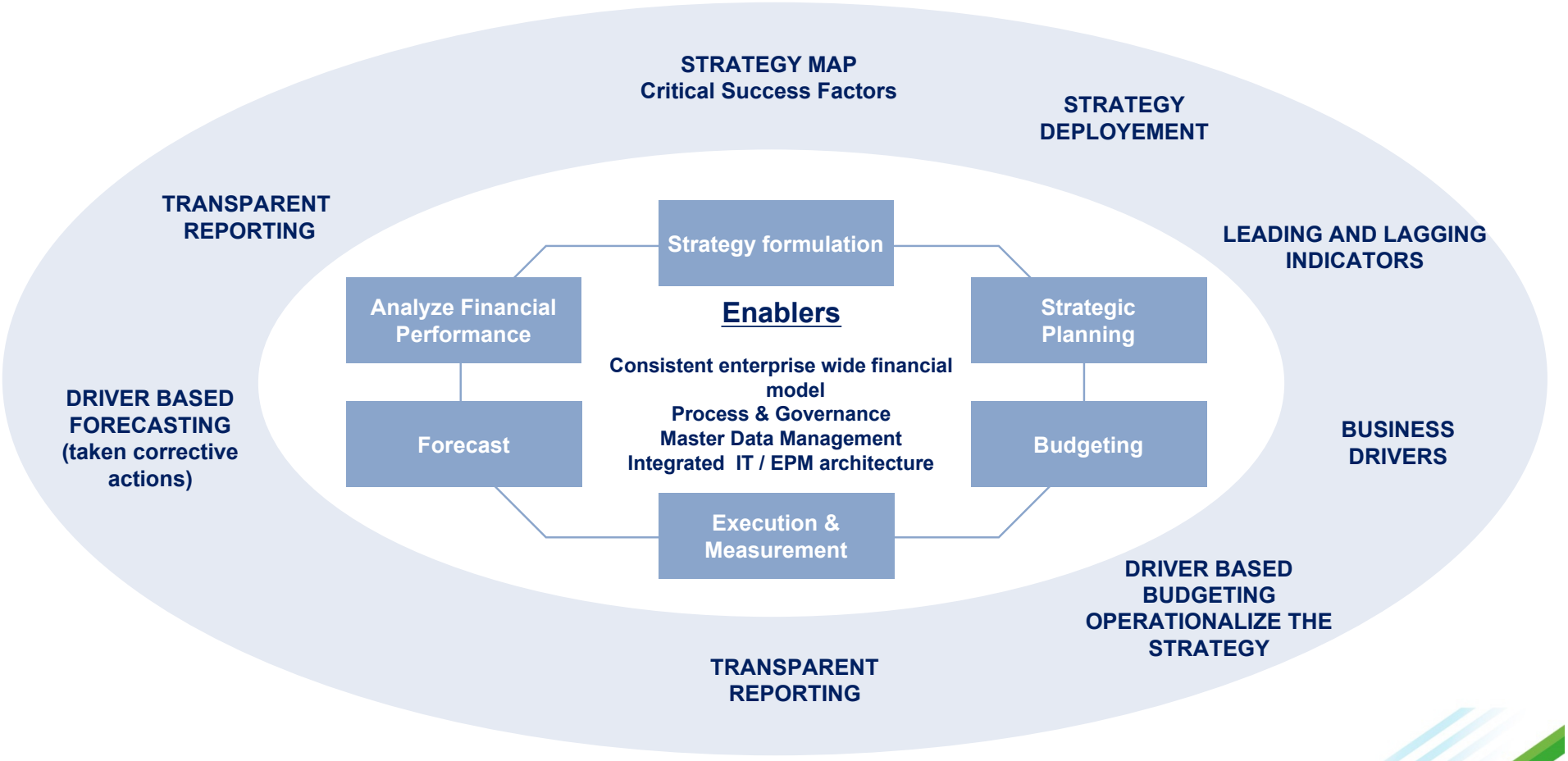
But before the CFO really can get value out of BIG DATA, order among structured data has to be stablished...



FROM BIG DATA TO FOCUSED DATA
Focus areas at the CFO office...

- CFOs want to understand the drivers behind the financial figures
- CFOs need data on business key indicators from ERP & GL & CRM , ...
- CFOs need reliable data to produce reliable forecast and budgets
- CFOs want to eliminate the huge manual effort involved in gathering and checking aggregated data sets...
- CFOs want to take faster decisions... - based on fast executable dashboards/reports
- CFOs want to predict future income/costs with higher degree of reliability...
- CFOs want to have one “source” to be used for all management reporting/analytics/BI!
- CFOs want to do multidimensional analytics with full traceability to the General Ledger!

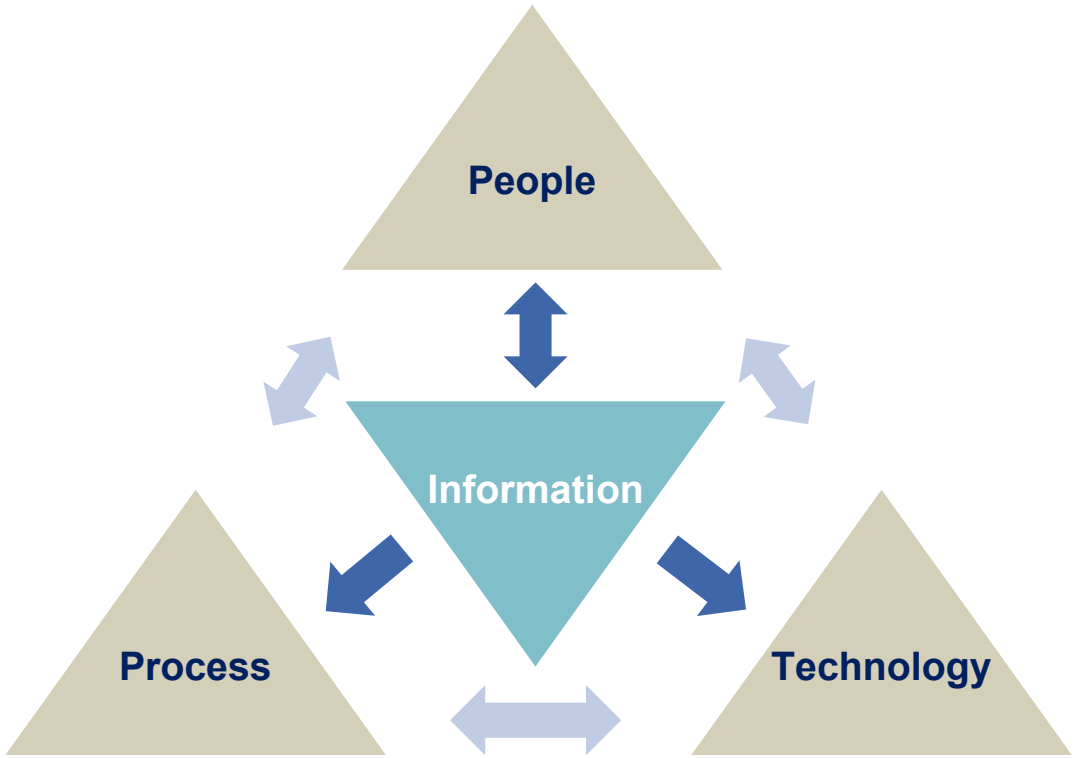
FROM BIG DATA TO FOCUSED DATA
An “Integrated Approach for Enterprise Performance Management”



FROM BIG DATA TO FOCUSED DATA
EPM Key Dimensions

Information driven operating model

Align and optimise the business processes and technology components to deliver the information required to manage the business



FROM BIG DATA TO FOCUSED DATA
These are “still” the issues you are confronted with...

Our **closing** / **budgeting process** should be shortened and our forecasts need to be more reliable

We need to understand what role we play in **managing performance**

We should reduce the number of **Excel® sheets** in use, which have to be filled manually”

We need to understand what drives performance and we need to **measure what matters**

FROM BIG DATA TO FOCUSED DATA
Focus area of the CFO office ...

