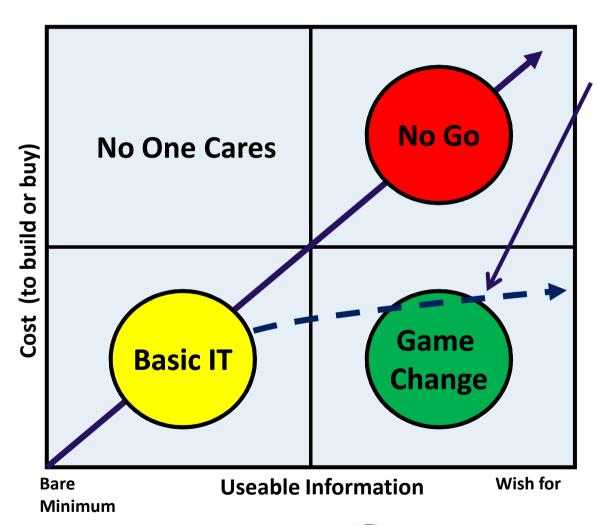


## Semantics Offers a New Paradigm



## Bending the line requires a new paradigm, e.g.

- √1980's PC's & Networks
- √ 1990's The Internet
- √2000's Semantics

#### **Innovators Get** the **Advantage**

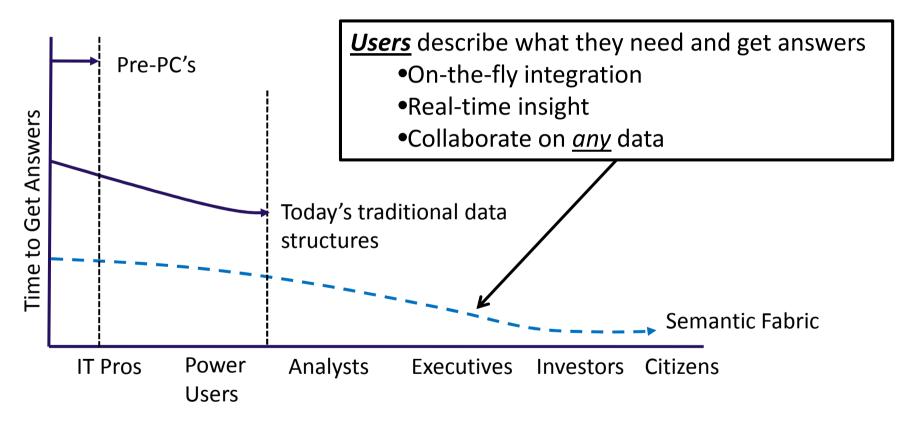
<u>Usually in the form of:</u>

- •Revenue Increase
- Cost containment
- •Risk Mitigation

Yesterday's Game Change is Today's Basic IT



## A New Paradigm for Responsiveness and Agility

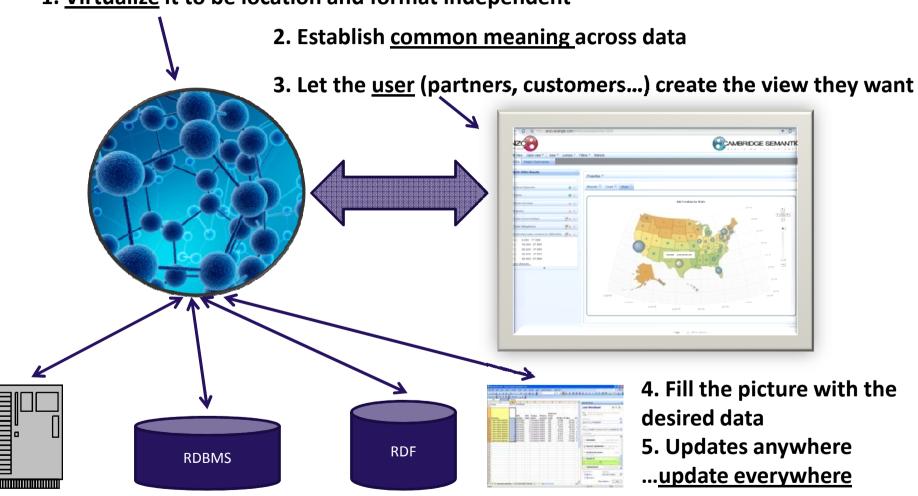


Reduced Time, Increased Reach



## The Power of a Semantic Fabric: Data lives at the source, anyone can leverage it

1. Virtualize it to be location and format independent





### **XBRL Meets Semantic Standards**

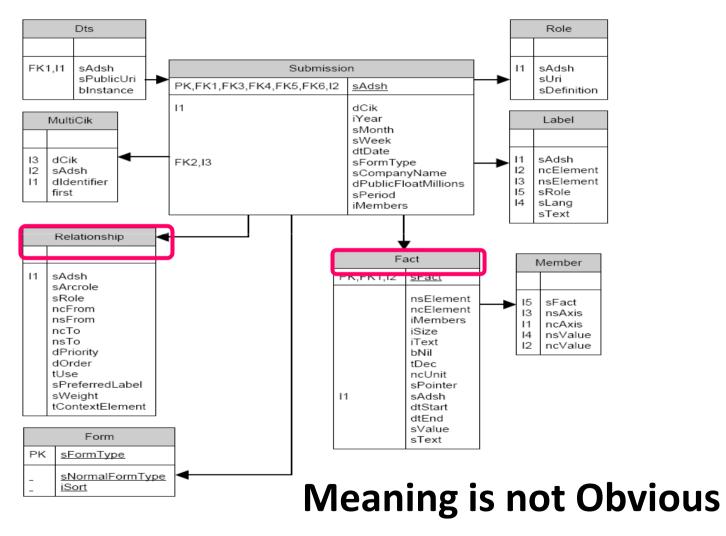
## A Case of Compliance? A Case of Internet Dating?

- XBRL adds structure to data
- Semantic standards attach meaning to the data
- •Structured data with meaning is consumable, re-usable, agile

#### Much Greater Insight into Financial Reporting Data



## A Word (Picture) on Structure





#### Add Tools for Non-Technical Users and...

#### Anyone can answer their own questions quickly

- Combine financial reporting data with any other data
- •Create <u>live</u> mashups that <u>stay linked</u> to the source
- •Share the result with others who can add to it...



#### Scenario

Identify potential cases of naked short selling by semantically linking XBRL filings with fails-to-deliver reports found at:

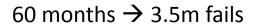
http://www.sec.gov/foia/docs/failsdata.htm

