CEMEX SSC – Balanced Scorecard in practice

User experience at CEMEX Shared Services building BI prototypes

Nov, 2011

Introduction

CEMEX is among the largest buildings material companies of the world having its European Shared Service Centre located in Budapest

Maturing the centre, it was decided to adobt Balanced Scorecard to measure, manage and improve Cost, Customer, Productivity and People perception

The following presentation is a brief summary on how the existing Cognos environment could be used for a low-cost and quick Balanced Scorecard implementation

- Include end users in building simple models and reports when building prototypes
- Shift focus from data collection to data analysis
- Help to drive management actions and measure progress
- Establish self-running teams
- Eliminate time required to prepare presentation for meetings
- Automate, when design is accepted and practice is embedded

Balanced Scorecard Example at Shared Services

Increase cost efficiency

Cost per Transaction

FTE cost, Overtime ,Training, T&E, overhead

Transaction per FTE

Increase quality, efficiency, reduce rework, labor intensity, innovation

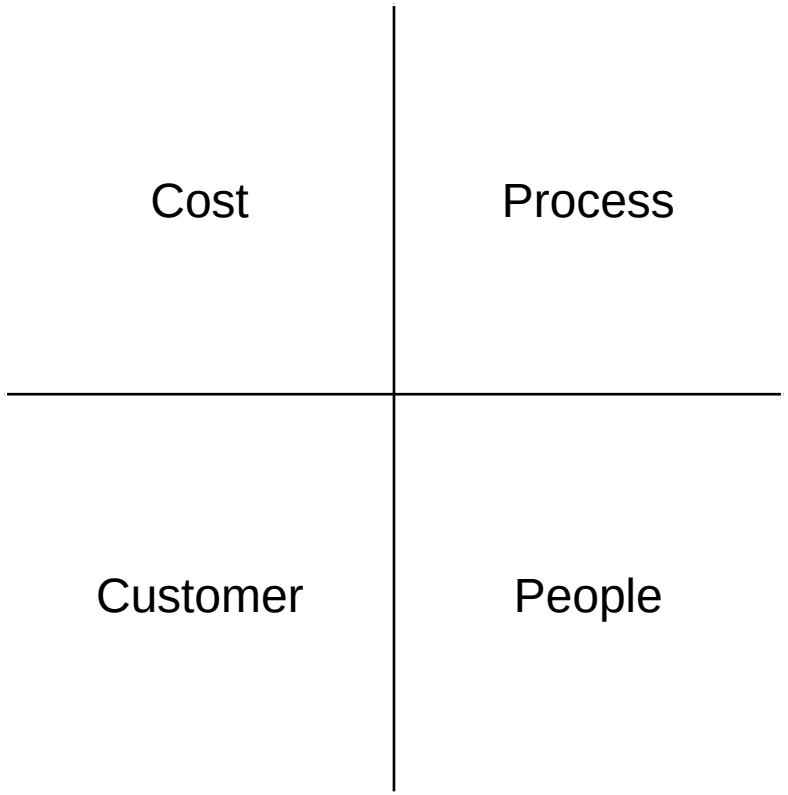
First Time Through (Matched right first time, WF%)

Manual v.s. Automated

Off-Cycle / Exceptions (Direct Payment, etc..)

Timeliness (Payment to Terms,etc..)

%Vendor Self Service, %e-invoicing



Increase Customer perception(time, performance, quality)

Customer satisfaction

Responsiveness

Audit compliance

SOX Compliance

Increase Employee Engagement (retention, motivation, skill developed)

