



DATA TRANSFORMERS

THE MONTHLY WEBINAR SERIES

EPM Reporting & Dashboards: What, When and How

Seth Landau – COO & EVP, Consulting Services

Jessica Benbow – Director, Consolidations, Reporting, Financial Close

John Liette – Manager, Business Intelligence

About MindStream

MindStream Analytics is a leading consulting and managed services provider with a proven track record for helping leading global companies address their enterprise challenges, focused on delivering sustainable profitability and competitive advantage.

Data is a new economic asset that is rapidly expanding and changing. You're challenged to figure out how to use it to your organization's advantage. We work collaboratively with our clients and bringing innovative strategies that enable organizations to gain competitive edge and win with data.

MindStream has been recognized by *CIOReview* in November 2015 as a 100 "Most Promising Oracle Solutions Provider," ProformaTech for our innovation, and others for our innovative thinking and business analytic applications expertise. In 2015, MindStream was named by MSPmentor as a "Top 501 Managed Services Provider." We were recently named "Top 10 Fastest Growing Data Analytics Company 2016" by *The Silicon Review*.



About the Presenters

- Seth Landau
 - COO & EVP, Consulting Services
 - 20 years of experience in EPM
 - Certified Treasury Professional
- Jessica Benbow
 - Director, Consolidations, Reporting, Financial Close
 - 12+ HFM/ FDM(EE) Implementations
 - BS in Accounting
- John Liette
 - Manager, Business Intelligence
 - 9+ Years of BI Administration Experience
 - MBA in Project Management



Agenda

- Compare and contrast Reporting and Dashboards
- Overview of Reporting/Dashboard Tools
- Choosing the right tool



Comparison Matrix

	HFR	SV (Ad-hoc)	SV (Formula)	OBIEE	EPRCS	CXO
Approval/Workflow	✗	✗	✗	✗	✓	✓
Ease of Build/Dynamic Members	✓	✓	⚠	⚠	⚠	✓
Collaboration/Commentary	✗	✗	✗	⚠	✓	✓
Web Build	⚠	⚠	⚠	✓	⚠	⚠
Security Configuration	✓	✓	✓	⚠	⚠	⚠
SOX/Controls	✓	✗	⚠	⚠	✓	✓
Non-Hyperion Data Integration	✗	✗	⚠	✓	✓	✓
Report Distribution	⚠	✗	⚠	✓	✓	✓
Dashboards	✗	✗	⚠	✓	⚠	✓
Integration with Microsoft Office	✓	✓	✓	✓	✓	✗
Drill-down in all Dimension	⚠	✓	✗	✓	⚠	⚠
Time to Implement	⚠	⚠	⚠	✗	⚠	✓

Key ✓ Supports ⚠ Supports with Limitations ✗ Does not Support



Reports vs Dashboards

Reporting v Dashboards

"A **report** is a document containing information organized in a narrative, graphic, or tabular form, prepared on ad hoc, periodic, recurring, regular, or as required basis."

"A **dashboard** is a **visual** display of the most important information needed to achieve one or more objectives which fits entirely on a single computer screen so it can be monitored at a glance."

Reporting v Dashboards

Reports	Dashboards
Reports <i>can</i> be short but are usually longer in nature	Dashboards are short and concise
Reports have visual <i>components</i>	Dashboards <u>are</u> visual
Reports include more background and data	Dashboards focus on specific KPIs
Reports require more in-depth attention (i.e. require reading through)	Dashboards are meant to be monitored at a glance
Reports often tell more of a story	Dashboards communicate specifics
Reports can include dashboards	Dashboards cannot or at least should not include a true report
Reports tend to be <i>more complex</i> in nature	Dashboards are simple
Reports can have actionable components	Dashboards are actionable

Overview of Reporting/Dashboarding Tools

Reporting Tools

- Hyperion Financial Reporting Studio (HFR)
- Hyperion SmartView
- Oracle Business Intelligence Enterprise Edition (OBIEE)
- Oracle Enterprise Performance Reporting Cloud Service (EPRCS)
- CXO - Cockpit



Hyperion Financial Reporting Studio (HFR)



Hyperion Financial Reporting Studio (HFR)

- Tool for designing and presenting analytic data graphically
- Object oriented graphical report layout using: Text Boxes, Grids, Images, and Charts
- Integrates with HFM, Hyperion Planning, and Essbase
- Objects can be used across multiple reports
- Report build performed on the Win32 client
- Report output available in HTML, PDF and XLS

HFR Report Build

7 Scenario Actual Year 2016 Period JAN View YTD Value <Parent Cur Totals>

6 <<MemberName("Grid1", Cur, "Entity")>> <<MemberDescription("Grid1", Cur, "Entity")>>
 <<POVDescription("Grid1", "Period")>> <<POVMember("Grid1", "Year")>>

5 Pages: LE_TINTL LE_99CON LE_99CON LE_TGHB LE_99CON LE_TTHLA

	A	B	C	D
	[CP Top]	[CP Top]	co(A)-co(B)	co(C)/co(A)
	SP_TTTT	SP_TTTT		
	PD_TTT	PD_TTT		
	RLT	RLT		
	GS_TTT	GS_TTT		
	RF_TTT	RF_TTT		
	Current Point of View	Current Point of View for View		
	Current Point of View	Current Point of View	<<POVMember>>	<<POVMember>>
	Current Point of View	Current Point of View for Period		
	Current Point of View Relative to Duren	<<POVMember>>	<<POVMember>>	
1	Revenues			
2	Written Penalties			
3	Children of B019T	###	###	###
4	B019T	###	###	- ###
6	Children of B030T AND NOT B019T	###	###	- ###
8	B030T	###	###	- ###
9	Children of B050T AND NOT B030T	###	###	- ###
11	B050T	###	###	- ###
13	Children of B080T AND NOT B050T	###	###	- ###
15	B080T	###	###	- ###

8

- (1) Text columns or rows that support Report format.
- (2) Single "hard coded" member selection
- (3) Dynamic member selection based on hierarchy
- (4) Formulas can be utilized (ie Sum, Var)
- (5) Page functionality supporting multiple selections
- (6) Text functions to support Report format
- (7) Selectable POV dimensions
- (8) Hidden content

HFR Report Generation

HomePage Explore: / Reports Consolidated Income Statement - Consolidated * **HTML**

