

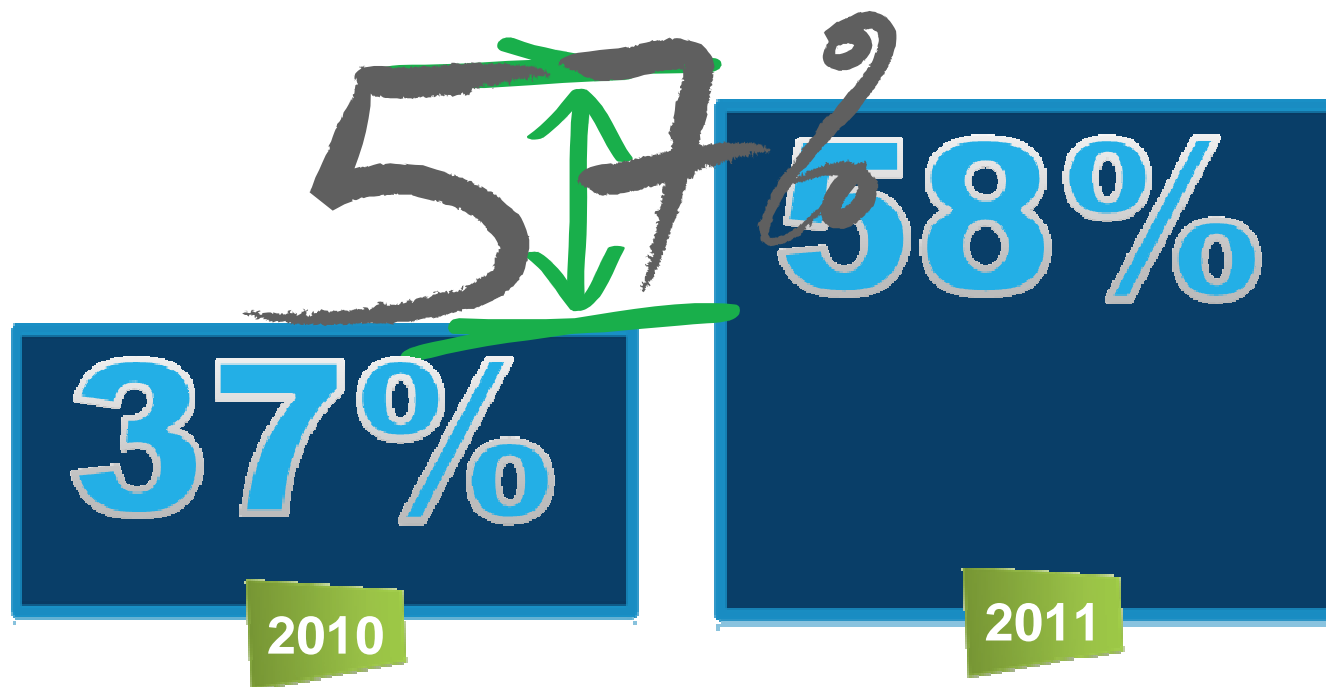
Dominique Di Grande – Business Analytics Specialty Architect  
21 Mars 2012

# Business Analytics: Driving Profitable Growth, Addressing Regulation and Risk



**Forecast** **Risk**  
**Regulation** **Inventory** **XBRL**  
**Headcount** **Variability** **Reporting** **Working**  
**Analysis** **Sarbanes-Oxley** **Demand** **Profitability**  
**Capital** **Growth** **Uncertainty** **Expense**  
**Cash** **Management** **Scorecards** **Flow**  
**Coverance**





More organizations see

# analytics

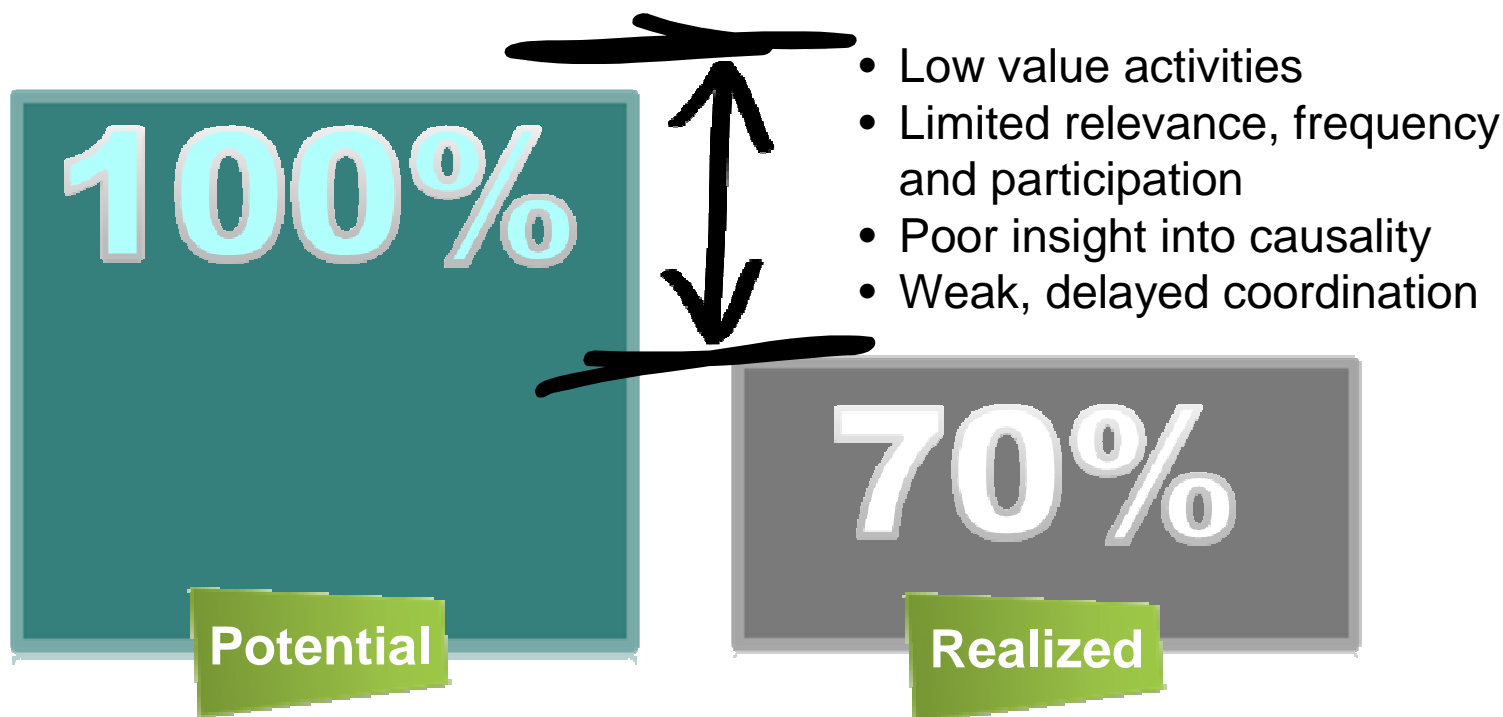
As competitive advantage

220%

Organizations competing on analytics  
substantially **outperform** their peers

.....

