



## 2012 Administrative Leadership Conference

# Reporting and Analysis Highlights

October 24, 2012



# Workshop Presenter(s)

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AITs: Decision Support

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# Please...

- Turn off cell phones.
- Avoid side conversations.
- Ask Questions at any time
- Sign the attendance roster.
- Complete the evaluation at the end of the workshop.



# Workshop Objectives

- Review purpose and strengths of reports and analysis tools
- Overview of Excel-based tools for performing analysis of expenditures as well as associated employee FTE and headcounts
- Highlight report resources



# Information Toolbox

- Reports
  - Answer a specific question
  - Can be reoccurring or one-time
  - Have an expectation of the answer
  - Often are very detailed listings
  - Help answer: Who, What, When, Where, How Much?
  - Generally detail what has already happened



# Information Toolbox

- Analysis
  - Answer a family of questions - conversation
  - Assist in identifying outliers and exceptions
  - Enable exploration and trending over time
  - Iterative process: one question leads to another
  - Often summarized
  - Can create insight: Why or What might



# Information Toolbox

- Dashboards
  - Visual information more easily consumed
  - Illustrates patterns or relationships
  - Enable monitoring of pre-determined items or areas of interest
  - Usually summarized



# Review Information Resources

- Reports
  - ViewDirect – point in time
  - EDDIE – refreshable on demand
  - Solution Library & QCH – Business Objects
- Analysis or OLAP (on-line analytical processing)
  - Expense Trends – Microsoft Excel
  - Employee FTE/HC – Microsoft Excel



# The Cubes



# Terminology

- Analysis or Cubes or OLAP (on-line analytical processing)
  - A product that allows you to easily interact with, summarize and review data. This activity is often referred to as ‘slicing and dicing’.
  - What are the advantages of putting data in a cube?
    - Faster and more responsive for exploration
    - Intuitive summarization of data
    - Packaged for trending, analysis, and identification of outliers
    - Quick filtration to reveal insights



# OLAP Cubes in Excel

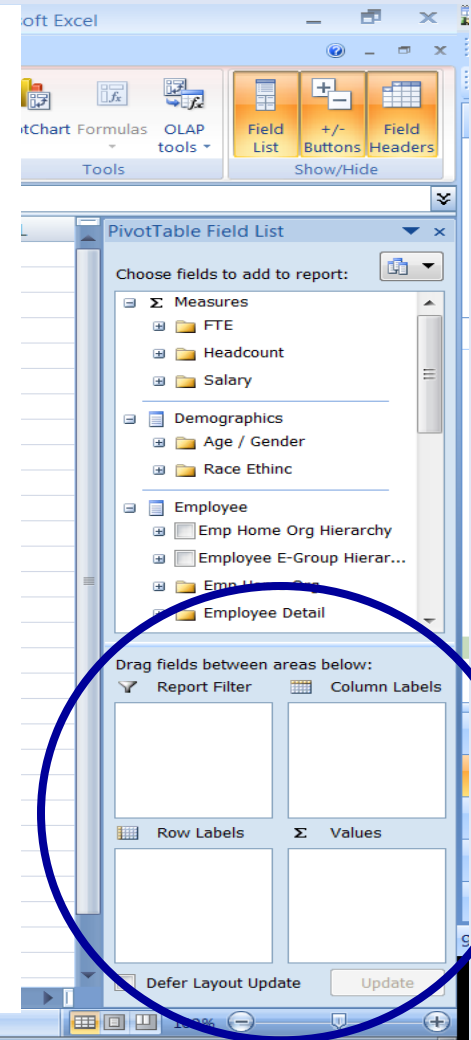
The screenshot shows the Microsoft Excel interface with the PivotTable Tools ribbon active. The PivotTable Field List task pane is open on the right, displaying a list of data elements grouped into three categories: Measures (FTE, Headcount, Salary), Demographics (Age / Gender, Race Ethnic), and Employee (Emp Home Org Hierarchy, Employee E-Group Hierar..., Emp Home Org, Employee Detail). The task pane is circled in blue, highlighting the 'Choose fields to add to report' section.