/Reports/Consolidated Income Statement - Consolidated

Scenario: Actual Year: 2016 Period: JAN View: YTD Value: <Entity Currency>

CI Income Statement
LE_99CON - Total Segment
USD
January 2016

2 Page: LE_99CON Total Segment

	YTD-Actual JAN-2016	YTD-Actual JAN-2015	YTD-Variance JAN-2016	YTD-Var % JAN-2016
Revenues				
Written Premiums				
1 First Year	129,000,000.00	141,000,000.00	(11,000,000.00)	(0.1)%
Renewal	300,000,000.00	288,000,000.00	12,000,000.00	0.0%
Single	2,000,000.00	3,000,000.00	(600,000.00)	(0.2)%
Total Written Premium	433,000,000.00	432,000,000.00	660,000.00	0.0%
Change in Unearned Premium Reserves	(23,000,000.00)	(27,000,000.00)	3,000,000.00	(0.1)%
Net Earned Premiums	409,000,000.00	405,000,000.00	4,000,000.00	0.0%
Fees	9,000,000.00	9,000,000.00	557,000.00	0.1%
Total Premium and Fees	418,000,000.00	414,000,000.00	4,000,000.00	0.0%
Net Investment Income	9,000,000.00	9,000,000.00	(507,000.00)	(0.1)%
Other Revenue	4,000,000.00	16,000,000.00	(11,000,000.00)	(2.4)%
Total Revenues	433,000,000.00	441,000,000.00	(7,000,000.00)	0.0%

HomePage Explore: / Reports Consolidated Income Statement - Consolidated * **PDF**

/Reports/Consolidated Income Statement - Consolidated

Scenario: Actual Year: 2016 Period: JAN View: YTD Value: <Entity Currency>

CI Income Statement
LE_99CON - Total Segment
USD
January 2016

2 LE_99CON Total Segment

	YTD-Actual JAN-2016	YTD-Actual JAN-2015	YTD-Variance JAN-2016	YTD-Var % JAN-2016
Revenues				
Written Premiums				
1 First Year	129,000,000.00	141,000,000.00	(11,000,000.00)	(0.1)%
Renewal	300,000,000.00	288,000,000.00	12,000,000.00	0.0%
Single	2,000,000.00	3,000,000.00	(600,000.00)	(0.2)%
Total Written Premium	433,000,000.00	432,000,000.00	660,000.00	0.0%
Change in Unearned Premium Reserves	(23,000,000.00)	(27,000,000.00)	3,000,000.00	(0.1)%
Net Earned Premiums	409,000,000.00	405,000,000.00	4,000,000.00	0.0%
Fees	9,000,000.00	9,000,000.00	557,000.00	0.1%
Total Premium and Fees	419,000,000.00	414,000,000.00	4,000,000.00	0.0%
Net Investment Income	9,000,000.00	9,000,000.00	(507,000.00)	(0.1)%
Other Revenue	4,000,000.00	16,000,000.00	(11,000,000.00)	(2.4)%
Total Revenues	433,000,000.00	441,000,000.00	(7,000,000.00)	0.0%

(1) Expansion available in HTML but not PDF

(2) Pages displayed as drop-down in HTML and as separate reports in PDF

Hyperion Smart View

Hyperion Smart View

Smart View allows users to view, import, manipulate, distribute and share data from various data sources using Microsoft Excel, Word, Outlook and PowerPoint.

Typical uses include:

- Ad-hoc analysis
- Formatted reports based on formulas
- Data Form review/ submission
- Review HFR Reports
- Journal Entry submission

Data integration with:

- HFM
- Essbase
- Hyperion Planning
- FCM
- HFR
- PBCS
- EPRCS



Smart View – Ad Hoc

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Essbase		RI_T	ContributionTotal	USD YTD	GS_TTT	DC_TTT	NT_TT	PD_TTT	ST_TT	OU_TTT	EC_TTTT	LE_99CON	SR_TTT	SP_TTTT
2			Jan	Jan											
3			2015	2016											
4	1	B030T	Net Earned Premiums	70,000,000.00	75,000,000.00	5,000,000.00									
5		B040T	Fees	10,000,000.00	15,000,000.00	5,000,000.00									
6		B050T	Total Premium and Fees	80,000,000.00	90,000,000.00	10,000,000.00									
7		B060T	Net Investment Income	15,000,000.00	20,000,000.00	5,000,000.00									
8		B070T	Other Revenue	5,000,000.00	10,000,000.00	5,000,000.00									
9		B080T	Total Revenues	100,000,000.00	120,000,000.00	20,000,000.00									

- Dynamic data analysis utilized to perform queries

(1) Drill into dimensions

(2) Utilize Excel formulas

(3) Can Pivot data between Rows/Columns

	A	B	C	D
1	HFM	Actual	Actual	
2		2015	2016	
3		YTD	YTD	
4		LE_99CON	LE_99CON	
5		<Entity Currency>	<Entity Currency>	
6		[ICP Top]	[ICP Top]	
7		SP_TTTT	SP_TTTT	
8		PD_TTT	PD_TTT	
9		RI_T	RI_T	
10		RF_TTT	RF_TTT	
11		GS_TTT	GS_TTT	
12		JAN - January	JAN - January	
13		B080T - Total Revenues	100,000,000.00	120,000,000.00
14	1	B050T - Total Premium and Fees	80,000,000.00	90,000,000.00
15		B030T - Net Earned Premiums	70,000,000.00	75,000,000.00
16		B040T - Fees	10,000,000.00	15,000,000.00
17		B060T - Net Investment Income	15,000,000.00	20,000,000.00
18		B070T - Other Revenue	5,000,000.00	10,000,000.00

Smart View – Formula Reports

CORPORATION													
CONSOLIDATED STATEMENTS OF CASH FLOWS													
For the Twelve Months Ended December 31, 2012													
(In 000s)													
				Reclassifies									
	Type	From Within	Unsettled Trades	CR Gain on Sale	Retirement Asset	Loan Adj.	Total	Rounded Millions	Rounding Adj.	Adjusted Total	Round		
CASH FLOWS FROM OPERATING ACTIVITIES													
Net income	CF_N	1	0	0	0	0	0	0	0	0	0	0	0
Adjustments to reconcile shareholder net income to net cash provided by operating activities:													
Depreciation and amortization	CF_C01	0	0	0	0	2,534	0	0	0	0	0	0	0
Realized investment losses (gain)	CF_C05	0	(43,298)	0	0	0	(43,298)	(43)	0	0	0	0	0
Deferred income taxes	CF_C10	0	0	0	0	0	0	0	0	0	0	0	0
Gains on sales of businesses (including discontinued operations)	CF_C15	0	0	0	0	0	0	0	0	0	0	0	0
(Income) loss from discontinued operations, net of taxes	CF_C20	0	(12)	0	0	0	(12)	-	0	0	0	0	0
Net changes in assets and liabilities, net of non-operating effects:													
Receivables, accounts and notes receivable	CF_C25	0	0	0	0	0	0	0	0	0	0	0	0
Reinsurance recoverables	CF_C30	0	0	0	0	0	0	0	0	0	0	0	0
Deferred policy acquisition costs	CF_C35	0	0	0	0	(2,534)	0	0	0	0	0	0	0
Other assets	CF_C40	0	0	0	0	0	0	0	0	0	0	0	0
Insurance liabilities	CF_C45	0	0	0	0	0	0	0	0	0	0	0	0
Accounts payable, accrued expenses and other liabilities	CF_C50	0	0	0	0	0	0	0	0	0	0	0	0
Current income taxes	CF_C55	0	0	0	0	0	0	0	0	0	0	0	0
Cash used to exit the Runoff Reinsurance Business	CF_C57	0	0	0	0	0	0	0	0	0	0	0	0
Mortgage Loans Held for sale	CF_C58	0	0	0	0	61,512	61,512	62	0	62	0	62	0
Other, net	CF_C60	0	0	0	0	(53,975)	0	0	0	0	0	0	0
Net cash provided by operating activities	CF_CF	0	0	0	0	7,573	0	0	0	0	0	0	0

