



# Presenting a Business Intelligence Platform Solution for your Organisation



Hello. How are you?



# Why are we here today?

- We have the
  - Skills and experience
  - Products
- To transform the way
  - You view your operations
  - Your operations functions as a result

# Who are we

We work with medium to large enterprises to understand the operation in a more wholistic way, by allowing them to integrate, analyze, report on, monitor and incorporate results back into their business operations.

# Some challenges

- Data is all over the place
- Different formats (Oracle, SAP, Excel, ...)
- Different structure
- Different values  
(eg. Province code ~
  - Region1::FS, Region2::2
- Too Technical

# ...Challenges (continued)

- Too few reports
- Too many reports
- Report structures not very helpful
- Reports look at one aspect of operations.
- Report format difficult/impossible to change
- Report on wrong parts of operations!

# ...Challenges (continued)

- Unable to get quick overview
- Too long to obtain information
- Cannot see relationship between events and operations
- Cannot see cause and effect
- Systems are isolated. Cannot get in/out.
- At the mercy of vendors/suppliers.
- All or nothing approach when considering systems.
- ...

Hello. How are you?



# Hello. How are you, really?

- Can you :
  - tell how your entire operation is doing?
  - access all the information available in your organisation?
  - look at the look at the relationships between events/operations?
  - trace results back to its source
  - see the effects of events/transactions

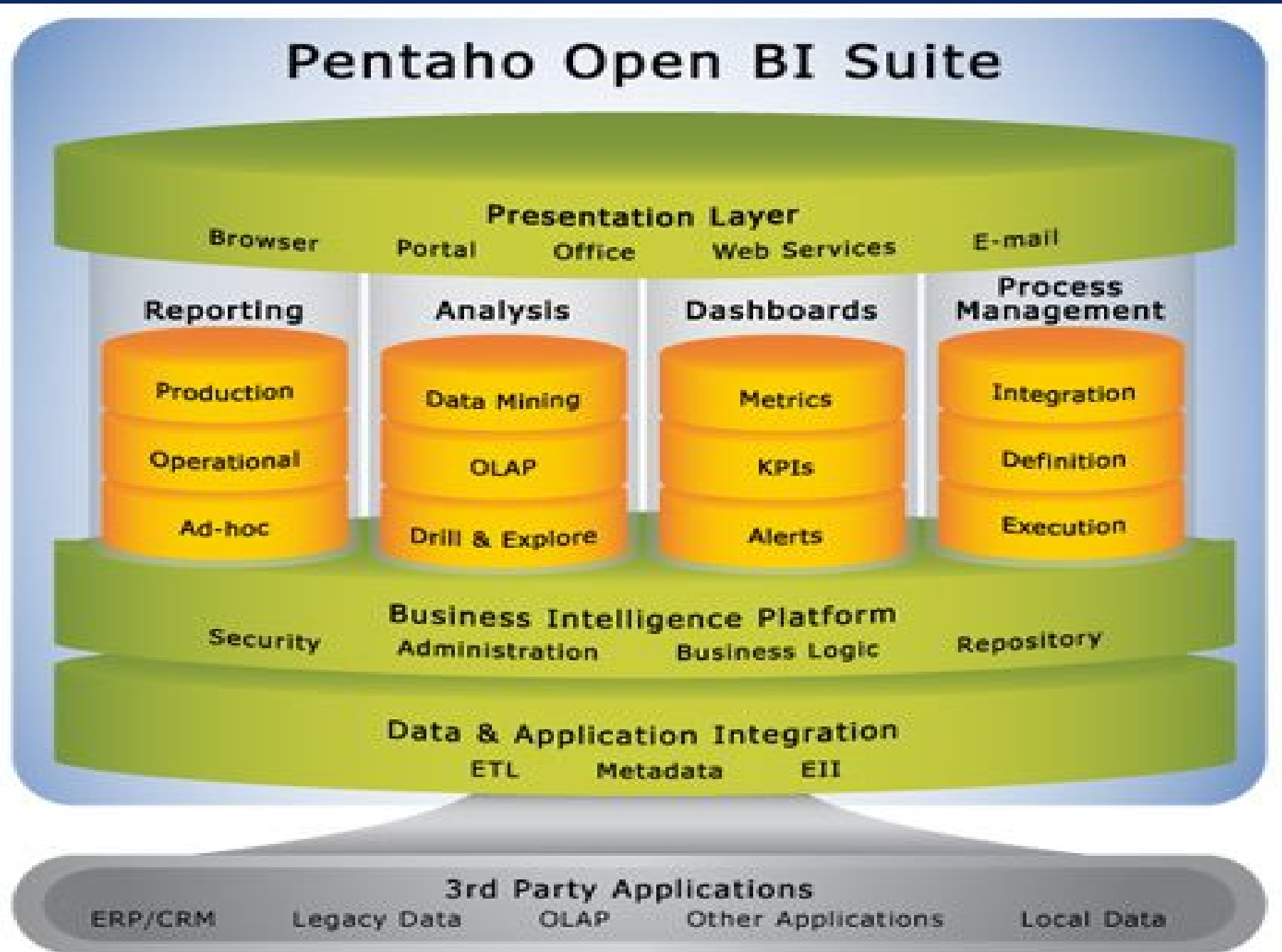
# We can help

- Our Business Intelligence Platform supports, integrates, and enables a full spectrum of end user capabilities, including:
  - Reporting
  - Analysis
  - Dashboards and Scorecards
  - Data Mining
  - Workflows
  - Portal and office integration
  - BI Platform

# What is the Pentaho BI Platform

- Integrated, enterprise-wide suite of tools
- integrates with operation, or works besides
- provides the ability to see your data the way you want to look at it.
- Componentised and modular
- Web-based, thin-client user interfaces