- 10-Q and 10-K Interactive Data
- Fail-To-Deliver Data

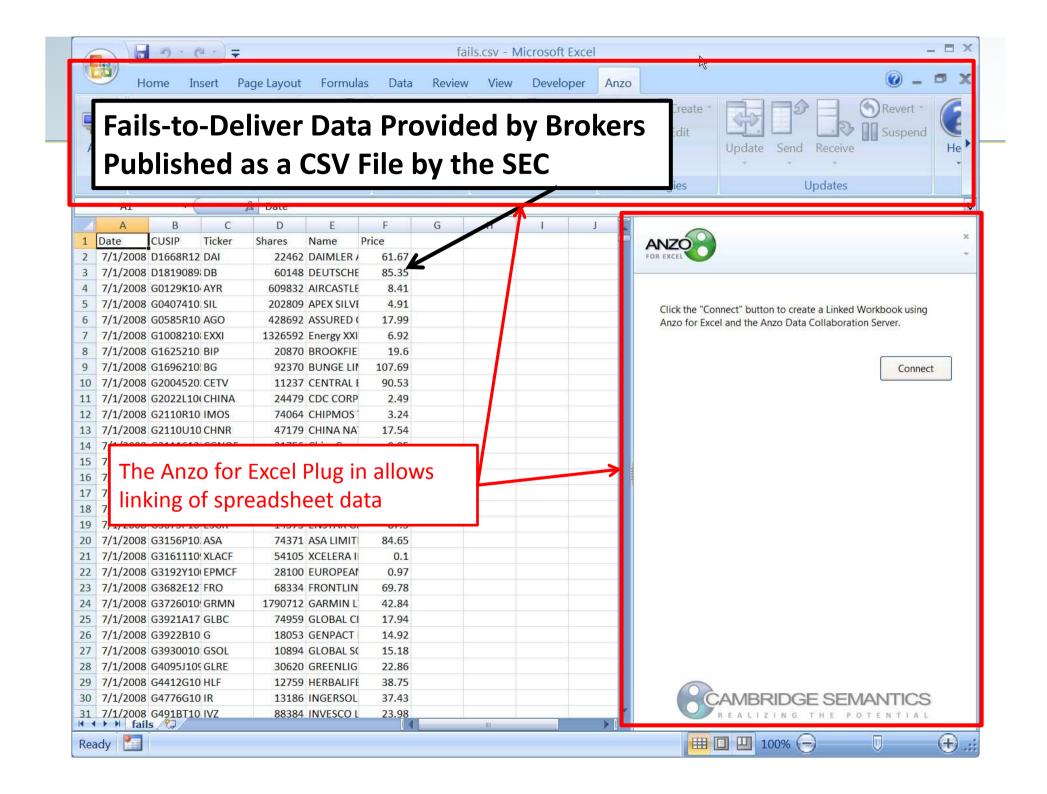


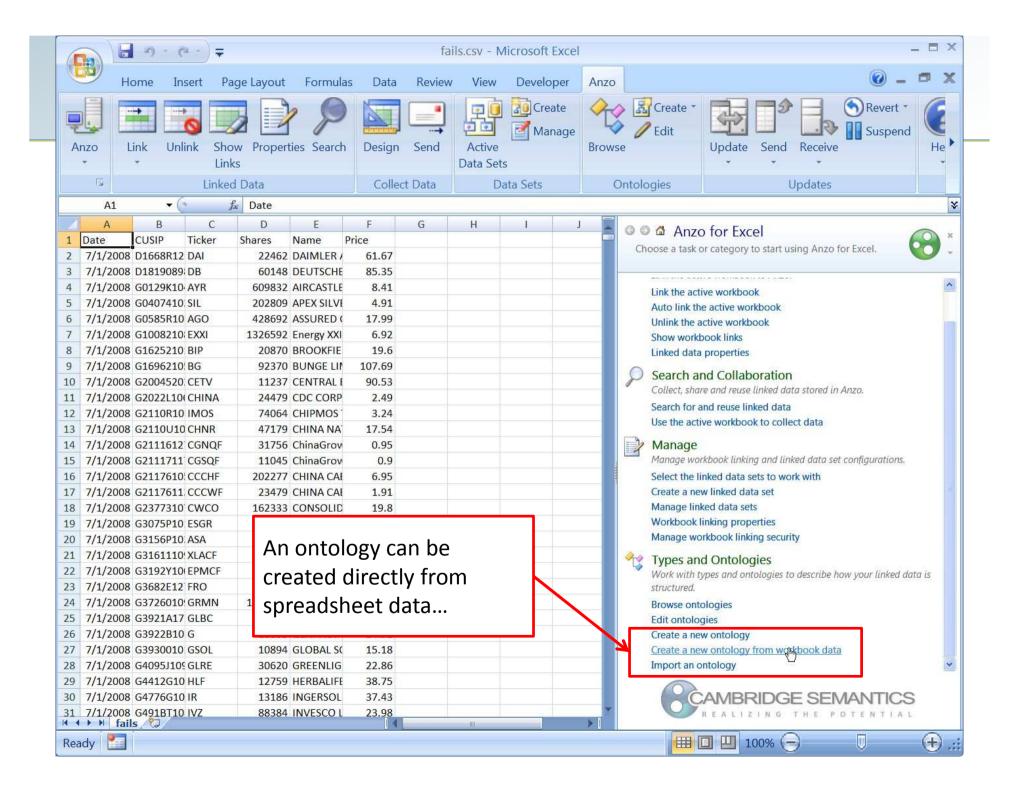
## Fail-to-Deliver

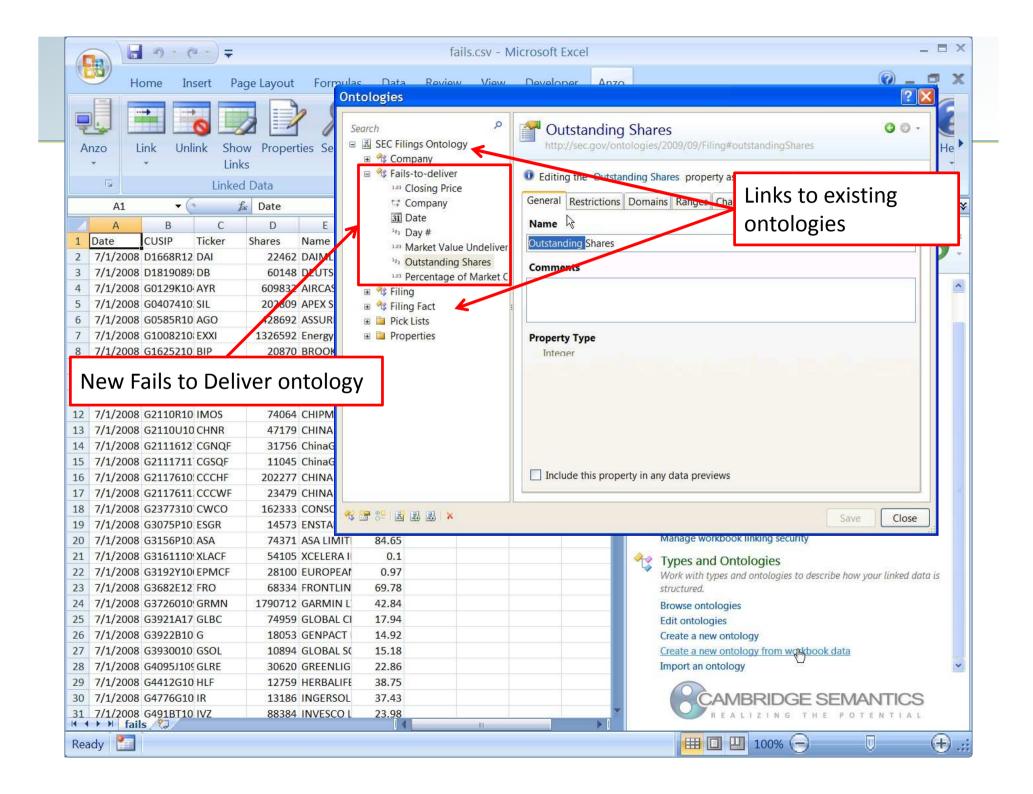
Date	CUSIP	Ticker	Shares	Name	Price
8/12/2009	M40184109	ELTK	250	ELTEK LTD	1.39
8/12/2009	M37605108	EMITF	502	ELBIT IMAGING LTD. ORD SHS	24.68
8/12/2009	M3760D101	ESLT	476	ELBIT SYSTEMS LTD	65.4
8/12/2009	M29925100	ECTX	998	ECTEL LTD	0.76
8/12/2009	M26744108	CRWTF	50	CROW TECHNOLOGIES 1977 LTD	2.5
8/12/2009	M25722105	CGEN	4809	COMPUGEN LTD	2.48
8/12/2009	M25596202	CTCH	200	COMMTOUCH SOFTWARE LTD NEW	2.58
8/12/2009	M23798107	CIMT	1653	CIMATRON LTD ORD SHS	0.92
8/12/2009	M22465104	CHKP	8015	CHECK POINT SOFTWR TECHNLS LTD	26.83
8/12/2009	M2196U109	CEL	626	CELLCOM ISRAEL LTD ORD SHS (IS	26.51
8/12/2009	M20791105	CAMT	1850	CAMTEK LTD.	1.15
8/12/2009	M20512105	BVRSF	4650	BVR SYSTEMS INC	0.18
8/12/2009	M0854Q105	ALLT	1058	ALLOT COMMUNICATIONS LTD ORD S	3.8
8/12/2009	L6388F110	MICC	1104	MILLICOM INTL CELLULAR SA	71.45
8/12/2009	L63631102	MTOAF	78	METRO INTERNATIONAL S.A. CL-A	0
8/12/2009	H89128104	TYC	84	TYCO INTERNATIONAL LTD COM STK	30.8
8/12/2009	H8912P106	TEL	68	TYCO ELECTRONICS LTD SWITZERLA	22.26
8/12/2009	H8817H100	RIG	43	TRANSOCEAN LTD (SWITZERLAND)	74.27
8/12/2009	H5833N103	NE	516	NOBLE CORP ORD SHS (CHE)	33.06
8/12/2009	H50430232	LOGI	417	LOGITECH INTERNATIONAL S.A.OR	16.58
8/12/2009	H27178104	FWLT	100	FOSTER WHEELER AG (SWITZERLAND	29.32
8/12/2009	H27013103	WFT	951	WEATHERFORD INT'L LTD (SWITZER	18.27
8/12/2009	H01301102	ACL	2253	ALCON CHF 0.20 PAR VALUE	128.72
8/12/2009	H0023R105	ACE	14	ACE LIMITED (SWITZERLAND)	49.22
8/12/2009	G98268108	XRTX	66	XYRATEX LTD (BERMUDA)	5.74
8/12/2009	G98255105	XL	2703	XL CAPITAL LTD CL-A	13.92
8/12/2009	G9825R107	XOMA	16307	XOMA LTD (BERMUDA)	0.84
8/12/2009	G9618E107	WTM	156	WHITE MOUNTAINS INSRN GRP,LTD	280.43