- Best when used with HFM. May be used with Essbase/Planning but may have performance issues
- (1) HS Function retrieves data from source
- (2) Manual Data Entry (potentially submitted back to source)

Smart View – Data Forms

POV Minority Interest Percentage - HFMCluster

Actual 2016 <Scenario View> LE_AI <Entity Currency> [ICP None] SP_00000 PD_000 R1_0 RF_000 GS_000 Refresh

M24

	A	B	C	D	E	F	G	H	I	J	K	L	M
1		JAN	FEB	MAR									
2	MIPTK	0.06	0.20	0.18									
3													

- Used to review or submit data into the source application based on a controlled POV.

(1) Allows for Review or Submission of data

(2) Controlled Point of View

OBIEE

OBIEEE

Oracle Business Intelligence Enterprise Edition (OBIEE) is a package of reporting and analytics tools that provides a robust and scalable solution for providing insight into the reality of your business.

- Connects to nearly any source
- Queries relational databases, data cubes, flat files, big data sources and many other technologies
- Provides historical, real time, and predictive analytics capabilities
- Integrates with a wide variety of technologies including Oracle's CRM, E-Business Suite, and Hyperion Platforms
- Oracle sells pre-packaged applications that contain out of the box integrations with Oracle products like CRM, E Business Suite and Hyperion tools

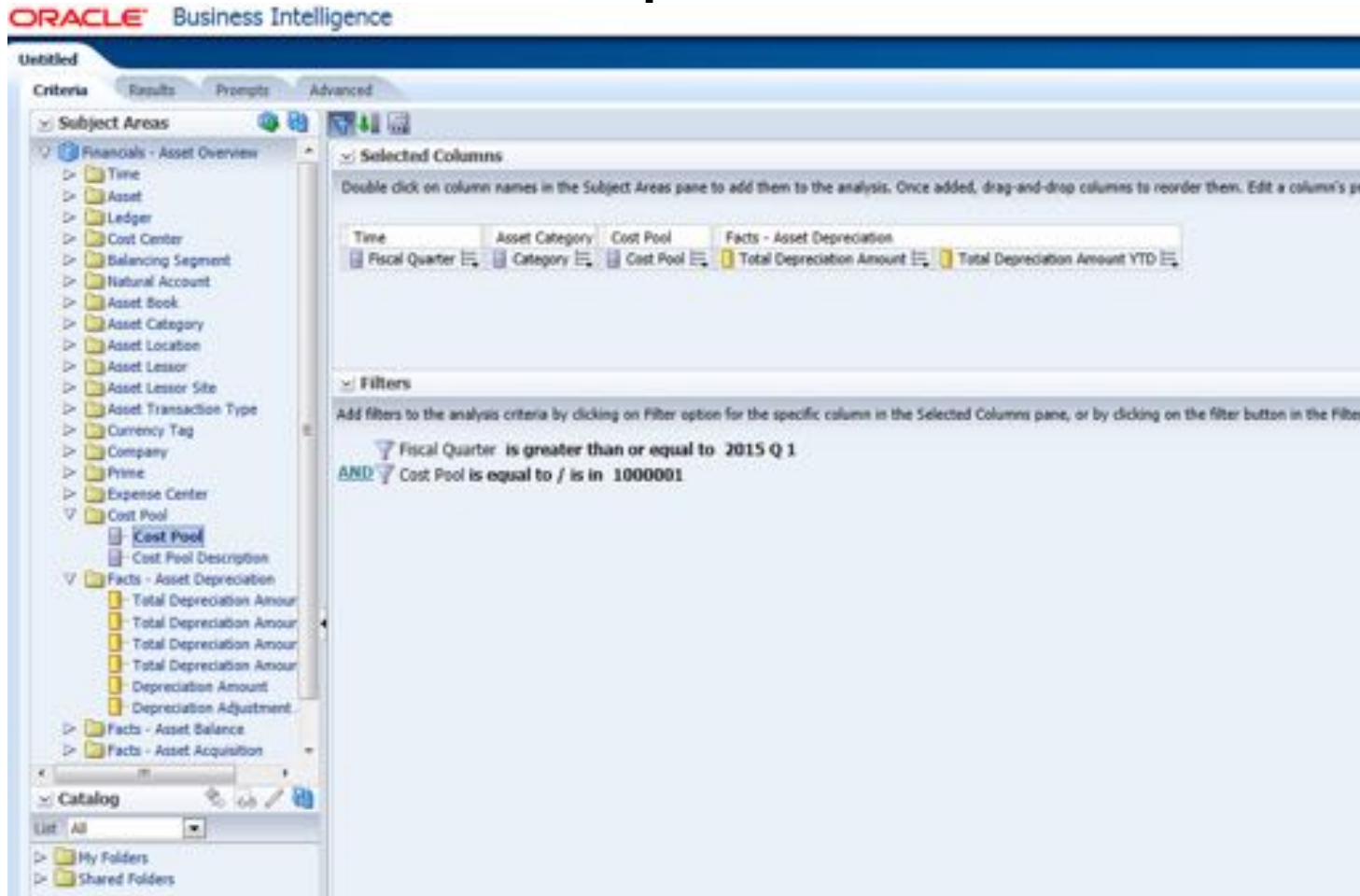
OBIEE Dashboards

- Flexible reporting with a wide variety of visualization options



Photo: Oracle.com

OBIEE – Report Creation



- Logical data model is stored in a metadata repository to limit the amount of technical details a user needs to be successful and is organized by subject area
- Available attributes listed on the left, selected items appear on the right, as well as filter conditions
- Supports SQL calculations and commands (Case Statements, statistical functions, etc)



Enterprise Performance Reporting Cloud Service (EPRCS)