# How it works



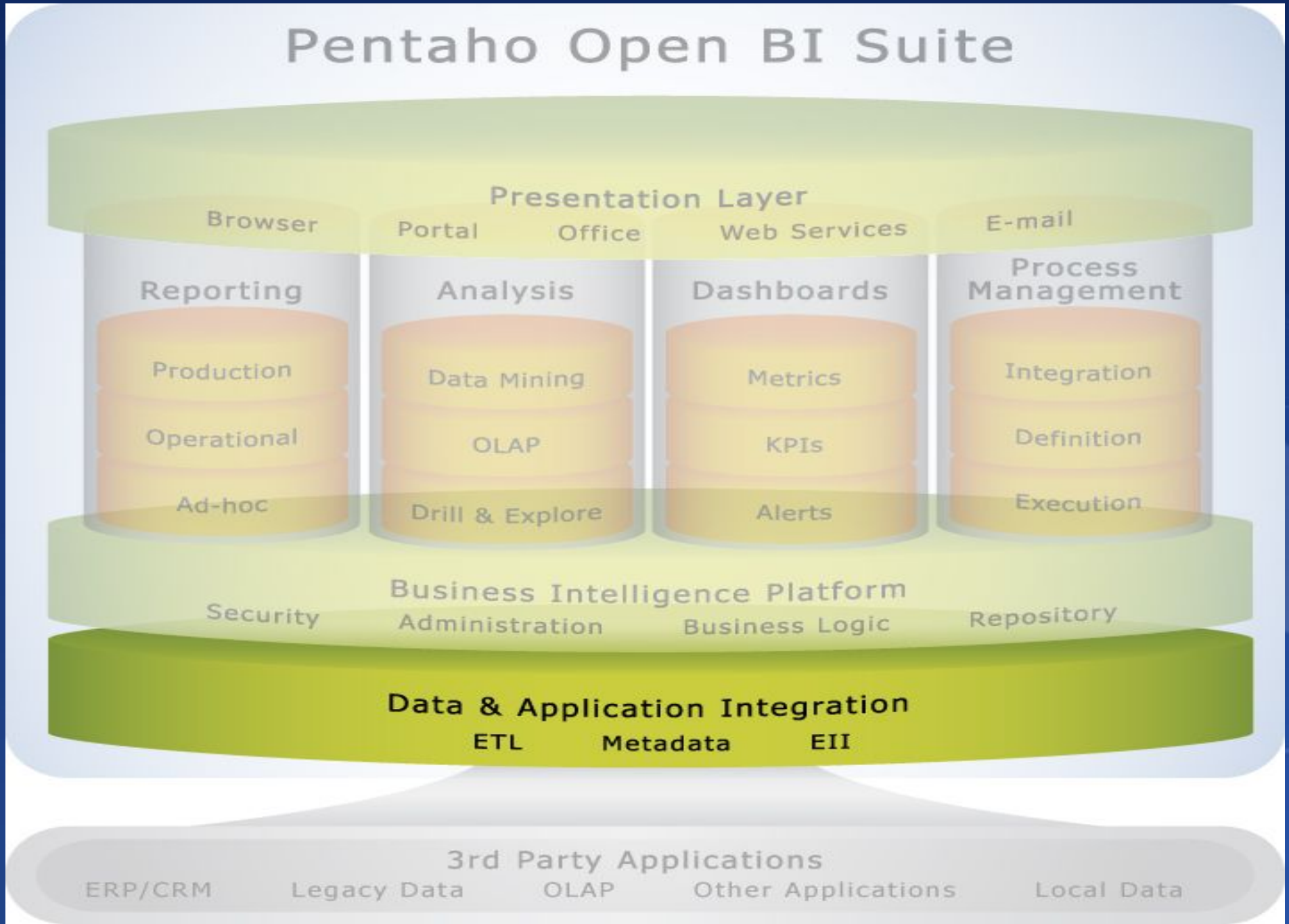
# Pentaho BI Platform

- Provides critical services for end users
  - Scheduling, Subscriptions, Bursting/Distribution, Alerting and notification, Integration of end user tools
- Provides critical services for Administrators
  - Integration with external business logic, Definition and execution of business rules, Content presentation
- API for system developers.

# ...Pentaho BI Platform (continued)

- Integration points to applications, portals
- Process management and integration
- Centralized security
- Based on open technologies and standards (J2EE, JDBC, JNDI, JSR-168, JSP, HTML, XSL, and XML)