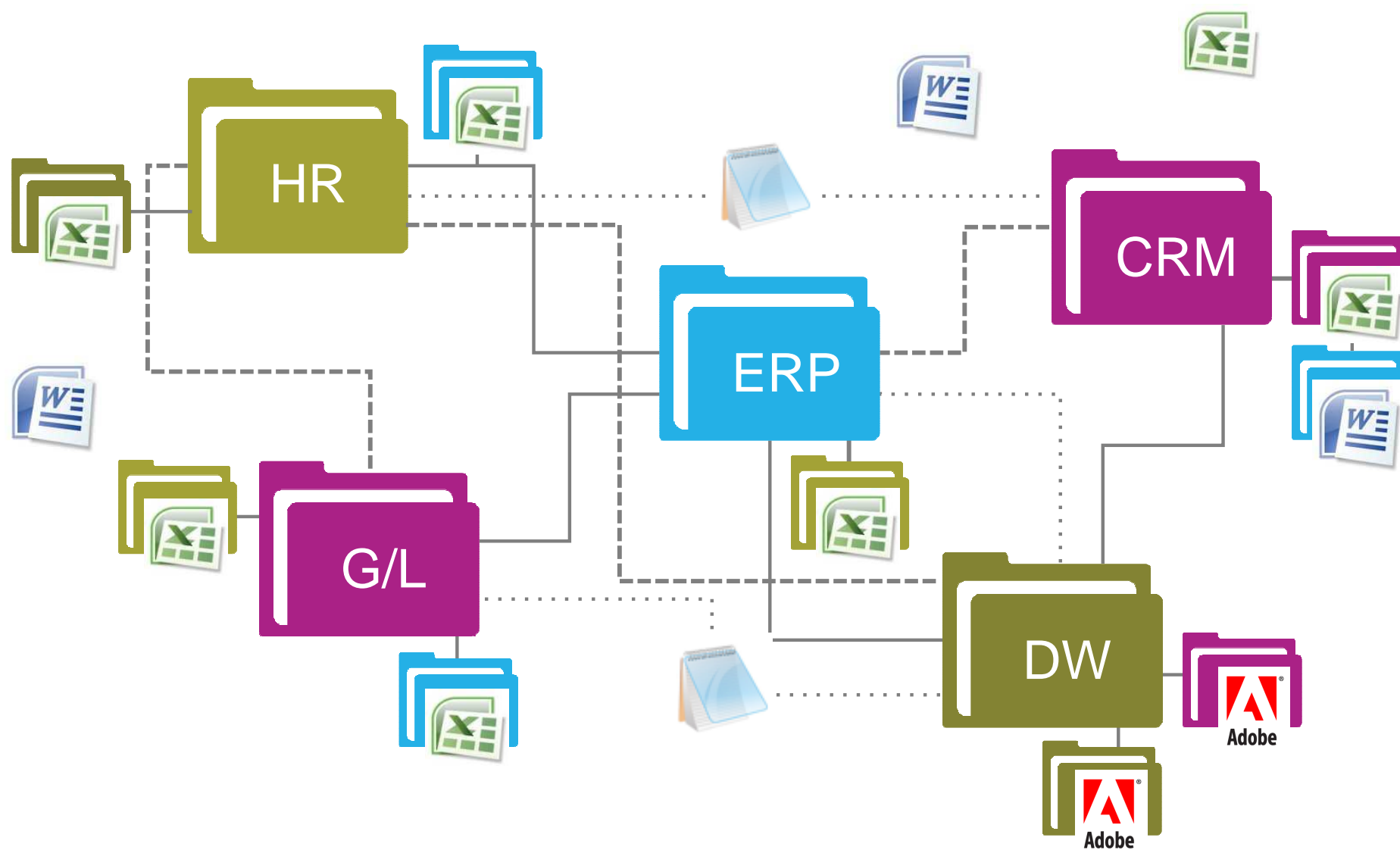
# Performance potential squandered by poor practices



.....

