IBM Cognos Financial Performance Analytics – Faster Insight: Smarter Financial Decisions

Business Analytics
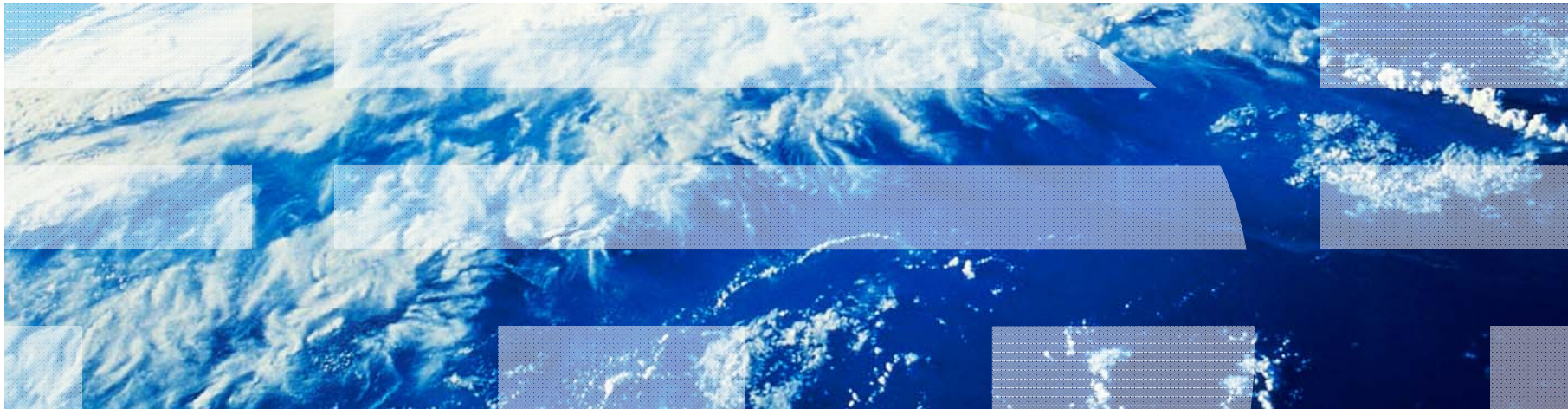
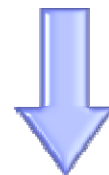# Smarter planet: Thinking and acting in new ways to make our systems more efficient, productive and responsive.
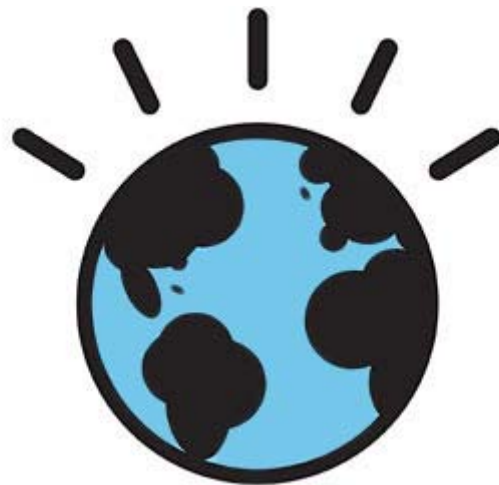
Smarter businesses are able to leverage information to drive smarter business outcomes

Increase Revenue

Increase Productivity

Reduce Costs
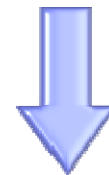
Reduce Risk

Ways to Optimize Decisions and Actions

Lack of Insight

Velocity

Volume

Inefficient Access

Variety

Inability to Predict

Sense and respond	**Predict and act**
Instinct and intuition	**Real-time, fact-driven**
Skilled analytics experts	**Everyone**
Back office	**Point of impact**
Automated	**Optimized**

SPSS
AN IBM® COMPANY

Cognos.
software
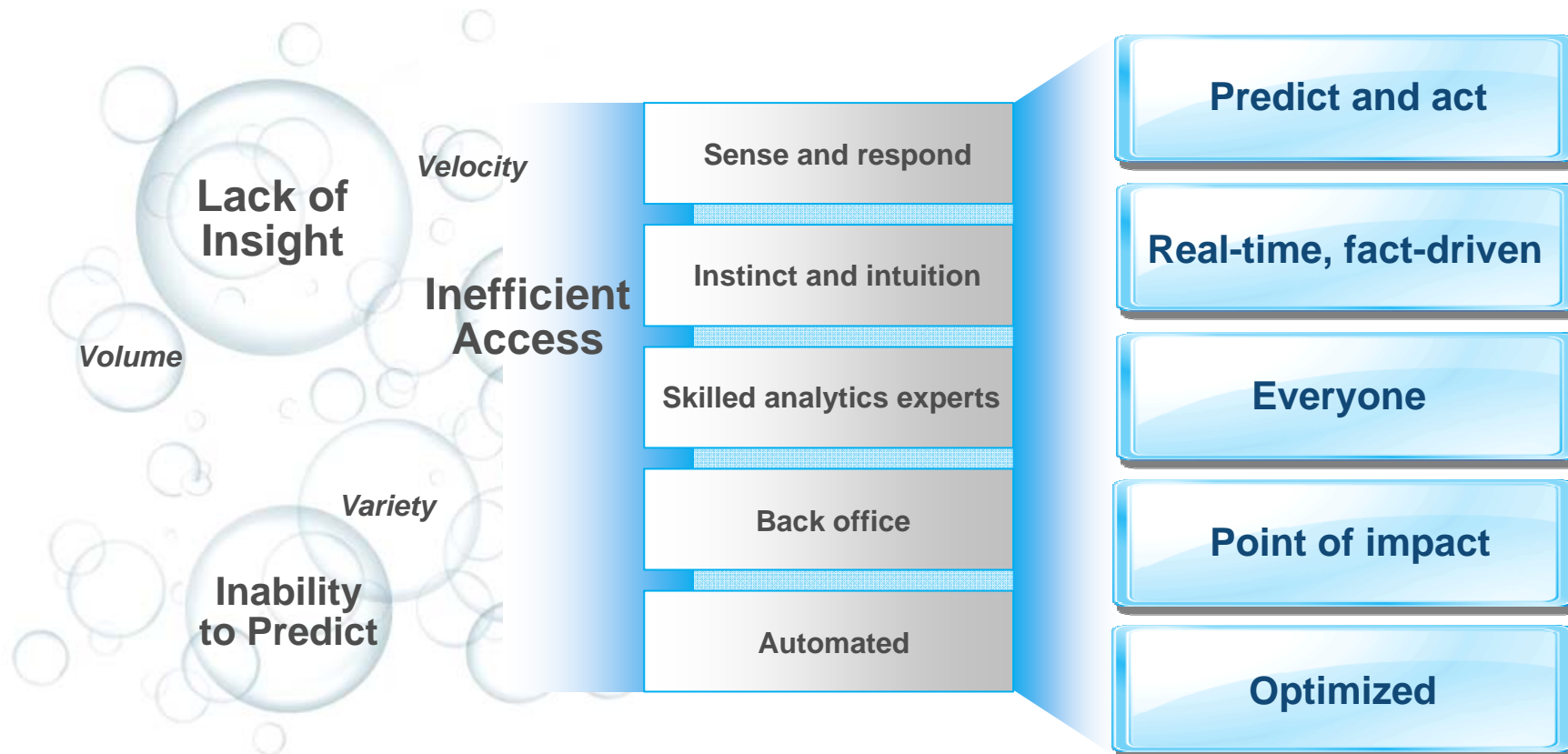
How Do You Get Started on an Information-led Transformation?

Industry out-performers are **8 times** more likely to pursue information-led transformation at an enterprise level than industry under-performers

Plan an information agenda

Information Agenda; BAO Strategy Services

Establish a flexible information platform

Apply business analytics to optimize decisions
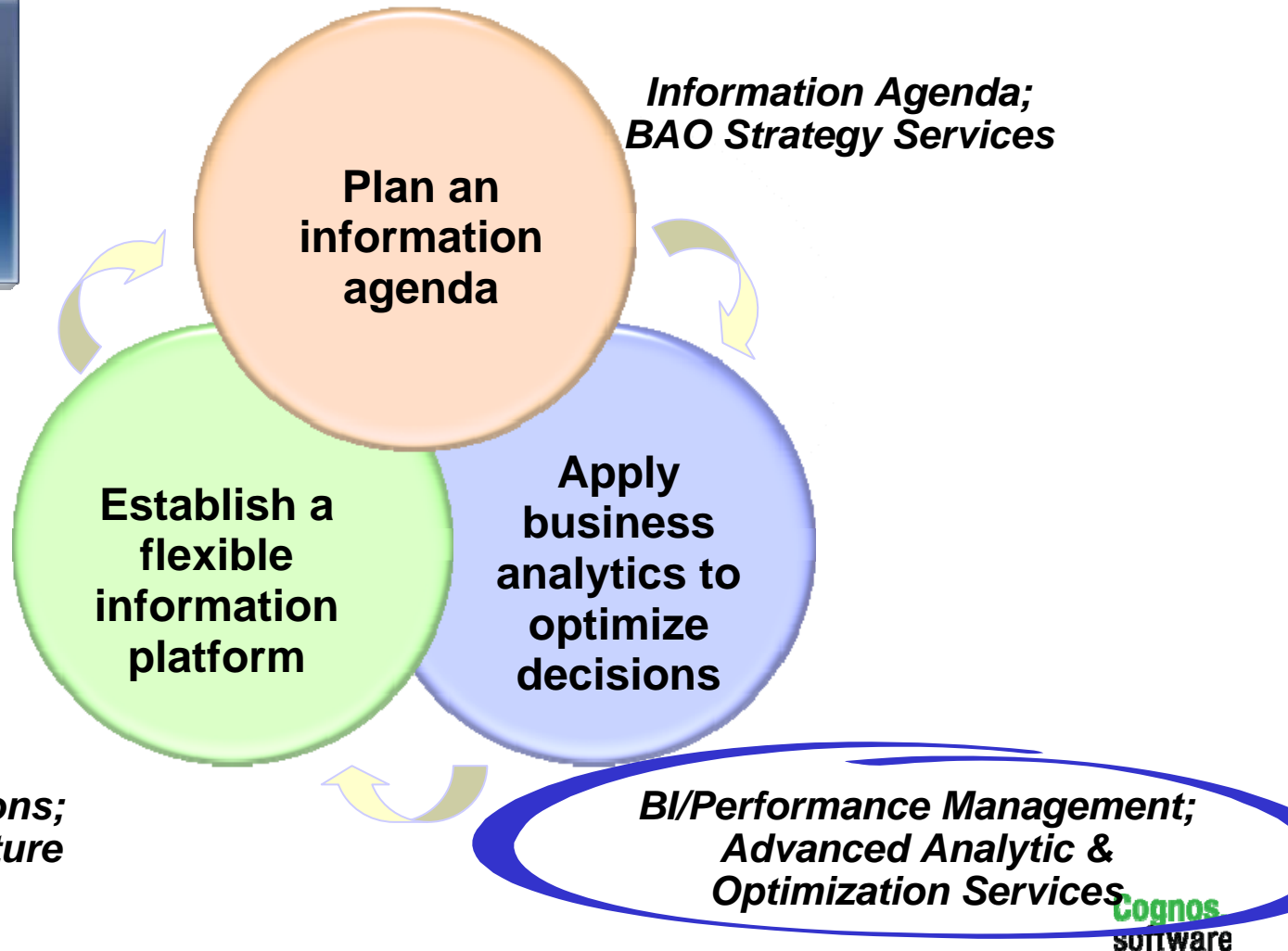
IOD Software & Solutions; Information Infrastructure