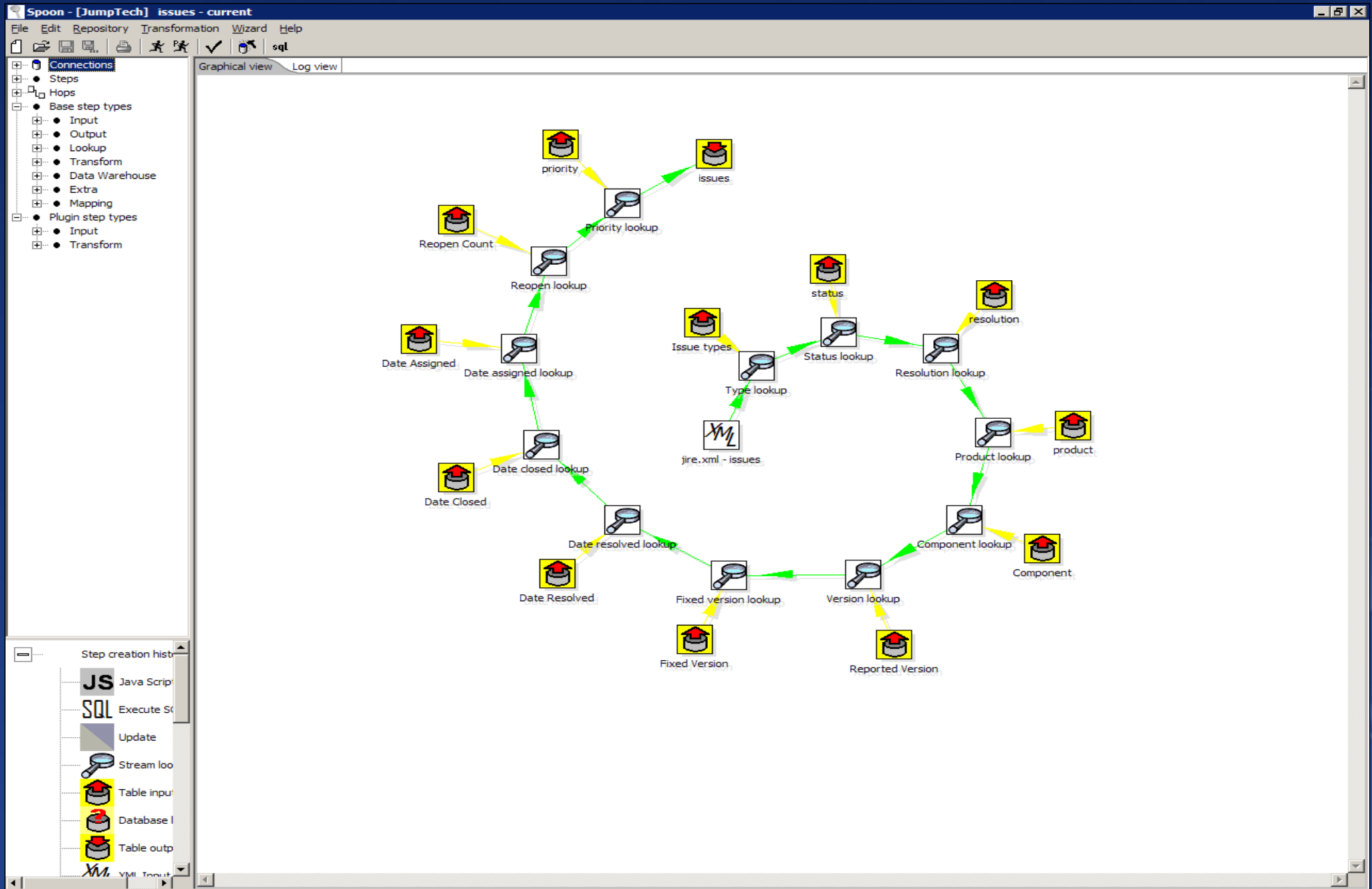
# Data Integration



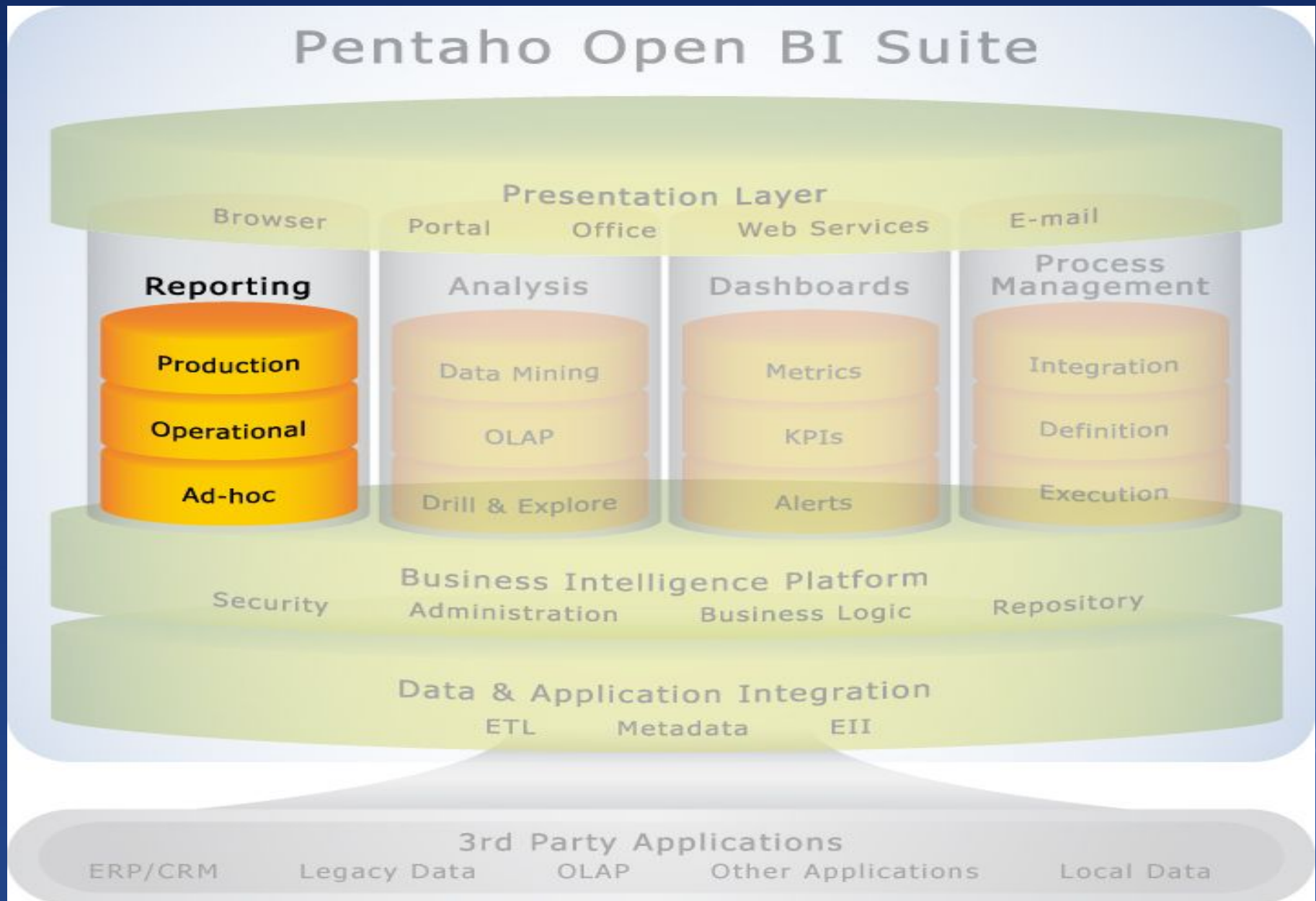
# Data Integration

- Access and integrate disparate data from
  - Different data storage types and database
  - Different formats
  - Different structures
- Access data where it resides
  - On your PC, in databases, on the web, in clustered databases, on ftp servers,...
- Maximize administrator productivity
  - Uses business data views, provides graphical tools and wizards.


# Data Integration



# Reporting




# Reporting

- Access and format data from disparate sources
    - Databases, XML, OLAP
  - Produce in popular formats
    - Excel, Web pages, XML, PDF
  - Multiple report types
    - Operational, Analytical, Financial
- 

# Reporting

- Produce reports directly against sources or using centralized metadata layer
- “pixel perfect” graphical report designer
- Web-based business user ad hoc report designer.

# Reporting



Steel Wheels  
500 International Speedway, Daytona, FL 32114  
(123) 456-7890 http://www.callsteel.com  
Run Date: 2/20/06 1:24 PM

---

**TO:** Reims Collectables  
55 rue de l'Abbaye, null  
Reims, null 51100 France

**INVOICE**

Attn: Paul Henriot  
Sales Rep: 1337  
Terms: Net 30 days

Invoice #: 10121  
Account Number: 353  
Date: May 07, 2006

| SKU      | Product Description                   | Price/Unit | Qty Ordered | Total Price     |
|----------|---------------------------------------|------------|-------------|-----------------|
| S50_4713 | 2002 Yamaha YZR M1                    | \$74.85    | 44          | \$3,293         |
| S24_2360 | 1982 Ducati 900 Monster               | \$76.88    | 32          | \$2,460         |
| S32_4485 | 1974 Ducati 350 Mk3 Desmo             | \$86.74    | 25          | \$2,168         |
| S12_2823 | 2002 Suzuki XREO                      | \$165.68   | 50          | \$8,284         |
| S10_1678 | 1969 Harley Davidson Ultimate Chopper | \$81.35    | 34          | \$2,765         |
|          |                                       |            |             | <b>\$18,971</b> |

Send Payment and Remittance Slip to:  
Steel Wheels  
500 International Speedway  
Daytona, FL 32114  
*Thank you for your business!*