30% of performance potential is lost due to  
**subpar performance management**

# Technology foundation is under pressure

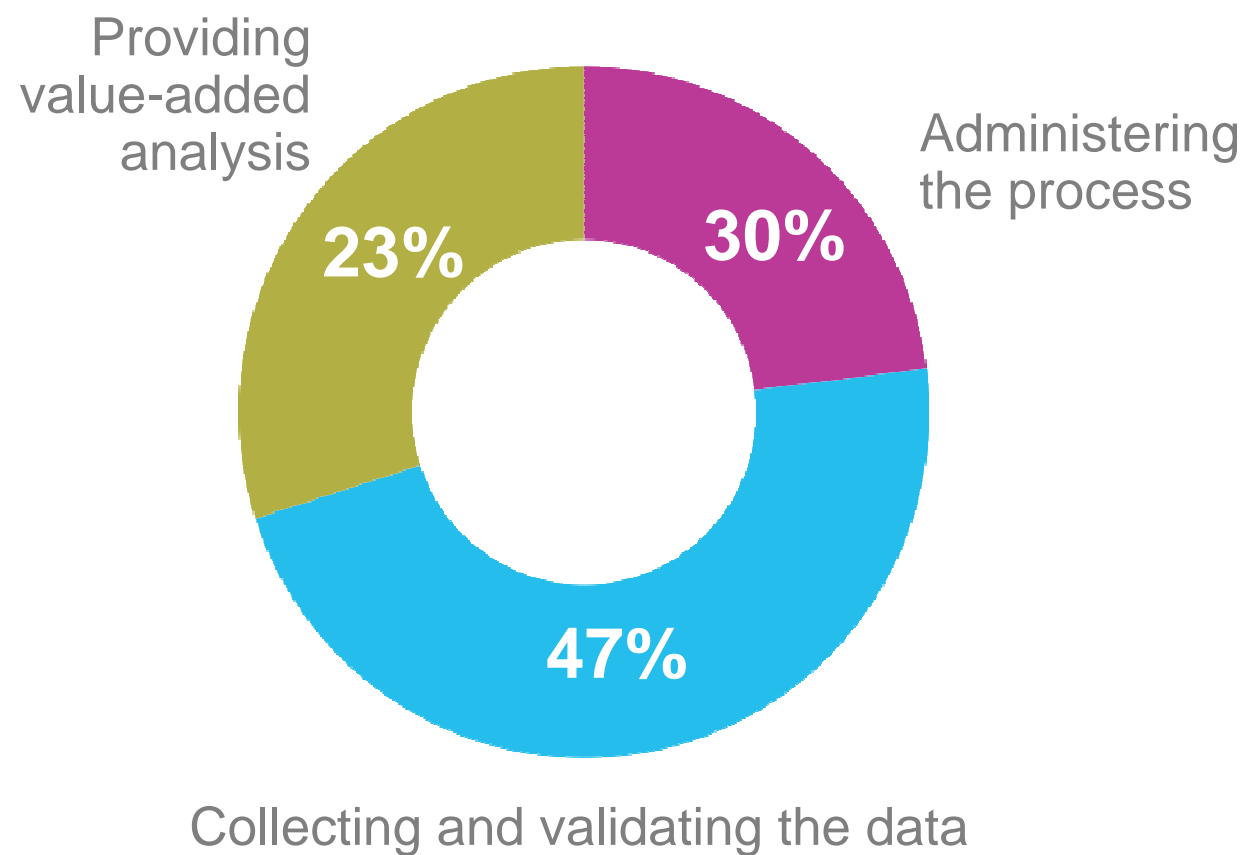


## Speed and agility do not match the marketplace volatility

**“For 55 percent of companies, their budget assumptions are useless by three months into the new year.”**

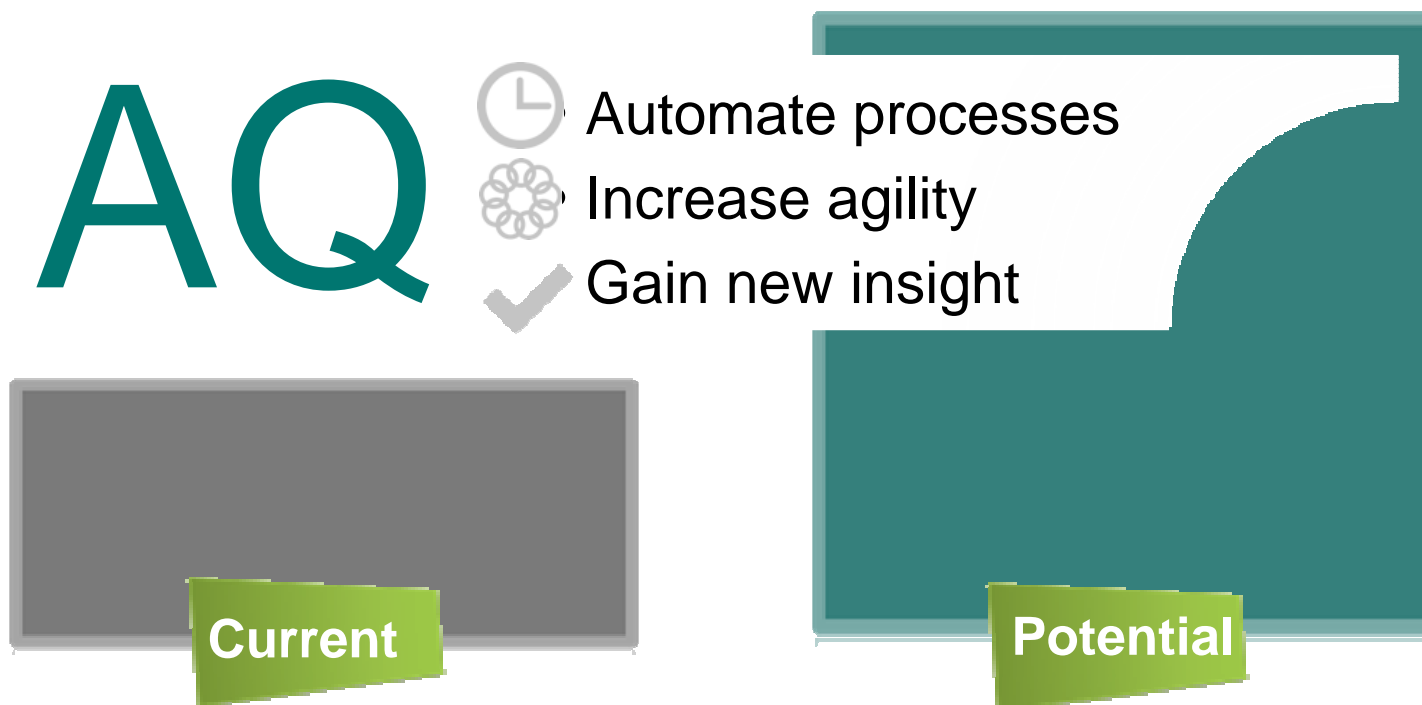


## Staff leverage is weak





# Raise your analytic maturity to gain the time, control, and confidence



.....

The more you **infuse analytics into your business**, the higher your AQ and the **better you and your business will perform**

# Transforming the decision process

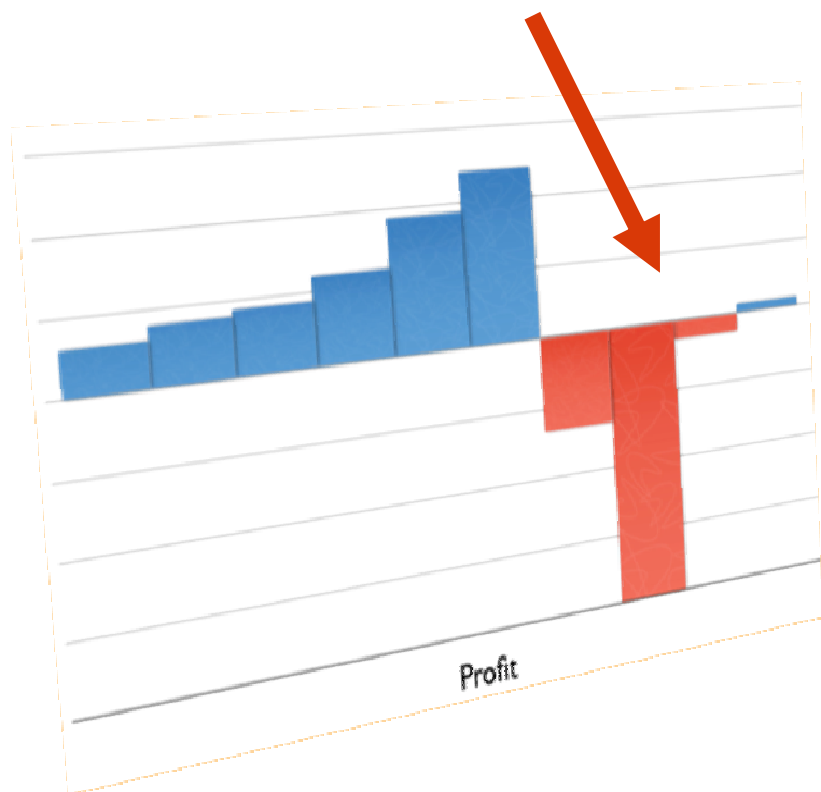


# Transforming the decision process



# Monthly reports do not help us understand root causes ... or profitability levers

Which products, customers, segments?