BI/Performance Management; Advanced Analytic & Optimization Services

SPSS AN IBM® COMPANY

Cognos software

New insights are delivered through Business Analytics

Optimized Performance

Informed Decisions

Actionable Insights

Trusted Information

IBM Business Analytics Value Proposition

IBM Business Analytics delivers **actionable insights** for **decision makers** at all levels of your organization, enabling them to **optimize** business performance

IBM Business Analytics Software Addresses Key Customer Needs

Business Intelligence

Query, reporting, analysis, scorecards and dashboards to enable decision makers across the organization to easily find, analyze and share the information they need to improve decision making

Advanced Analytics

Data mining, predictive modeling, 'what if' simulation, statistics, and text analytics to identify meaningful patterns and correlations in data sets to predict future events and assess the attractiveness of various courses of action

Financial Performance & Strategy Management

Budgeting and planning, financial consolidation, scorecarding and strategy management, financial analytics and related reporting capabilities to help simplify, structure, and automate dynamic and sustainable financial performance and strategy management practices

Analytic Applications

Applications that package business analytics capabilities, data models, process workflows and reports to address a particular domain or business problem (e.g. customer, workforce, supply chain and financial performance management)
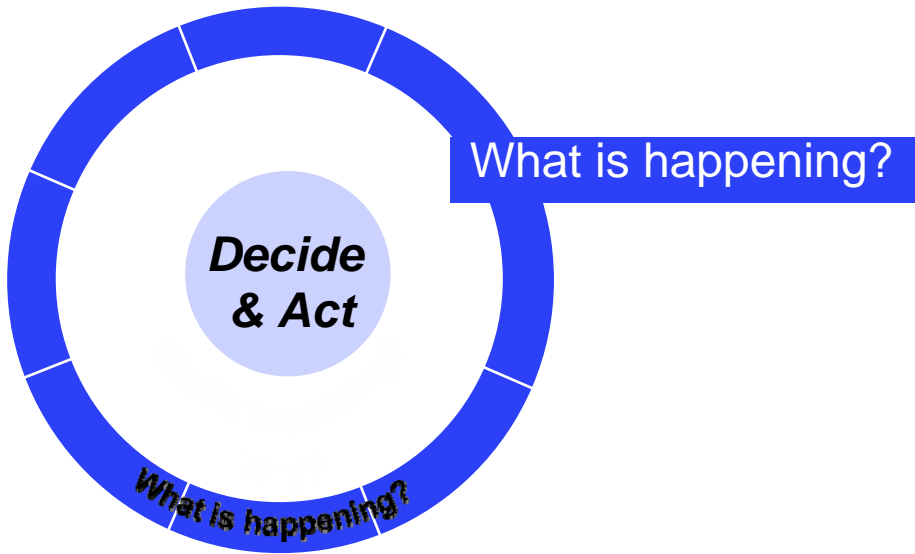
Optimize Business Performance through…..
- ✓Actionable insights for decision makers
- ✓Consistent, accurate and trusted information
- ✓Rich industry solutions, proven practices and professional services

SPSS
AN IBM® COMPANY

Cognos.
software

For Example…….

Scorecards & Dashboards

What is happening?

Decide & Act

What is happening?

Immediate Insights to Business Performance

For Example…….

Scorecards & Dashboards

Reports

What is happening?

Decide & Act

What is happening?
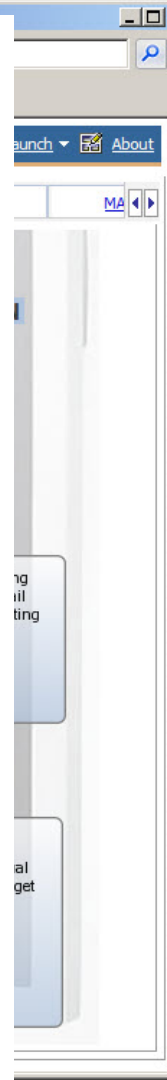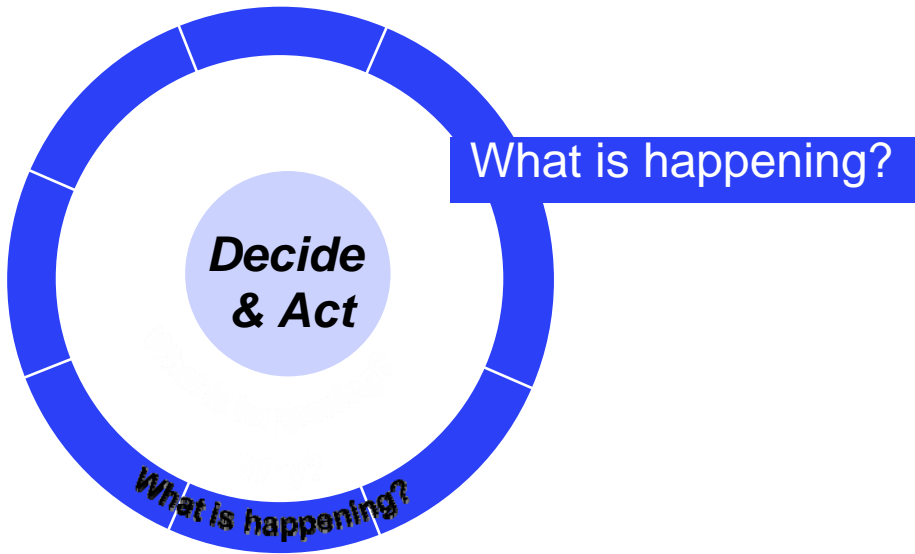
Immediate Insights to Business Performance

For Example…….

| Scorecards & Dashboards | Reports | Real Time Monitoring |
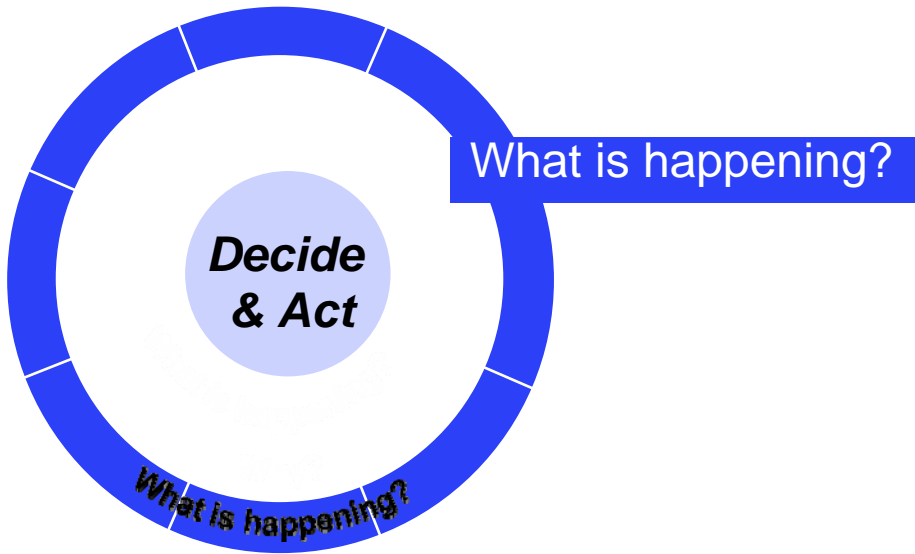
Decide & Act

What is happening?

What is happening?

Immediate Insights to Business Performance

10

For Example…….

Ad Hoc Query

Decide & Act

Why?

Why?
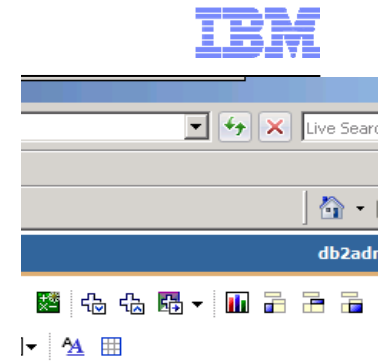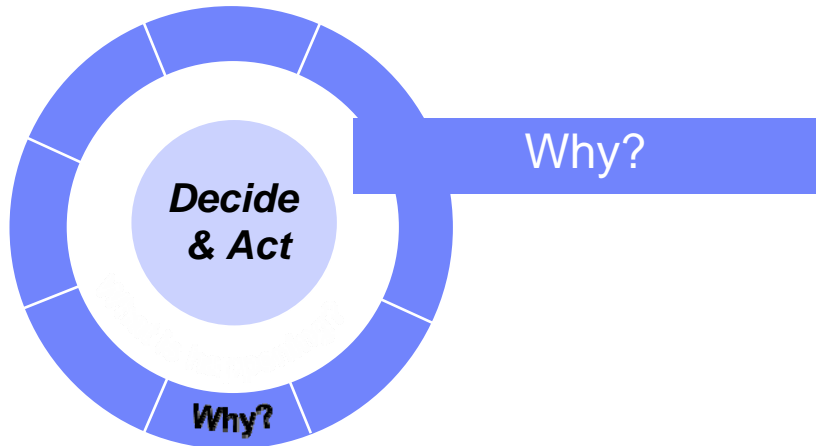
Product Type

urn quantity	% Returned ▽	Lost revenue
2,282	1.43%	$211,268
988	1.20%	$49,798
1,946	1.13%	$77,840
1,220	1.09%	$114,826
2,531	0.85%	$180,182
2,082	0.83%	$175,235
11,049	1.03%	$809,148
3,863	1.28%	$86,377
14,769	1.11%	$46,522
33,811	1.07%	$66,270
4,189	1.06%	$76,868
2,695	1.04%	$92,897
1,689	0.79%	$36,428
831	0.41%	$7,088
61,847	1.06%	$412,450
10,808	1.33%	$371,888
3,229	1.31%	$242,175
23,007	1.27%	$19,611
10,356	1.19%	$163,459
26,794	1.15%	$135,799
10,446	1.13%	$101,162
	1.11%	$387,244
	0.92%	$109,621

Deeper Analysis of Trends & Patterns

For Example…….

Ad Hoc Query

Trend & Statistical Analysis

Decide & Act

Why?