- The “Pivot Table Field List” contains all of the data elements available in the cube.
- The Field List has logical groupings of the data elements.
- The data elements in a grouping are listed alphabetically



# OLAP Cubes in Excel

- To analyze data, you put objects in one of the four sections in the bottom right hand corner.
1. Report Filter – It is a good idea to start filtering your selections, before displaying them. Filters appear as drop downs lists in the upper left hand corner of the excel worksheet.
  2. Column Labels – This will put the field across the top of as columns. Time is often a good column choice for trending.
  3. Row Labels – When you click on the box in front of an field, it is automatically placed in the Row Label section.
  4. Values – Measures are put here. These are things you count or sum.





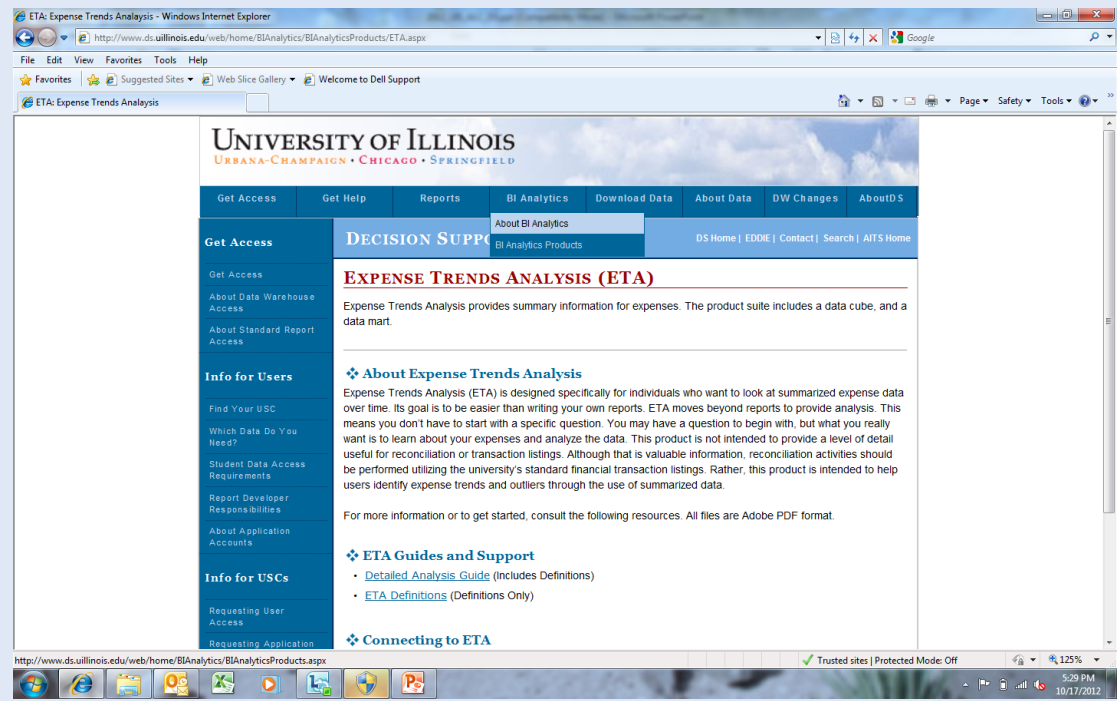
# Expense Trends cube

- Purpose: to analyze your expenses and look for trends
- What's in it:
  - Expenses only
  - Current FY and previous five
  - Limited employee/job/position information
  - Vendor names

# Expense Trends cube

- How often is it updated?
  - Monthly
- Where can I find out more information?