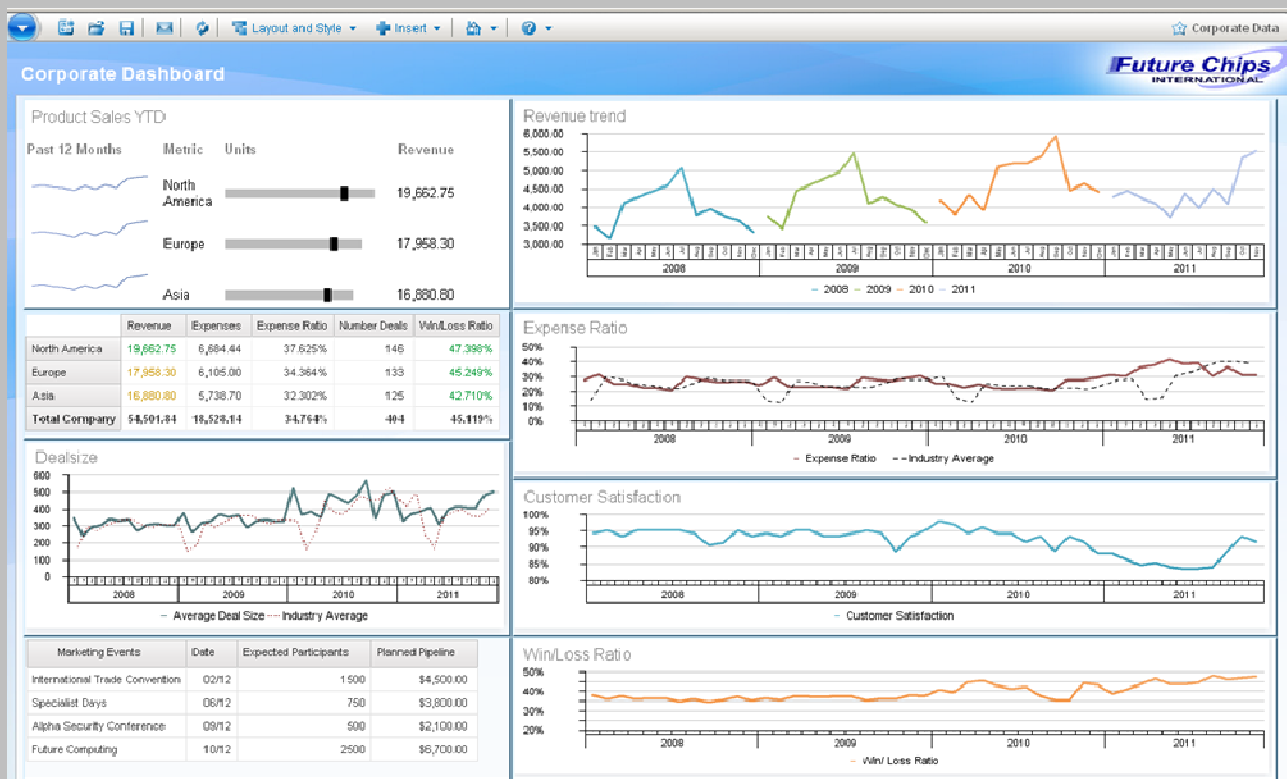
**Profit and Loss Statement**  
For the Year ending 12/31/2011

Stated in 000s

	Budget	Actual	Variance	Variance %
Total Sales Revenue [J]	5,000	4,900	(100.0)	-2.0%
Total Cost of Sales [K]	800	750	(50.0)	-6.3%
<b>Gross Profit [L=J-K]</b>	<b>4,200</b>	<b>4,150</b>	<b>(50.0)</b>	<b>-1.1%</b>
<b>Operating Expenses</b>				
<b>Sales and Marketing</b>				
Advertising				
Direct marketing	230	210	20.0	9.5%
<b>Total Sales and Marketing Expenses [M]</b>	<b>150</b>	<b>200</b>	<b>(50.0)</b>	<b>-25.0%</b>
<b>Research and Development</b>				
Technology licenses	380	410	(30.0)	-7.3%
<b>Total Research and Development Expenses [N]</b>	<b>80</b>	<b>75</b>	<b>5.0</b>	<b>6.7%</b>
<b>General and Administrative</b>				
Wages and salaries	800	710	90.0	12.7%
Rent	120	120	0.0	0.0%
<b>Total General and Administrative Expenses [O]</b>	<b>920</b>	<b>830</b>	<b>90.0</b>	<b>10.8%</b>
<b>Total Operating Expenses [P=M+N+O]</b>	<b>1,380</b>	<b>1,315</b>	<b>65.0</b>	<b>4.9%</b>
<b>Income from Operations [Q=L-P]</b>	<b>2,820</b>	<b>2,835</b>	<b>15</b>	<b>0.5%</b>
<b>Taxes</b>				
Total Taxes [S]	512	501	11.2	2.2%
<b>Net Profit [T=Q+R-S]</b>	<b>2,308</b>	<b>2,334</b>	<b>27</b>	<b>1.1%</b>

# From looking backward to looking forward

Leading vs. lagging | External & internal vs. internal only | Forecasting vs. budgeting only



IBM Cognos Business Intelligence 10 – comprehensive dashboards

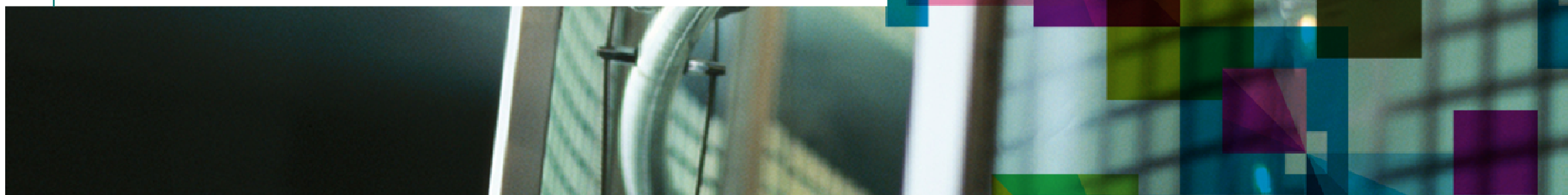
# Transforming the decision process



- **We need to understand and respond faster to marketplace changes.**



- **The data I need is not just in corporate systems.**





# INSIGHT

What if?

# ACTION

Visualize

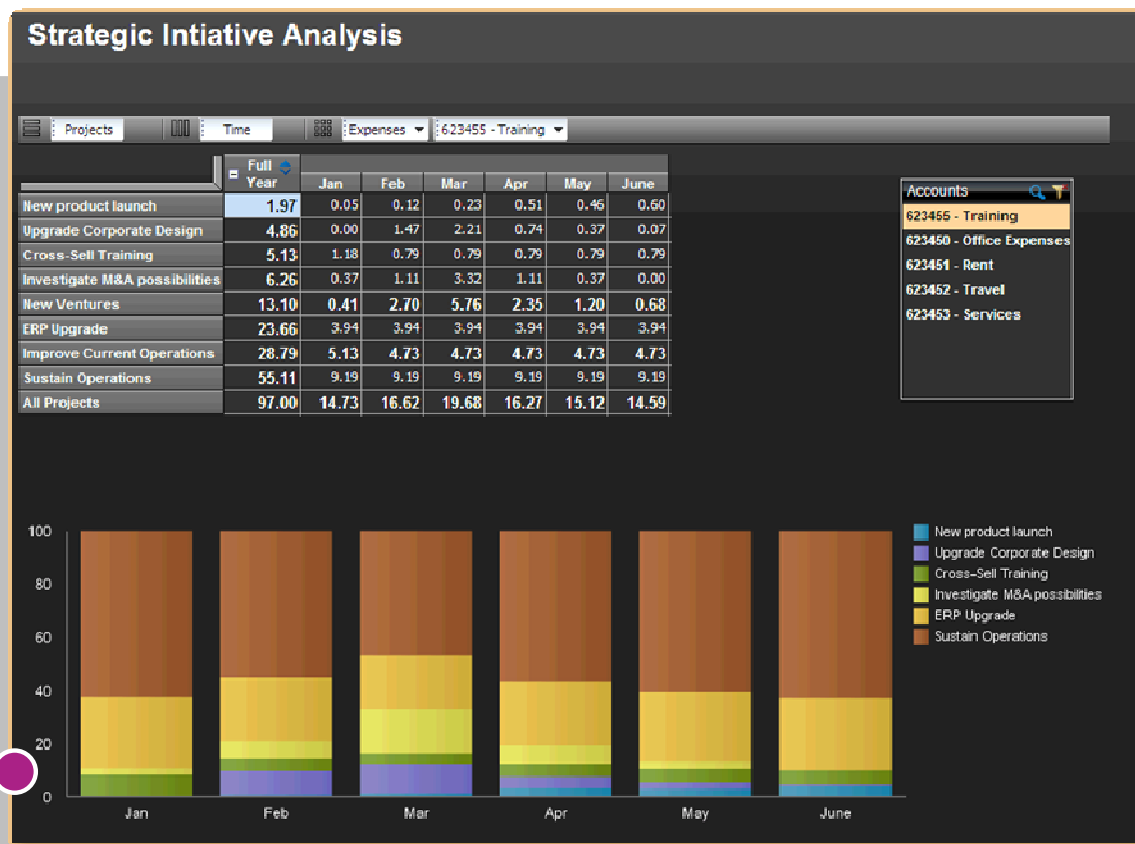
Cognos  
Insight

Explore

# Agile, personal analytics



- Access to external and corporate-sanctioned data sources
- Boundless freedom to perform analysis
- “Write-back” for what-if scenarios and planning template development