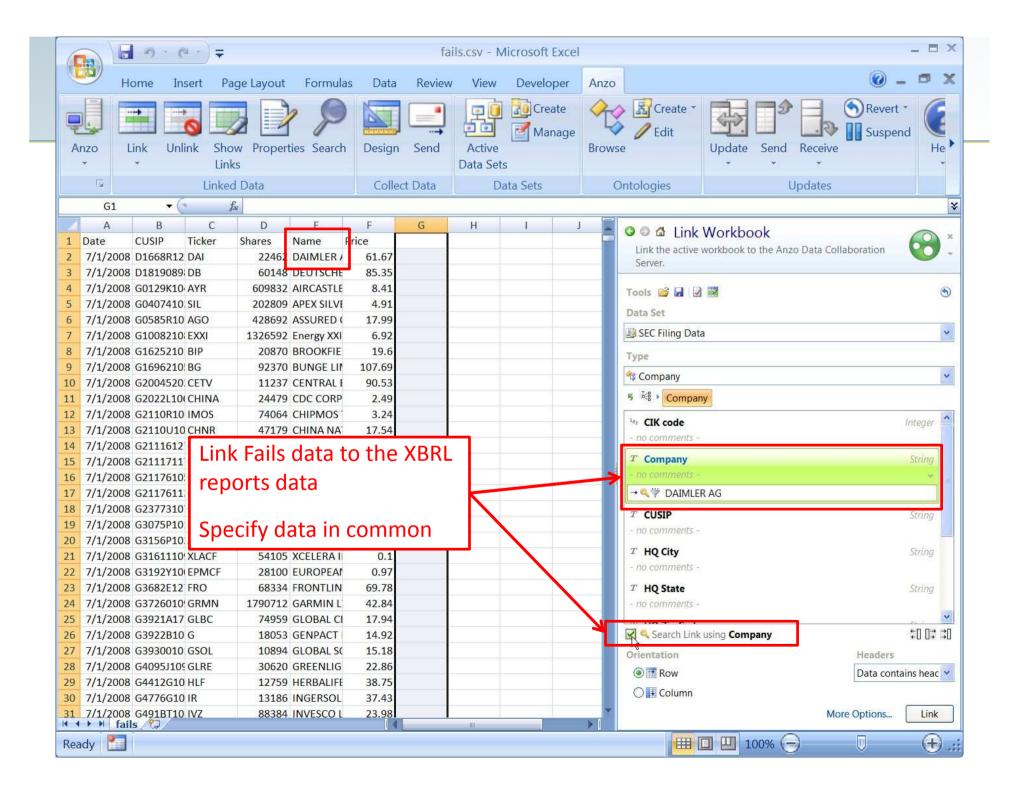


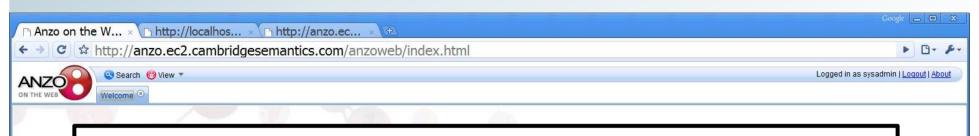












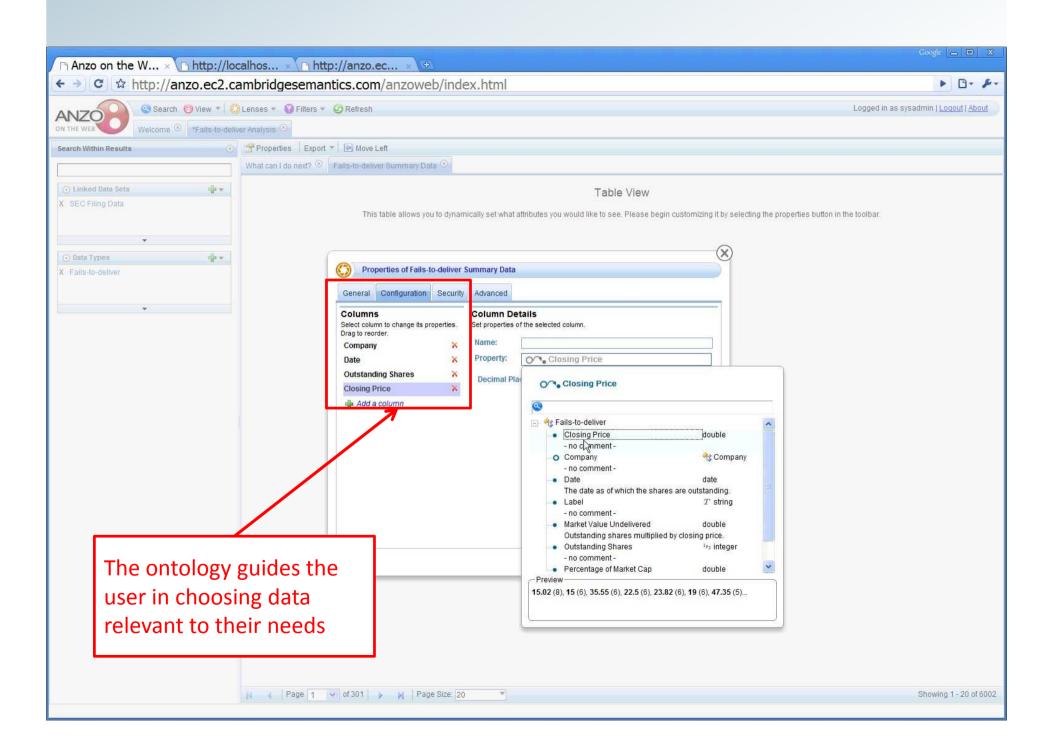
#### Data Linked To A Semantic Fabric Can Be Better Understood