Why?
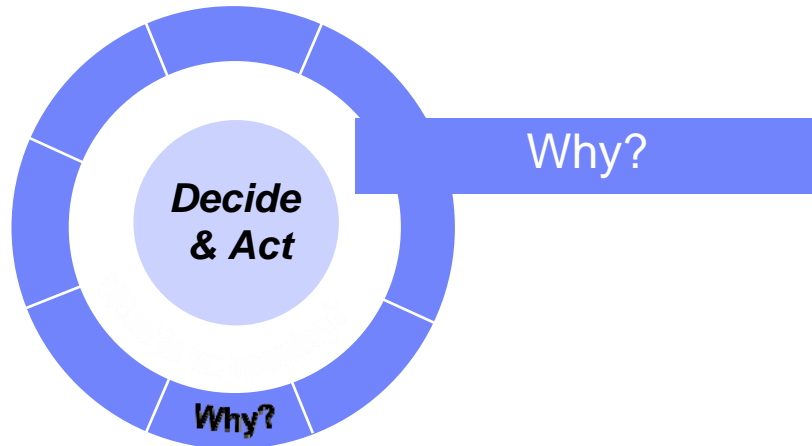
Deeper Analysis of Trends & Patterns

For Example…….

Ad Hoc Query

Trend & Statistical Analysis

Content Analytics

Decide & Act

Why?

Why?
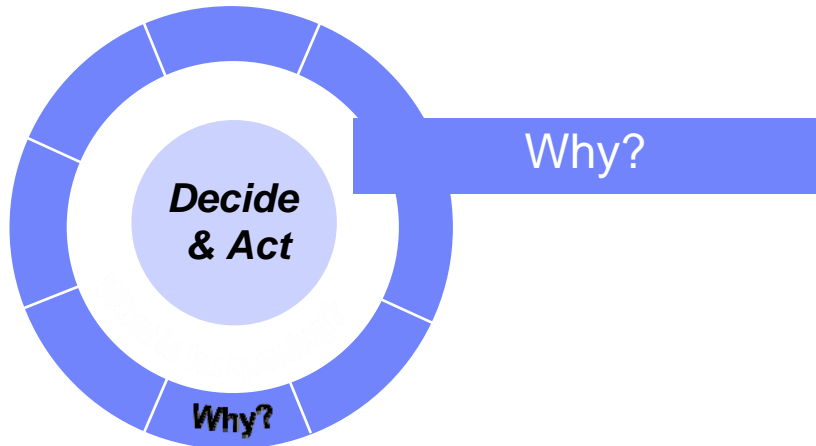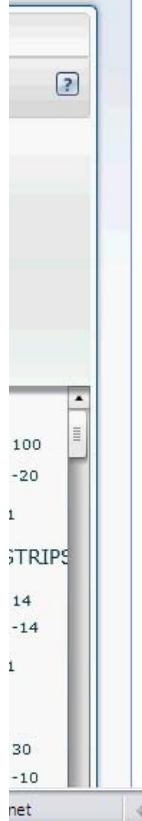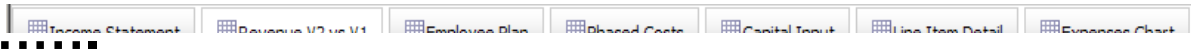
Deeper Analysis of Trends & Patterns

For Example……..

What if

What is Likely to Happen?

Decide & Act

What is likely to happen?

Version 2
Version 1

Foresight to Plan & Allocate Resources

Cognos.
software

For Example…….

MBARetail® - PASW® Modeler 13

What if		Predictive Modeling

Decide & Act

What is likely to happen?

What is Likely to Happen?

ort %	Confidence %
	15.834
	35.244
	9.58
	53.291
	13.628
	32.08
	20.885
	24.126
	22.195
	22.257
	8.246
	50.89
	28.038
	16.615

Foresight to Plan & Allocate Resources

SPSS
AN IBM® COMPANY

Cognos.
software

IBM Cognos 8 Performance Management System
Universal Capabilities

Applications & Blueprints

Access & Interactivity

| Query | Reporting | Analysis | Scorecards | Dashboards | Planning |

Business Modeling

Performance Management Platform

Information Infrastructure
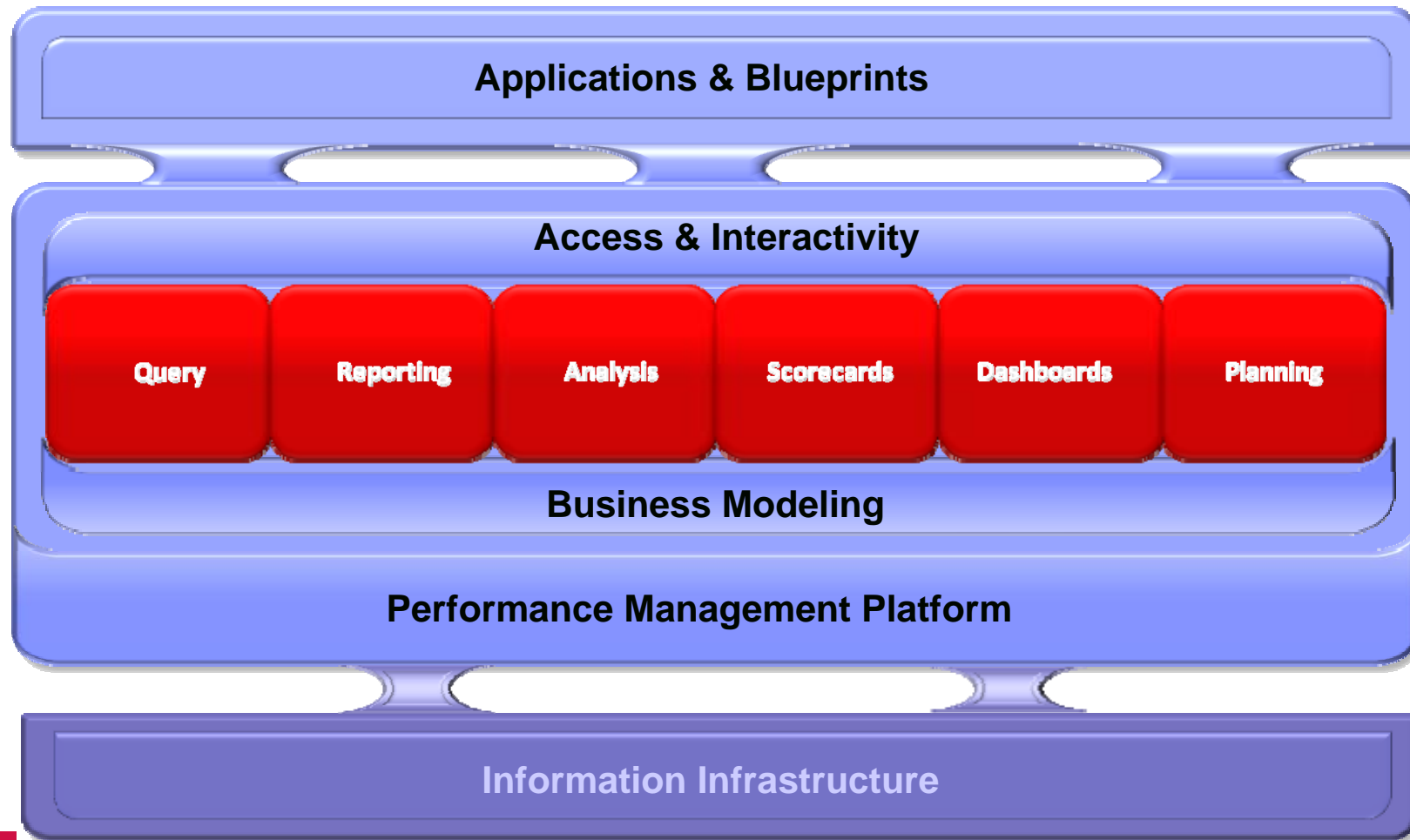
Optimized Decision Making

Executive | Business Manager | Line Manager | Casual Business User | Business Analyst | Financial Analyst

Intuitive and tightly integrated capabilities accommodate decision makers with different needs and skill sets

DASHBOARDING | SCORECARDING | REPORTING | QUERY | ANALYSIS | CONTENT ANALYTICS | PREDICTIVE MODELING | PLANNING

Easy access to a consistent, trusted and relevant view of information where, when and how it is needed

Common Business Model

Message Sources | Relational Sources | Application Sources | OLAP Sources | Modern and Legacy Sources

SPSS AN IBM COMPANY

Cognos. software

Maximized Business and IT Productivity

Executive **Business Manager** **Line Manager** **Casual Business User** **Business Analyst** **Financial Analyst**

Self-service increases business satisfaction and productivity, e.g.:
- ✓ Intuitive, self-service reporting and analysis
- ✓ Guided contribution to plans, budgets and forecasts
- ✓ Business dimension management

CIO **Architect** **Administrator** **BI Professional** **DBA** **Modeler**

Decision-making system is easy to deploy and manage, with capabilities that reduce the burden on IT while delivering higher business satisfaction, e.g.:
- ✓ Open SOA platform that fits your environment
- ✓ Flexible deployment options
- ✓ Author once, publish anywhere

IBM Cognos Analytic Applications

- Faster insight drives smarter, faster decisions and action

- Consistent measurement
  of business performance and strategy execution

- Anticipate and explore
  new opportunities

- More effective management
  of risks and controls

Performance Management System

Revenue

Expense & Capital

Workforce

Operations

Financial Performance Management Solutions

| Financial | Workforce | Supplier / Procurement | Customer / Sales |

Analytic Applications

MARKETING

FINANCE

HR

Plan, Forecast, and Control

Analyze and Optimize

STRATEGY

Close, Consolidate, and Report

SALES

PRODUCT DEVELOPMENT

CUSTOMER SERVICE

OPERATIONS

SPSS
AN IBM® COMPANY

Cognos. software

Faster Insight: Smarter Decisions

Workforce Analytics for insurance firm provided managers with consistent reporting to assess employees' performance
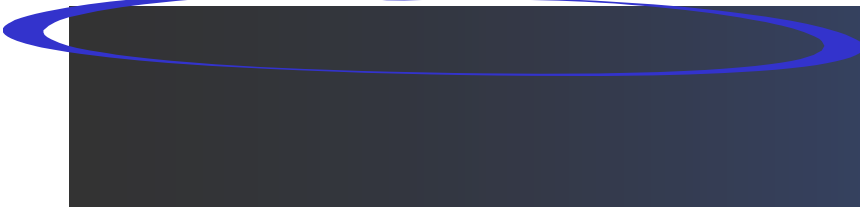
Oil & Gas international company projected $2-$5M in savings with consolidated analysis of spend

Manufacturer pinpointed sales territory that was discounting too heavily and impacting revenue