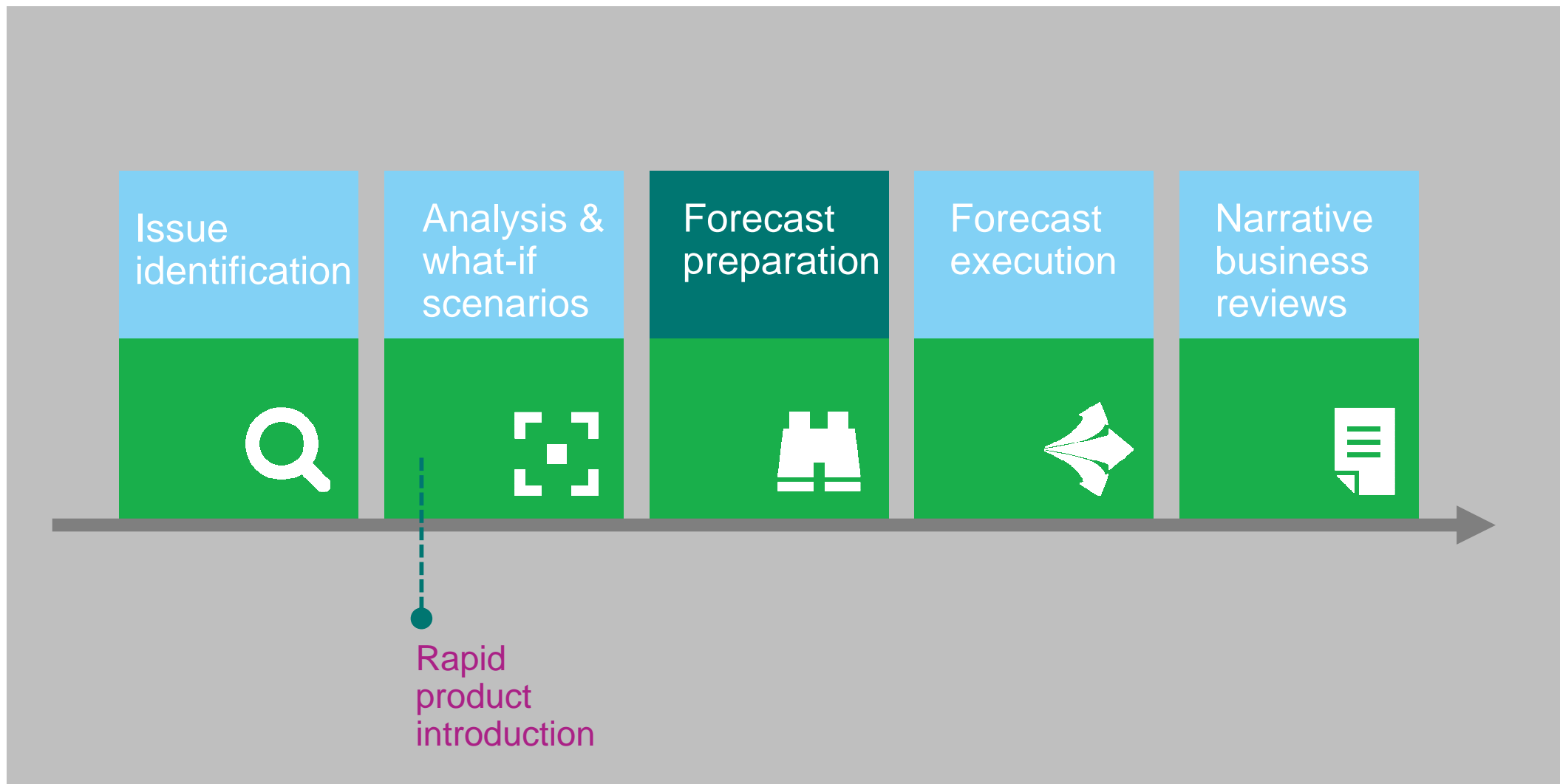
IBM Cognos Insight

# Demo

- **Analysis and what-if scenarios**



# Transforming the decision process



# From spreadsheet formulas and links to visual modeling

Visual vs. Text | Business-User vs. IT specialist | Agile Prototype-to-Deploy



From Spreadsheet  
formulae & links to

Visual Modeling & Composition

```
=100*(Sheet2!B$29+'[Northern  
Region.xls]Frcst'!$B$3+'[So  
uthern  
Region.xls]Forecast'!$B$3+'  
[Southern Region.xls]-  
Frcst'[Northern  
Region.xls]Sheet2'!$B$3)
```

The screenshot shows the IBM Cognos TM1 10 Performance Modeler interface. It features several panes: 'Price and Cost' and 'Revenue Plan' on the left and right, respectively, both showing dimension hierarchies (Versions, Regions, SKUs, Periods, Years) and member lists. A central 'Mappings' pane shows a table mapping 'Unit Sales Price' and 'Unit Cost' from the 'Price and Cost' model to the 'Revenue Plan' model. Blue arrows indicate the flow of data from the source model to the target model.

Mapped Source	Mapped Target
Unit Sales Price	Unit Sales Price
Unit Cost	Unit Cost

IBM Cognos TM1 10 (Performance Modeler)



# Intuitive modeling and application deployment



- Multidimensional modeling tools
- Big time savings, less risk and better visibility
- Visual interface for intuitive modeling

The screenshot displays the IBM Cognos TM1 Performance Modeler interface. On the left, there are two tree views: 'Design' and 'TMI Objects'. The 'Design' tree shows a hierarchy for 'Revenue\_analysis' including 'Approval Hierarchy', 'Work-Flow', 'Views', 'Price and Cost', 'Revenue Plan', and 'Rights'. The 'TMI Objects' tree shows 'Dimensions', 'Cubes', 'Price and Cost', 'Revenue Plan', 'Links', 'Processes', 'Chores', and 'Websheets'. The main workspace contains a circular workflow diagram with four steps: 1. Define Views, 2. Define the Approval Hierarchy, 3. Deploy the Application, and 4. Define Security. Below the diagram is a 'Properties' table.