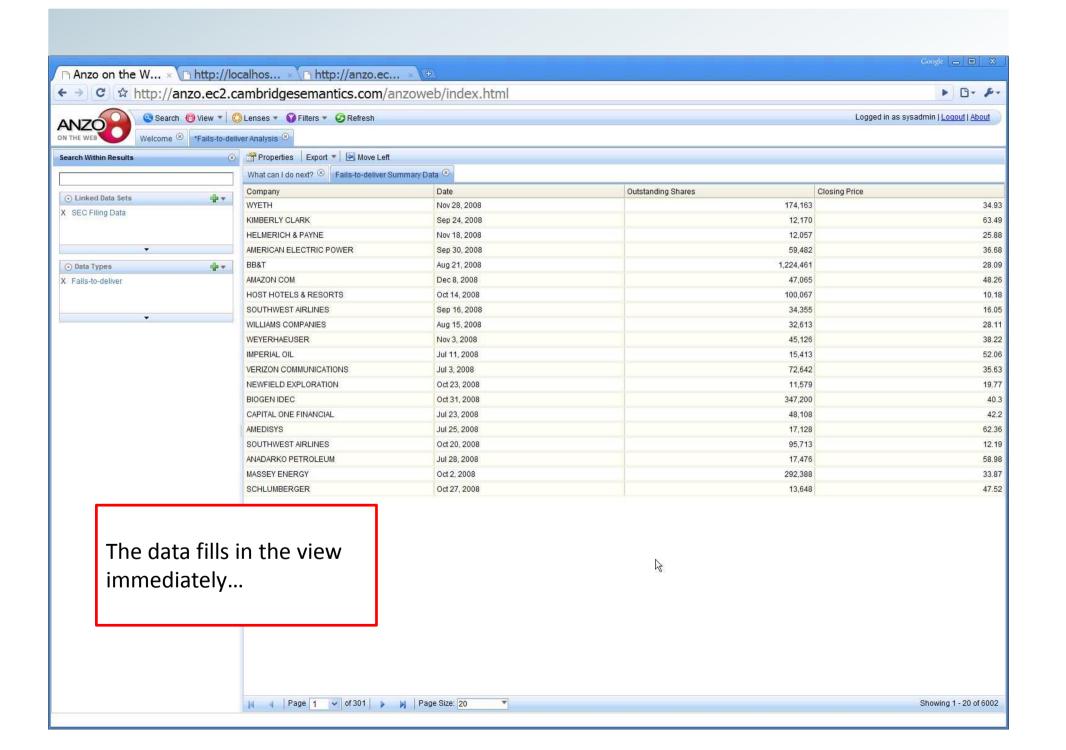


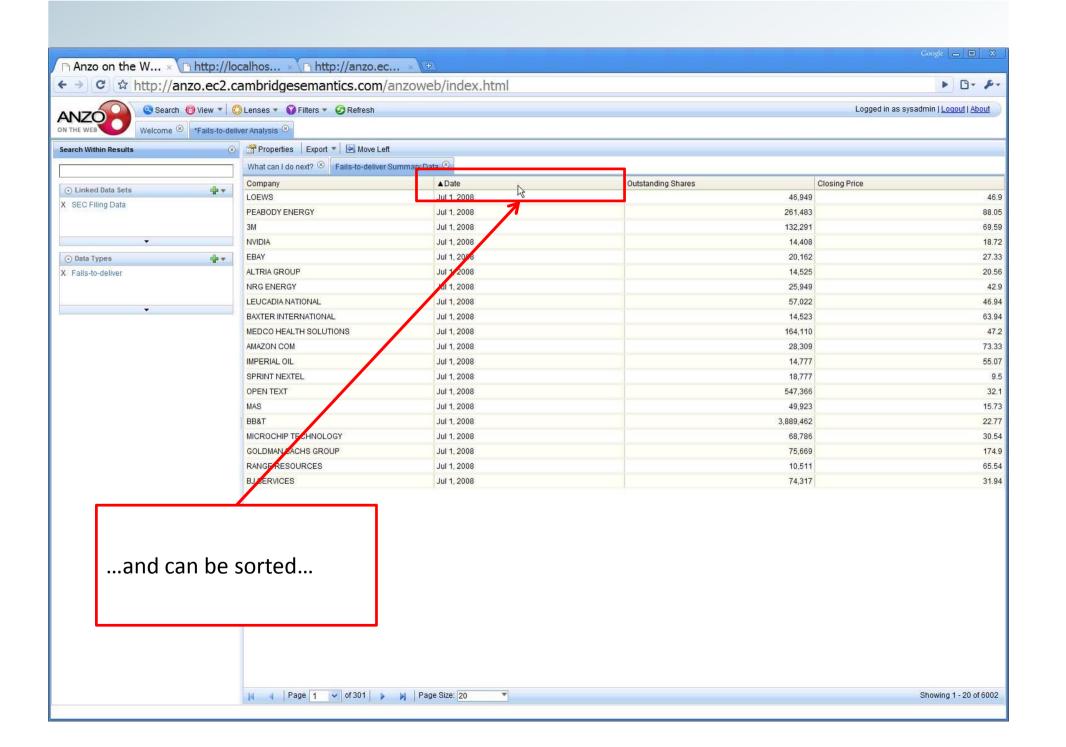
#### Welcome to Anzo on the Web

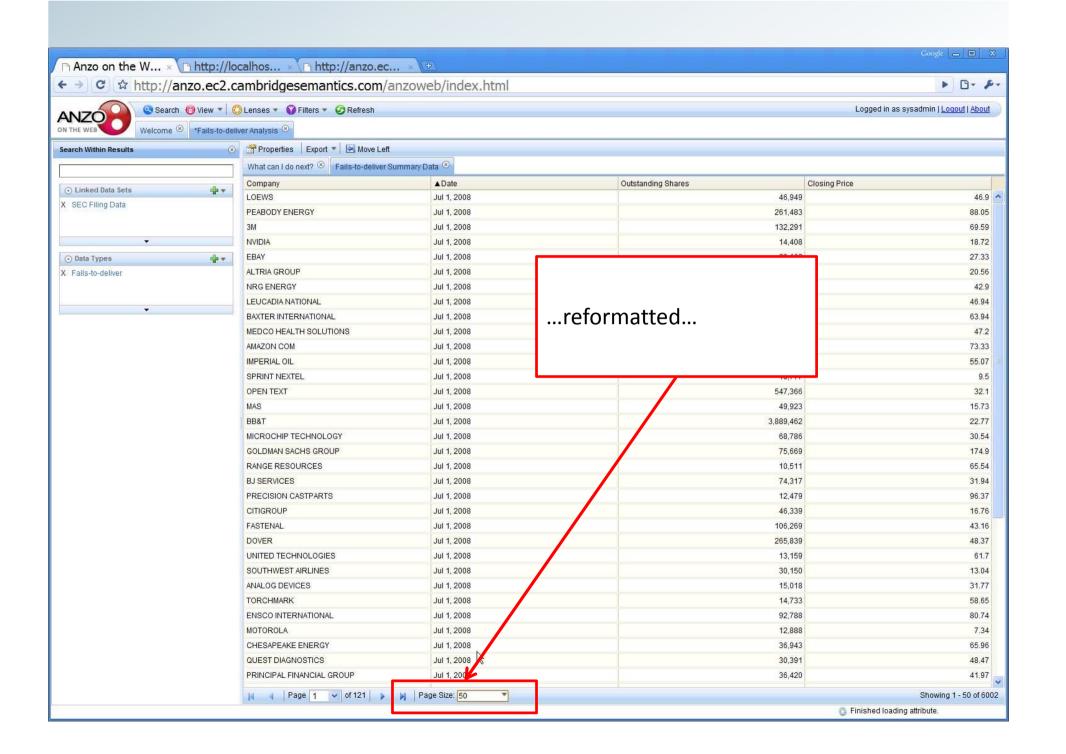
Find the data you want to use
Create a view to put it in
Add lenses to visualize it
Add facets to filter it
Share the view you create

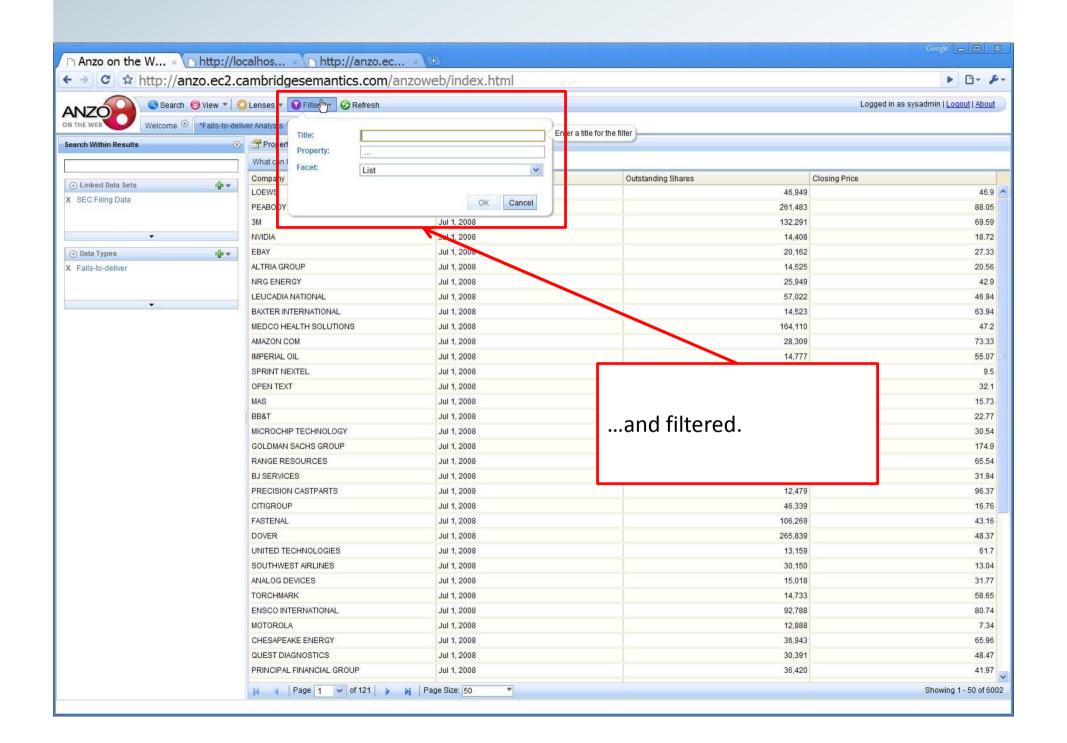
Anzo on the Web enables non-technical search, combine and view linked data