The Performance Challenge for Finance
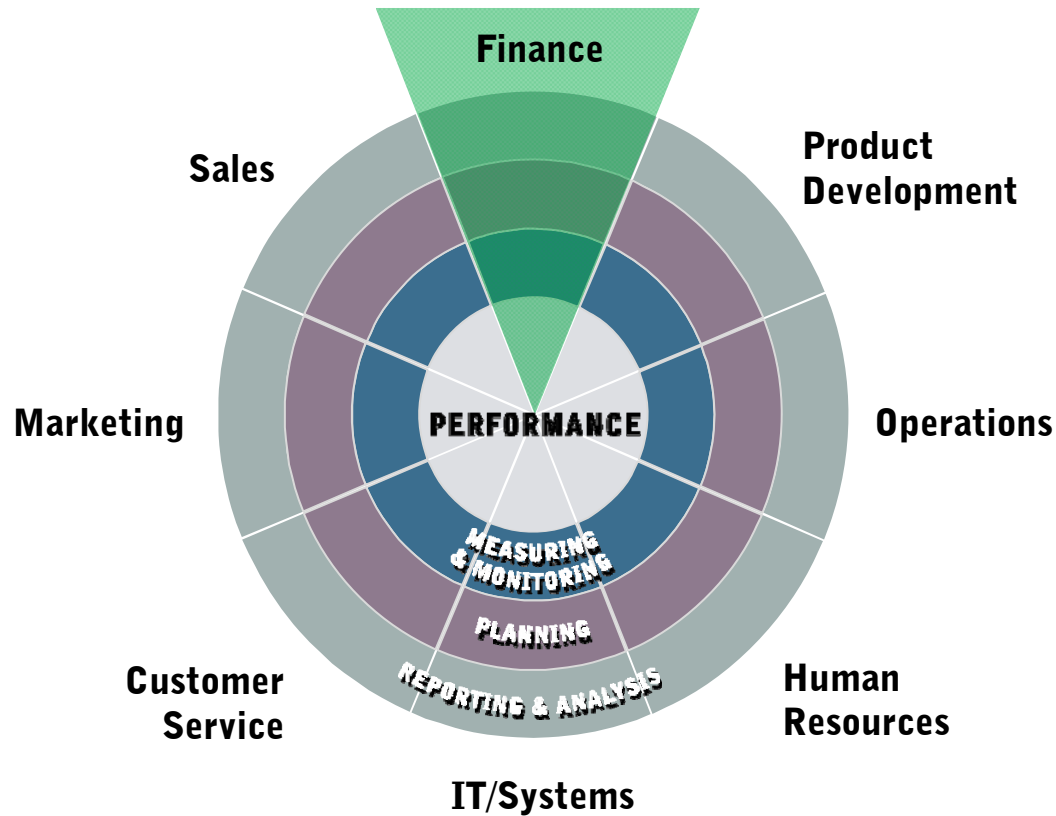
- More than 50% manually produce operational metrics

  CFO Survey, IBM Institute of Business Value, 2010

- Finance continues to spend nearly 50% of their time on transactional activities

  CFO Survey, IBM Institute of Business Value, 2010

- 47% of a financial analysts time is spent on collecting and validating information

  APQC Survey, 2009

- Over 25% lack common data definitions and processes

  CFO Survey, IBM Institute of Business Value, 2010

Financial Reporting Cycle

CLOSE → **CONSOLIDATE** → **REPORT**

Closing Process
(Consolidation System)

- Data Input & Changes
- Collect From Subsidiaries

Closing Process
(Accounting Processes)

- Close Sub Ledgers and Systems
- Account Reconciliation
- Intercompany transactions
- Prepare journal entries: accruals & adjustments

First Mile

Consolidation
(Consolidation System)

- Create single currencies
- Minority interest holdings
- Intercompany eliminations
- Group closing adj.
- Management adjustments

Consolidate financials

Internal controls & compliance testing

Consolidation

Reporting
(Consolidation System)

Internal Reporting
- Financial reporting adjustments
- Standard financial reports

External Reporting
- Financial statement preparation
- Publish quarterly

Financial Reporting

Reporting
(Reporting Systems)

- Performance management reports
- Enterprise use: reports, scorecards, ad-hoc

Management Reporting

Compliance & Control

First Mile
- AR/AP/GL performance understanding
- Data entry and collection
- Reconciliation entries and reporting
- Data import and lineage/audit reports

Consolidation
- Consolidation by legal/management
- Consolidation specific processes for data and reporting
- Prepare trial balances
- Unaudited financial statements
- Access and report internal controls

Financial Reporting
- Financial statement publishing
- Financial reports (month vs. month, month vs. last year)
- GAAP Reporting

Management Reporting
- Performance management reports (actual vs. plan, plan vs. forecast
- Financial scorecards/dashboards

SPSS AN IBM COMPANY

Cognos. software

A Typical Scenario

"We need a baseline approach to assess cash inflow and outflow from our transaction systems, so that we can begin assessing an integrated working capital strategy."

Controller

- *Need a solution to answer what happened and when*
- *Need timely access to ALL my financial data*
- *Need a consistent and cost-effective way to "know"*

Implications for Financial Management Reporting

- Spreadsheets, spreadsheets, spreadsheets
- Inconsistent data from which to make decisions
- Different reporting formats
- Time-consuming financial reporting

What's Required

- Single system with packaged out-of-the-box reporting
- Adapts to my changing business requirements
- Financial decision making alignment to preserve cash
- Drive efficiencies in AP and AR processes

SPSS
AN IBM COMPANY

Cognos.
software

Financial Management Reporting

What are gain insight into financial management reporting that improves internal reporting costs and efficiencies …

Office of Finance Reporting Performance Metrics	Median	Benchmark
Systems cost to perform general accounting per $100,000 US revenue	$8.63	$2.83
Cycle time in *days* to produce period end management reports	6.00	3.00
Total cost of the process *"provide financial reporting"* per $100,000 US revenue	$0.67	$0.28
Average time in weeks to make a *change* in the production environment, including activities associated with end-to-end activities associated with making the change, such as coding, testing, configuration and deployment	10.00	2.00
Average time in weeks to fulfill a simple information need	4.00	1.00

IBM Benchmarking Wizard – General Accounting and Financial Survey, 2009

Faster Insights: Smarter Financial Decisions

Packaged Business Intelligence

- Eliminate manual, inaccurate and costly internal controls using consistent reporting and analysis to support a faster close process

- Improve the efficiency of finance and operations with standard self-serve management reports

- Ensure the alignment of performance goals using standard financial reports and analysis enterprise wide

Adaptability

- Configure report changes to ensure continuously relevant content

- Synchronize application changes automatically

- Extend the business model to other departments

Enterprise-wide Platform (IBM Cognos 8)

- Ties together BI with financial performance and strategy management

GENERAL LEDGER

IBM Cognos 8

Financial Performance Analytics

ACCOUNTS RECEIVABLE

ACCOUNTS PAYABLE

IBM Cognos Financial Performance Analytics

Business Drivers

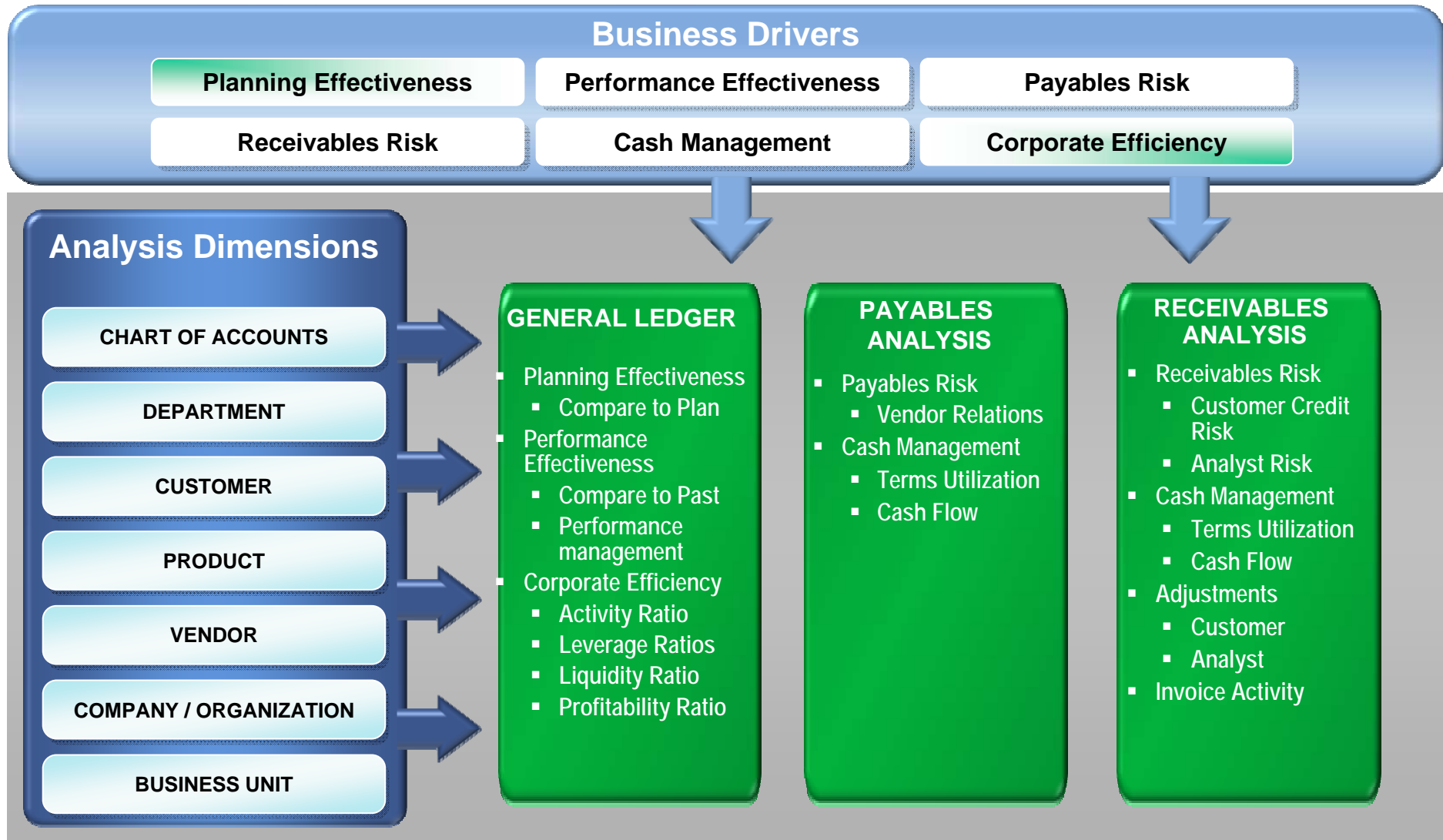| Planning Effectiveness	Performance Effectiveness	Payables Risk
Receivables Risk	Cash Management	Corporate Efficiency

Analysis Dimensions

- CHART OF ACCOUNTS
- DEPARTMENT
- CUSTOMER
- PRODUCT
- VENDOR
- COMPANY / ORGANIZATION
- BUSINESS UNIT

GENERAL LEDGER

- Planning Effectiveness
  - Compare to Plan
- Performance Effectiveness
  - Compare to Past
  - Performance management
- Corporate Efficiency
  - Activity Ratio
  - Leverage Ratios
  - Liquidity Ratio
  - Profitability Ratio

PAYABLES ANALYSIS

- Payables Risk
  - Vendor Relations
- Cash Management
  - Terms Utilization
  - Cash Flow

RECEIVABLES ANALYSIS

- Receivables Risk
  - Customer Credit Risk
  - Analyst Risk
- Cash Management
  - Terms Utilization
  - Cash Flow
- Adjustments
  - Customer
  - Analyst
- Invoice Activity

software

General Ledger Analysis

ANALYSIS PACKAGES	INSIGHT TO BUSINESS QUESTIONS	METRICS

PLANNING EFFECTIVENESS

- Are we meeting stated objectives across the business?
- Does performance to plan vary geographically?
- Which revenue types are meeting objectives?
- Are we controlling costs as planned?
- Which costs are above expectation?