Property	Value
Type	Application
Application Name	Revenue_analysis
Application Type	Approval
Created by	bob business
Deployed	Yes
Saved	No
Enable Charting	Yes
Enable Multiple Sandboxing	Yes

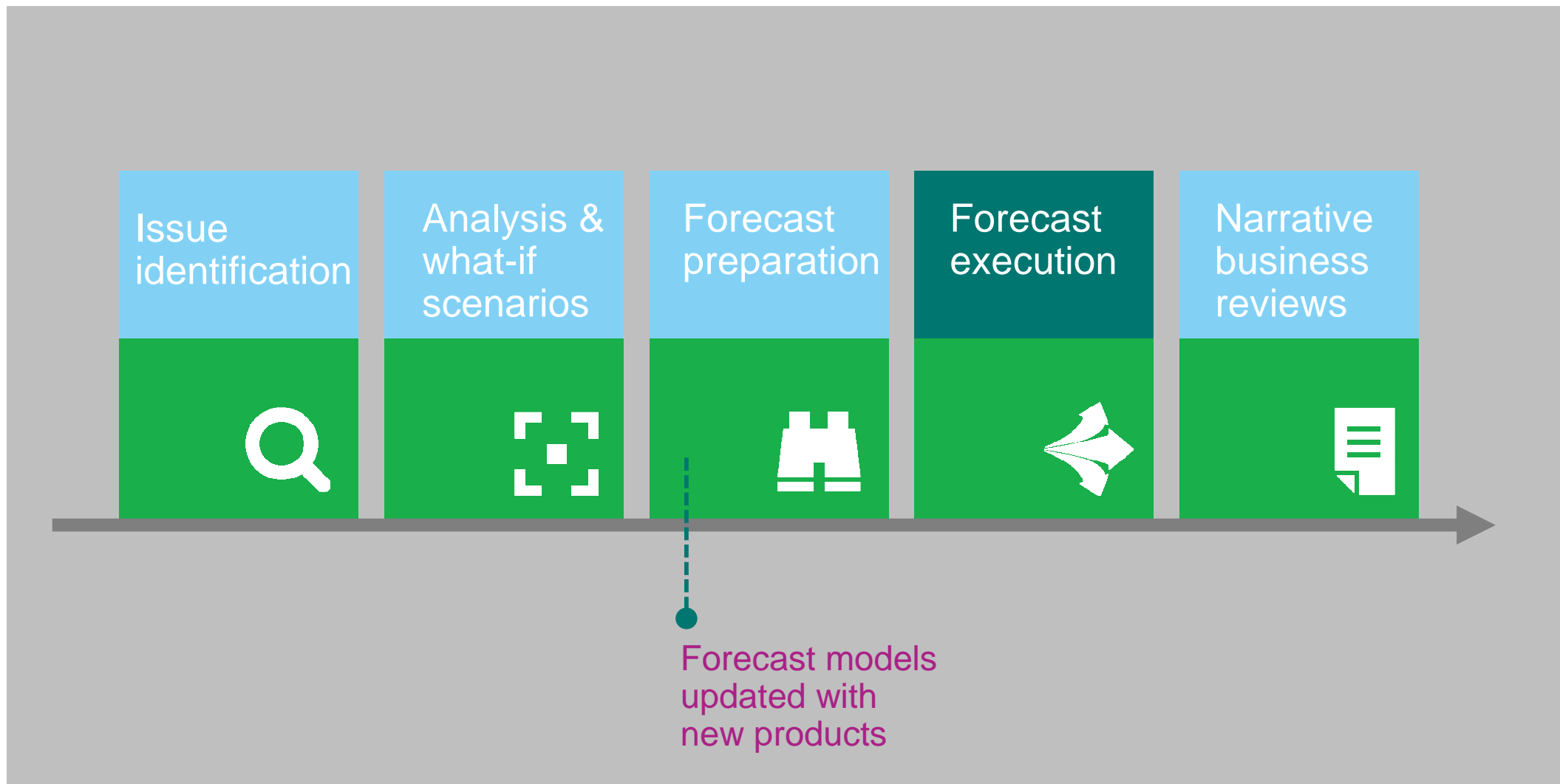
IBM Cognos TM1 10 (Performance Modeler)