Employee Satisfaction

Capacity index, Turnover %

Innovation Ideas

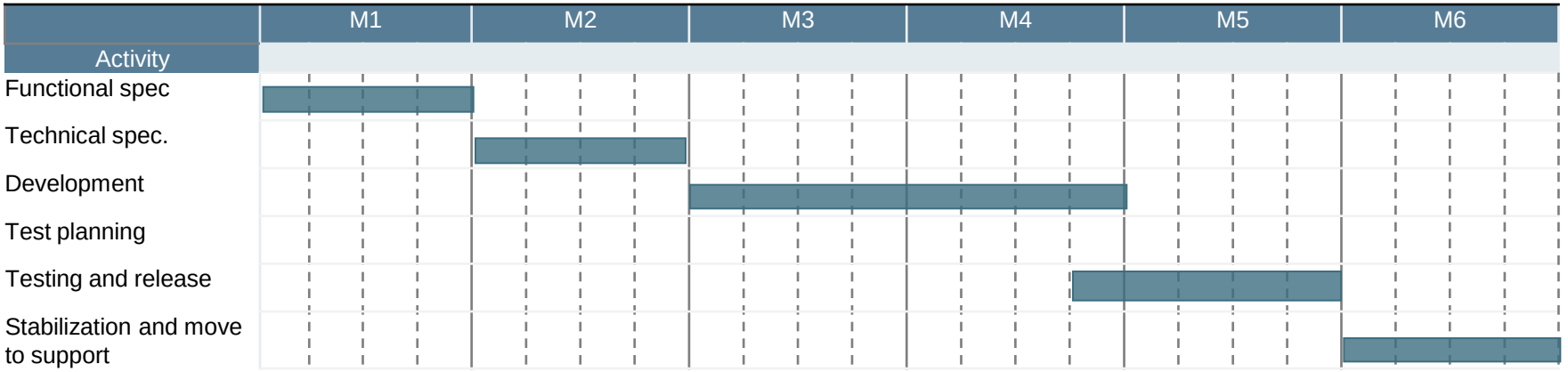
Cross training

Balanced scorecards should be 'Easy to Produce, Easy to Digest'

Creating Balanced Scorecard pilot required a re-think our approach to BI projects, as we wanted to be quick and flexible

Characteristics of regular BI projects

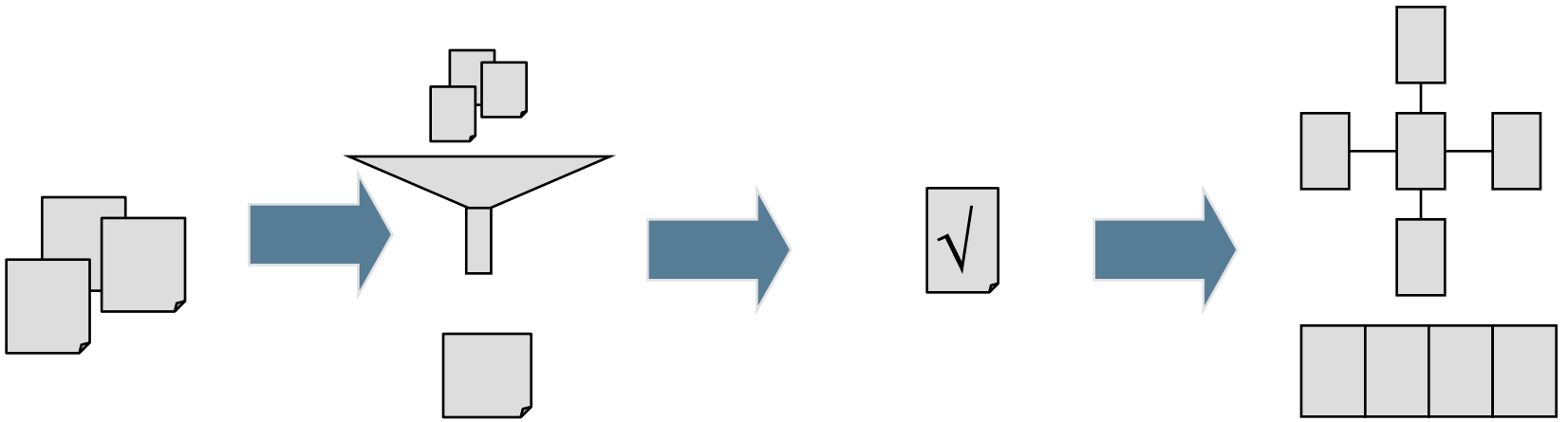
- Functional Specification (data requirements, reporting requirements)
- Technical Specification (database, data extraction, BI model, cubes and reports)
- Development (interfaces, databases, BI Models, cubes and reports)
- Test scenarios
- Testing and release
- Stabilization and move to support



Going through similar implementations helped to gain experience and look at Cognos as a tool similar to Excel

Balance Scorecard was built as a prototype, automation when design is final and practice is embedded

Building on a culture and capacity of using Cognos



KPIs, Reports & formats analyzed

Proposal built based on referential models (CEMEX processes, Published Patterns, Shared Services Best Practices etc.)