PERFORMANCE EFFECTIVENESS

- Is the business's performance improving over time?
- Are results improving across geographies?

CORPORATE EFFICIENCY

- Are we in compliance with lending covenants?
- Do we effectively leverage assets with long-term borrowing?
- Is gross margin trending upward?
- Do receivable and inventory turns represent a balanced workload?

METRICS

- Income Statement Amount
- Balance Sheet Amount
- Profit Margin
- Gross Margin
- Income Statement Amount - Target
- Balance Sheet Amount – Target
- Income Statement Amount – Variance
- Balance Sheet Amount - Variance
- Current Ratio
- Quick Ratio
- Inventory Turnover
- Receivables Turnover
- Return on Sales
- Times Interest Earned
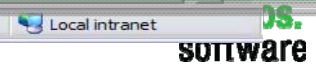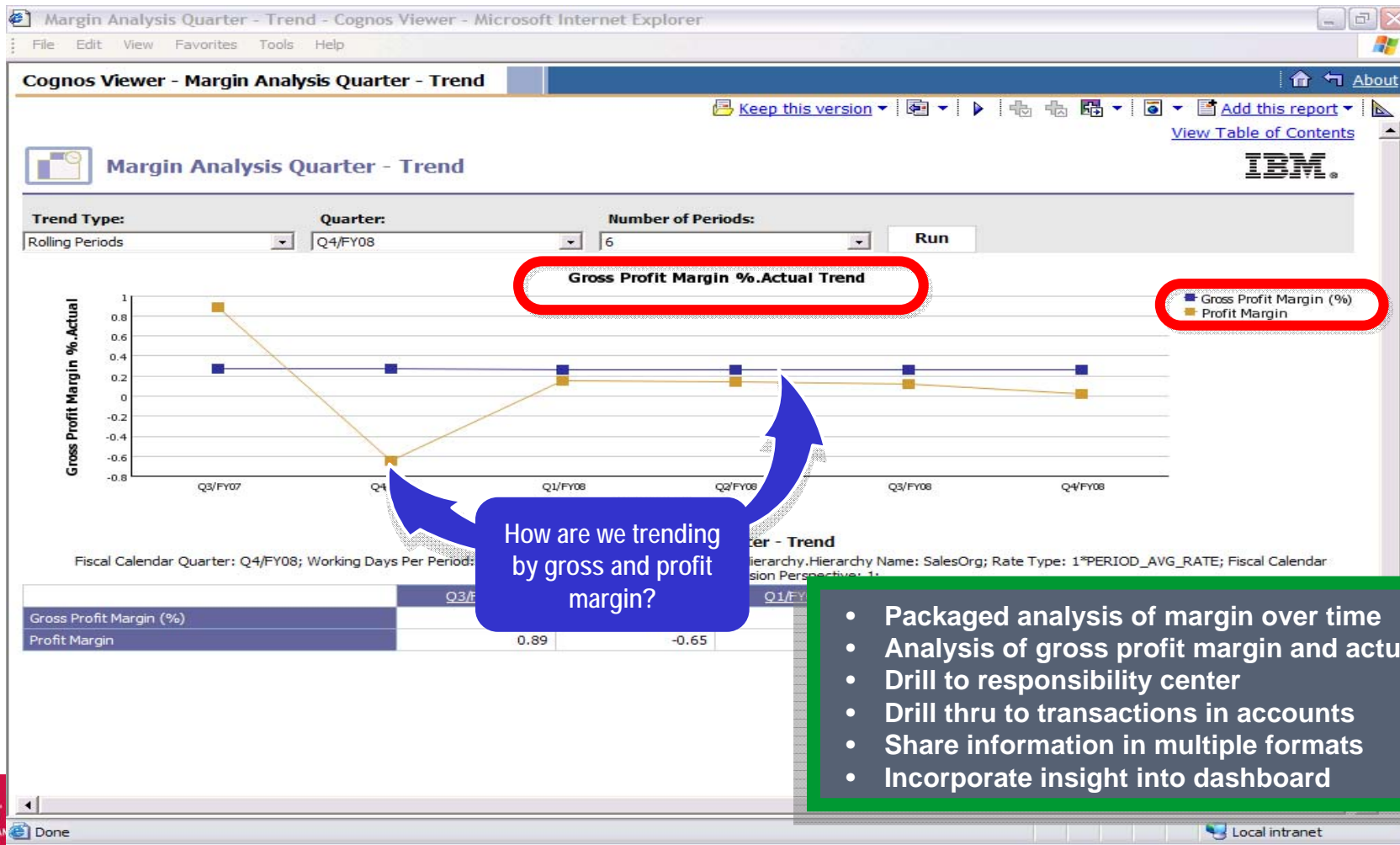
…

General Ledger Income Analysis

How is our Margin Trending Quarter Over Quarter?

Accounts Receivables Analysis

ANALYSIS PACKAGES	INSIGHT TO BUSINESS QUESTIONS	METRICS

RECEIVABLES RISK

- Does the business provide sufficient credit?
- How much credit loss do we incur and from whom?
- Does this vary across credit managers?
- Are bad debt expenses within expectation?

CASH MANAGEMENT

- What is expected cash inflow?
  - Based on due date
  - Based on discount date
- Can we collect major accounts earlier?
- Do customers utilize terms discounts, and at what values?
- Do we grant generous discounts terms?
- Are discounts taken earned?

ADJUSTMENTS

- What level of adjustments occur?
- Do adjustments follow a receivables analyst or sales person?

INVOICE ACTIVITY

- What is weighted average balance outstanding?
- Do we invoice too frequently?

METRICS

- Due Date Cash Inflow
- Discount Date Cash Inflow
- Discount Offered Count
- Discount Offered Amount
- Weighted Average Days Past Due
- Current AR Amount
- Invoice Count
- Invoice Adjustment to Amount Ratio
- Invoice Adjustment Amount
- Bad Debt Amount

…

Cash Inflow Analysis

What are my cash inflow trends?

- **Packaged analysis of receivables risks**
- **Operational level drill down**
- **Analyze by organization & assess by time**
- **Use to instruct collections on focus areas**

Accounts Payables Analysis

ANALYSIS PACKAGES	INSIGHT TO BUSINESS QUESTIONS	METRICS

PAYABLES RISK

- Are we paying within contract terms?
- Do we have excessive late payment fees?
- Do we maintain a consistent aging pattern for vendors?

CASH MANAGEMENT

- What are current cash requirements?
  - Based on due date
  - Based on discount date
- Does the business utilize discounts?
- Are discount values reasonable to the business?
- What is the cost of discount lost?
- Why are discounts lost?

METRICS

- Closing Balance
- Late Payment Amount
- Late Payment Count
- Invoice Amount
- Invoice Count
- Discount Taken
- Discount Lost
- Weighted Average Days Past Due
- Discount Offered
- Current Payables

…

Late Payment Analysis

What's Owed to Which Vendor?
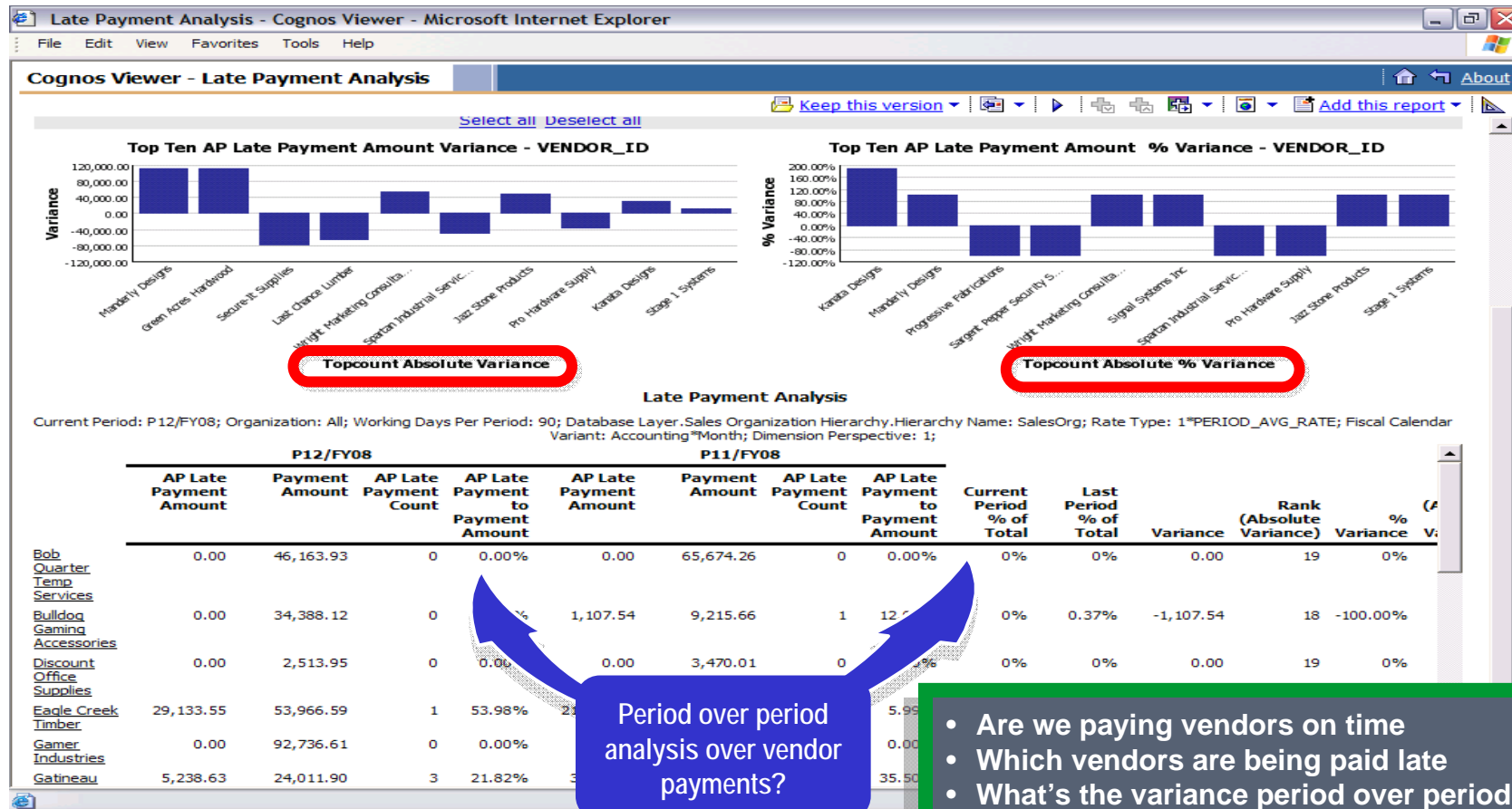
Period over period analysis over vendor payments?