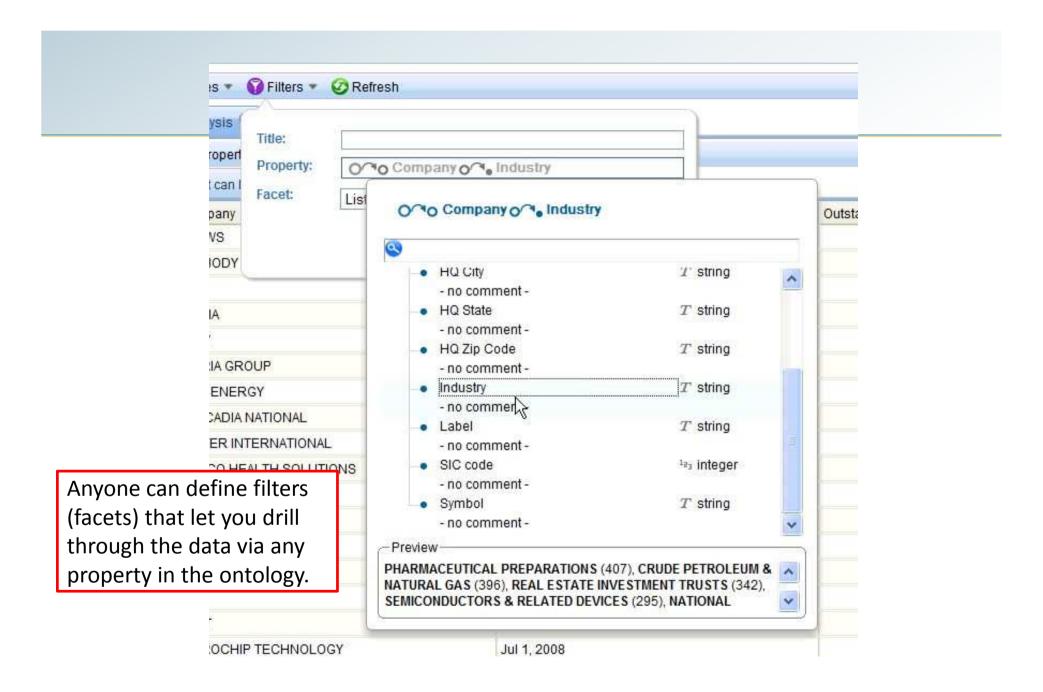




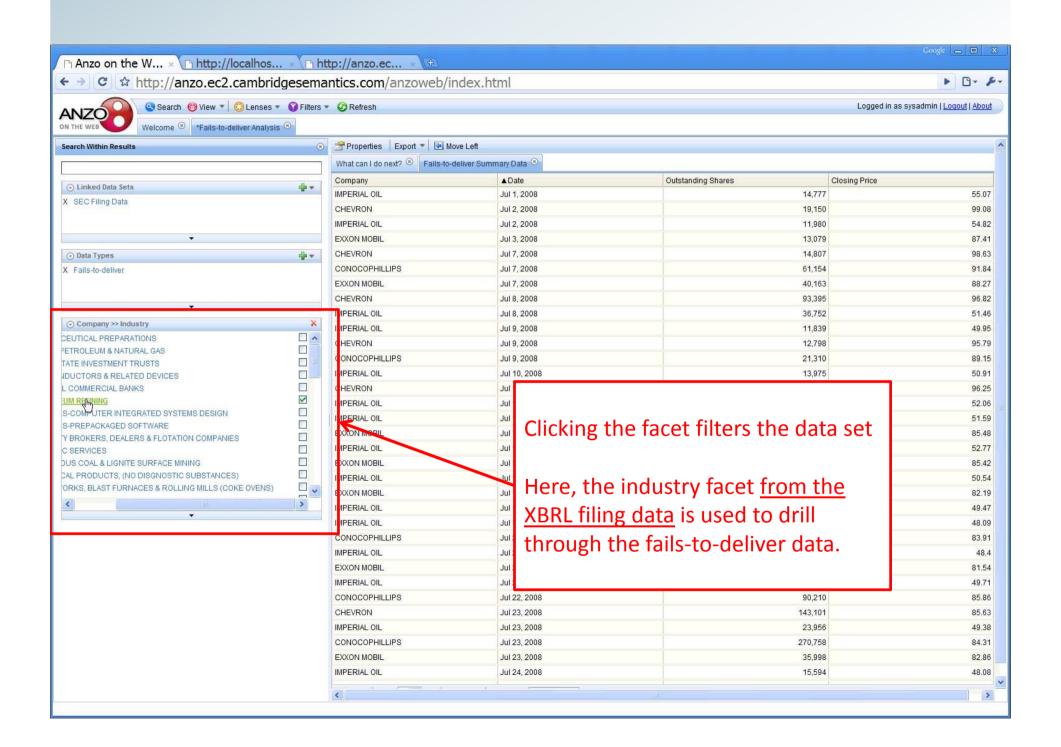


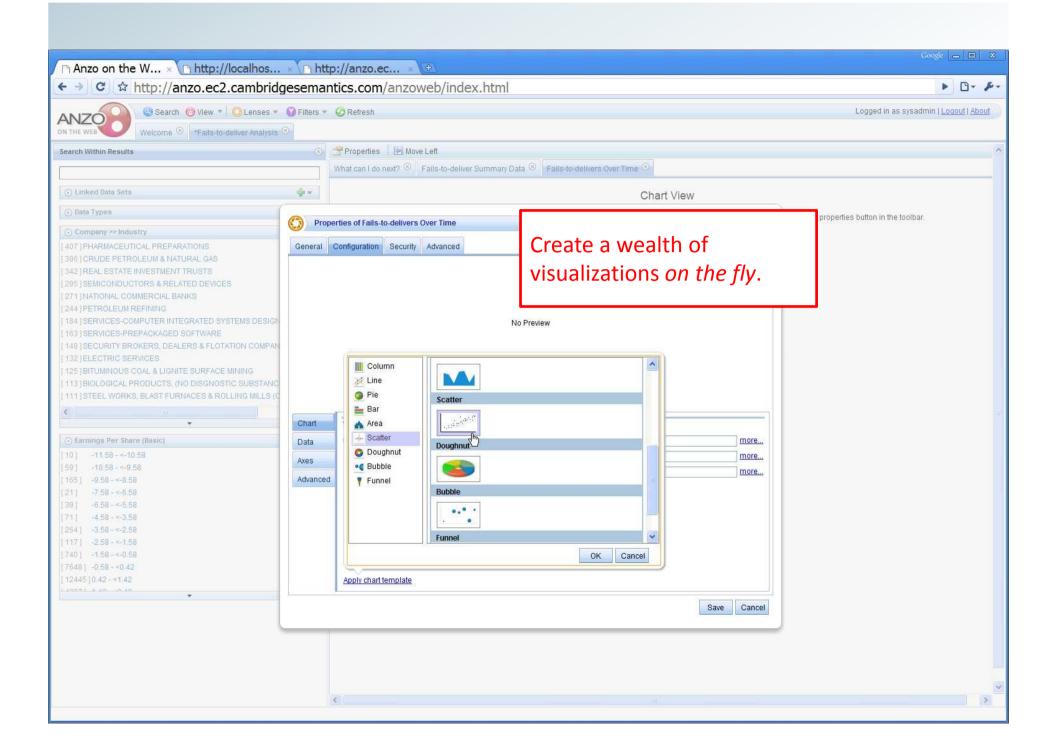


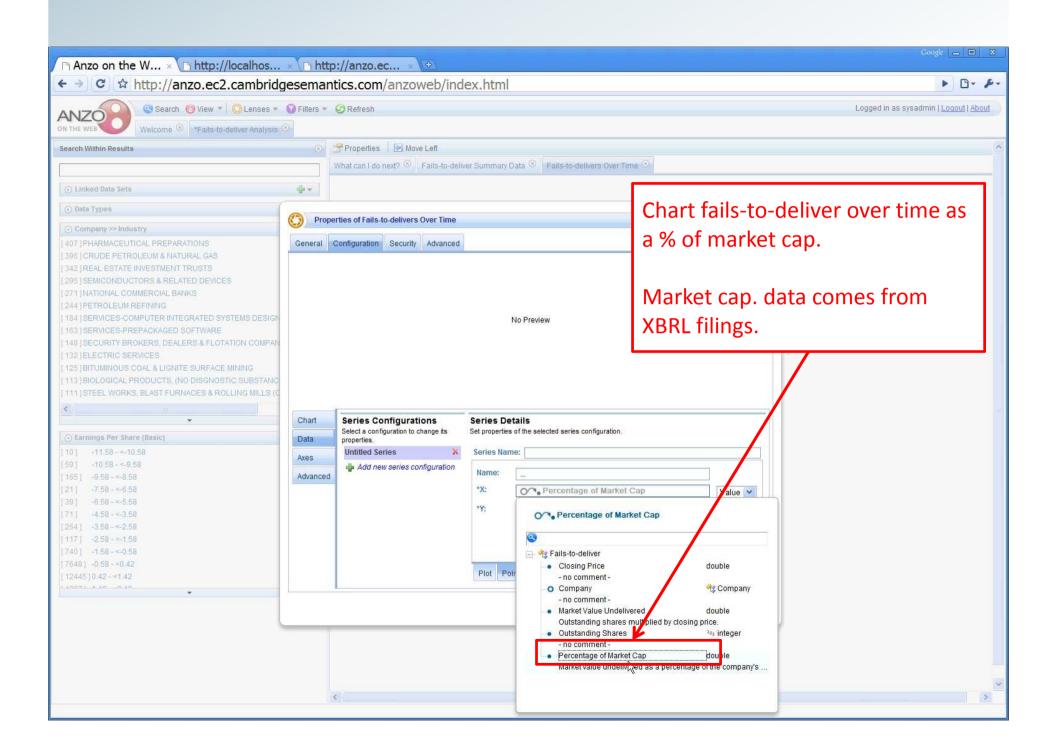


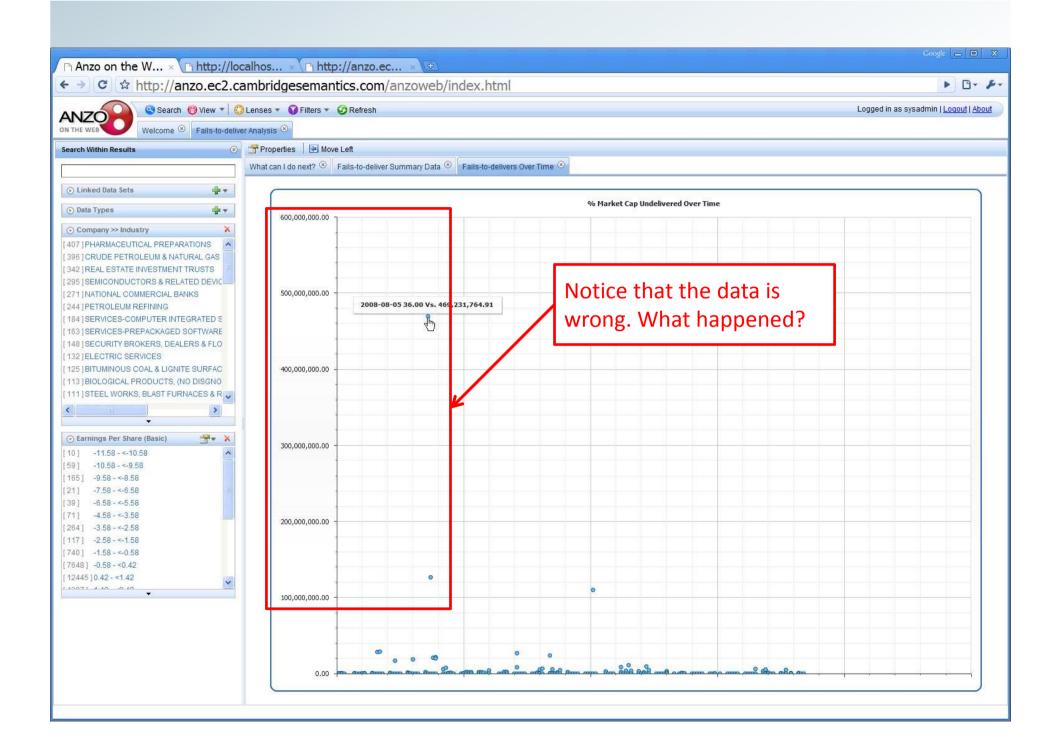


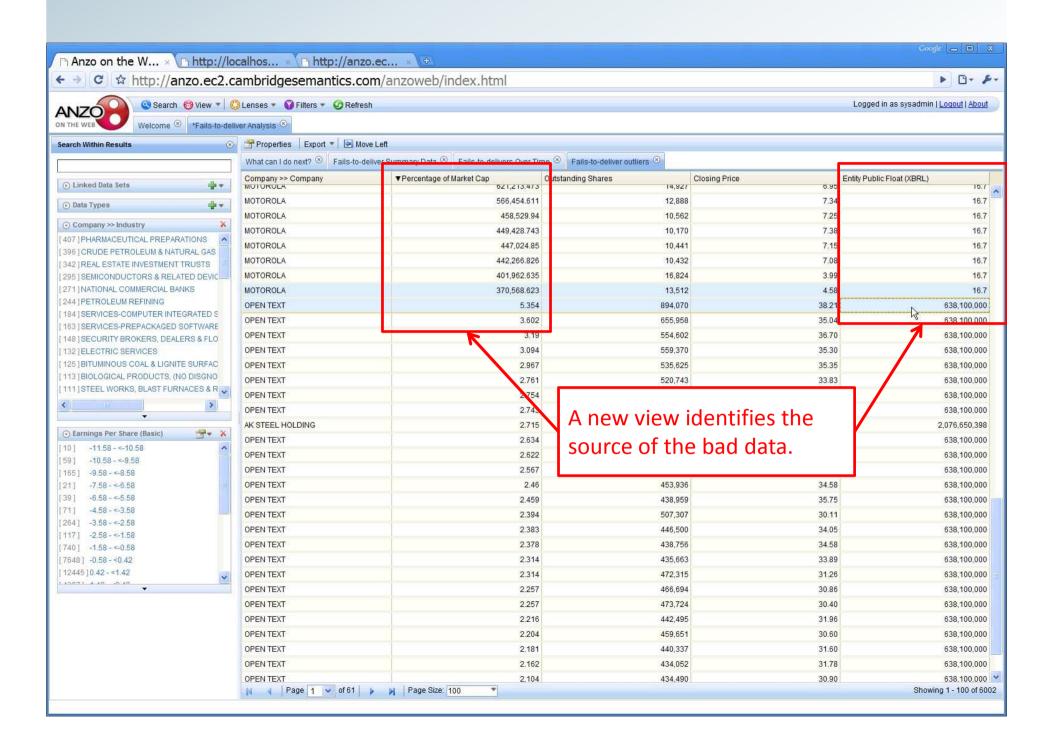


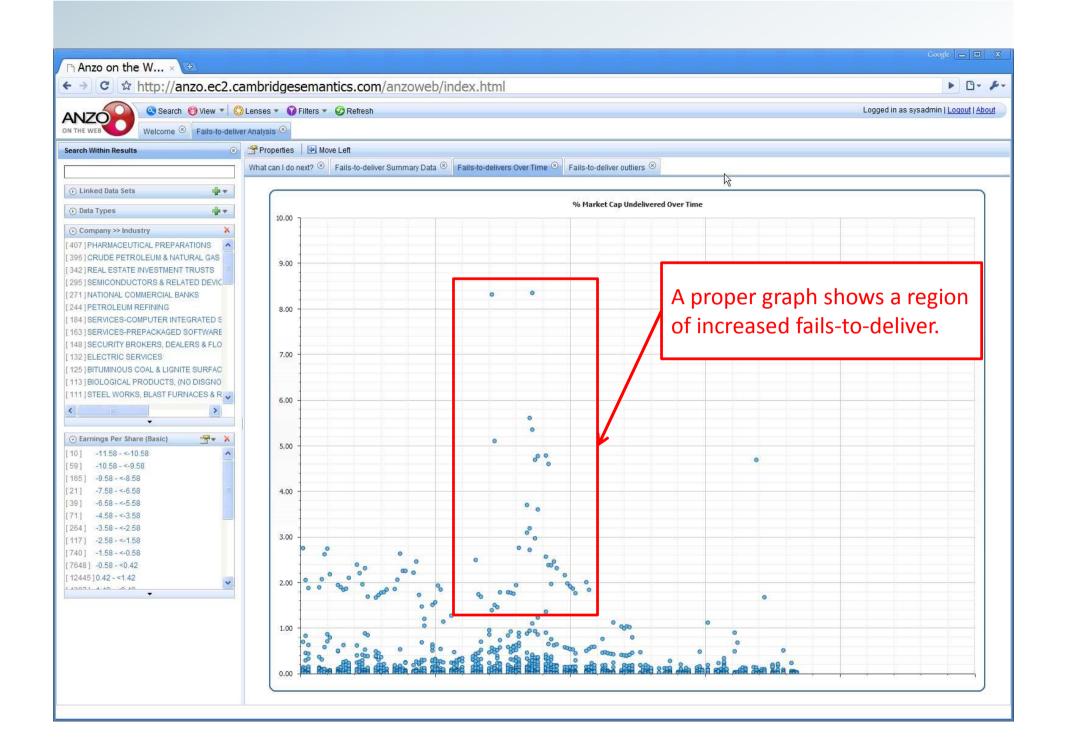






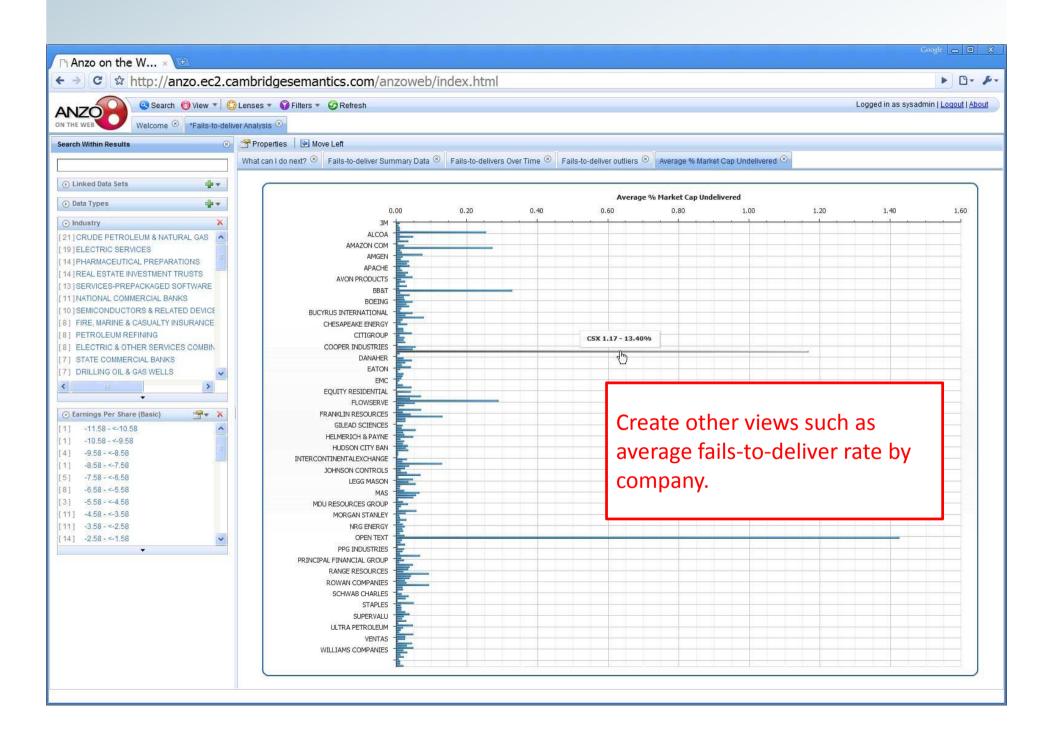


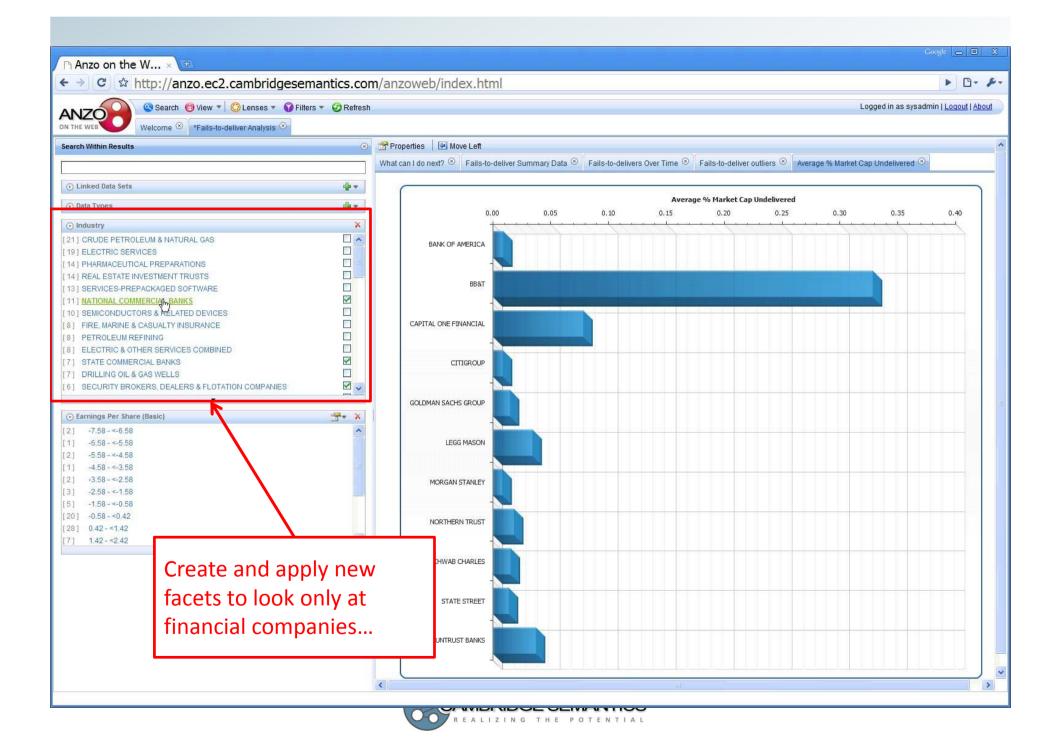