<http://www.ds.uillinois.edu/web/home/BIAnalytics/BIAnalyticsProducts/ETA.aspx>



The screenshot shows a web browser window displaying the University of Illinois Expense Trends Analysis (ETA) website. The browser's address bar shows the URL: <http://www.ds.uillinois.edu/web/home/BIAnalytics/BIAnalyticsProducts/ETA.aspx>. The website header features the University of Illinois logo and a navigation menu with links: Get Access, Get Help, Reports, BI Analytics, Download Data, About Data, DW Changes, and About DS. Below this, a sub-menu for BI Analytics includes links to About BI Analytics and BI Analytics Products. The main content area is titled "EXPENSE TRENDS ANALYSIS (ETA)" and provides a summary of the product suite, which includes a data cube and a data mart. It also contains sections for "About Expense Trends Analysis", "ETA Guides and Support" (with links to Detailed Analysis Guide and ETA Definitions), and "Connecting to ETA". The left sidebar contains links for Get Access, About Data Warehouse Access, About Standard Report Access, Info for Users, and Info for USCs.



# Expense Trends cube

Book1 [Compatibility Mode] - Microsoft Excel

PivotTable Name: Active Field: Total Expense Amount

PivotTable

Active Field

Group Selection

Ungroup

Group Field

Group

Sort & Filter

Sort

Insert Slicer

Refresh

Change Data Source

Data

Clear

Select

Move PivotTable

Actions

Summarize Values By

Show Values As

Calculations

Fields, Items, & Sets

PivotChart

OLAP Tools

What-If Analysis

Tools

Field List

+/- Buttons

Field Headers

Show

A5		Total Expense Amount			
A	B	C	D	E	
1 Chart Of Account	4 - University of Illinois - Springfield				
2 Fiscal Year	(Multiple Items)				
3 Account Type Level 1 Title	(Multiple Items)				
4					
5 Total Expense Amount	Fiscal Year				
6 Account Type Level 1 Title	2010	2011	2012	Grand Total	
7 Non-Personnel Expenses	\$30,592,979.24	\$33,824,214.10	\$40,278,829.82	\$104,696,023.16	
8 Personnel Expenses	\$46,171,866.69	\$45,451,469.57	\$47,604,189.97	\$139,227,526.23	
9 Grand Total	\$76,764,845.93	\$79,275,683.67	\$87,883,019.79	\$243,923,549.39	
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PivotTable Field List

Choose fields to add to report:

- Acct Expense Hierarchy
- Fund Hierarchy
- Org Expense Hierarchy
- Organization Hierarchy
- Account
  - Account
  - Account Type Level 1 Code
  - ☒ Account Type Level 1 ...
  - Account Type Level 2 Code
  - Account Type Level 2 Title
  - Acct Expense Category
  - Acct Expense Class
  - Acct Expense Group
- Chart of Account

Drag fields between areas below:

Report Filter

- Chart Of Acc...
- Fiscal Year
- Account Type...

Column Labels

- Fiscal Quarte...

Row Labels

- Account Hier...

Values

- Total Expens...

Defer Layout Update

Update

Sheet1 Sheet2 Sheet3

Ready

100%

5:37 PM 10/17/2012



# Employee FTE/HC cube

- Purpose: to analyze look for trends in employee FTE and headcount
- What's in it:
  - Employee and job information (non terminated jobs)
  - 10 years of data – 2004 to current
  - Employee groups, Salary, Tenure, Rank
  - Faculty Information: Tenure Rank

# Employee FTE/HC cube

- How often is it updated?
  - Monthly (on the 10<sup>th</sup> day of the month)
- Where can I find out more information?

<http://www.ds.uiillinois.edu/web/Home/BIAnalytics/BIAnalyticsProducts/HeadcountAnalysis.aspx>