- Are we paying vendors on time
- Which vendors are being paid late
- What's the variance period over period
- How often are we late
- Which vendors to we owe the most to

Cognos.
software

Making Businesses Smarter
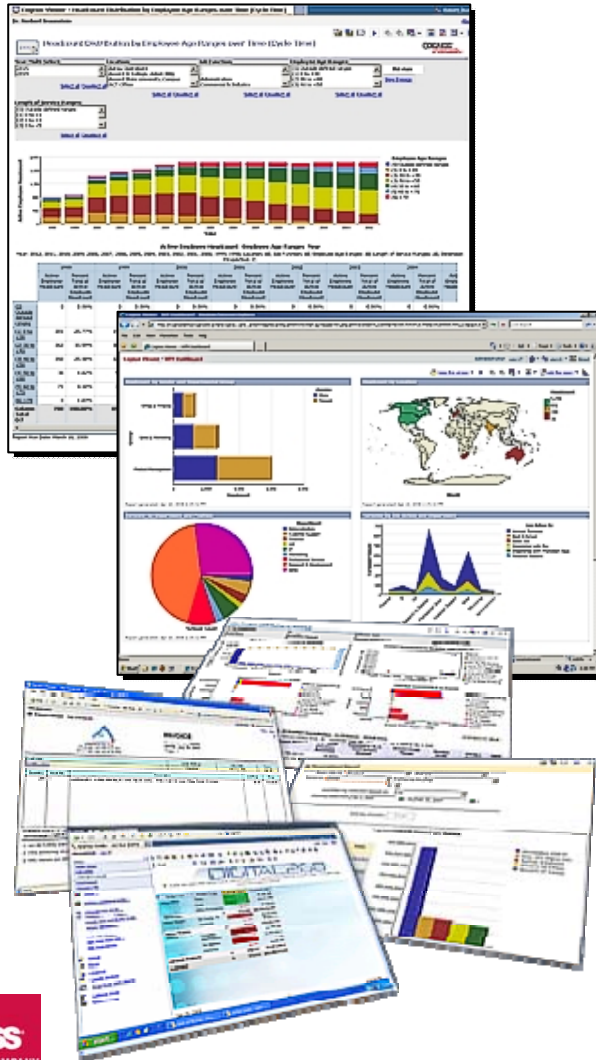
- A starting to point to a performance system with consistent reporting and analysis from multiple systems

- Faster time-to-value with packaged analytics

- Information leveraged as a strategic asset to affect business change

- Aligned business outcomes to manage risk and controls

- Smarter Decisions = Smarter Business

Challenge: Application Manageability

Dynamic Reporting Environments Are Difficult to Manage

CIO

"Requirements activities impact up to 35% of a project effort, and can cause waiting time, and redundant activities that eat up to 10% of your budget"

Executive

"Only 22% of executives felt that their IT and business strategy were tightly integrated"

Finance

"49% of budgets suffer overruns and 62% fail to meet their scheduled"

IT

30% of all project costs are associated with rework. Requirements mistakes account for up to 70% of this cost

Operations

"50% of data warehouse projects fail and can take 16-18 months to complete."

Growing focus on business outcomes

*"CIOs are under pressure to enable their teams to become **catalysts for change.** However, **change is outpacing their ability to deliver**.*

*They are reorienting their teams to **focus on ROI & quantified business outcomes** and to **mitigate risk and reduce costs**"*

– IBM CIO Survey

SPSS AN IBM® COMPANY

Cognos. software

Summary of Challenges for IT

Managing Information

- Build and maintaining data warehouses that often have a high project failure rate and cost several million dollars

- Lengthy business requirements and complex fulfillment processes

- Fragmented, multiple technologies with little integration

- Extensive customization that's time-consuming & costly

- Manually driven iterative processes that are mistake prone

Providing Insight

- Ad hoc reporting environment and limited depth of reporting and analysis strains internal resources

- Must report from multiple data sources

- Gather requirements, design, author and change reports

- Lack of skills and expertise in departmental areas, such as finance, HR, procurement or sales

CIOs are Skilled Customer Advocates that Create Value by Truly Understanding What Customers Want

High growth CIOs proactively craft data into actionable information

58%

36%

+61%
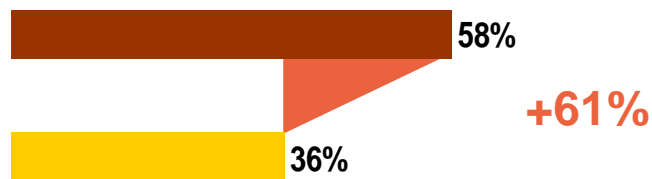
"We do recognize the strategic advantage of using data to support improved decision making. We are not as strong as we would like to be, but this is a key plank of our strategy moving forward."

Consumer products CIO, Ireland

CIOs expect end-customers in five years to continuously explore new channels...

+37%

54%

74%
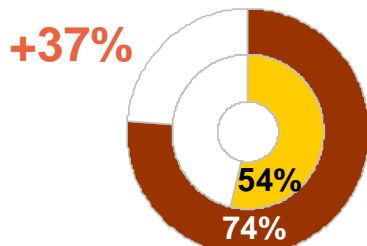
... and anticipate much greater levels of integration and transparency with customers in the next five years

+55%

44%

68%
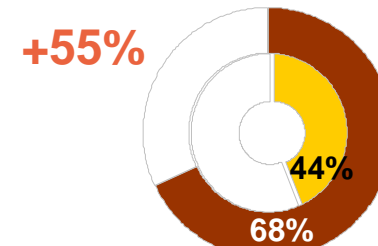
☐ Low growth ☐ High growth

Faster Insight: Smarter Decisions

- **Packaged Business Intelligence** – Self-serve, ready made reports that reduce ad hoc custom reporting

- **Highly Adaptable** – Configurable drag-and-drop interface that reduces re-work, ensures continuously relevant content and speeds time to insight

- **Extensibility** – Create new insight by extending the business model to new areas for analysis using an extensive range and combination of measures and dimensions

What's in the Box…

| Common Decision-Making Model | Open, Enterprise Platform | Source System |

| Seamless Business Intelligence | Analytics Drill Through | Packaged Reporting & Analysis |

What's Included?

Generated Data Repository

Over 43,000 Objects including
- ☑ **250+ Dimensions**
- ☑ **850+ Metrics**
- ☑ **230+ Defined Calculations**

1000+ Report Permutations

Adaptive Framework
- ☑ **Unlimited Extensions**
- ☑ **Delivered ERP extraction**
- ☑ **Unlimited Data Sources**

Financial Analytics
- Ledger
- Payables
- Receivables
- Cash Management
- Customer/Vendor Risk

Sales Analytics
- Pipeline Performance
- Sales force Performance
- Sales Segmentation
- Customer Relations
- Pricing and Program Analytics

Workforce Analytics
- Talent Development
- Talent Management
- Talent Retention
- Workforce Strength
- Compensation

Procurement Analytics
- Spend Analysis
- Vendor Analysis
- Contract Management
- Operational Efficiency

SPSS
AN IBM COMPANY

Cognos.
software

Why We're Different – Adaptability

Build Option

- Time to insight = Long
- Requirements = Outdated
- Cost of maintenance = High
- <u>Multiple touch points</u>

Buy Option

- Requirements = Rigid
- Custom business logic = Hard
- Extensibility = Low
- <u>Multiple touch points</u>

Our Approach

- Business-centric vs.. data centric

- Highly configurable drag-and-drop interface for the modifications to reports and addition of new ones

- Automated synchronization of core components that eliminates manual work

- Extensible business model for a wider analysis of performance

What's the Difference – Time to Value

Other Analytic Applications

IBM Cognos Analytic Applications
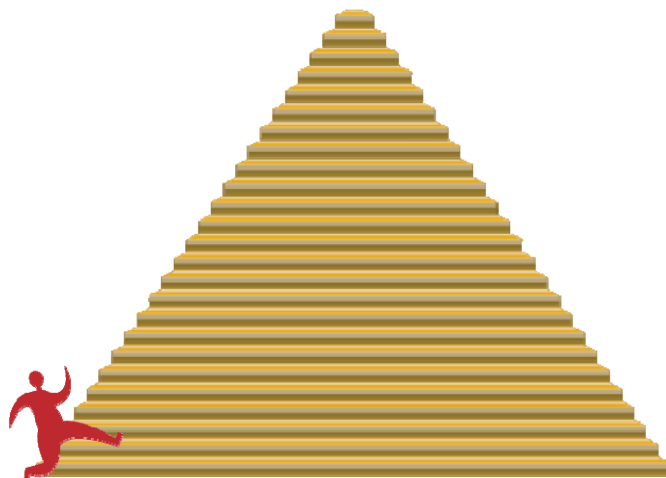
25

Average number of touch points to change a traditional packaged report
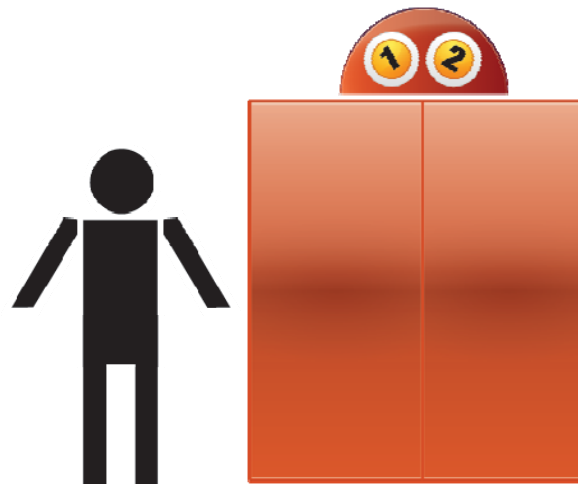
2

Average number of touch points to change a traditional IBM Cognos Analytic Applications