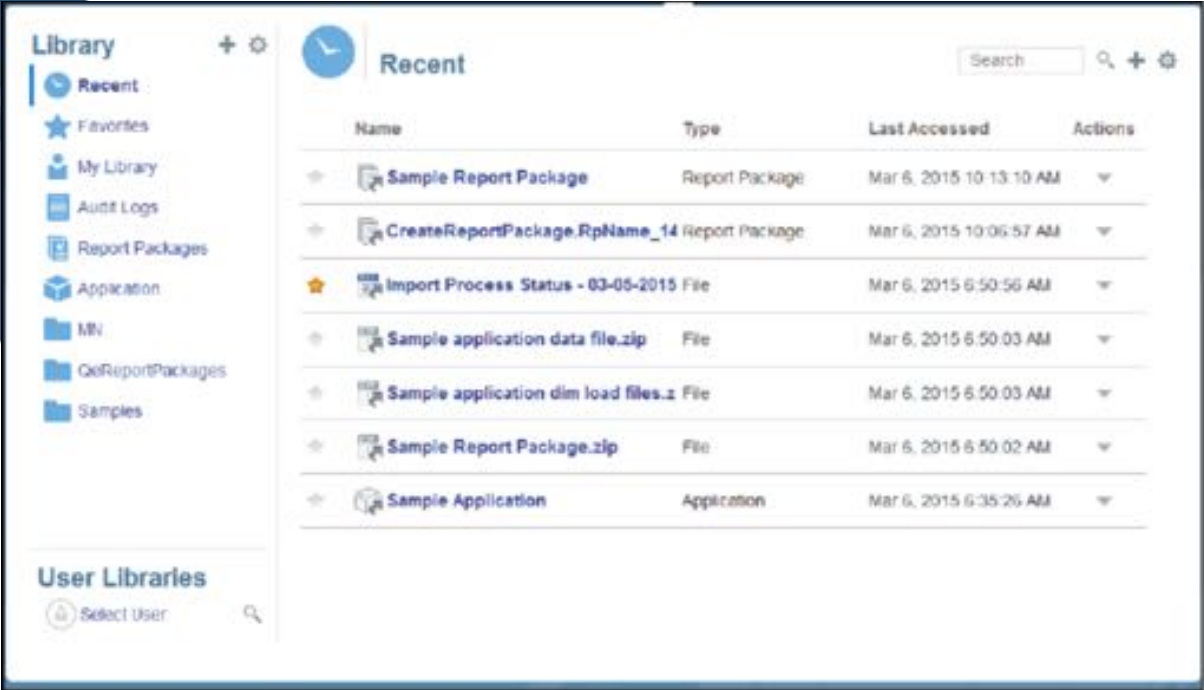
Enterprise Performance Reporting Cloud Service (EPRCS)

- **Distribution:** Users simultaneously updating different sections / doclets of reports
- **Task Management:** Notification of upcoming deliverables / alerts
- **Reporting:** External, Internal and Statutory Financial Reporting Needs
- **Complete:** Authoring, *collaboration*, *commentary* and delivery, including versioning
- **Workflow:** Approve reports sections and overall monitoring of the process
- **Secure:** Role-based, auditable access on desktop and mobile devices
- **Integrate data and Metadata from various Oracle and non-Oracle sources (EPM, BI, ERP, OBIEE, RDBMS, Microsoft – utilizing Smart-view):** can build an application in EPRCS to bring in dimension / data or go directly to the source depending on scope

EPRCS Home Page



Library



EPRCS – Authorizing / Workflow

Edit Report Package: Define Process

Select the development phases you want to include and set the timeline.

Author | **Review** | Sign Off

☒ Review

Start Review On (UTC-05:00) New York - Eastern Time (ET)

End Review Cycle 1 On (UTC-05:00) New York - Eastern Time (ET)

End Review Cycle 2 On (UTC-05:00) New York - Eastern Time (ET) X

[+ Add Another Review Cycle](#)

End Review On (UTC-05:00) New York - Eastern Time (ET)

EDEN 10Q Q2 FY2014

Report Center
In Progress

Author

Sep 16, 2014

2 Days Past Due

70%

Review

Sep 22, 2014

4 Days Left

Not Started

Sign Off

Sep 26, 2014

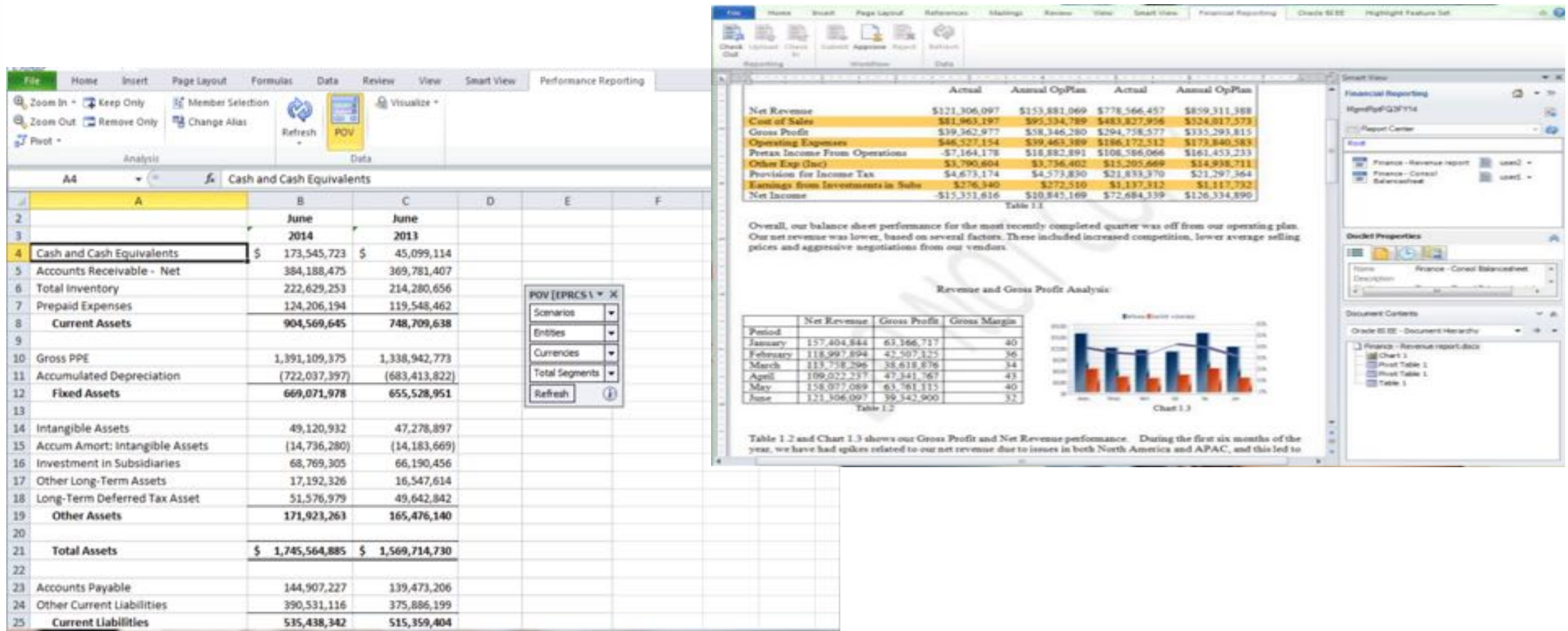
8 Days Left

Not Started

Name	Responsibility	Author	Approver 1	Approver 2
EDEN 10Q Q2 FY2014				
Cover		Vito Sep 21, 2014		
Table of Contents	Valerie	Valerie Sep 17, 2014		
Part I. Financial Information				
Cautionary Note		Sam Sep 21, 2014	Annie Sep 21, 2014	
1.0 Financial Statements				
1.1 Income Statement		Steve Sep 21, 2014	Annie Sep 21, 2014	
1.2 Balance Sheets		Rodney Sep 21, 2014	Adam Sep 21, 2014	
1.3 Notes to Financials		Rodney Sep 21, 2014	Annie Sep 21, 2014	Adam Sep 21, 2014
2.0 Management's Discussion	Sam	Sam Sep 17, 2014	Peter Sep 18, 2014	