FROM BIG DATA TO FOCUSED DATA
Strategic Planning , Budgeting , Forecast , Reporting

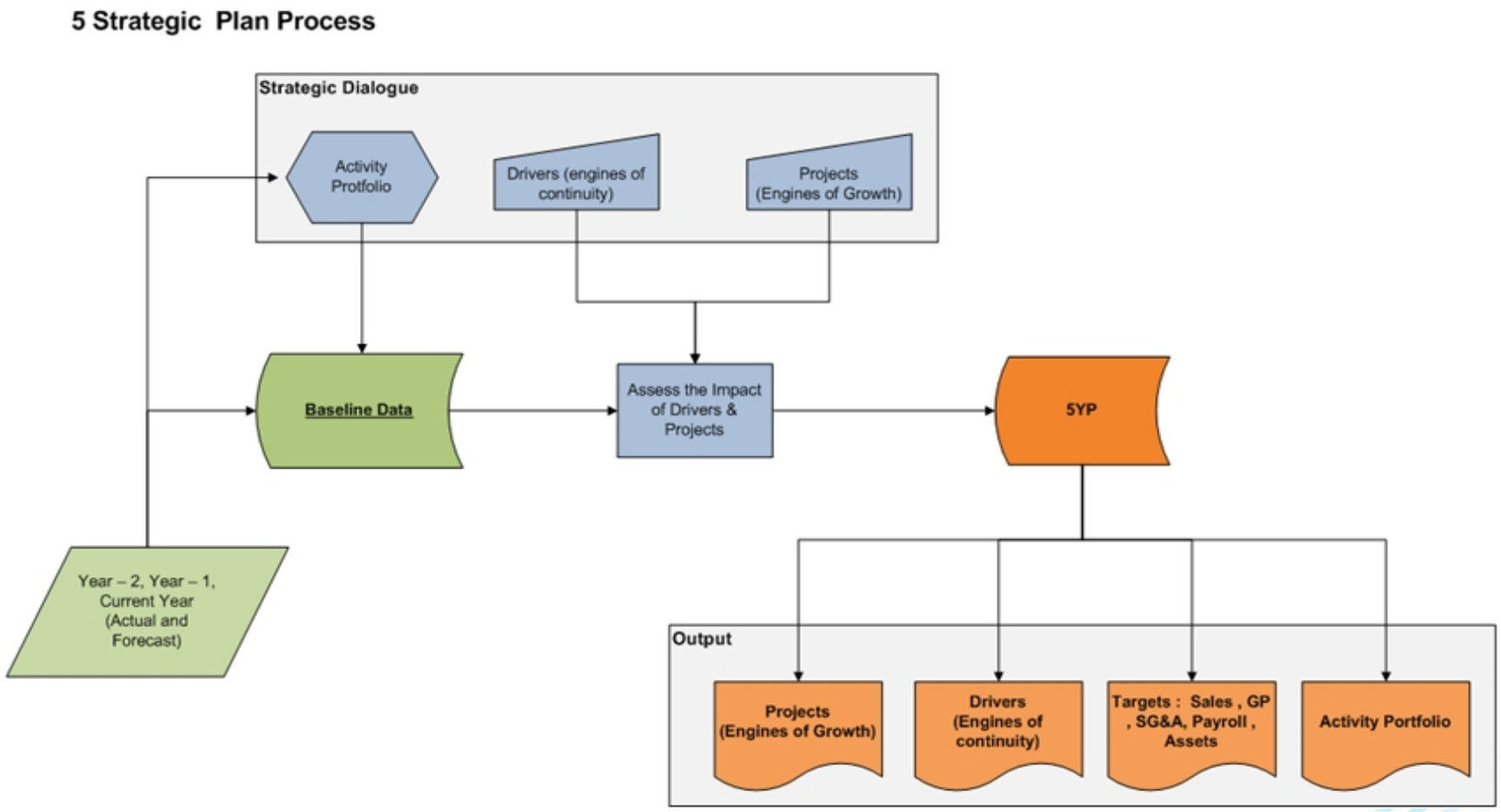
	BELGIUM Combined	Actual 2009 EUR	% of sales	Budget 2010 EUR	% of sales	Forecast III 2010 EUR	% of sales	Budget 2011 EUR	% of sales	3 Year Plan 2012 EUR	% of sales	3 Year Plan 2013 EUR	% of sales
LEVEL 1	Income Stat.												
30110000	Sales* (+)	4 619 319 848	100,00	4 796 210 823	100,00								
30140000	Other revenue (+)	6 631 083	0,14	4 867 397	0,10								
30300000COS	Cost of sales (-)	-3 707 291 341	-80,26	-3 837 696 446	-80,02								
3030000LCO	Intercompany Eliminations	6 819 760	0,15	- 400 000	-0,01								
	Gross profit	**925 479 349**	**20,03**	**962 981 775**	**20,08**								
30200000	Other opera. inc. (+)	36 100 137	0,78	38 091 986	0,79								
30300000SGA	Sell. Gen. Adm. Exp (-)	- 759 003 942	-16,43	- 771 757 962	-16,09								
30500000	Transfer pricing (-)	- 13 419 642	-0,29	- 16 617 460	-0,35								
30400000	Other opera. Exp. (-)	- 1 830 318	-0,04	- 71 855	0,00								
30600000	Impairment charges (-)	- 3 479 095	-0,08										
3030000LSG	Intercompany Eliminations	656 410	0,01	400 000	0,01								
	Profit from operations	**184 502 899**	**3,99**	**213 026 483**	**4,44**								
31200000	Finance costs (-)	- 15 545 166	-0,34	- 16 669 196	-0,35								
31100000	Income fr. Inv. (+)	13 636 868	0,30	4 385 656	0,09								
31300000	Income fr. Inv. Eq.M.												
3120000L	Intercompany Eliminations	1	0,00										
	Profit before tax	**182 594 601**	**3,95**	**200 742 943**	**4,19**								
33000000	Income tax expense (-)	- 60 692 384	-1,31	- 69 605 320	-1,45								
	N P before disc. oper.	**121 902 217**	**2,64**	**131 137 623**	**2,73**								
35000000	Discontinued operations	8 420 581	0,18										
	N P of the year	**130 322 798**	**2,82**	**131 137 623**	**2,73**								