# Demo

- **Prepare ad-hoc forecast models**



# Transforming the decision process







From detailed and numeric to

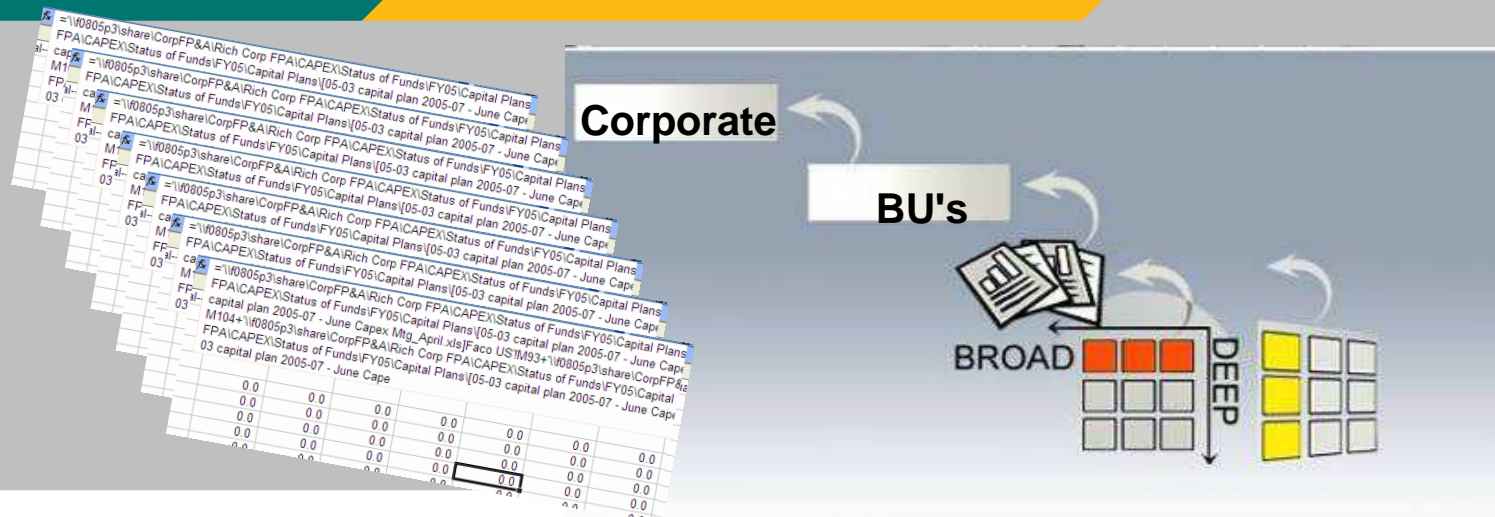
Driver-based forecasts

	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL	YTD Actuals Variance	YTD Act Var %	Total Variance	Total Var %
Revenue	143.00	150.00	176.00	166.00	200.00	180.00	181.00	190.00	200.00	200.00	210.00	260.00	2256.00	-65.00	-7%	256.00	13%
COS	92.95	97.00	114.00	108.00	131.00	117.00	117.00	125.00	131.00	132.00	140.00	180.00	1484.95	-957.05	-64%	84.95	6%
Margin	50.05	53.00	62.00	58.00	69.00	63.00	64.00	65.00	69.00	68.00	70.00	80.00	771.05	-22.95	-7%	71.05	10%
Margin %	35.00%	35.33%	35.23%	34.94%	34.50%	35.00%	35.36%	34.21%	34.50%	34.00%	33.33%	30.77%	34.35%	0%		-0.65%	
Salaries	19.00	19.00	19.00	19.00	19.00	19.00	19.00	22.00	22.00	22.00	22.00	22.00	243.00	-1.00	-1%	-3.00	-1%
Bonus	1.43	1.50	1.76	1.66	2.00	1.80	1.81	1.90	2.00	2.00	2.10	2.60	22.56	-2.35	-39%	2.56	13%
Benefits	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.22	0.22	0.22	0.22	0.22	2.43	1.35	59%	-0.07	-3%
Insurance	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	1.80	0.00	0%	-0.10	-5%	
Rent	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	34.80	0.00	0%	-1.20	-3%	
Utilities	3.00	2.00	2.50	1.58	1.00	1.00	1.20	1.40	1.59	2.00	2.50	3.00	22.77	0.92	8%	-1.23	-5%
Office Supplies	0.11	0.20	0.16	0.20	0.07	0.37	0.14	0.42	0.49	0.34	0.38	0.43	3.30	0.07	9%	1.00	43%
Travel - Air	7.15	7.50	8.80	9.00	15.00	9.00	9.05	9.50	10.00	10.00	10.50	13.00	118.50	-17.45	-58%	13.50	13%
Travel - Hotels	1.43	1.50	1.76	1.66	2.00	1.80	1.81	1.90	2.00	2.00	2.10	2.60	22.56	-3.35	-67%	-7.44	-25%
Travel - Car	0.72	0.75	0.88	0.83	1.00	0.90	0.91	0.95	1.00	1.00	1.05	1.30	11.28	-2.68	-178%	6.28	128%
Travel - Train	1.90	1.00	1.50	1.00	1.20	1.00	1.00	3.00	2.00	2.00	2.00	3.00	20.00	-1.50	-33%	9.00	82%
Gifts & Misc	0.50	0.00	0.00	0.50	0.00	0.00	0.00	5.00	0.00	0.00	0.00	0.00	6.00	0.00	0%	-1.00	-14%
Maintenance & Repair	0.35	0.14	0.06	0.43	0.30	0.36	0.31	0.42	0.03	0.41	0.09	0.13	3.04	0.02	1%	0.04	1%
Marketing	2.00	0.00	8.00	9.00	4.00	7.00	8.00	4.00	5.00	2.00	9.00	1.00	59.00	-3.00	-15%	5.00	9%
Net Income	9.83	16.17	14.35	9.90	20.18	17.53	17.53	16.24	14.62	20.98	15.01	27.66	200.01	15.43	28%	0.01	0%



From manual aggregation to

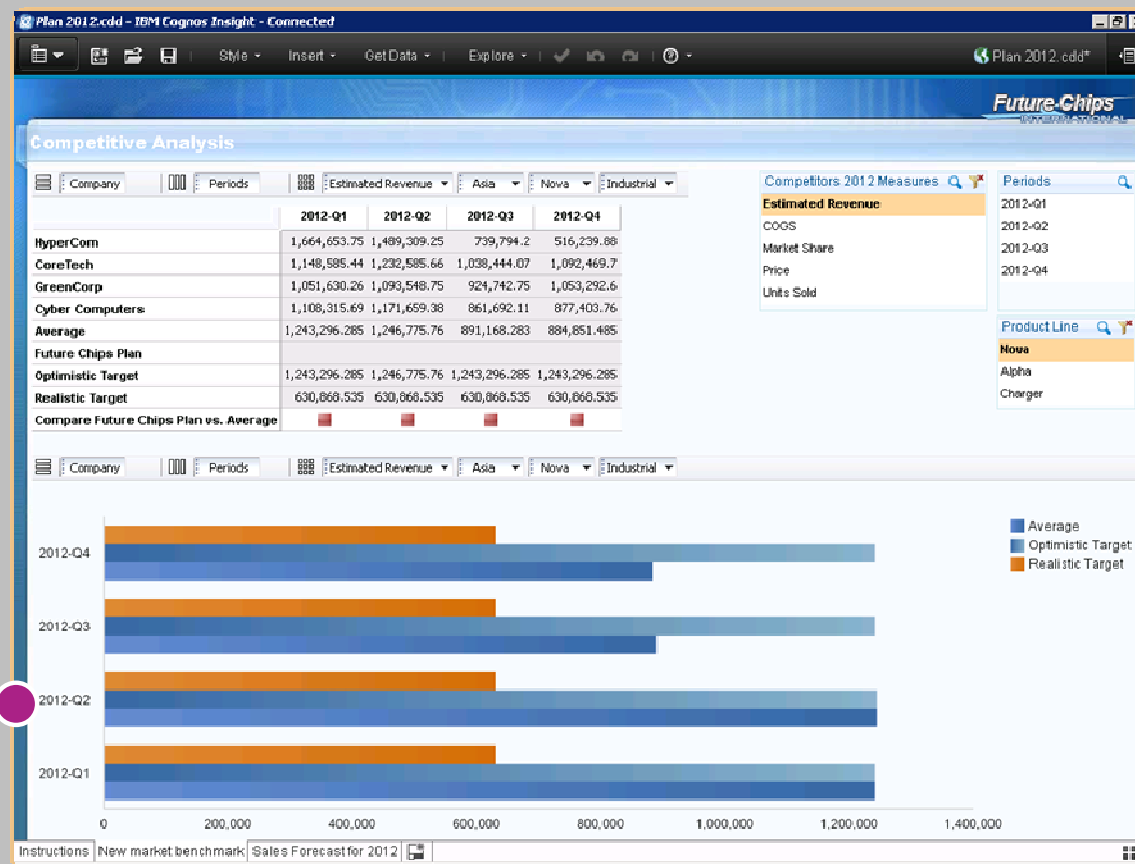
Process automation



# Planning, analysis, forecasting & profitability modeling



- Driver-based models
- Easier scenarios to address risk
- Easy distribution and aggregation of templates
- Real-time reporting against plan, budgets and forecasts