[+ Add Doclet](#)[+ Add Section](#)

EPRCS – Integration of data via Smart-view



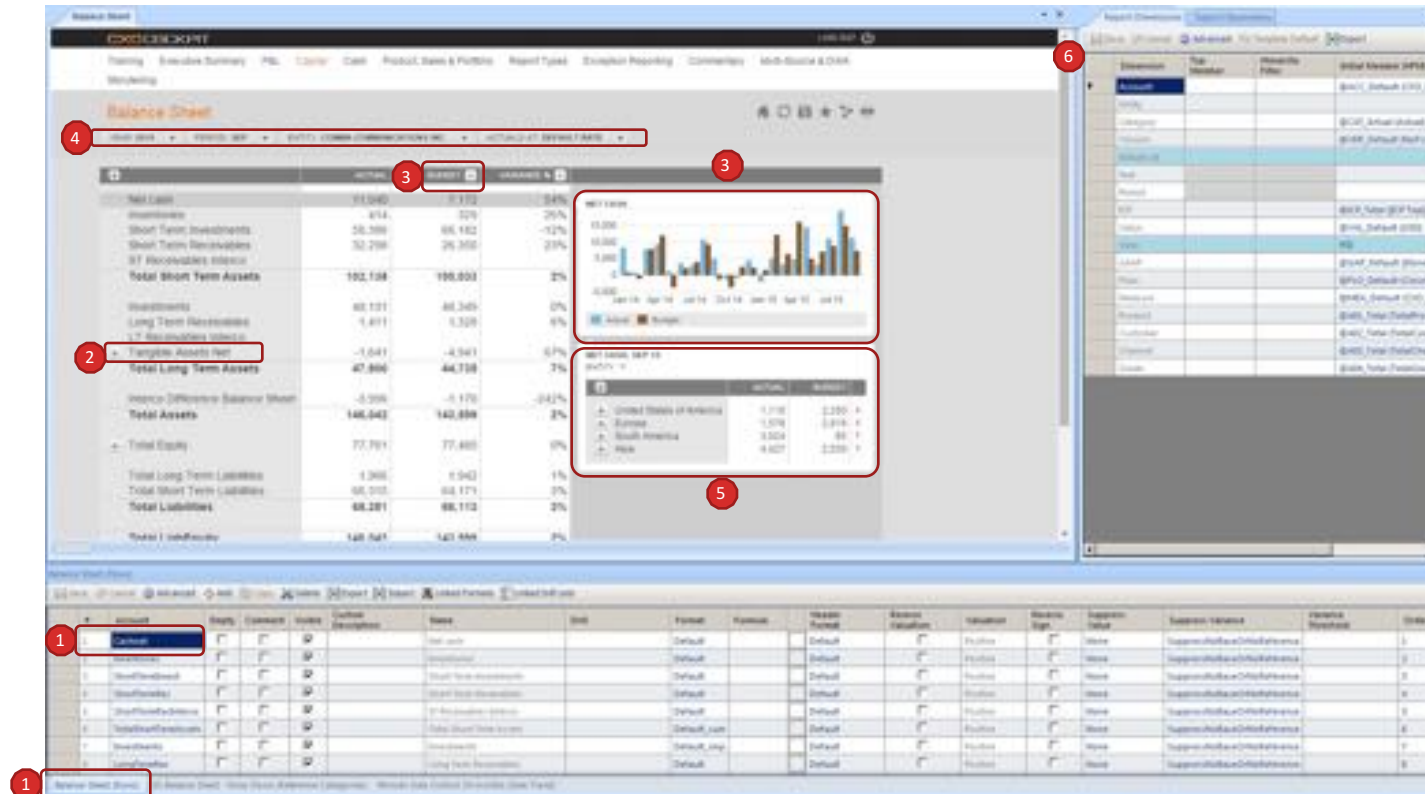
CXO - Cockpit

CXO - Cockpit

- Reporting *and* dashboarding platform that integrates will multiple data sources to create Management and Board reporting.
- Seamless fit with the way companies work; including specialized processes, output and systems
- Guided and governed reporting with a focus on control and guided analysis for a shared narrative
- Supports the entire reporting story through the inclusion of core EPM data, supplemental (multi source) and commentary
- Preconfigured templates are available to speed up the implementation timeline
- Finance owned and Executive friendly resulting in easy to maintain and use reports



CXO – Design Studio



(1) Member selection from source.
Final lists can be reused.

(2) Expansion functionality. Custom expansions possible.

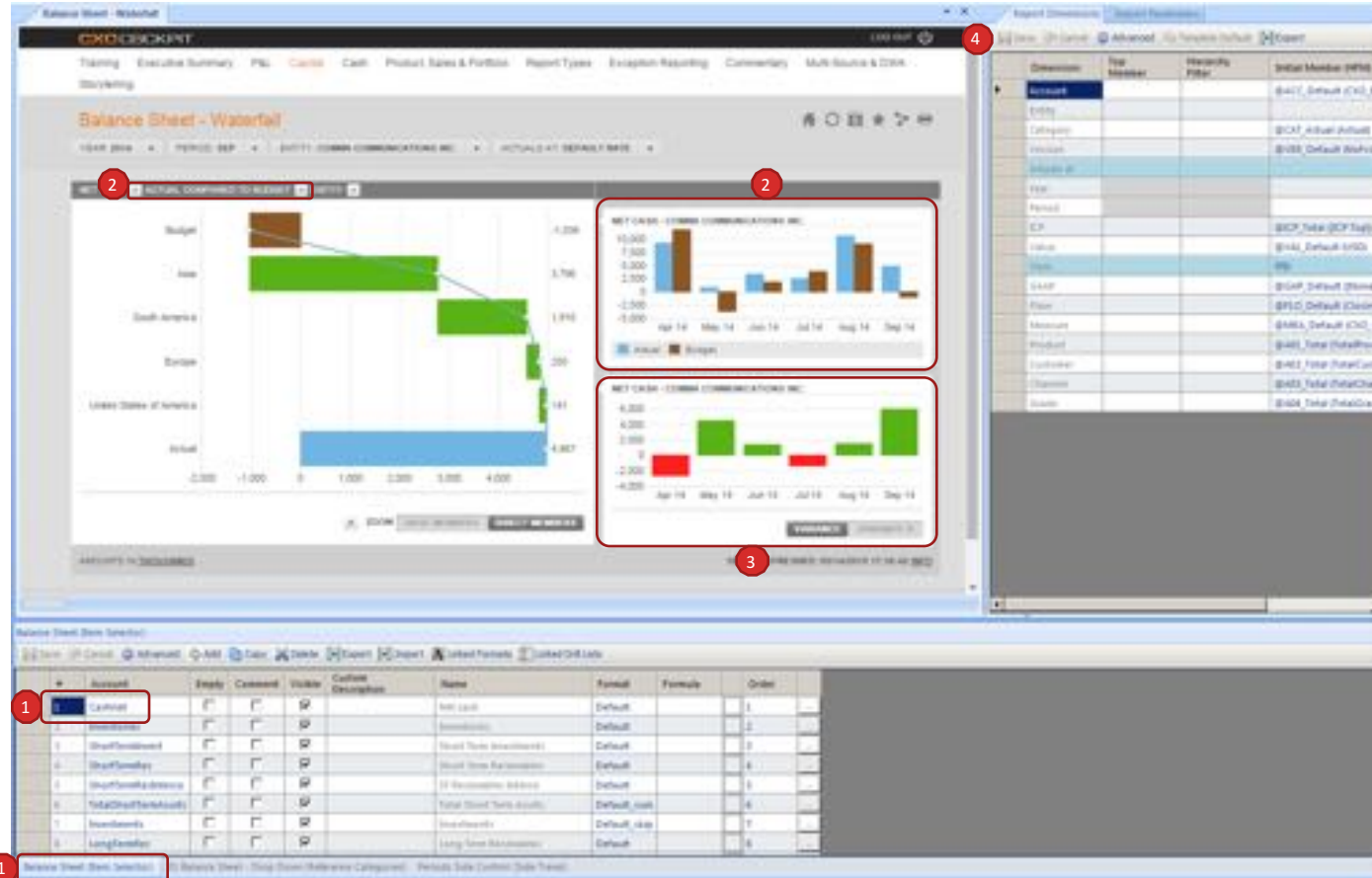
(3) Selectable comparison point.
Pictorial example of comparison