The screenshot displays the 'FTE Headcount Analysis' web application in a Windows Internet Explorer browser. The URL bar shows the path: <http://www.ds.uiillinois.edu/web/Home/BIAnalytics/BIAnalyticsProducts/HeadcountAnalysis.aspx>. The page header features the University of Illinois logo and navigation tabs for 'Get Access', 'Get Help', 'Reports', 'BI Analytics', 'Download Data', 'About Data', 'DW Changes', and 'About DS'. The 'BI Analytics' tab is active, showing sub-links for 'About BI Analytics' and 'BI Analytics Products'. The main content area is titled 'DECISION SUPPORT' and 'HEADCOUNT FTE ANALYSIS (HFA)'. It includes a description of the Headcount Full-Time Employee (FTE) Analysis (HFA) product, which is designed to answer questions about employee headcounts over time. The page also provides links to 'About Headcount FTE Analysis', 'Headcount FTE Analysis Guides and Support' (including 'Headcount FTE Analysis (HFA) Cube Definitions' and 'Headcount FTE Analysis (HFA) Detailed Guide'), and 'Connecting to Headcount FTE Analysis' (including 'Get Access to OLAP Cube'). A sidebar on the left contains links for 'Get Access', 'About Data Warehouse Access', 'About Standard Report Access', 'Info for Users', and 'Info for USCs'.



# Employee FTE/HC cube

Book1 [Compatibility Mode] - Microsoft Excel

PivotTable Name: PivotTable2  
Active Field: Headcount

Options: Expand Entire Field, Collapse Entire Field, Field Settings, Active Field

Design: Group Selection, Ungroup, Group Field, Group, Sort & Filter, Refresh, Change Data Source, Clear, Select, Move PivotTable, Summarize Values By, Show Values As, Fields, Items, & Sets, PivotChart, OLAP Tools, What-If Analysis, Field List, +/- Buttons, Field Headers

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1														
2	Home Campus Code	4												
3	Fiscal Period	04												
4														
5	Headcount	Fiscal Year												
6	Faculty Rank Desc	2010	2011	2012	2013	Grand Total								
7	Assistant Professor	80	69	67	57	122								
8	Associate Professor	81	83	90	94	114								
9	No Rank Description	1639	1654	1657	1664	3218								
10	Professor	30	26	26	27	37								
11	Grand Total	1766	1774	1783	1777	3325								
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PivotTable Field List

Choose fields to add to report:

- Position Detail
- Salary Range
  - ☐ Job Salary Range Lower Value
  - ☐ Job Salary Range Name
  - ☐ Job Salary Range Upper Value
- Time
  - ☐ Academic Period
  - ☐ Academic Year
  - ☐ Calendar Month
  - ☐ Calendar Year
  - ☐ Fiscal Month
  - ☒ Fiscal Period
  - ☒ Fiscal Year

Drag fields between areas below:

Report Filter: Home Campus..., Fiscal Period

Column Labels: Fiscal Year

Row Labels: Faculty Rank...

Values: Headcount

Defer Layout Update: Update

Ready | Sheet1 | Sheet2 | Sheet3 | 100% | 5:58 PM 10/17/2012



# Reporting



## EDDIE

SAP BusinessObjects InfoView - Windows Internet Explorer

https://eddie.ds.uillinois.edu/InfoViewApp/listing/main.do?appKind=InfoView&service=%2FInfoViewApp%2Fcommon%2FappService.do&loc=en

File Edit View Favorites Tools Help

SAP BusinessObjects InfoView

Welcome: hessgill

Home Document List Open Send To Dashboards Help Preferences About Log Out

New Add Organize Actions Search title 1 of 1

Title	Last Run	Type
FIOL_Misclassified_FOAPAL		Desktop Intelligence Report
UR_FIAR_FIN_Ledgers_AR_Payment_Trans		Desktop Intelligence Report
UR_FIFA_Commodity_Search	Aug 19, 2008 11:12 AM	Desktop Intelligence Report
UR_FIFA_Fixed_Asset_By_Org		Desktop Intelligence Report
UR_FIFA_FIXED_ASSET_Pending_List	Dec 17, 2009 10:43 AM	Desktop Intelligence Report
UR_FIGL_College_MultiFund_Management_Report		Desktop Intelligence Report
UR_FIGL_Departmental_MultiFund_Management_Report	Sep 14, 2011 3:21 PM	Desktop Intelligence Report
UR_FIGL_Detail_Fund_Balance_Change	Jan 21, 2011 11:33 AM	Desktop Intelligence Report
UR_FIGL_LOCATION	May 29, 2009 1:35 PM	Desktop Intelligence Report
UR_FIGL_Operating_Ledger_By_Org	Oct 8, 2012 1:06 PM	Desktop Intelligence Report
UR_FIGR_GRANT_DETAIL		Desktop Intelligence Report

Total: 11 objects

Discussions

The list pane is updated.