SPSS
AN IBM® COMPANY

Cognos.
software

© 2010 IBM Corporation

Adaptable – From Data Source to Insight

CONFIGURATION

Ensure continuously relevant content through drag-and-drop configuration changes to and modification of reports
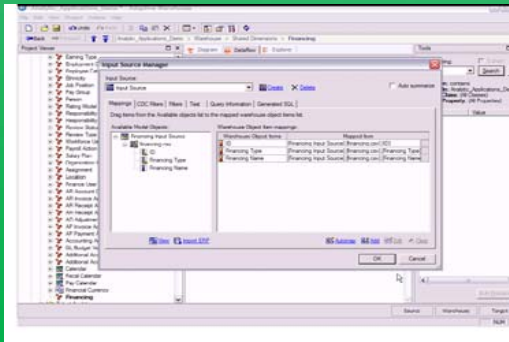
SYNCHRONIZATION

Synchronize the generation of application ETL, data warehouse, semantic and reporting layer
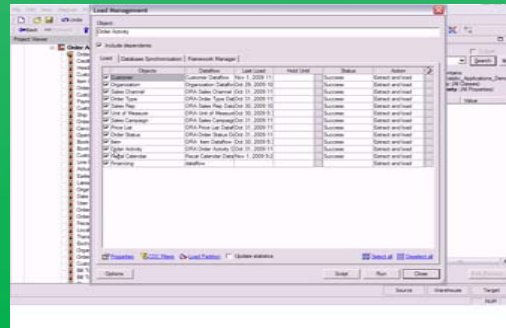
EXTENSIBILITY

Extend the business model to other areas of analysis for a more integrated and expanded view of performance
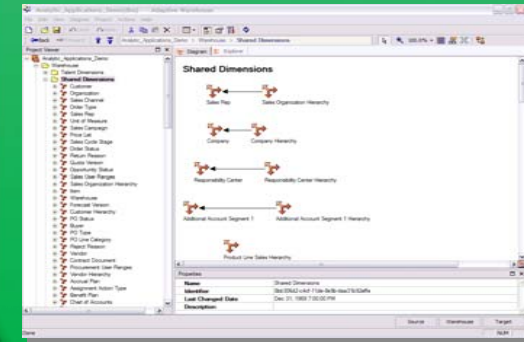
Configuration –

> *Make changes to business rules, data attributes and source through a drag-and-drop process to ensure continuously relevant reporting content, while eliminating much of the coding, customizing and interpreting of data involved with other vendors' solutions*

- **Reduce manual re-work** with drag and drop configuration that maps new or modified reporting information to existing or new data sources automatically – including easily handling flex fields

- **Meet new reporting requests quickly** by configuring and validating reports before they are published to stakeholders

- **Improve ROI** by continuously creating new reporting and analysis that meets the ever changing business requirements of your organization

SPSS
AN IBM® COMPANY

Cognos.
software

IBM
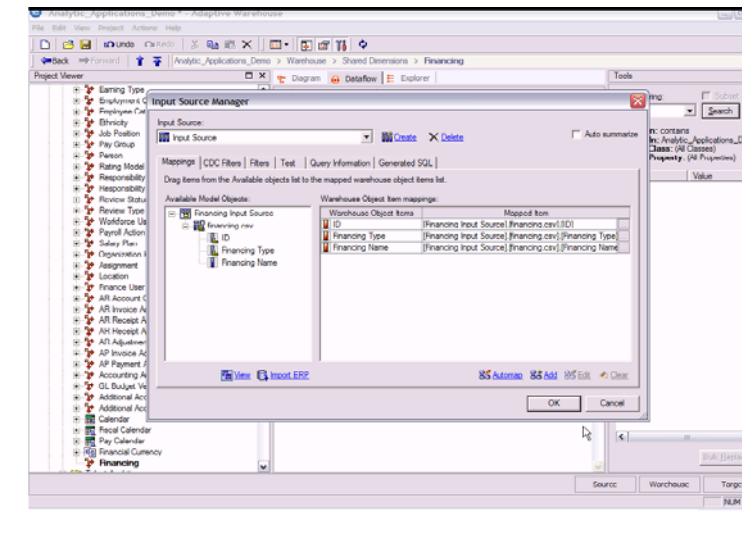
Synchronize –

Automatically synchronize the generation of core components of the application's ETL, data warehouse, semantic and reporting layer … seamlessly from source to insight
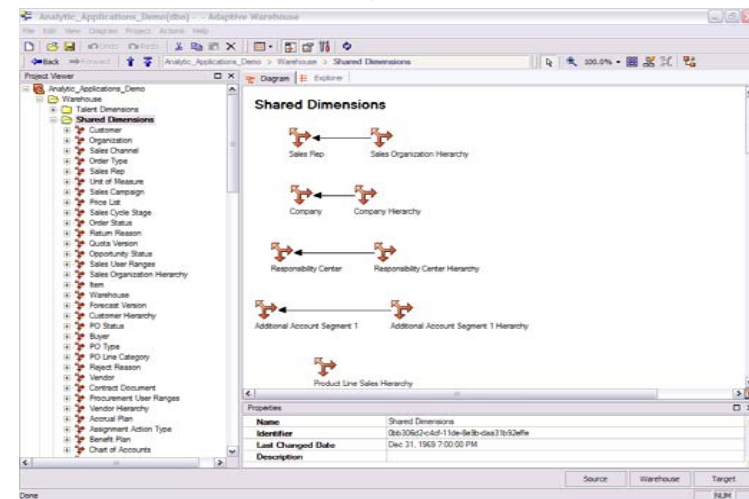
- **Better manage your asset** as the application automatically synchronizes component changes to generate scripts to the DW schema, the ETL code and the BI semantic layer to make the attribute available for a new report

- **Less work, fewer errors** with only 2 interfaces to synch changes to the application vs. 25 with other vendors' solutions

- **Improve ROI** by improving efficiencies involved in meeting business requirements and making reporting changes
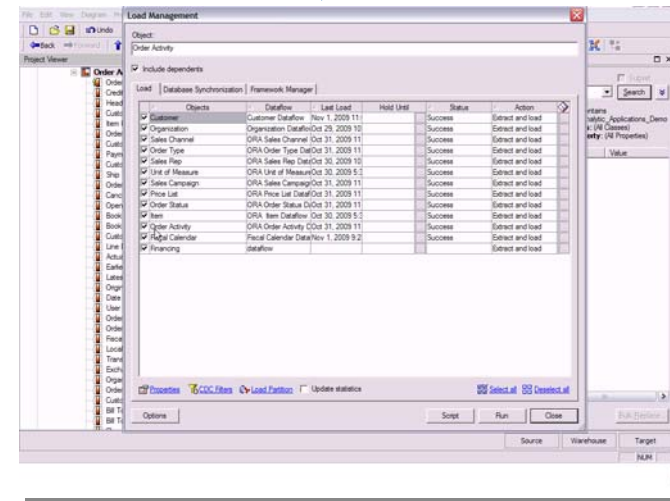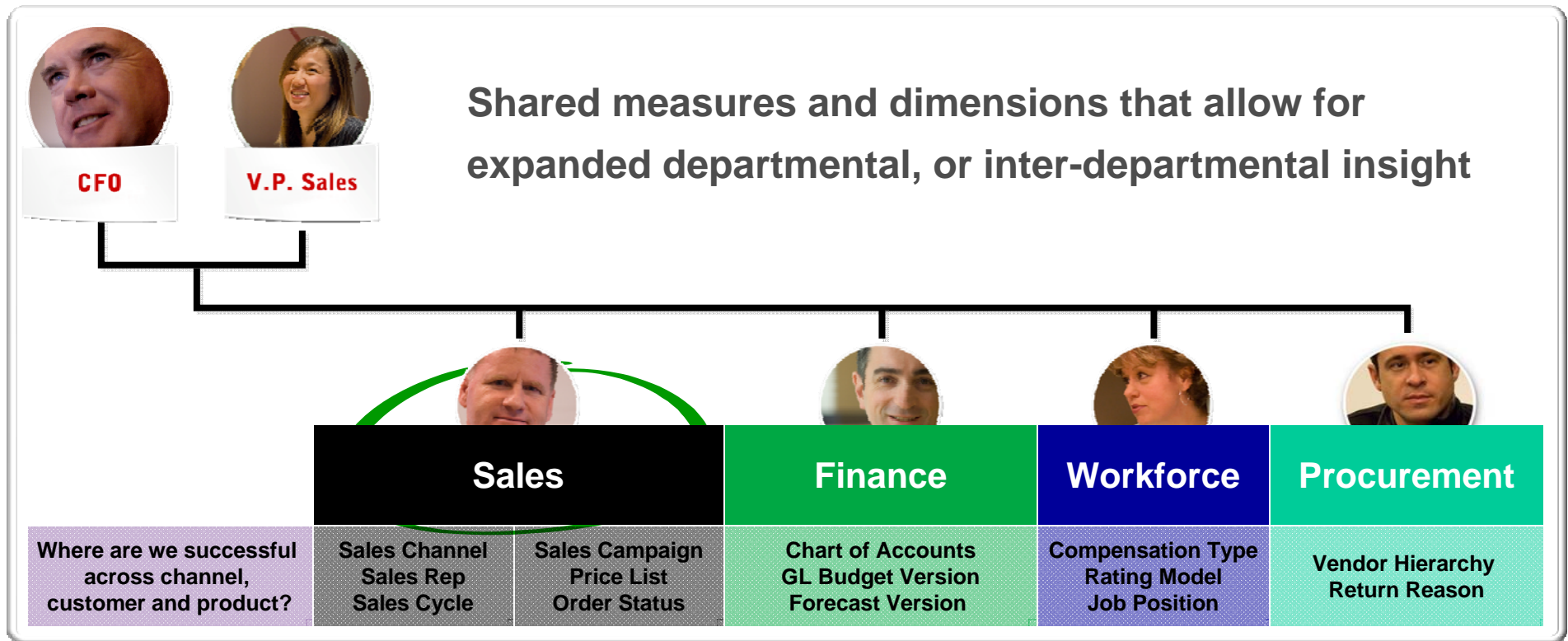
Extensibility –