Note that the increased fails-to-2008-09-23 Vs. 5.61 deliver are clustered around September 2008, the height of

the subprime crisis.





## **XBRL Meets Semantic Standards**

#### Love at First Sight?

Structure + Meaning = Understanding

- •Reusable Data
- Collaboration
- Agility...

#### At Least a Great Match





# Practical Semantics Applied to Recovery.gov

## Simple Questions, Hard to Answer

#### **Example:**

Is there a correlation between geographic distribution of recovery dollars, population and new jobs created?

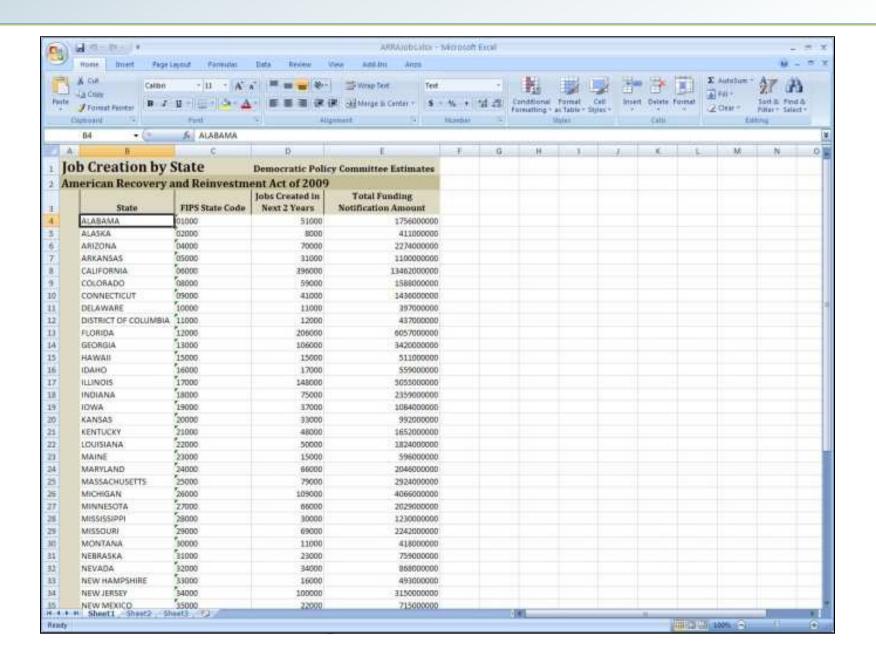
To get the answer, you need to know:

- Recovery spending by state
- Population by state
- New jobs by state

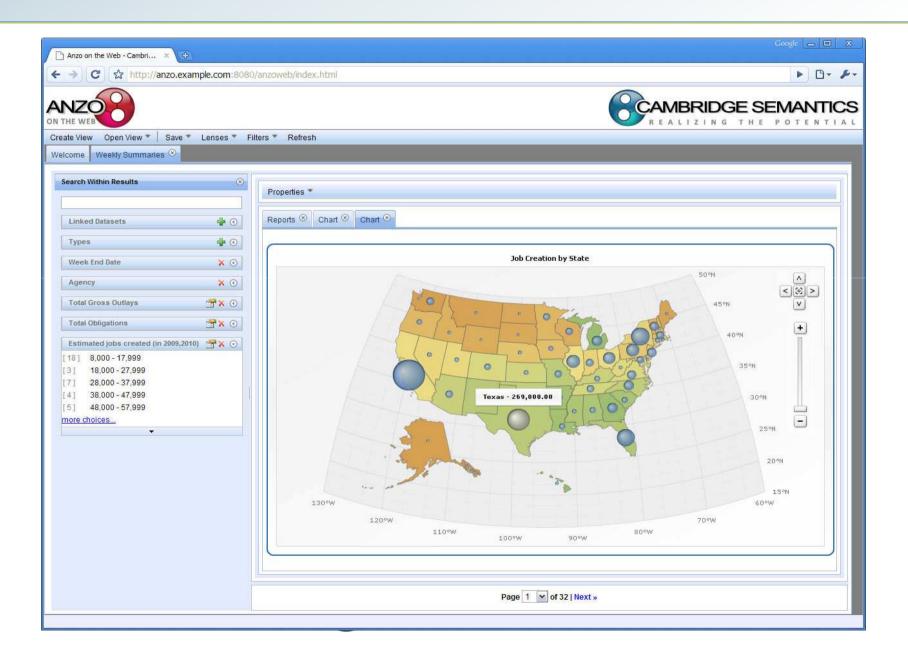
Recovery.gov alone cannot answer this question