(4) Selectable Point of View. Display can be restricted/customized

(5) Additional account detail automatically available based on metadata.

(6) Report dimensions/parameters to customize appearance

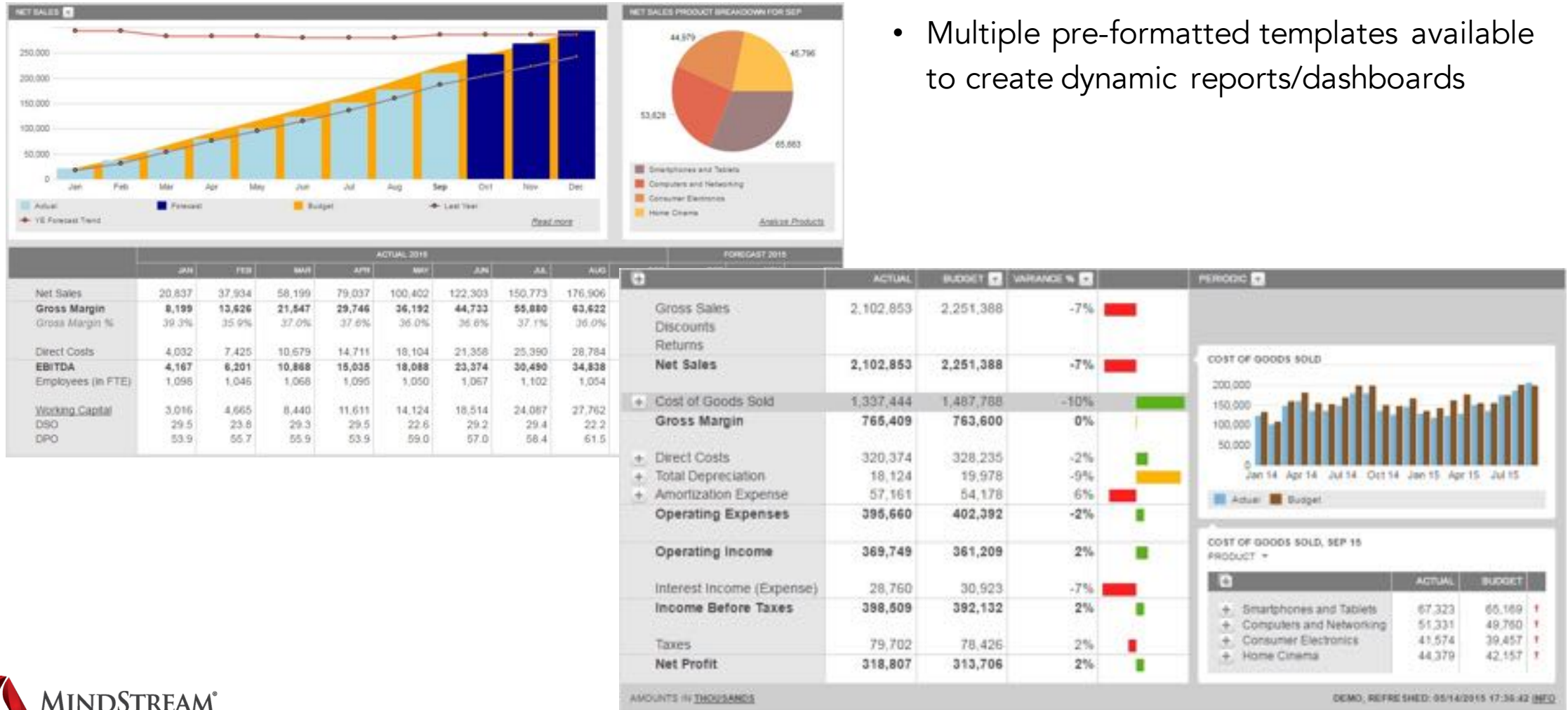
CXO – Design Studio



- (1) Member selection from source. Final lists can be reused.
- (2) Selectable comparison point. Pictorial example of comparison
- (3) Pictorial illustration of variances over the periods compared.
- (4) Report dimensions/parameters to customize appearance