> *Combine a robust range of measures and dimensions, or simply create new ones to extend the business model and gain new performance insight cross-departmentally, or within existing ones*
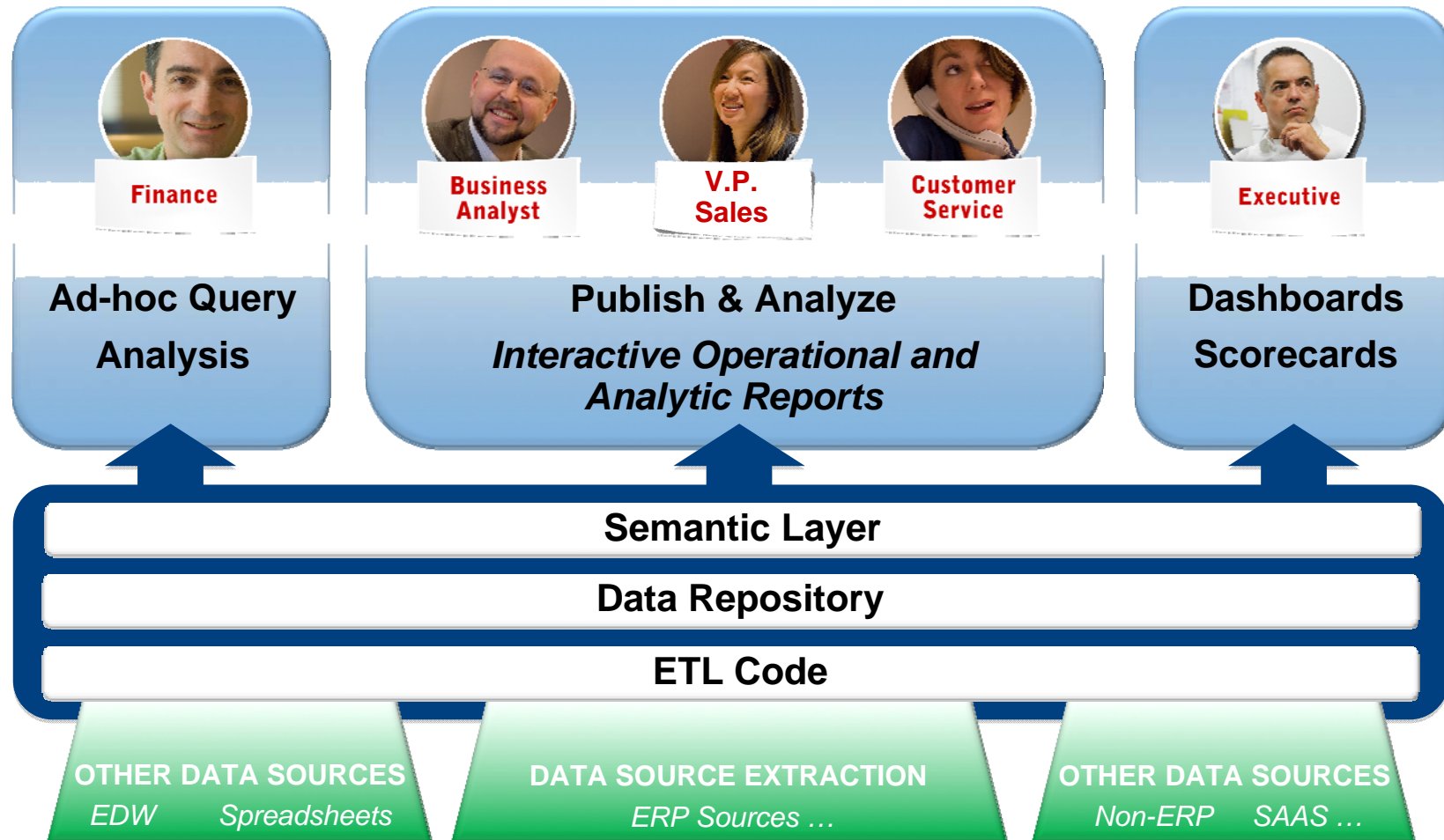
- **Create cross-departmental insight** by leveraging existing business models as opposed to setting up another silo of information and trying to manually integrate it into your existing environment.

- **Better application management** by using an extensive library of available measures and dimensions, or create news ones, through a single touch point (AW) that can multiple data sources

- **Meet corporate reporting** requirements more cost-effectively and quickly with a configurable drag and drop interface that uses a single application management model
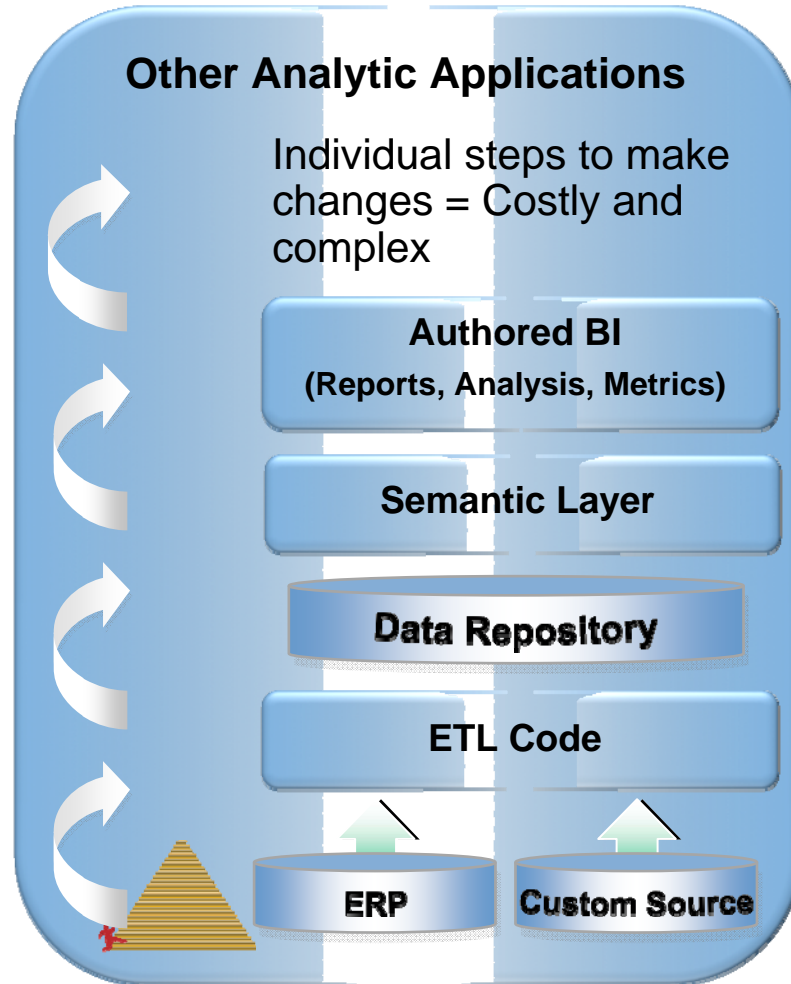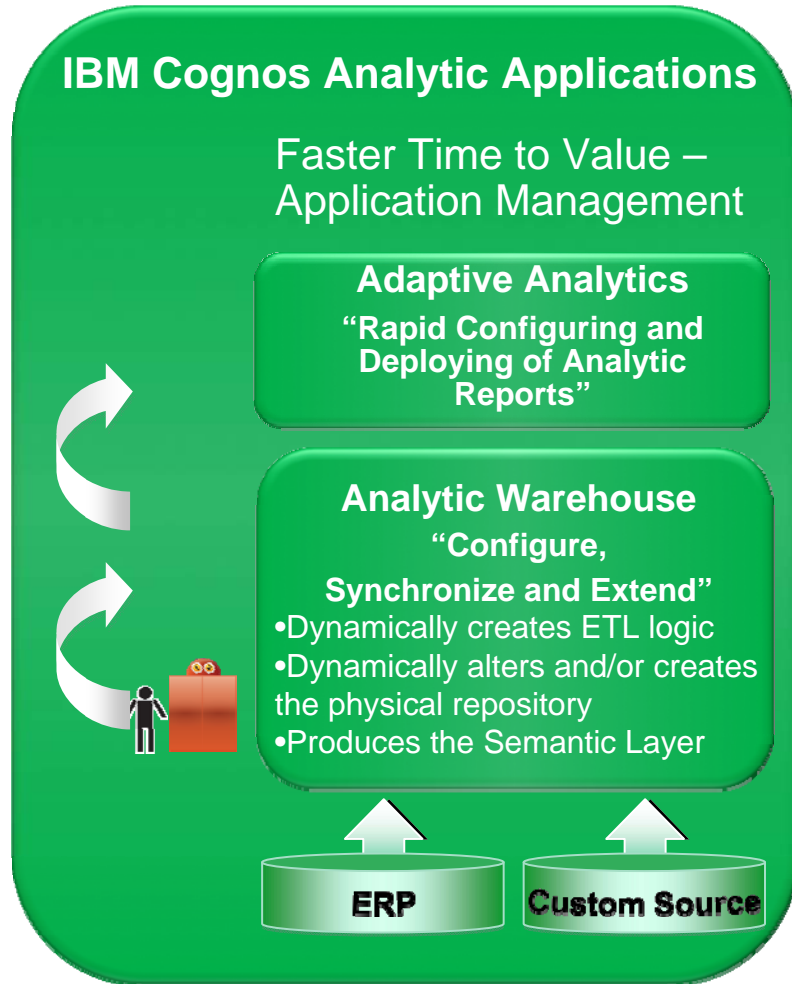
How We Do It…Extensible Business Model

Shared measures and dimensions that allow for expanded departmental, or inter-departmental insight

	Sales		Finance	Workforce	Procurement
Where are we successful across channel, customer and product?	Sales Channel Sales Rep Sales Cycle	Sales Campaign Price List Order Status	Chart of Accounts GL Budget Version Forecast Version	Compensation Type Rating Model Job Position	Vendor Hierarchy Return Reason

CFO

V.P. Sales

IBM

How We Do It…

Ad-hoc Query

Analysis

Finance

Publish & Analyze

Interactive Operational and Analytic Reports

Business Analyst

V.P. Sales

Customer Service

Dashboards

Scorecards

Executive

Semantic Layer

Data Repository

ETL Code

OTHER DATA SOURCES
EDW   Spreadsheets

DATA SOURCE EXTRACTION
ERP Sources …

OTHER DATA SOURCES
Non-ERP   SAAS …

SPSS
AN IBM COMPANY

Cognos.
software

The Benefit for Your Team

IBM Cognos Analytic Applications

Faster Time to Value –
Application Management

Adaptive Analytics

"Rapid Configuring and Deploying of Analytic Reports"

Analytic Warehouse

"Configure,
Synchronize and Extend"
• Dynamically creates ETL logic
• Dynamically alters and/or creates the physical repository
• Produces the Semantic Layer

ERP   **Custom Source**

Other Analytic Applications

Individual steps to make changes = Costly and complex

Authored BI

(Reports, Analysis, Metrics)

Semantic Layer

Data Repository

ETL Code

ERP   **Custom Source**

More Effectively Managing Your Investment

Your Pains

- **High project costs:** Poor requirements gathering contributes 70% of rework costs, or $1,300 per defect

- **Disconnect between business goals and requirements solution:** Disconnect results in too much rework, high costs, and poor quality

- **Delays in time to market:** Lost cycles and time, arising from lack of collaboration and challenges in coordinating plans, process and resources across teams

- **Labour intensive to meet LOB needs:** Resource constrained IT departments not meeting simple requests in a timely manner

Our Approach

- Improve your team's productivity by **automating labor-intensive processes** involved in changing business requirements

- **Deliver value to LOB stakeholders faster** by proactively meeting reporting and analysis for ever-changing inputs

- **Extend the value and lifecycle** of your application with continuously relevant content

- Gain better **TCO and ROI** with automatic upgradeability and manageability

SPSS
AN IBM® COMPANY

Cognos.
software

SPSS
AN IBM* COMPANY

Cognos.
software