---

Account Number: 353

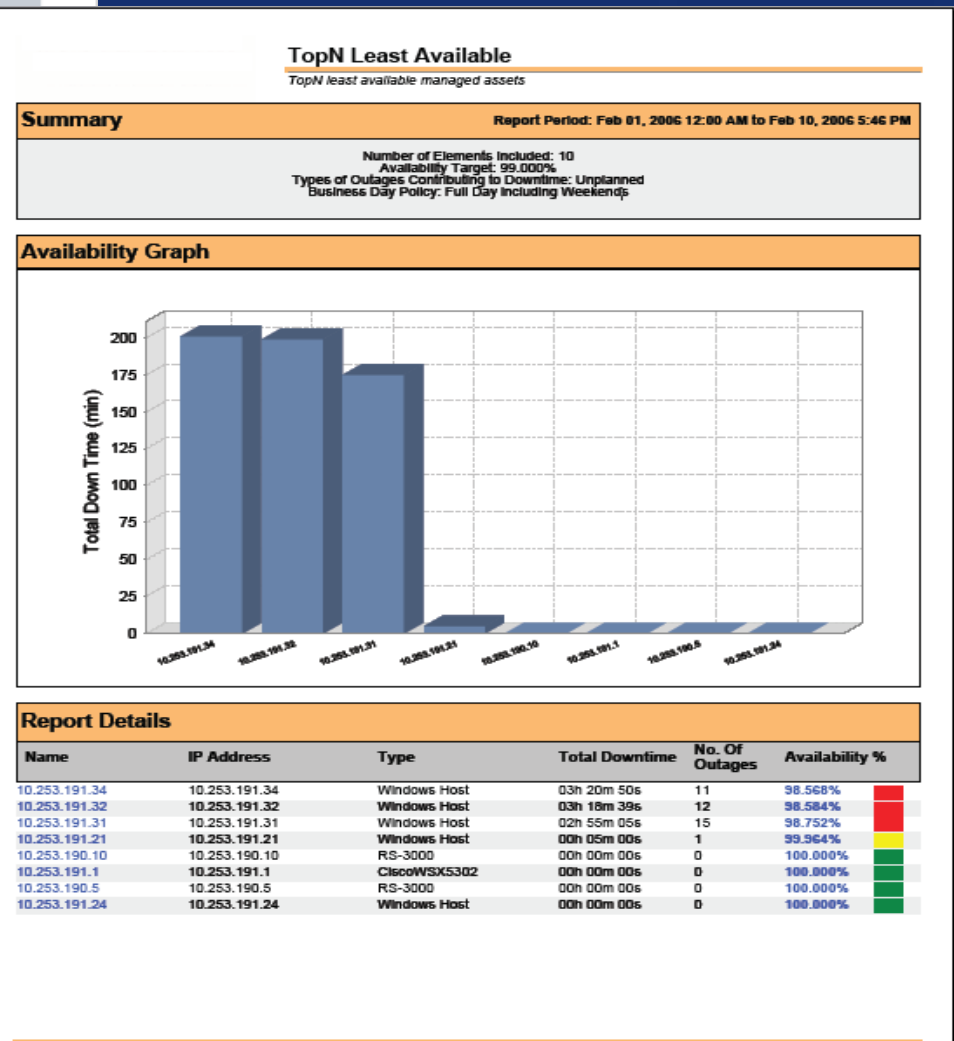
Reims Collectables

REMITTANCE

Reims Collectables  
59 rue de l'Abbaye, null  
Reims, null 51100 France

AMOUNT ENCLOSED:

Invoice  
Account Num



# Reporting

SalesAnalysis.report\* - C:\Pentaho\Report Def\SalesAnalysis.report - Pentaho Report Designer 1.5.7

File Edit View Help

100% 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0 7.5 8.0 8.5 9.0 9.5 10

Page: \$(PageofPages)  
Run Date: \$(report.date)

**pentaho™**  
open source business intelligence

**Sales Analysis**

REGION: \$(ccomp\_REGION)

| State | Store | QTY | Sales |
|-------|-------|-----|-------|
|-------|-------|-----|-------|

cord\_PLANT    ccomp STATE    ccomp STORENAME    cord QUANTITY    cord LINEPRICE    cord

Design Preview

Structure

- Report
  - Data Sets
  - Report Functions
  - Page Header
    - Message Field Page: \$(PageofPages)
    - Message Field Run Date: \$(report.date)
    - Static Image
  - Report Header
  - Item Band
  - Report Footer
  - Page Footer
  - No Data Band
  - Watermark
  - Groups

Properties

ID

|      |                  |
|------|------------------|
| Name | Element@20166107 |
|------|------------------|

Appearance

|                   |                               |
|-------------------|-------------------------------|
| URL               | file:/C:/Documents%20and...   |
| Keep Aspect       | <input type="checkbox"/> True |
| Style Expressions | No Expressions                |
| Padding           | 0; 0; 0; 0                    |
| Border            |                               |