Trusted sites | Protected Mode: Off | 125% | 10:26 PM 10/17/2012



# EDDIE

- Recent Finance Reports
  - UR\_FIGL\_Departmental\_Multifund\_Management\_Report
  - UR\_FIGL\_College\_Multifund\_Management\_Report
  - UR\_FIGR\_Grant\_Detail



# EDDIE

- Multifund Management reports
  - Management overview of most fund types
  - Review college/departmental fund balances
  - Summary of balances across fund types for a particular 3-digit organization code, fiscal year, and fiscal period
  - Additional tabs in the report provide more detail for each fund type, including: State and ICR budget balance available, revolving funds, gift funds, and grant funds.



# EDDIE

- One Grant detail
  - Research Administrators or Investigators who manage grants
  - Focuses on a single grant code including detailed transaction as well as summary information
  - Multi-tab report package containing Inception To Date, Personnel and Non-Personnel summaries across account types for a particular grant code
  - Additional tabs in the report provide transaction detail as well as projections.



# Get Access

Home - Windows Internet Explorer

http://www.ds.uillinois.edu/web/

File Edit View Favorites Tools Help

★ Favorites | ★ Suggested Sites | Web Slice Gallery | Welcome to Dell Support

Outlook Web App | Home

Page Safety Tools

## UNIVERSITY OF ILLINOIS

URBANA-CHAMPAIGN • CHICAGO • SPRINGFIELD

<a href="#">Get Access</a>	<a href="#">Get Help</a>	<a href="#">Reports</a>	<a href="#">BI Analytics</a>	<a href="#">Download Data</a>	<a href="#">About Data</a>	<a href="#">DW Changes</a>	<a href="#">About DS</a>
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About Data Warehouse Access

About Standard Report Access

Info for Users

Info for Unit Security Contacts

DS Home | EDDIE | Contact | Search | AITS Home

Decision Support (DS) is a Business Intelligence Competency Center for the University of Illinois. DS is responsible for scoping, designing, and delivering solutions to business problems using a combination of enterprise data warehouse and business intelligence frameworks. For more information, read [About DS](#).

### ❖ Customer Alerts

**Data Warehouse Processing Alert** *September 20 UPDATE: October 12*  
Data Warehouse processing (ETL) encountered an error in the Test Results History table (T\_TEST\_RESULT\_HIST) on 9/15, 9/20, and 9/27. Items with a unique constraint with no change in "activity\_date" do not have current information. The activity date did not change, but the test scores were updated. Decision Support plans to resolve the issue with the November Change Management release (scheduled for 11/1). We apologize for any inconvenience and appreciate your patience. If you have any

### ❖ Daily Data Availability Summary

The Data Warehouse **daily** updates were last completed at these times. For more information, see the complete [Data Availability](#) report.

The Data Warehouse is currently undergoing maintenance, therefore data availability information can not be displayed at this time.

### ❖ Get Started

- [Get Access](#)
- [Change Password](#)
- [View Standard Reports](#)
- [Create Custom Reports](#)
- [Create Data Downloads](#)

### ❖ Assistance & Education

### ❖ Check Out

- Solution available for problems opening EDDIE Desktop Intelligence**  
AITS is pleased to announce a solution to the file association issue causing the difficulties. Step-by-step instructions for the solution are available. For more information, see the [Business Objects Information](#) page.
- DS Website Moving to AITS Website**  
The DS website will be moving to the AITS website. For more information, see the [News & Notes](#).