BELGIUM Combined

FROM BIG DATA TO FOCUSED DATA
Planning types

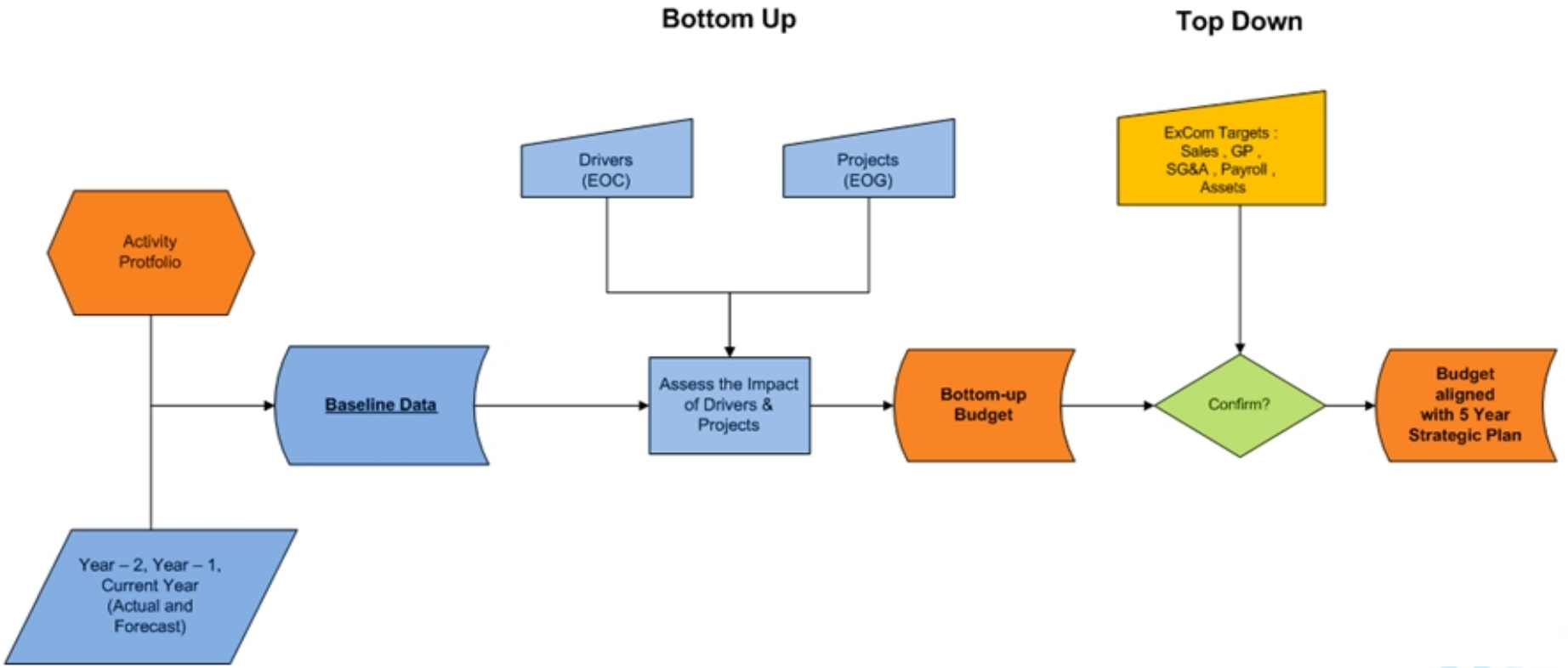
Planning Types	Granularity	Purpose	Horizon
Strategic Plan	Low	Long-range financial objectives	Long Term (3 to 5 years)
Budget	Medium to High	Tactical execution of the first year of the strategic plan	Short Term (1 year)
Forecast	Low to Medium	Adjusting short-term strategies and tactics	Short Term (running year)
Production Plan	High	Day-to-Day financial controls	Short Term (e.g. weekly)

FROM BIG DATA TO FOCUSED DATA
Process: from Strategy to Execution → Strategy

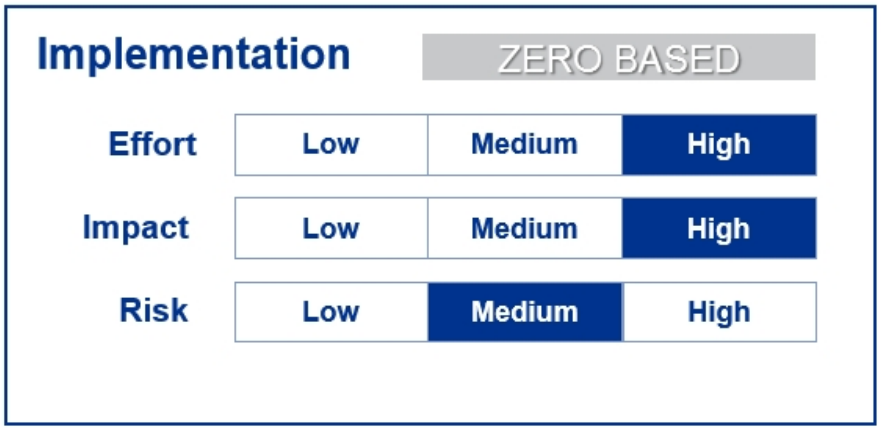


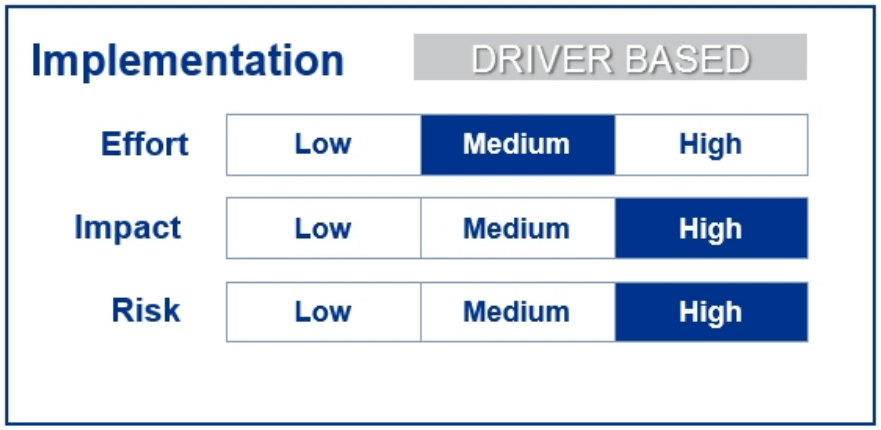
FROM BIG DATA TO FOCUSED DATA
Process: from Strategy to Execution → Execution

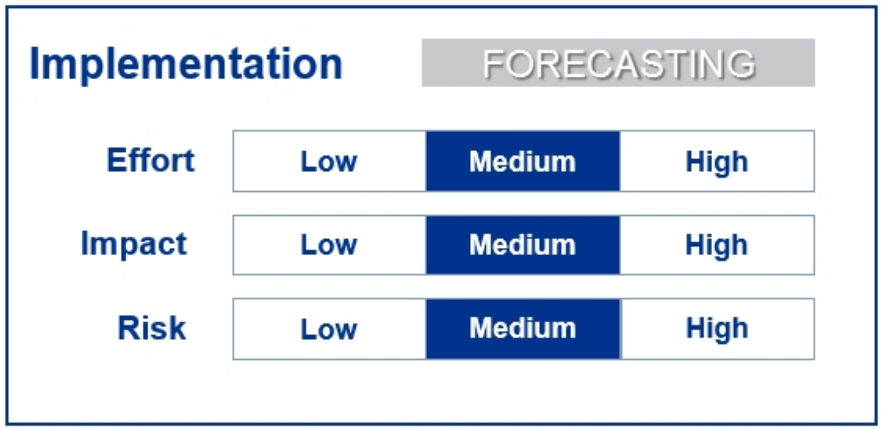
First year strategic plan translated in monthly Budget