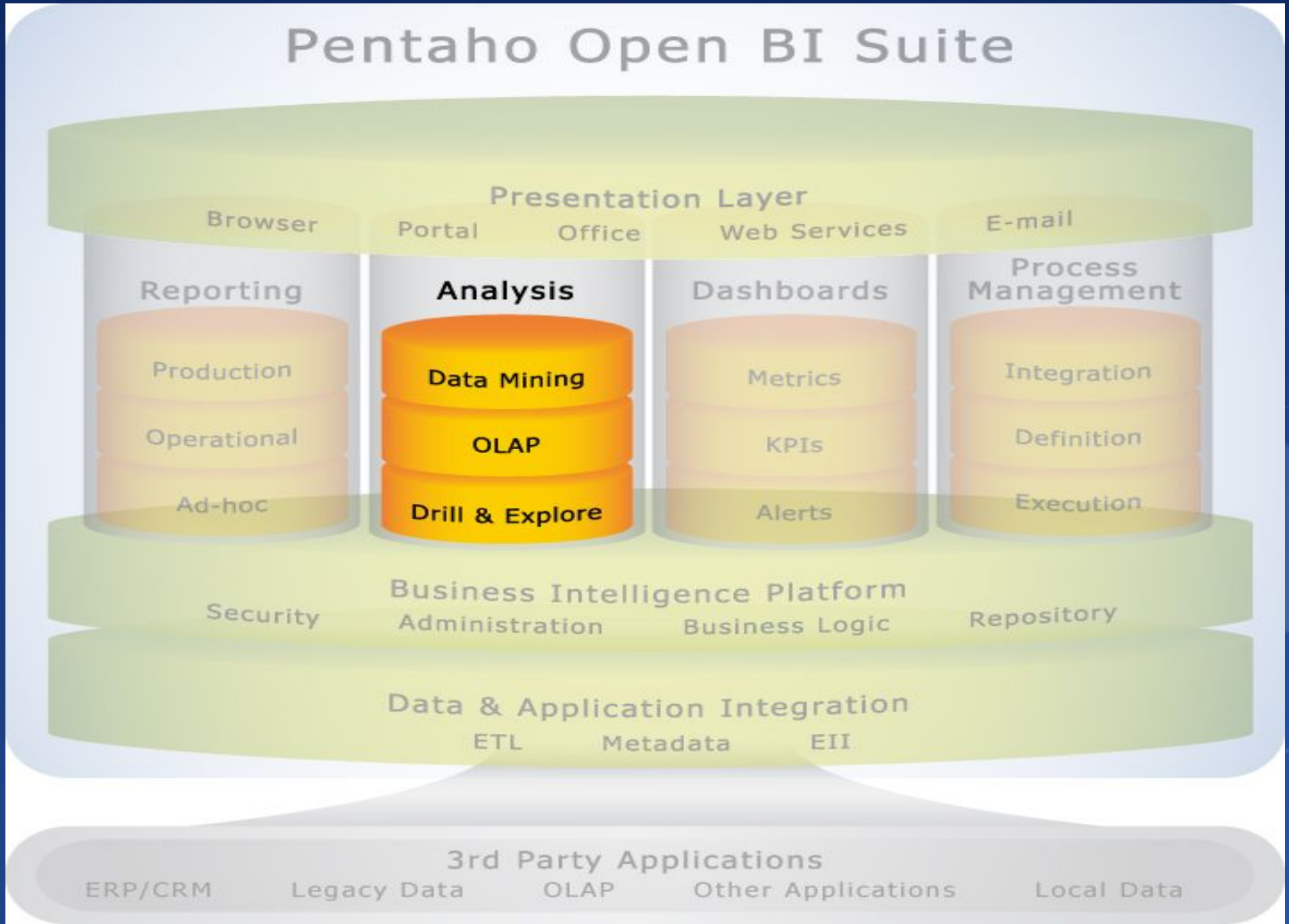
Spatial

|              |          |
|--------------|----------|
| Position     | 9; 9     |
| Minimum Size | 238; 100 |
| Maximum Size | 0; 0     |

Messages

| Summary               | Description  |
|-----------------------|--|
| Field not set         | The field is not set                                     |
| Field not set         | The field is not set                                     |
| Text Elements overlap | Text Elements should not overlap for some output targets |
| Text Elements overlap | Text Elements should not overlap for some output targets |

# Analysis



# Analysis

- View data “dimensionally”
  - e.g. Activity by region, by project, by time period (year, month,...)
- Navigate and explore
  - Ad Hoc analysis
  - “Drill-down” from year to quarter
  - Pivot
  - Select specific members for analysis
  - Analyse cause/effect relationship
- Web-based or Excel front-end.

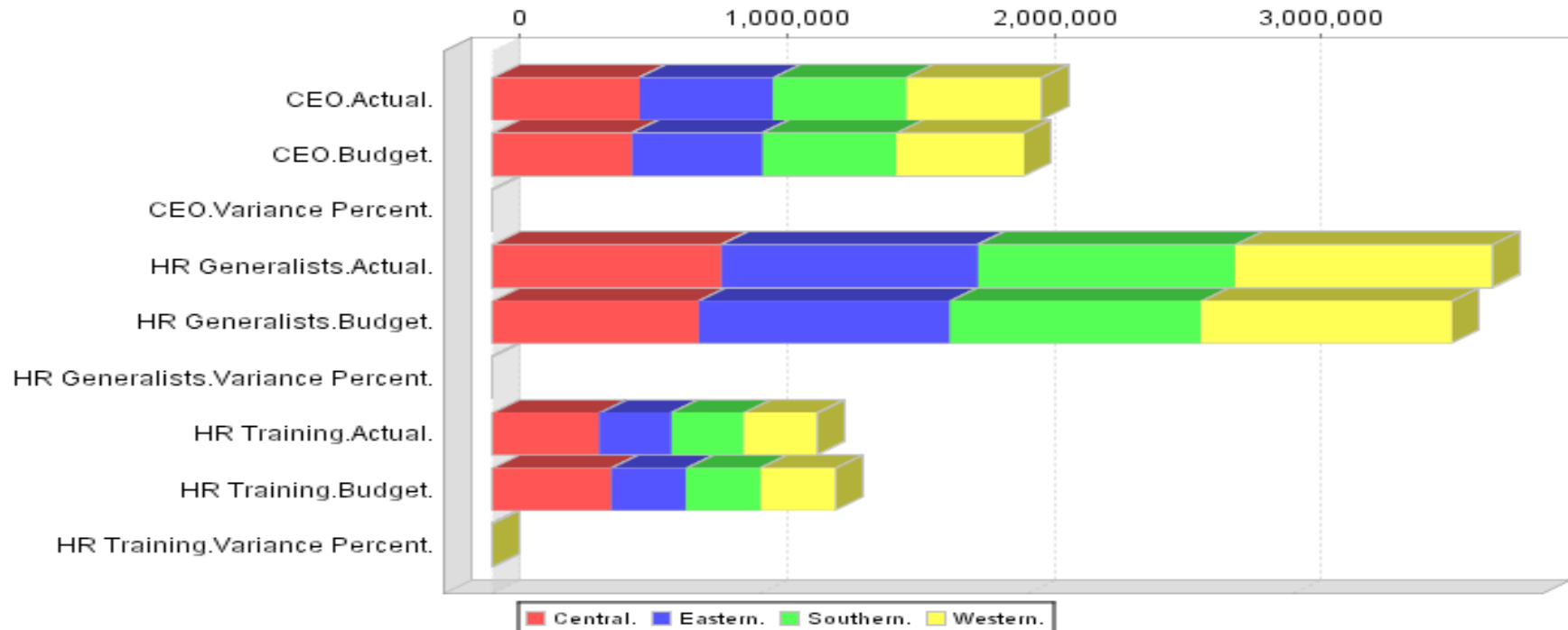
# Analysis



|                |                  | Region      |             |             |             |
|----------------|------------------|-------------|-------------|-------------|-------------|
| Positions      | Measures         | Central     | Eastern     | Southern    | Western     |
| CEO            | Actual           | ↓549,625.00 | ↓500,000.00 | ↓500,000.00 | ↓500,000.00 |
|                | Budget           | ↓522,250.00 | ↓488,750.00 | ↓498,750.00 | ↓478,750.00 |
|                | Variance Percent | -5.24%      | -2.30%      | -.25%       | -4.44%      |
| HR Generalists | Actual           | ↓856,190.00 | ↓961,000.00 | ↓961,000.00 | ↓961,000.00 |
|                | Budget           | ↓771,225.00 | ↓940,158.00 | ↓940,158.00 | ↓938,158.00 |
|                | Variance Percent | -11.02%     | -2.22%      | -2.22%      | -2.43%      |
| HR Training    | Actual           | ↓397,473.00 | ↓271,200.00 | ↓271,200.00 | ↓271,200.00 |
|                | Budget           | ↓443,570.00 | ↓279,674.00 | ↓279,674.00 | ↓277,674.00 |
|                | Variance Percent | 10.39%      | 3.03%       | 3.03%       | 2.33%       |