Proposal is reviewed and commented by Area Managers within the next days from receiving

A final model with its capture form is created

Our idea was to use our existing Cognos infrastructure on a cost efficient and flexible way before institutionalizing

Simple architecture for the Balanced Scorecard during prototype phase

Using existing Cognos architecture at no extra cost

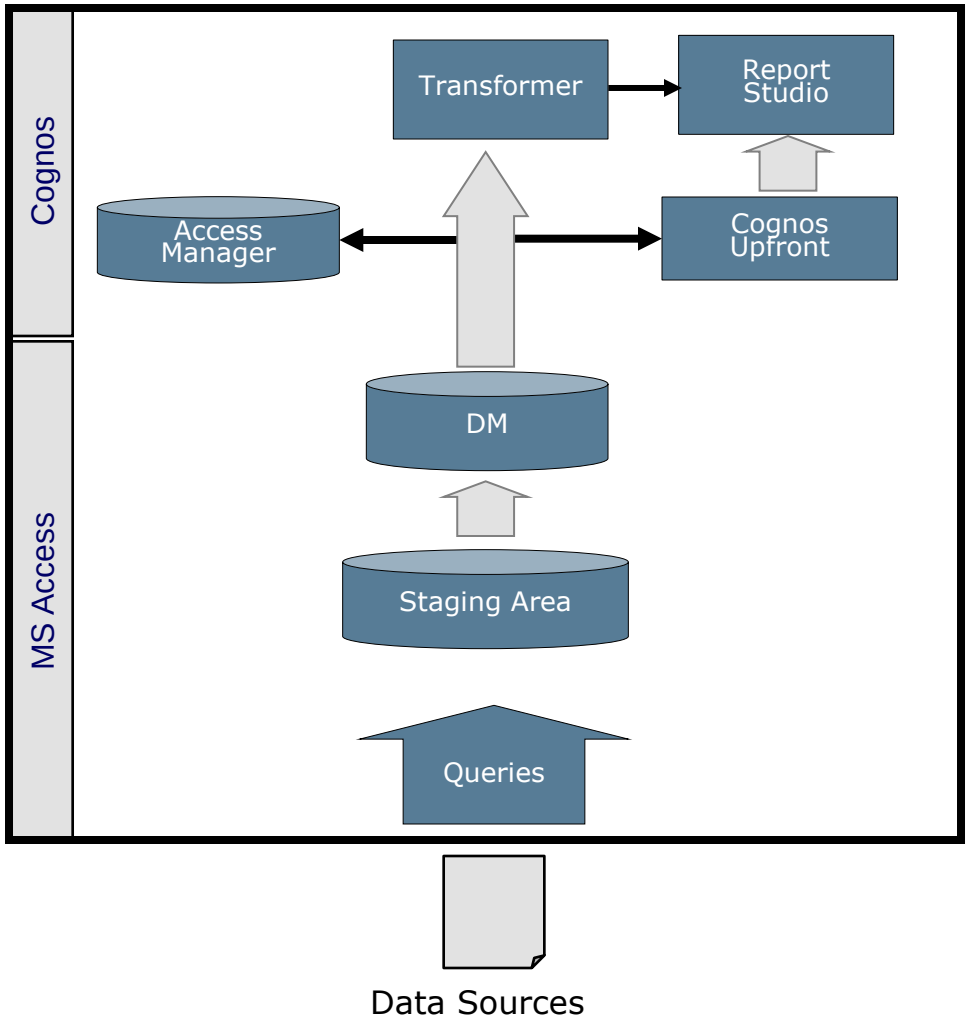
Visualization

Portal Services

Data Warehouse

Transformation & Load

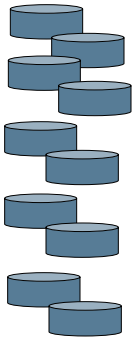
Extraction



Characteristics

- Uses our Cognos architecture
  - Only requires the Access , Cognos Framework Manager, Report Studio and Cognos client licenses
  - Did not requrie additional investment, but configuration
- Scalable to support multi-user, network access and data volumes