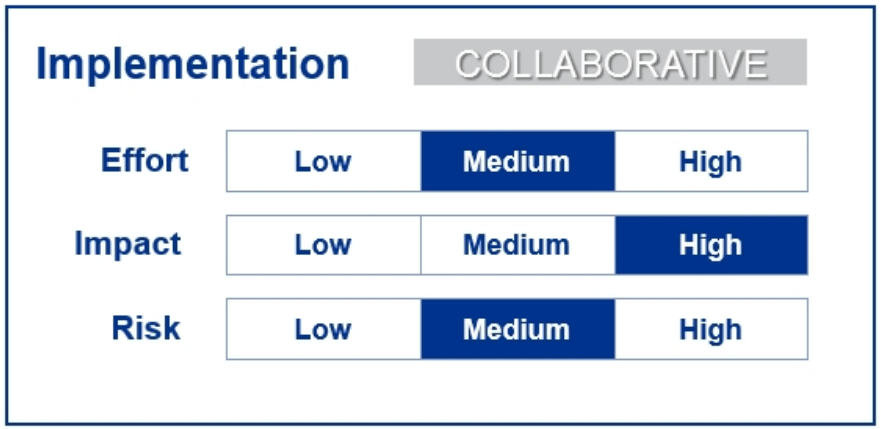


FROM BIG DATA TO FOCUSED DATA
Budgeting Methods

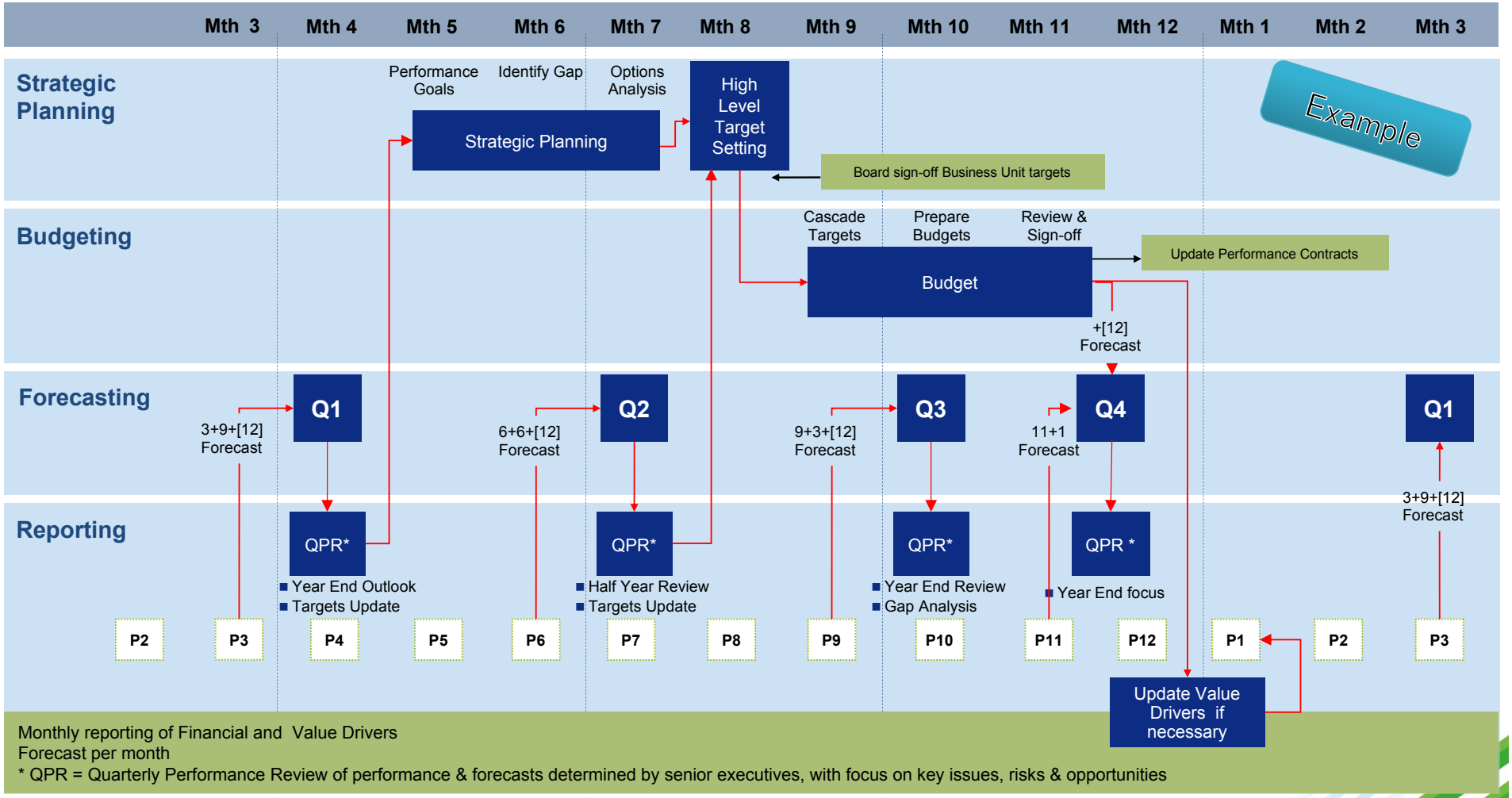








FROM BIG DATA TO FOCUSED DATA
Integrated Planning Calendar



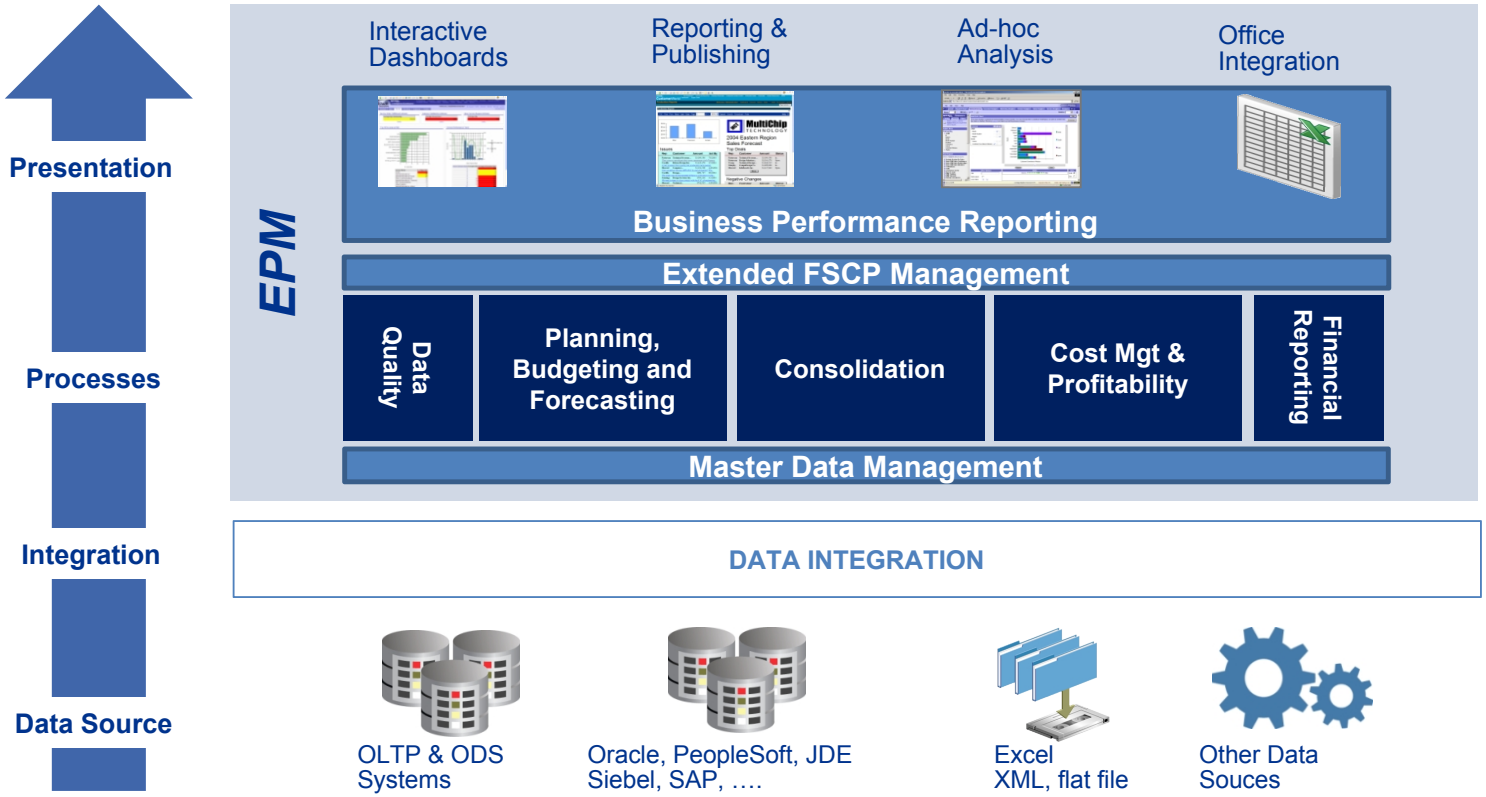
FROM BIG DATA TO FOCUSED DATA
Roles & Responsibilities → RACI