http://www.ds.uillinois.edu/web/Home/GetAccess.aspx

Trusted sites | Protected Mode: Off

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10/17/2012



# Get Training

Help (Get Help) - Windows Internet Explorer

http://www.ds.uillinois.edu/web/Home/Help.aspx

File Edit View Favorites Tools Help

★ Favorites ★ Suggested Sites Web Slice Gallery Welcome to Dell Support

Outlook Web App Help (Get Help)

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Get Access Get Help Reports BI Analytics Download Data About Data DW Changes AboutDS

**Get Access** Search  
Change or Reset Passwords  
Self-Directed Training  
Classes & Workshops  
1-on-1 Assistance  
Troubleshoot  
BusinessObjects Information  
Technical Support  
Glossary  
General Information Resources

**Info for Users**

Find Your USC  
Which Data Do You Need?  
Student Data Access Requirements  
Report Developer Responsibilities  
About Application Accounts

**Info for USCs**

Requesting User Access  
Requesting Application

**SUPPORT** DS Home | EDDIE | Contact | Search | AITS Home

There is a variety of support and training options, from on-line demos and webcasts, to hands-on. Browse the list below to see which options are right for you.

Search | Search the DS website for specific information

Change or Reset Passwords | Change or reset EDDIE and/or Data Warehouse passwords

Self-Directed Training | Online demonstrations, printable manuals and instructional materials, and archived webcasts

Classes & Workshops | Tool Training, Webcasts, and Custom Lab sessions

1-on-1 Assistance | Practice Lab sessions

Troubleshoot | Common EDDIE / BusinessObjects Error Messages

BusinessObjects Information | Information on BusinessObjects, including Desktop Intelligence installation information, training options, and frequently asked questions

Technical Support | Browse for an answer to your question, or file a request for assistance

Done

Trusted sites | Protected Mode: Off

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10/17/2012



# Get Help

1on1 (1-on-1 Reporting Assistance) - Windows Internet Explorer

http://www.ds.uillinois.edu/web/Home/Help/1on1.aspx

File Edit View Favorites Tools Help

★ Favorites ★ Suggested Sites Web Slice Gallery Welcome to Dell Support

Outlook Web App 1on1 (1-on-1 Reporting...

• Call 516.453.0020 and enter access code 894 156 885 # when prompted to hear what's happening.

To Join for STUDENT (Meeting ID 901-380-035):

- Go to <https://www.gotomeeting.com/join/901380035> and sign in to see what's happening.
- Call 516.453.0020 and enter access code 901 380 035 # when prompted to hear what's happening.

**UIS Practice Lab Schedule**

First Wednesdays; No January or July sessions

Time: 1:00 to 3:00 p.m.

Location: BSB 108

Fall 2010 Scheduled Sessions:

- No January Session
- February 1 - Canceled
- March 7 - Canceled
- April 4
- May 2
- June 6
- No July Session
- August 1
- September 5
- October 3
- November 7
- December 5

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Done

Trusted sites | Protected Mode: Off

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# Get Help

- Contact the AITS Service Desk (ask for Decision Support)
  - Email at: [servicedeskait@uillinois.edu](mailto:servicedeskait@uillinois.edu)
  
- Contact AITS-Decision Support
  - Email at: [dsusersupportspecialists@uillinois.edu](mailto:dsusersupportspecialists@uillinois.edu)



# Helpful People

- Michelle Bergman – Functional Area Coordinator –  
Student: [bergman@uillinois.edu](mailto:bergman@uillinois.edu)
- Mandy Bodine – Functional Area Coordinator – Finance  
[abodine@uillinois.edu](mailto:abodine@uillinois.edu)
- Eddie Lee – User Support Specialist  
[edwinlee@uillinois.edu](mailto:edwinlee@uillinois.edu)

***Remember:*** Decision Support is on campus on the first Wednesday of every month in BSB 108.



# Additional Resources

- To learn more about using Pivot Tables in Microsoft Excel
  - [go.uis.edu/lynda](http://go.uis.edu/lynda)



# Questions?