Slicer: [(All)=All Departments]

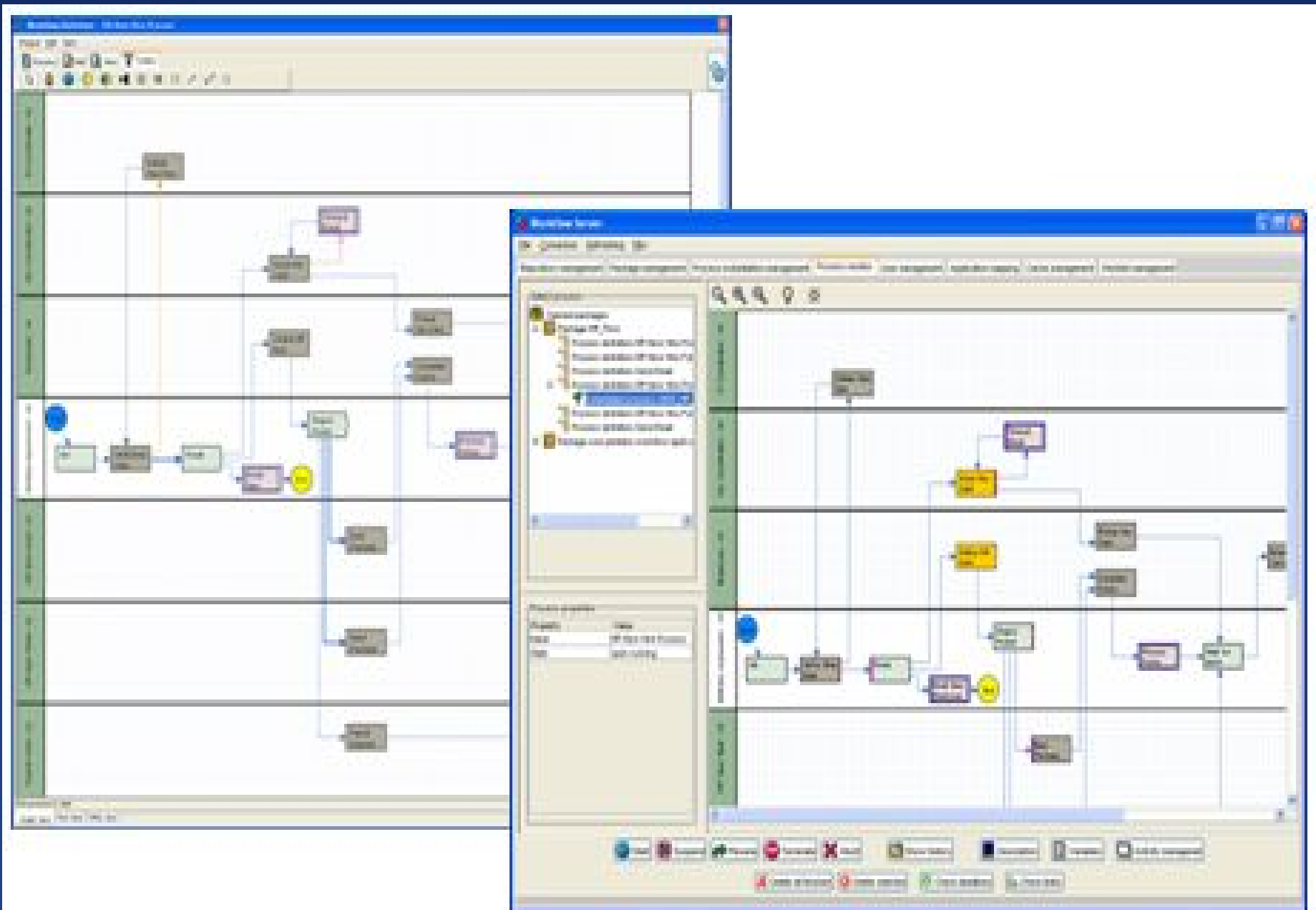
Slicer: (All)=All Departments



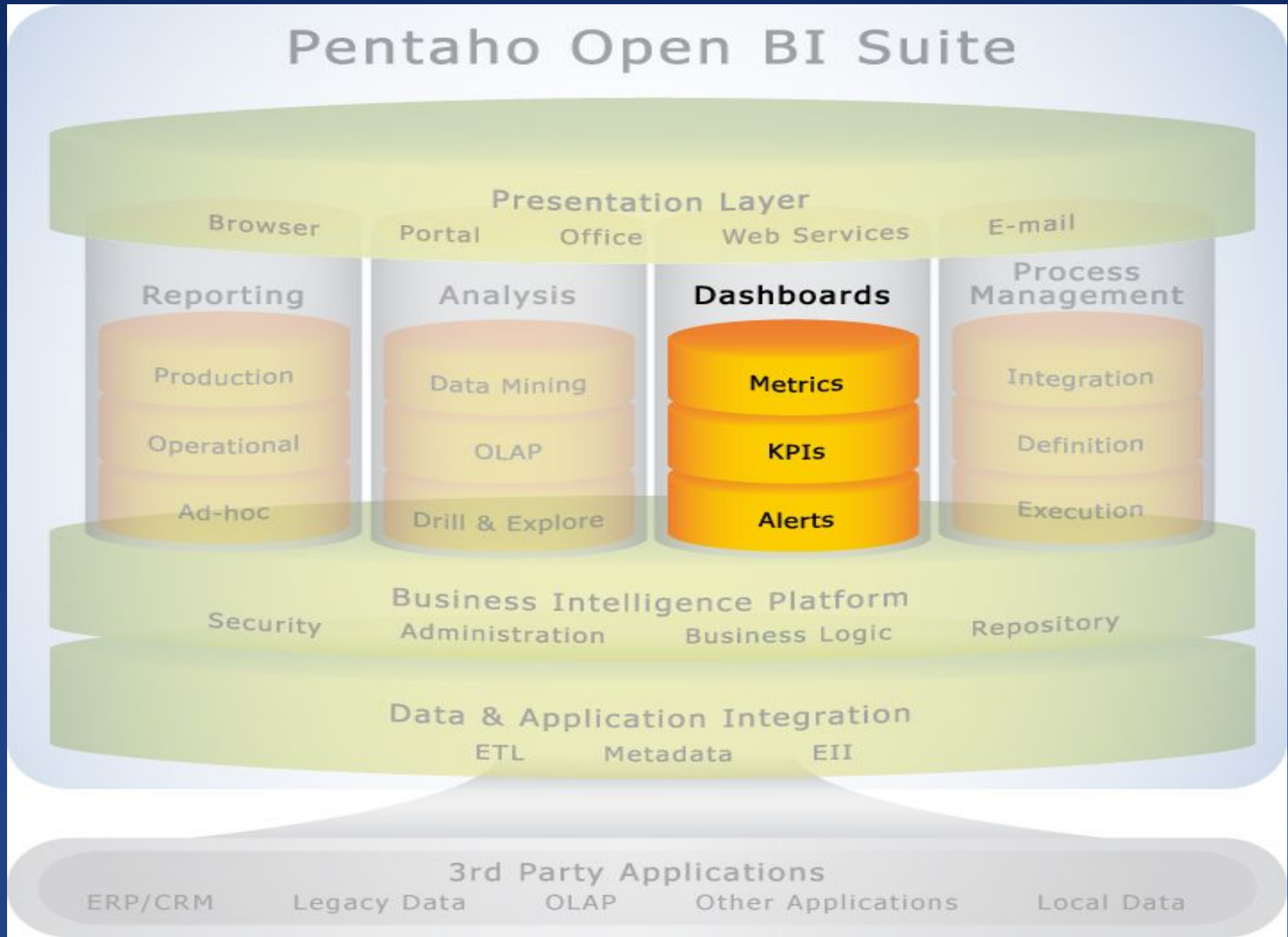
# Data Mining

- Rich analytical capability
  - Over 50 data preprocessing models, over 76 classification/regression algorithms, 8 clustering algorithms, over 15 attribute/subset evaluators, and 10 search algorithms for feature selection
- Graphical interfaces
  - Exploratory data analysis
  - Experiment execution
  - Process / flow modeling

# Data Mining



# Dashboards



# Dashboards

- Monitor Key Performance Indicators (KPIs) / metrics
  - Investigate underlying details
  - Drill to supporting reports
  - Track exceptions
  - Alert users based on business rules
- 

# Dashboards

- Tight business process integration
  - Embedded workflow
  - Can receive events from or trigger events in external systems
- Pentaho Open BI Suite Integration
  - Comprehensive auditing of use activity, performance and data access
  - Context-sensitive drilling to reports or analysis
  - Integrated security, scheduling, alerting, portal integration