		Ex Board	Group CEO	Group CFO	Head of Finance	Corp Finance - Strategy	Group Finance (FPA)	Bus Unit CEO	Bus Unit CFO	Bus Unit FC	Bus Unit Strategy Manager	Invest Reln	Group Econ
1.1	Input Business Unit perspective				I	C		C	A	C	R	C	
1.2	Conduct external analysis		C	C	A	R	C	C	C		C	C	
1.3	Determine performance goals	I	C	C	A	R	C					C	C
2.1	Input performance update data					I	C	C	A	R			
2.2	Identify performance gap	I	I	C	A	R	C		C				
3.1	Identify opportunities				I	C		A	R	R	R		
3.2	Conduct options analysis	I	I	A	C	R	C	C	C		C		C
4.1	Input parameters				A	C			C				R
4.2	Set Targets	I	C	A	R	R	C	R	R	I	C	I	
5.1	Cascade and review of Targets		C	C	A	R		C	R	I	C		
5.2	Update Group Targets for each of next 5 years	I			A	R	I						
5.3	Final review and sign-off	A	C	R	I	I		I				I	

Example

Key: R = Responsible A = Accountable C = Consulted I =Informed

FROM BIG DATA TO FOCUSED DATA :
An integrated BI & EPM platform provides the foundation for an Enterprise wide Information Model and leading edge practice



EPM is an integral part of the financial systems landscape architecture making use of a BI framework

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FROM BIG DATA TO FOCUSED DATA

When is it vital to question your current Performance Management model?

Do you know which are the real causes for deviations between Actuals / Budget / Forecast

You start doubting on the reported figures

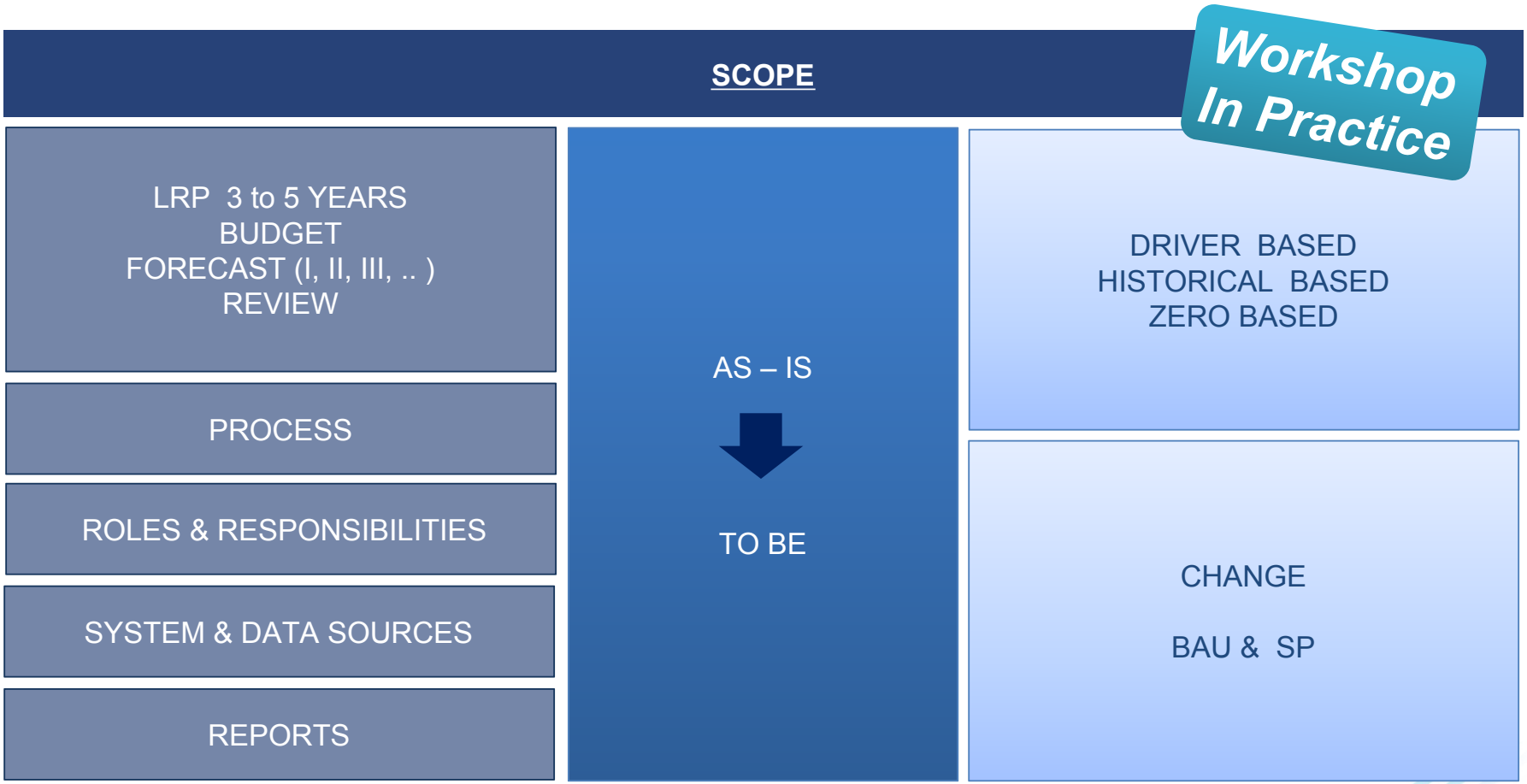
Strategic initiatives are defined but bottom line contribution is invisible

People do not take responsibility

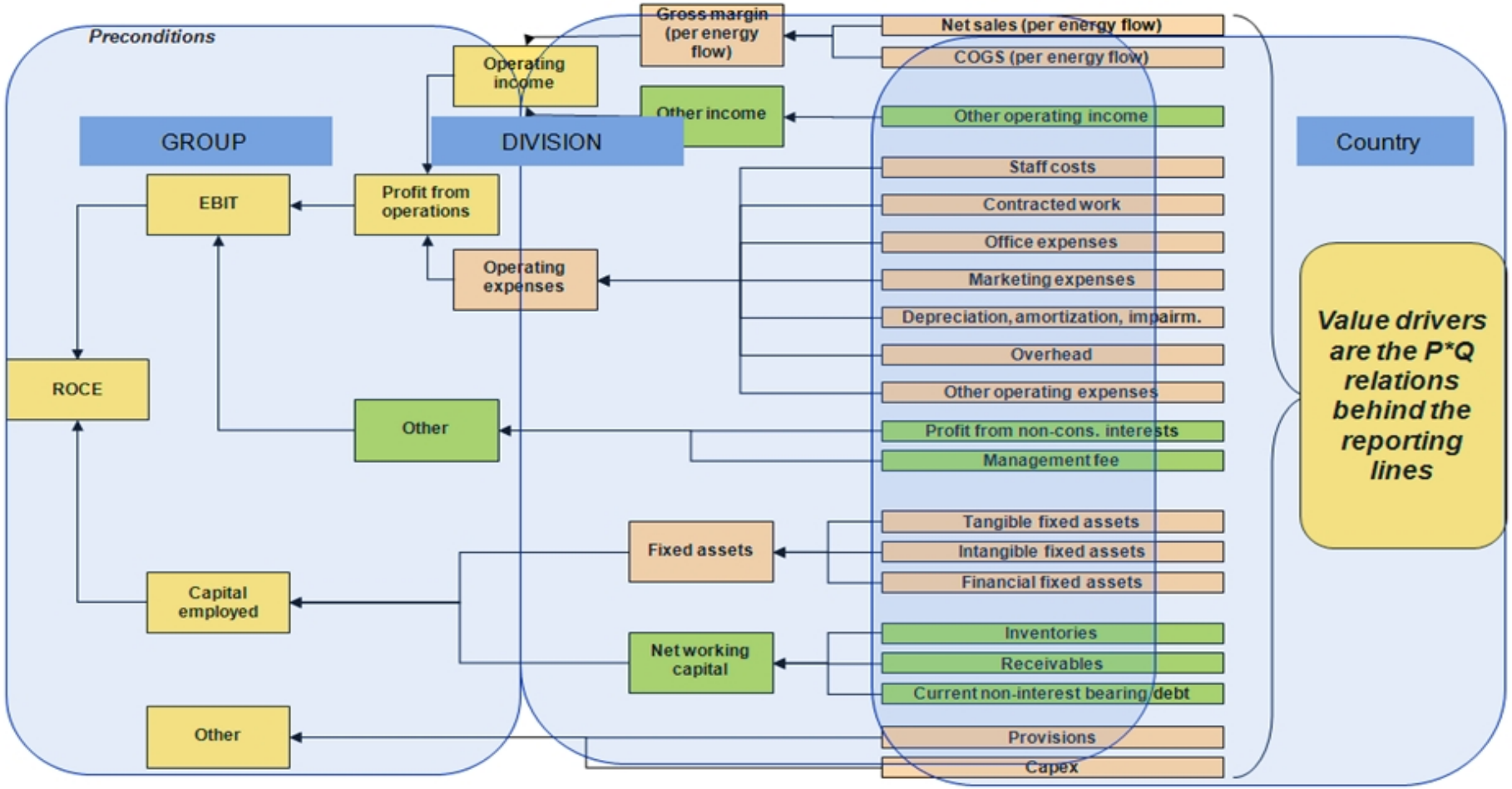
Reporting focused on past events rather then what might happen