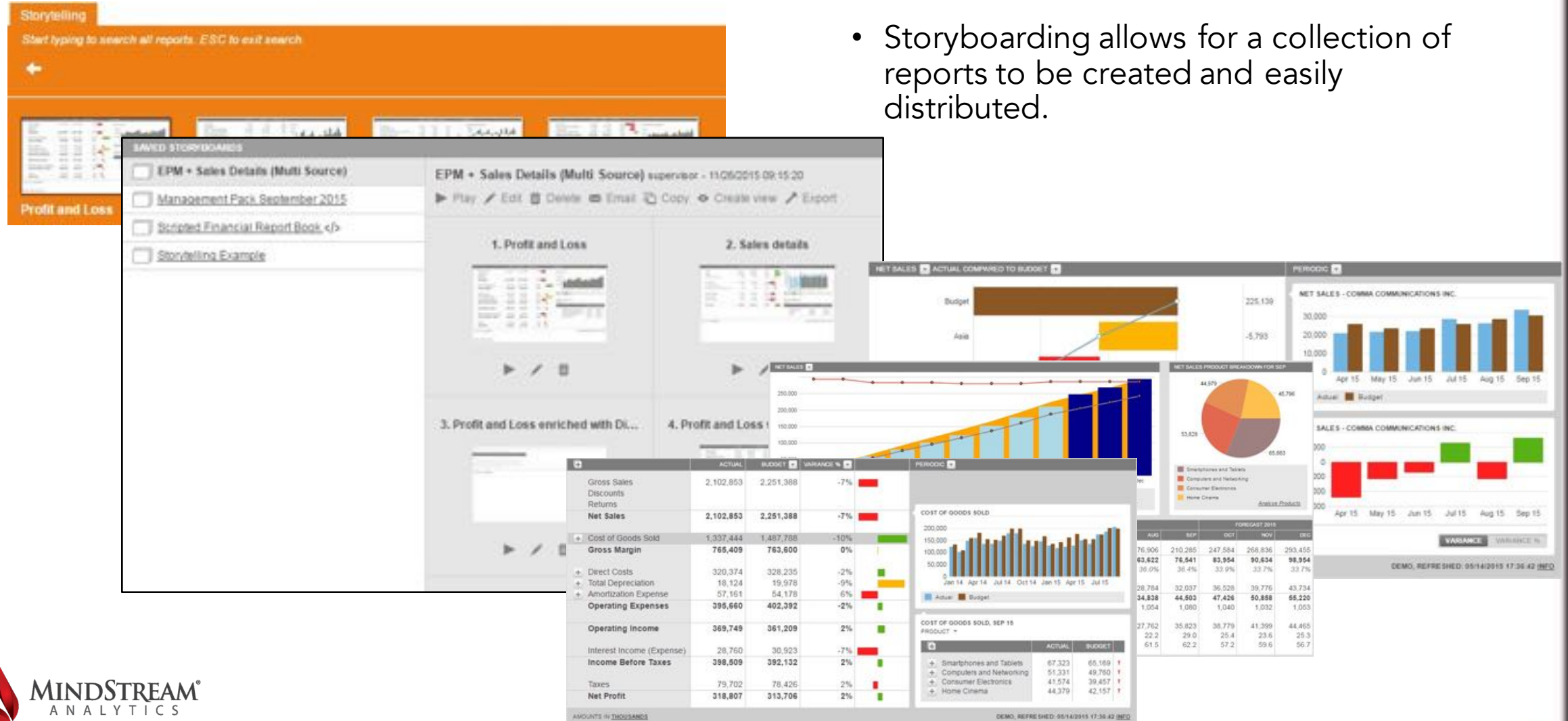
CXO – Web Output

- Multiple pre-formatted templates available to create dynamic reports/dashboards



CXO - Storyboarding

- Storyboarding allows for a collection of reports to be created and easily distributed.



CXO - Commentary

	ACTUAL 2016									BUDGET	VARIANCE	%	ACTUAL	FOOTNOTE
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	SEP 2016			SEP 2016	
+ Net Sales	20,837	17,097	20,265	20,837	21,366	21,900	28,471	26,132	33,380	30,194	11			A.
+ Cost of Goods Sold	12,639	11,669	12,344	12,639	14,920	13,360	17,324	16,390	20,461	19,654	4			
Gross Margin	8,199	5,428	7,921	8,199	6,446	8,541	11,147	7,742	12,919	10,540	23			
Total Compensation	2,475	2,064	1,979	2,475	2,064	1,979	2,475	2,064	1,979	2,343	-16			B.
Professional Services	310	284	248	310	284	248	310	284	248	301	-18			
Travel& Entertainment	449	358	361	449	358	361	449	358	361	411	-12			
Administrative	796	687	665	796	687	666	796	687	666	838	-21			
Direct Costs	4,032	3,393	3,254	4,032	3,393	3,254	4,032	3,393	3,254	3,892	-16			
Total Depreciation	218	161	225	218	161	225	218	161	225	245	-8			
Amortization Expense	686	477	742	686	477	742	686	477	742	631	18			
Operating Expenses	4,936	4,032	4,221	4,936	4,032	4,221	4,936	4,032	4,221	4,768	-11			
Operating Income	3,263	1,396	3,700	3,263	2,414	4,320	6,211	3,710	8,698	5,772	51			
Interest Income (Expense)	216	215	228	249	253	365	310	448	561	510	10			
Income Before Taxes	3,479	1,611	3,928	3,512	2,668	4,684	6,521	4,158	9,259	6,282	47			
Taxes	696	322	786	702	540	937	1,304	832	1,852	1,256	47			C.
Net Profit	2,783	1,289	3,143	2,810	2,128	3,748	5,217	3,326	7,407	5,026	47			

AMOUNTS IN THOUSANDS

DEMO, REFRESHED: 05/14/2016 17:36:42 (UTC)

(1) Footnote commentary which may be used for a specific line or data point

(2) Collection and reporting of commentary from all levels of the Organizational structure

1

POV COMMENTS SUBSIDIARY COMMENTS

A.

Positive Gross Margin caused by new purchase discounts for the Microwave sector in the Asia region

B.

C.

2

BOOKMARK COMMENTS POV COMMENTS SUBSIDIARY COMMENTS (3)

Entity: South America Last modified by Supervisor on 1/12/2016 10:22:41 PM

It is our 9th month in a row exceeding the Sales budget. An outstanding performance from the entire team. We are very pleased to see all our new product lines doing so well in every single one of our underlying countries. We expect very good results again next month.

Entity: Europe Last modified by Supervisor on 1/13/2016 12:12:25 AM

During the first nine months of this year we lost one third of our sales force to a new player in the market. We have managed to stop this trend by actively coaching our remaining sales people and recruiting new and fresh sales people in all our major European regions. We expect to be back on track within 2 months from now.

Entity: Asia Last modified by Supervisor on 1/12/2016 10:22:41 PM

Coming from a difficult FY12 we are performing exceptionally well in FY13. The new products are well received in all our regions and our sales team is showing excellent execution. Despite the high September target we beat it by over 8%. Congratulations to the team.

Choosing the Right Tool

Tool Selection Procedures

1. Collect and **identify reports/dashboards** to be created
2. Review data and **data source availability**
3. Determine report/dashboard **audience**
4. Define report/dashboard **requirements** (i.e., comparisons, commentary, workflow, security, etc.)