# Dashboards



Home | Getting Started | Reporting | Business Rules | Printing | Bursting | Widgets | DataSource | Secure | Advanced

### Filters

Select filters to apply to other controls on this page

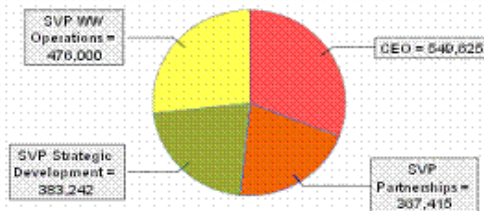
REGION:  Central

DEPARTMENT:

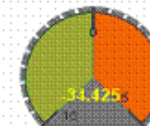
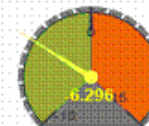
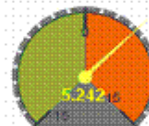
### Headcount Data

| Position                  | Actual             | Budget             | Variance         |
|---------------------------|--------------------|--------------------|------------------|
| SVP Strategic Development | \$383,242          | \$403,405          | \$20,163         |
| SVP Partnerships          | \$367,415          | \$392,100          | \$24,685         |
| CEO                       | \$549,625          | \$522,250          | -\$27,375        |
| SVP WW Operations         | \$476,000          | \$725,887          | \$249,887        |
| <b>Total</b>              | <b>\$1,776,282</b> | <b>\$2,043,642</b> | <b>\$267,360</b> |