The PM process becomes a real burden for your organization

FROM BIG DATA TO FOCUSED DATA
Workshop Framework



FROM BIG DATA TO FOCUSED DATA
Value tree analysis

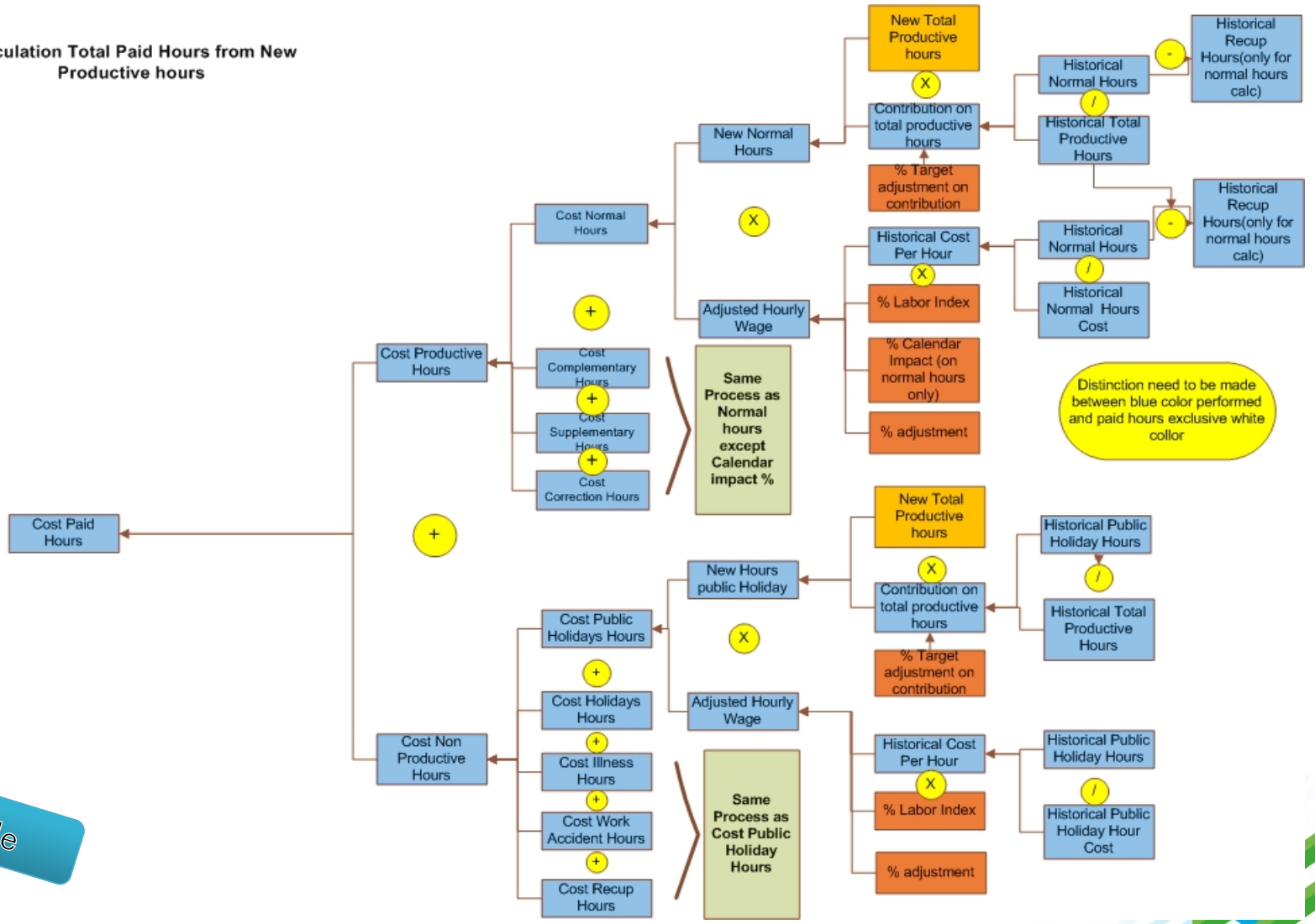


FROM BIG DATA TO FOCUSED DATA
Value tree analysis

1 **Calculation Total Paid Hours from New Productive hours**

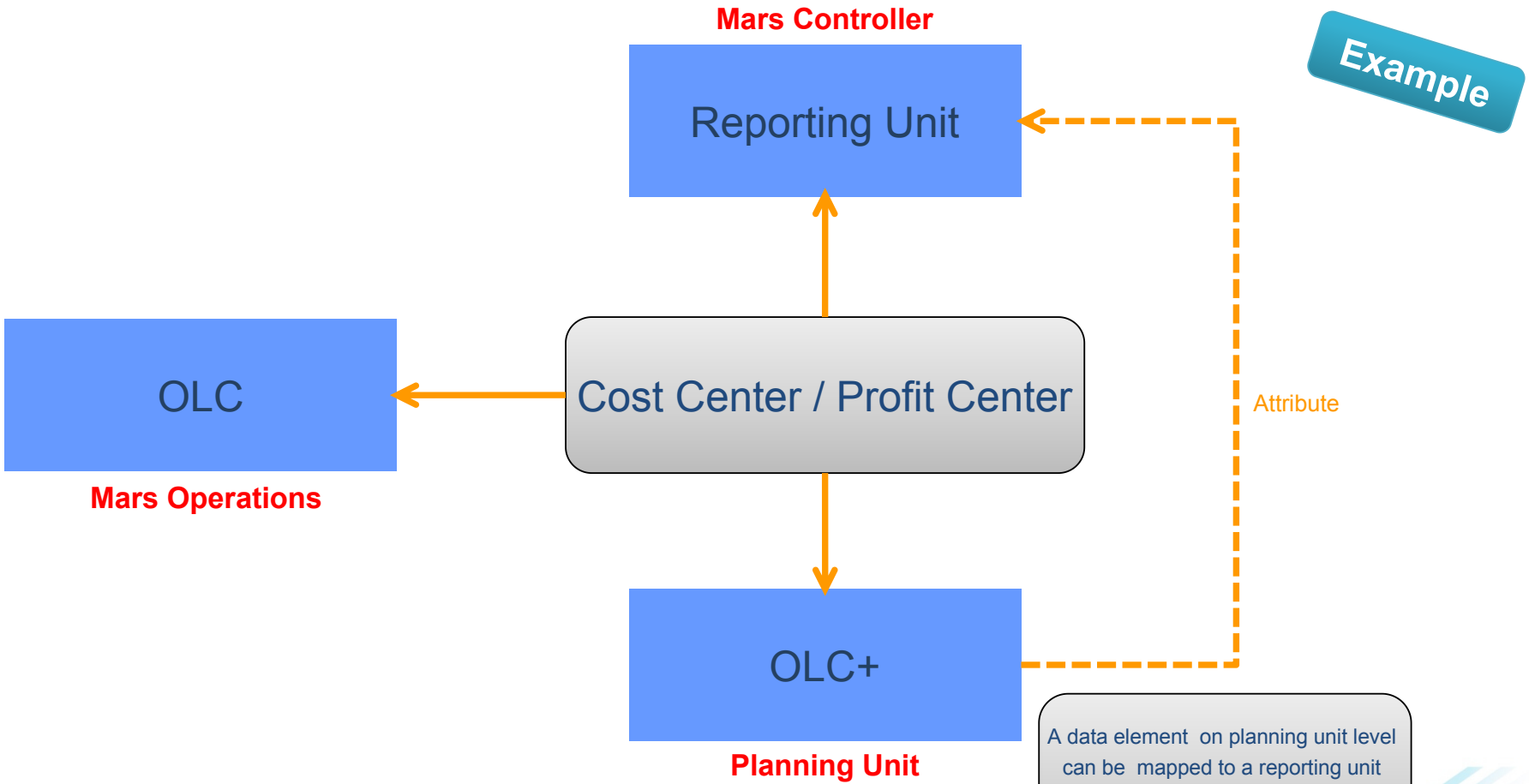
Driver Parameter

Calculated



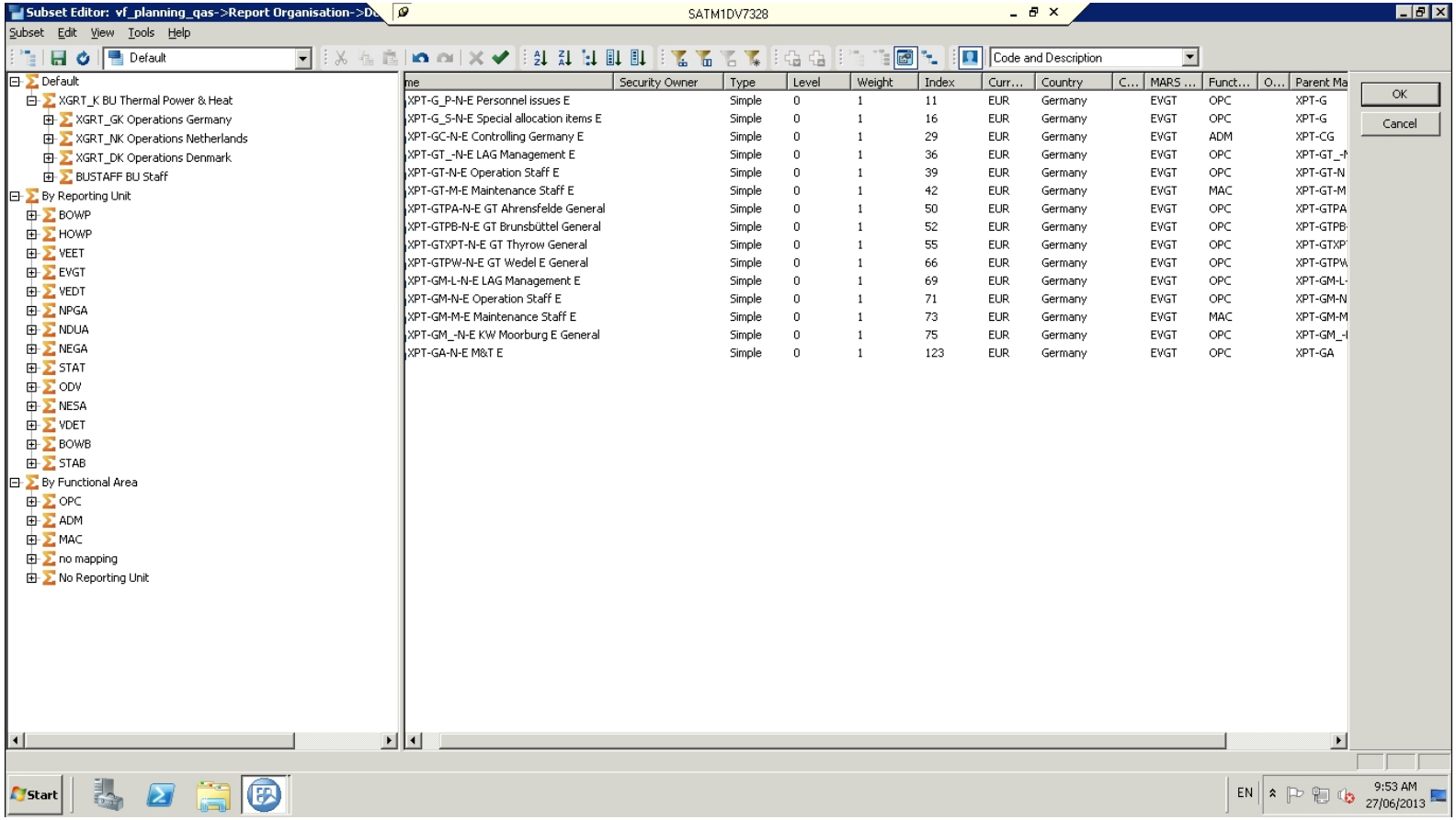
Example

FROM BIG DATA TO FOCUSED DATA
Organization structure impact



FROM BIG DATA TO FOCUSED DATA
Organization structure impact

Example



The functional design determines what type of information characteristics needs to be enabled in the technical design for implementing TM1 Cognos

Functional Design

Value tree - analysis

- Visual representation of budget calculations
- Ready for translation in (SAP) BI tool

Cookbook and reporting calender

- Budgeting calendar
- Applications and sources used
- Timelines
- Assumptions and guidelines

Overview business drivers

Business Driver	Input / Load	Data source	Forecast owner	Unit	Input / Calculation	Materiality	Contribution to forecasting variance
# Customers	L	Datawarehouse	Diretor Legal Entity	#	I	H	H
Input % shipment	I	Datawarehouse	Distribution department	%	C	H	L
# Production hours	L	Excel	Operations manager	#	I	M	H

- Is the data for the business drivers (automatically) loaded or does it require external input?
- Which data sources are used to extract information for the business drivers?
- Who can influence the business driver and is responsible for the performance?
- What is the materiality of the business driver (H/M/L)?
- What is the contribution to forecasting variance of the business driver (H/M/L)?