Payroll Balanced Scorecard – Example



ERP – SAP, FTE Database
ERP – SAP
Internal Data collection
Internal Data collection

Internal data collection
Internal data collection

NEXON-HR database
Internal data collection

ERP – SAP, JDE Cost, FTE database
ERP – SAP, JDE Cost, FTE database

Payroll Balanced Scorecard - Current Month: 2011/Oct

Current Month		Weight	Worst Case	Target	Best Case	Current Performance	Current Score	Target Score	Weighted Score	Weighted Target Score
Process	All audience per admin [No.]	10.00%					39.75%	31.25%	3.98%	3.13%
	Payment / Off-cycle payment [No.]	5.00%					21.31%	17.95%	1.07%	0.90%
	Payment and reporting delays / Payment and report [No.]	5.00%					100.00%	100.00%	5.00%	5.00%
	PYA compliance [%]	10.00%					95.90%	80.00%	9.59%	8.00%
Customer	Business control compliance [%]	12.50%					52.00%	50.00%	6.50%	6.25%
	SLA compliance [%]	12.50%	XXX		XXX		94.05%	75.00%	11.76%	9.37%
People	Capacity index [%]	15.00%					58.33%	44.44%	8.75%	6.67%
	Knowledge certification [Score]	10.00%					62.50%	50.00%	6.25%	5.00%
Cost	Cost per payment [$/payment]	10.00%					99.67%	45.70%	9.99%	4.57%
	E2E Cost per payment [$/payment]	10.00%					49.92%	45.70%	4.99%	4.57%
	Payroll						67.36%	54.00%	67.88%	53.46%

Current Score = (Performance - Worst Case) / (Best Case - Worst Case)

While data collection is complex, Balanced Scorecard aims to visualize quick the KPIs we already collect on the four domains

Context Diagram – using Cognis institutional environment for the non-institutional example

Each month by the 5th day, the area responsible captures the facts in a form.

The data sheets are saved on a specific directory on the network – specific to the areas

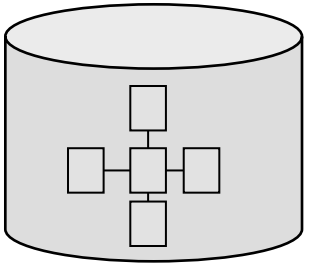
Area responsible

MS PowerPoint

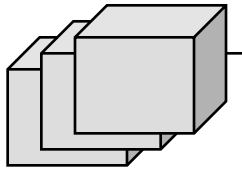
SSC Managers

The area responsible runs the cubes once the information is updated

Area responsible



Data Base



Cognos Transformer

Once the cubes are updated, the users can consult them

Future automation

Payroll Balanced Scorecard

Time analysis is enabled

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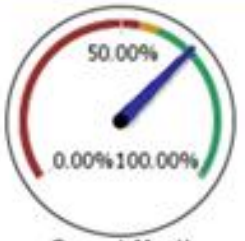
Last 90 days