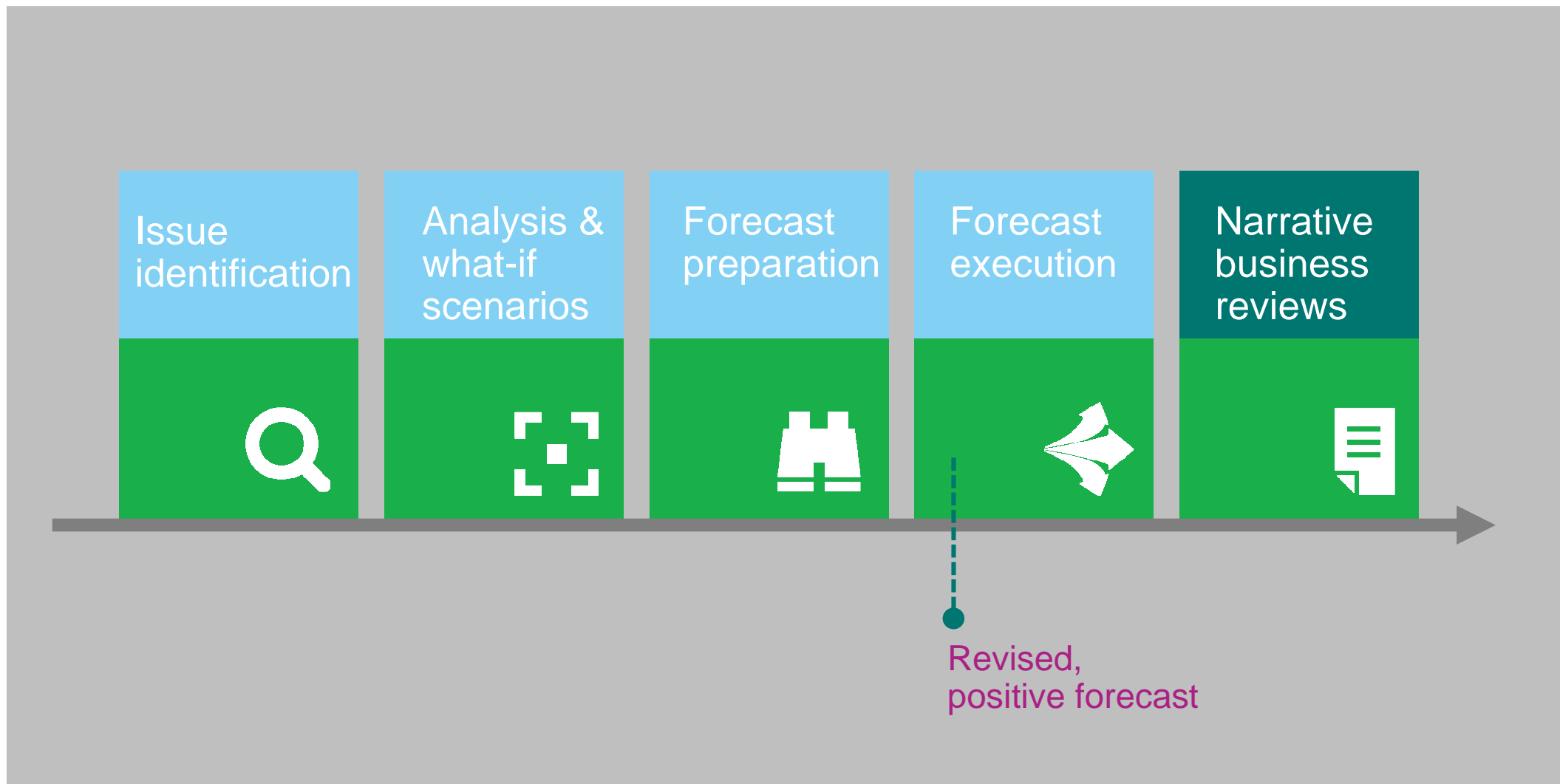
IBM Cognos TM1 10 (Cognos Insight, Contributor, Excel)

# Demo

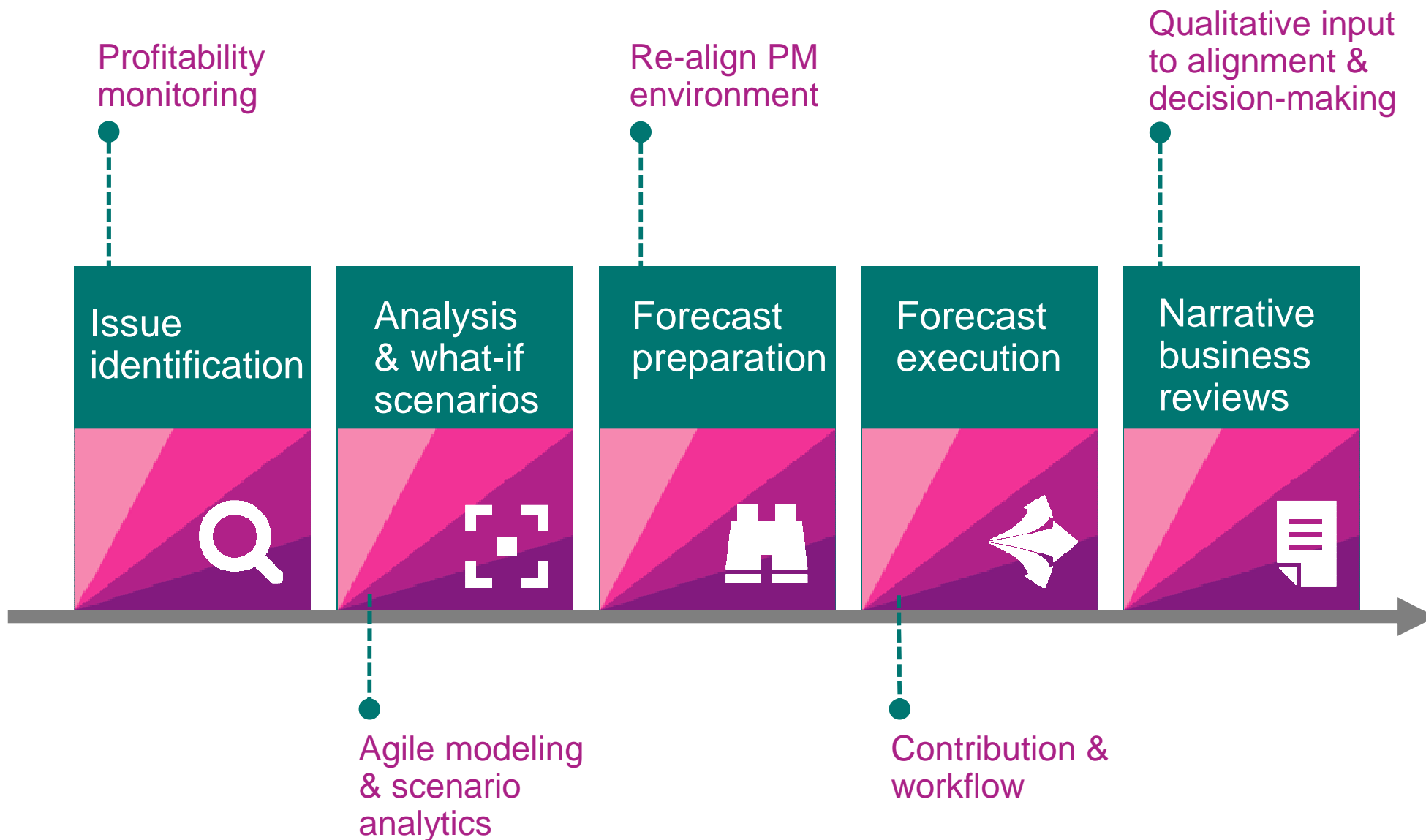
- Collaborate and update forecast



# Transforming the decision process



# Smarter Analytics. Smarter Outcomes.



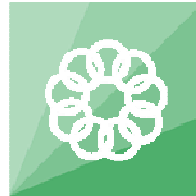
## IBM business analytics deliver ...



### Time

#### **Drive efficiencies and scale**

- Eliminate intensely manual efforts
- Structure and automate dynamic processes
- Scale to large user communities and data sets



### Control

#### **Gain agility and preparedness**

- Link operational and financial performance management
- Support advanced analytic techniques (e.g., scenario and predictive analytics)
- Eliminate delays in coordinating around to emerging realities



### Confidence

#### **Improve effectiveness and outcomes**

- Dramatically reduce risk of errors
- Cost-effectively address compliance
- Drive new confidence in analytics-driven decision making