Comparison Matrix

	HFR	SV (Ad-hoc)	SV (Formula)	OBIEE	EPRCS	CXO
Approval/Workflow	✗	✗	✗	✗	✓	✓
Ease of Build/Dynamic Members	✓	✓	⚠	⚠	⚠	✓
Collaboration/Commentary	✗	✗	✗	⚠	✓	✓
Web Build	⚠	⚠	⚠	✓	⚠	⚠
Security Configuration	✓	✓	✓	⚠	⚠	⚠
SOX/Controls	✓	✗	⚠	⚠	✓	✓
Non-Hyperion Data Integration	✗	✗	⚠	✓	✓	✓
Report Distribution	⚠	✗	⚠	✓	✓	✓
Dashboards	✗	✗	⚠	✓	⚠	✓
Integration with Microsoft Office	✓	✓	✓	✓	✓	✗
Drill-down in all Dimension	⚠	✓	✗	✓	⚠	⚠
Time to Implement	⚠	⚠	⚠	✗	⚠	✓

Key ✓ Supports ⚠ Supports with Limitations ✗ Does not Support









Compare – Dashboards

		Dashboards
HFR	✗	HFR is not typically utilized for Dashboard creation.
SV (Ad-hoc)	✗	Ad-hoc functionality is not typically utilized for Dashboard creation.
SV (Formula)	⚠	Formula driven SmartViews could be utilized for Dashboard creation, however, this is a manual process and is not available for review on mobile devices.
OBIEE	✓	Dashboards are a primary function of OBIEE, which can be viewed from a computer or mobile device. Dashboards can host a variety of reports that combine to provide insight into business processes and status. Dynamic parameters allow one dashboard to provide a wide variety of angles to view specific data points.
EPRCS	⚠	While graphical capability for Dashboards technically can be done via Smart-view, EPRCS is inherently not a Dashboard solution.
CXO	✓	Support robust Dashboards that can be viewed on the users computer or mobile device. Also, multiple Dashboards can be combined to create a Storyboard facilitating a holistic review.

Compare – Non-Hyperion Data Integration

		Non-Hyperion Data Integration
HFR	✗	Integrates with HFM, Hyperion Planning, Essbase, and HPCM. Cannot be used with non-Hyperion products
SV (Ad-hoc)	✗	Integrates with HFM, Hyperion Planning, Essbase, and HPCM. Cannot be used with non-Hyperion products.
SV (Formula)	⚠	Integrates with HFM, Hyperion Planning, Essbase, and HPCM. Data from other sources can be linked into these reports by utilizing cell references or copy/paste. This data can potentially be submitted back into a Hyperion product.
OBIEE	✓	Integrates with a wide variety of data sources, including relational databases, data cubes, flat files, big data sources and many other technologies.
EPRCS	✓	Provides flexible integration capabilities with non-Hyperion sources, from Flat Files to ERPs to relational databases to OBIEE.
CXO	✓	Supports data integration with Oracle Hyperion, SAP BPC/BW/HANA, IBM TM1, Tagetik, MS SSAS, and more. With the release of version 6.0 data can be directly uploaded into the CXO repository from flat file sources (ie Excel).

Compare – Report Distribution

		Report Distribution
HFR		Reports can be generated through a Batch process and emailed to a variety of users. Limitations around seeing “live” data after distributed.
SV (Ad-hoc)		Not typically distributed to many users. These can be shared over Email or on a Shared Drive, however, user’s individual Options settings may cause the ad-hocs to no longer function.
SV (Formula)		Can be distributed through Email or on a Shared Drive, however, if the user reviewing the report does not have access to the Source System no balance will be visible.
OBIEE		Reports can be accessed on demand or scheduled and delivered via email, FTP, and other delivery methods, including the ability to schedule based on conditions (Example: if Report A returns no results, run Report B and send to the group).
EPRCS		Report Packages can be distributed in groups of reports or books via mobile, web, or Microsoft Office.
CXO		Reports or Storyboards can be distributed to any user with Report Viewer access. The user will be able to make controlled modifications to the POV and refresh data to get “live” results. These reports can be accessed from the user’s computer or mobile device.

Compare – Collaboration/Commentary

		Collaboration/Commentary
HFR	✗	HFR does not natively support the ability to capture and report out User Commentary.
SV (Ad-hoc)	✗	SmartView Ad-Hoc can be used to capture User Commentary through Cell Text. However, the commentary cannot be consolidated and reported out at various levels of the Organization.
SV (Formula)	✗	SmartView Formulas can be used to capture User Commentary through Cell Text. However, the commentary cannot be consolidated and reported out at various levels of the Organization.
OBIEE	⚠	OBIEE supports write back functionality to some data sources which could be configured to support commentary, but commentary is not an out of the box feature of the application.
EPRCS	✓	EPRCS performs review cycles and commentary for individual reports sections as well as the entire report package. Supports interactive collaboration across multiple users.
CXO	✓	Rich and flexible report-level, line-item and bookmark collaborative commentary and footnotes. Users can input commentary which can be consolidated as reported out at various levels of the Organization.

Compare – Approval/Workflow

		Approval/Workflow
HFR	✗	HFR does not natively support the ability for users to Approve a report through a designated Workflow.
SV (Ad-hoc)	✗	SmartView Ad-Hoc would not typically require an Approval process. However, Process Management data can be review in an Ad-Hoc.
SV (Formula)	✗	SmartView Formulas does not natively support the ability for users to Approve a report through a designated Workflow. However, SmartView can be leveraged within other tools (ie IBM Clarity) to manage the Workflow process.
OBIEE	✗	OBIEE does not support an approval workflow process
EPRCS	✓	EPRCS offers interactive Process workflow, Approvals and Status Reporting.
CXO	✓	Beginning with Release 6.0, web-based administrative workflow enable true Agile Reporting.

Compare – Security Configuration

		Security Configuration
HFR	✓	<ol style="list-style-type: none"> 1. Shared Services utilized to control/restrict access 2. Ability to secure users as Report Developers and Report Users 3. Data level security inherited from Shared Services (ie Entity level access)
SV (Ad-hoc)/ SV (Formula)	✓	<ol style="list-style-type: none"> 1. Shared Services utilized to control/restrict access 2. All users with View or higher access may create and view Ad-Hoc in SmartView 3. Ability to submit data from Excel to source data can be restricted 4. Data level security inherited from Shared Services (ie Entity level access)
OBIEE	⚠	<ol style="list-style-type: none"> 1. OBIEE does not integrate w/ Shared Services, it leverages Weblogic services to control/restrict access 2. Weblogic can integrate to enterprise LDAP applications as well as database stored security authorizations 3. A granular level of authorization can be granted to specific features and functions of the toolset, as well as for whole subject areas, data connections, or even row level security
EPRCS	⚠	<ol style="list-style-type: none"> 1. EPRCS does not integrate with Shared Services / Users and Groups added manually or via batch file 2. Offer 6 major roles inherent within the product and 3 levels of security
CXO	⚠	<ol style="list-style-type: none"> 1. Does not integrate with Shared Services 2. Ability to secure users as Report Administrator, Report Builder or Report Viewer 3. Data level security filtered can be enabled, however, not inherited from Shared Services

MindStream Analytics brings you...

Expert Knowledge on EPM Reporting & Dashboards

Thank you! Questions?

Jessica Benbow

Director, Consolidations, Reporting, Financial Close

Office: 800.497.0151 ext. 732

jbenbow@mindstreamanalytics.com

Lisa Spencer

EVP, Sales & Marketing

Office: 415.340.3323

lspencer@mindstreamanalytics.com

Seth Landau

COO & EVP, Consulting Services
slandau@mindstreamanalytics.com