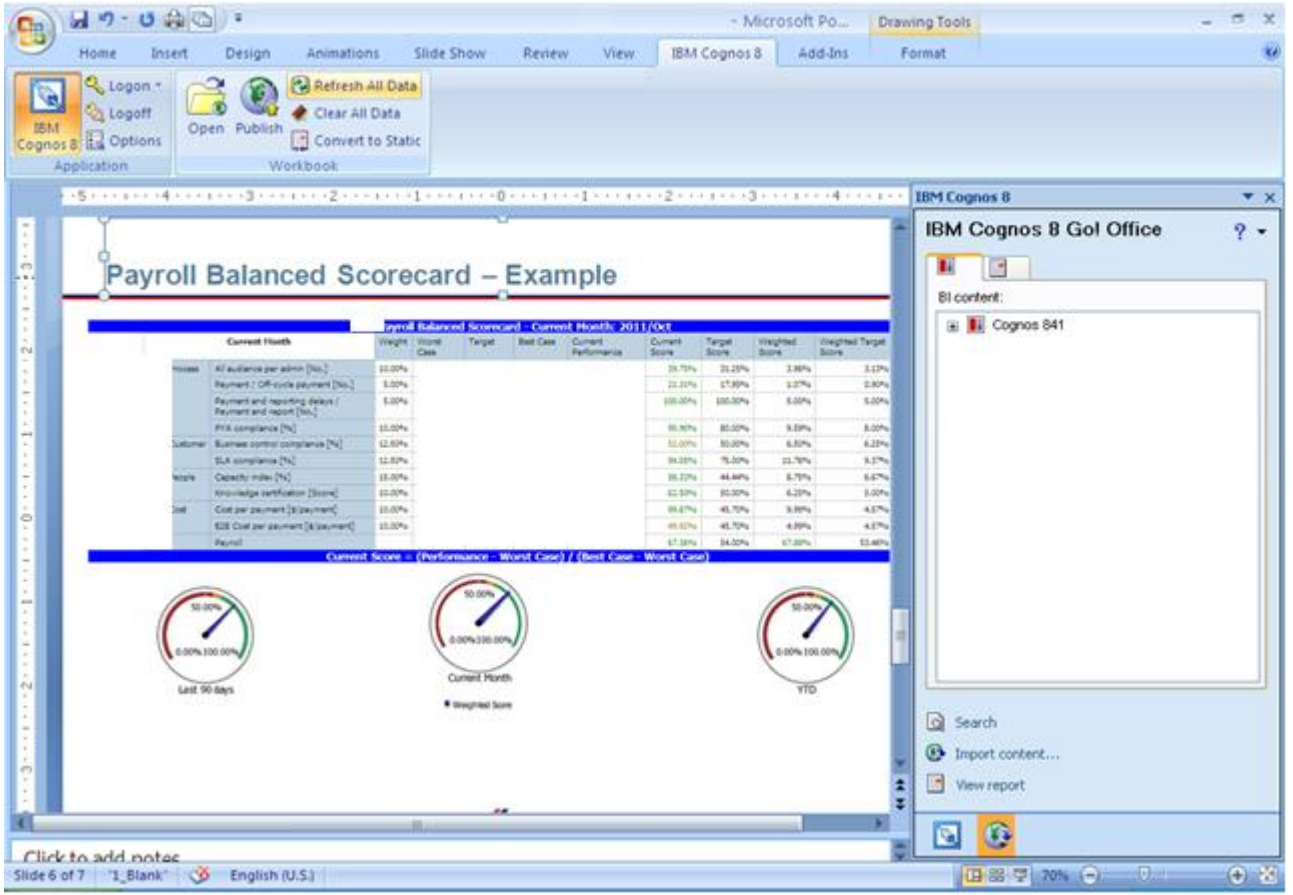
Current Month

■ Weighted Score

YTD

Embedding new practice is supported by Cognos Go Office

With easy selling points to Managers



Selling Points

- Each area uses the same designed template for data collection
- Each area is presented in the same format in Cognos using the same report design
- Managers prepare Powerpoint presentations to monthly meeting
- Managers do not need to enter Cognos site for monthly updates
  - Done though single click on IBM Cognos Go!Office
- Charts, Cross-tabs are updated in minutes automatically
  - Many work hours saved per Manager per month

Managers bacame 'willing' to provide their resources to prototyping

Summary

PROs

- Piloted for simple models
  - Great for prototyping
- Works well, if data is to be collected from numerous data sources, outside ERP
  - No Cost of interfacing
- Single data sheet for all areas enable common reporting
  - Individual KPIs may differ
- Inexpensive to maintain
- Flexible – databases, model, cubes & reports are created without consulting support
- Reports can be released within days after user requirement
- Reports are downloaded to Power Point automatically
- Adoption short: some managers do not even access Cognos other than through Powerpoint
- Automation after final design and practice is embedded

CONs

- Complex models should follow institutional approach
  - Data must be available for prototypes
  - Data collection Automation is not avoided on the long run
- Need to have Cognos infrastructure
- Requires Top Management support towards Cognos BI
  - Does help if technically advanced
- Requires adoption of Cognos and continuous training on the job
  - Takes time to take fear of Cognos away
- Reports quality heavily depends on data quality
- Support is on your own
- Does not work without (a) strong Power User(s) on site
  - Both Cognos and Business literate