### Headcount Costs



### Actual Headcount - % Variance from Budget

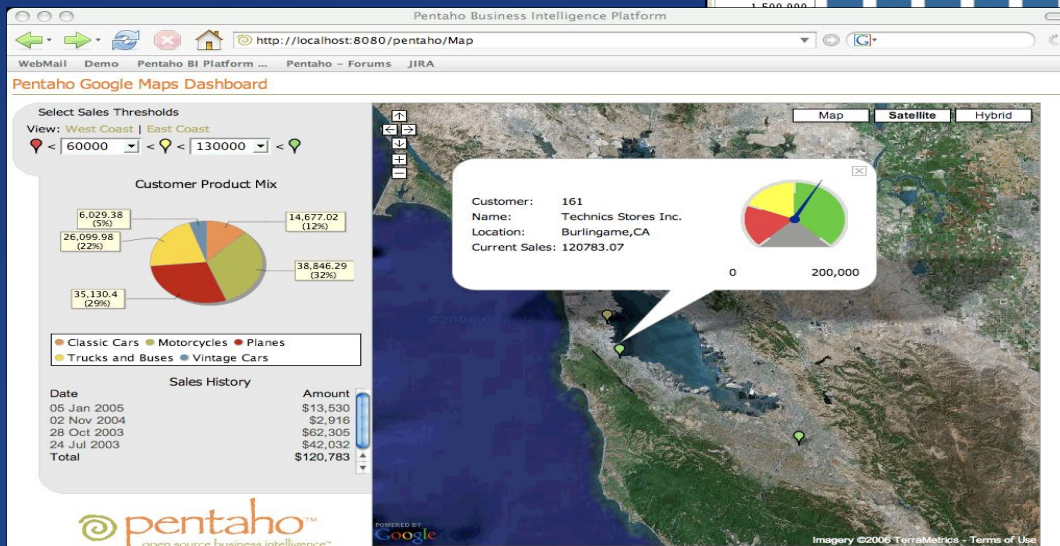
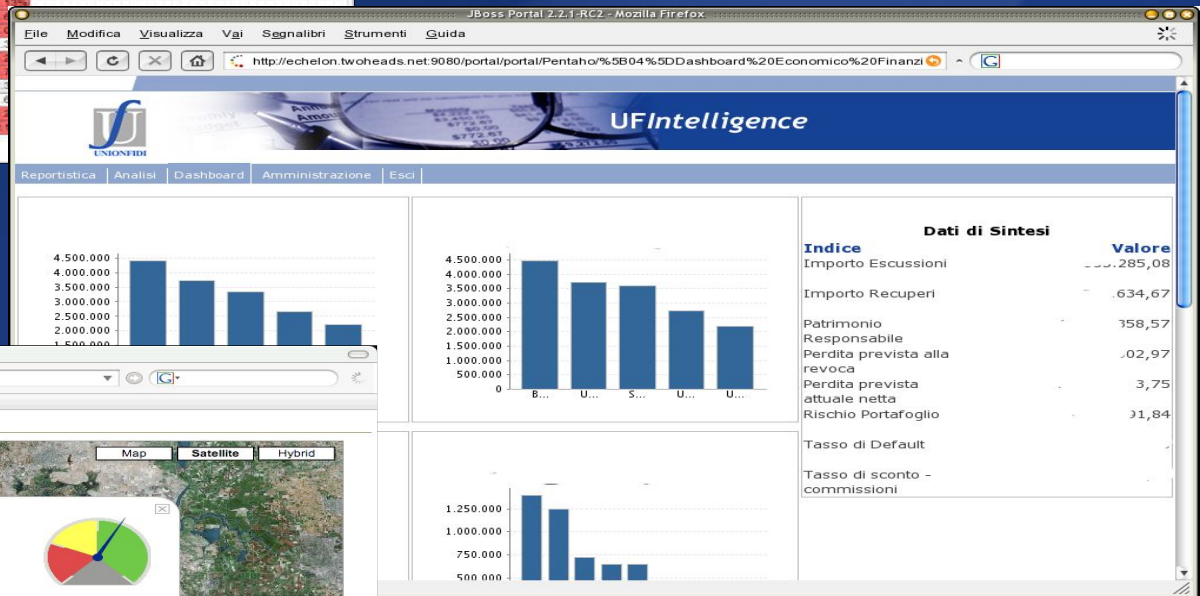
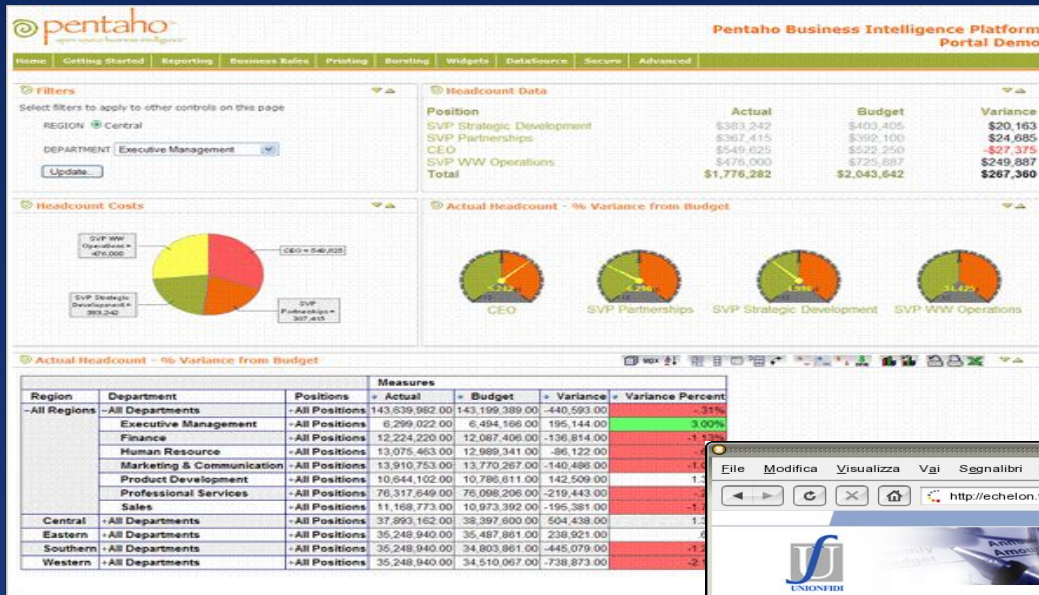


### Actual Headcount - % Variance from Budget

MDX

| Region       | Department                | Positions      | Measures       |                |             |                  |
|--------------|---------------------------|----------------|----------------|----------------|-------------|------------------|
|              |                           |                | Actual         | Budget         | Variance    | Variance Percent |
| -All Regions | -All Departments          | +All Positions | 143,639,982.00 | 143,199,389.00 | -440,593.00 | -0.31%           |
|              | Executive Management      | +All Positions | 6,299,022.00   | 6,494,166.00   | 195,144.00  | 3.00%            |
|              | Finance                   | +All Positions | 12,224,220.00  | 12,087,406.00  | -136,814.00 | -1.13%           |
|              | Human Resource            | +All Positions | 13,075,463.00  | 12,989,341.00  | -86,122.00  | -0.66%           |
|              | Marketing & Communication | +All Positions | 13,910,753.00  | 13,770,267.00  | -140,486.00 | -1.02%           |
|              | Product Development       | +All Positions | 10,644,102.00  | 10,786,611.00  | 142,509.00  | 1.32%            |
|              | Professional Services     | +All Positions | 76,317,649.00  | 76,098,206.00  | -219,443.00 | -0.29%           |
|              | Sales                     | +All Positions | 11,168,773.00  | 10,973,392.00  | -195,381.00 | -1.78%           |
| Central      | +All Departments          | +All Positions | 37,893,162.00  | 38,397,600.00  | 504,438.00  | 1.31%            |
| Eastern      | +All Departments          | +All Positions | 35,248,940.00  | 35,487,861.00  | 238,921.00  | 0.67%            |
| Southern     | +All Departments          | +All Positions | 35,248,940.00  | 34,803,861.00  | -445,079.00 | -1.28%           |
| Western      | +All Departments          | +All Positions | 35,248,940.00  | 34,510,067.00  | -738,873.00 | -2.14%           |

# Dashboards



# Portals and Integration

- Comes bundled with the Jboss Portal, a leading portal.
- JSR-168 compliant, so that the BI components can intergrate with existing portals.
- Can be embedded, or extended.
- Provides web services to other applications.

# Workflow

- Comes embedded with a workflow engine.
- Can be customised using a BPEL compliant workflows designer.

# Benefits of Using Pentaho

- Out of the box portal
- Graphical tools to develop and customise your own solution.
- Lower acquisition and support costs.
- Source code provided to all implementations.
- Open architecture
- Progressive licensing options

# What can you do next?

- Allow us to show you the real power of our BI platform.
- Contact [pradesh@datacraft.co.za](mailto:pradesh@datacraft.co.za)
- Contact [kuben@datacraft.co.za](mailto:kuben@datacraft.co.za)

**DATA CRAFT**  
SOFTWARE CONSULTING

 **pentaho™**  
open source business intelligence™