Technical Design and Implementation

COGNOS AN IBM COMPANY

TM1

Preferred supplier TO-BE

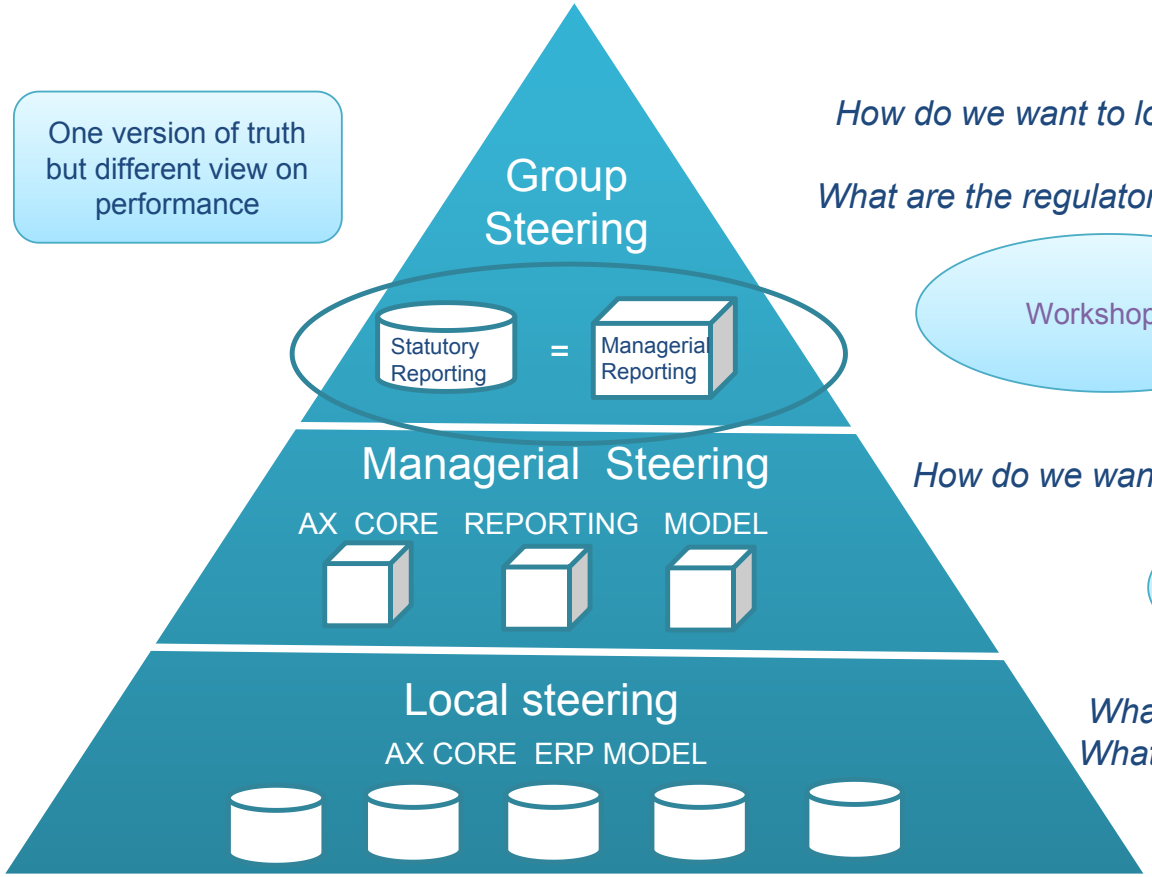
Design:
- Technical Design
- Interface Design
- Infrastructure Design

Implementation:
- Software installation
- Developed application
- User Acceptance Testing (UAT)

FROM BIG DATA TO FOCUSED DATA
Reporting Pyramid

Example

One version of truth but different view on performance



How do we want to look at the reported information ?
+
What are the regulatory obligations we have in reporting

Workshop 2

How do we want to look at the reported information ?

Workshop 2

What information do we want to report on ?
What characteristics do we want by report ?

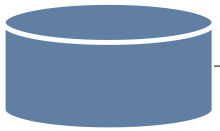
Workshop 1

Reporting landscape : conceptual approach

BI layer includes:
Consolidation reporting
Statutory reporting

BI layer including :
- •Standard reports
- • Dashboards
- • Scorecards
- • Office integration
- • Management reporting framework reports

Example



Consolidation
External reporting

Reporting framework

Analysis

Planning Cube

Focus on managerial reporting

Focus on legal reporting

Central business warehouse

Central version of truth

Non-ERP data
CRM – HR - ...

Core AX non-financial data
Volumes , BOM , ...

Core AX financial data

Bridging landscape : conceptual approach

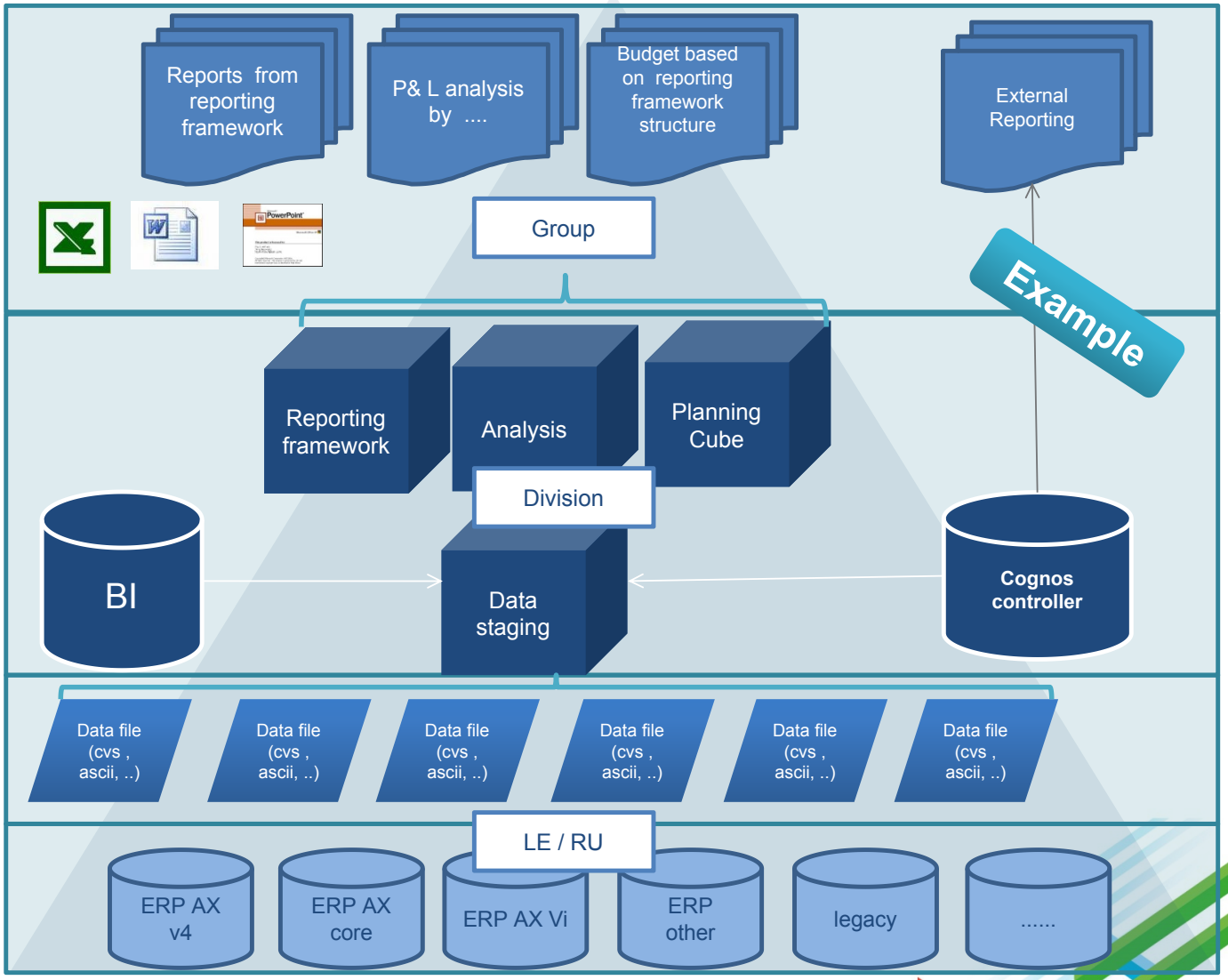
Output from cubes

Structured cubes to generate reports defined in framework , make analysis and prepare budgets and forecasts on same dimensions as reporting

Storage cube for data to be used in reporting framework

Data source files for reporting framework (Cognos MMR could be part of this)

Current ERP and GL application cross country / legal entity



Agenda : FROM BIG DATA TO FOCUSED DATA

- Introduction
- KPMG Survey & Results
- What's in for the CFO offices ?
- KPMG workshop framework & benefits

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FROM BIG DATA TO FOCUSED DATA
Possible benefits & outcomes from driver based planning and reporting

1. Basis for implementation of value driven Performance Management Process

2. Better insight in what is happening – transparant reporting

3. Objective and accurate basis for improved management decisions

Correct focus and insight into what actually drives performance aligned with strategic plan

- *Focus on business drivers that matter*
- *Understand why actuals deviate from budget and take the correct actions*
- *Increase of a accountability and release of empowerment*

Reliable information for decision taking

- *automated process*
- *one version of the truth*
- *experienced based decision taking supported / challenged by data driven decision taking*

Improved Governance

- *Budget / forecast guidelines*

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