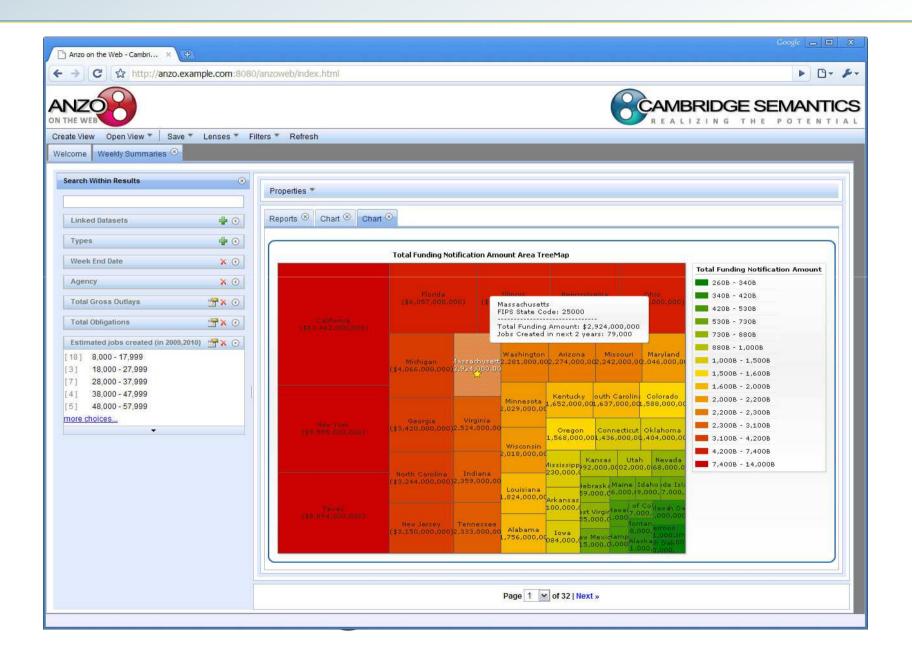
## The Answers Live in Three Sources



## Like This...

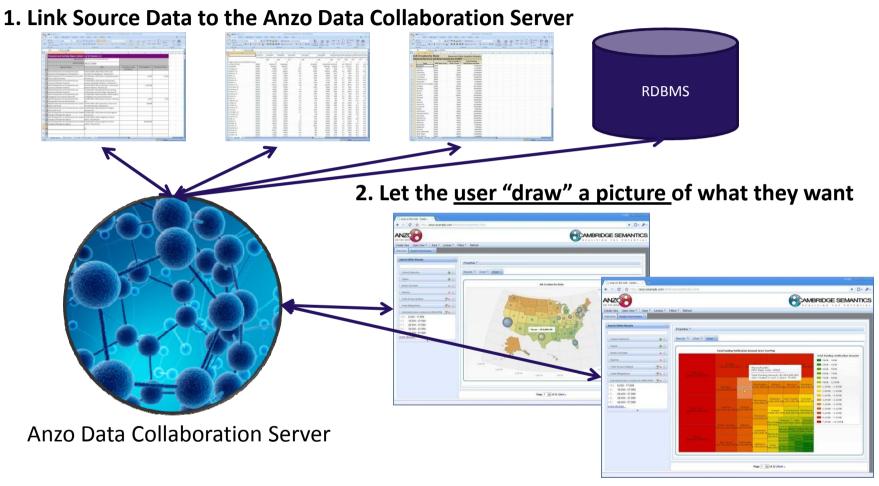


## Or this...



## How it's Done:

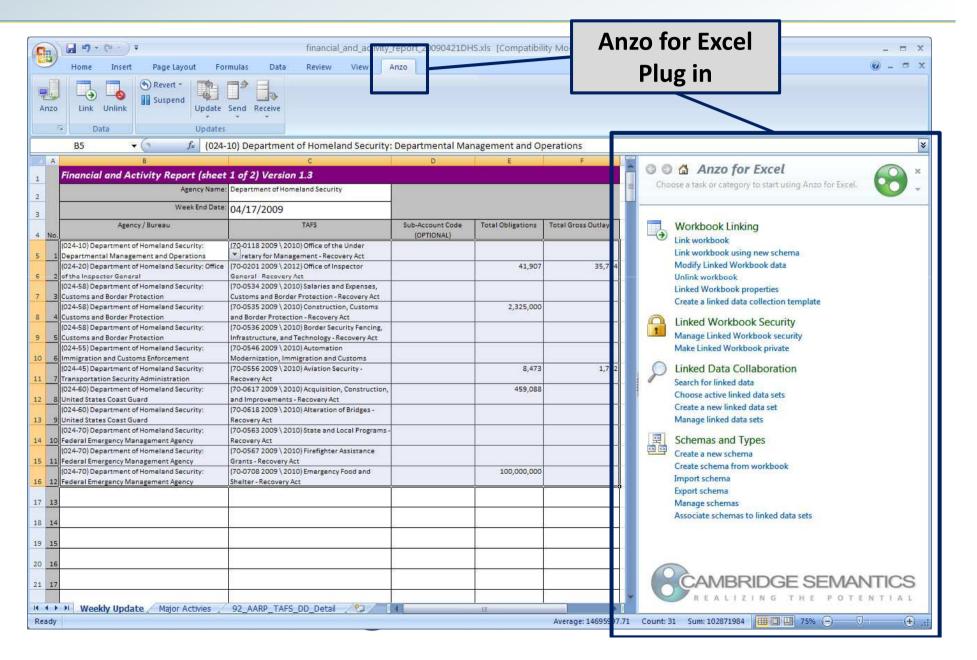
#### Leave Data Where it Lives and...



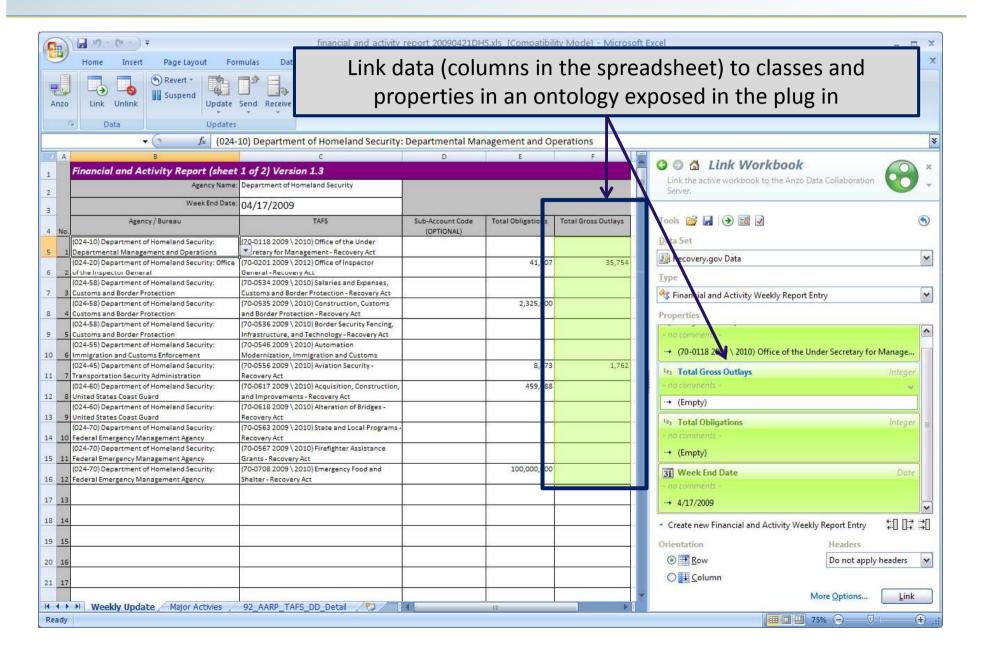
3. Fill the picture with the appropriate data



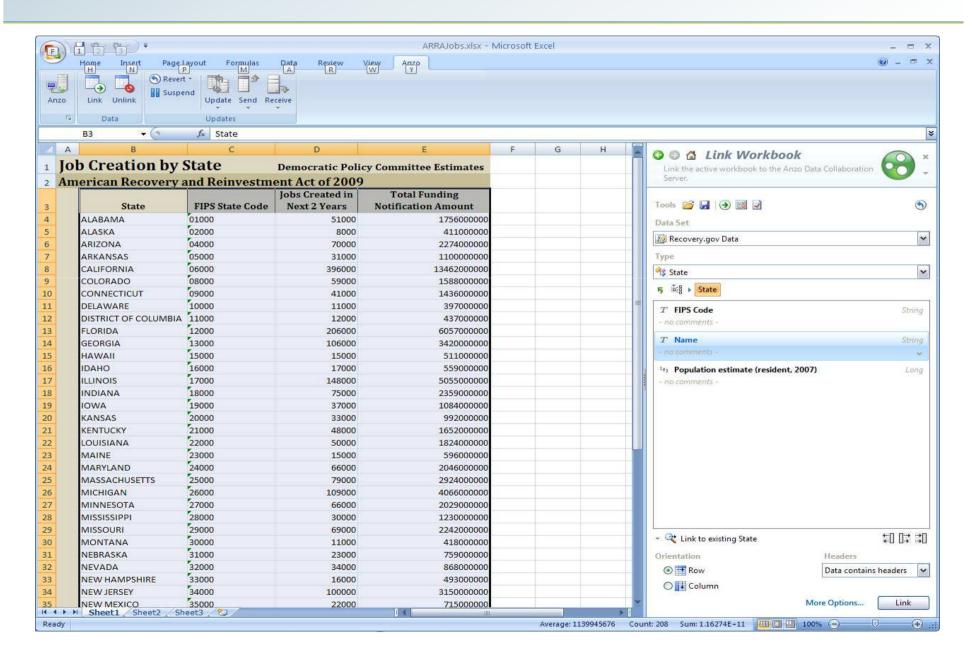
# Linking Source Data is Simple



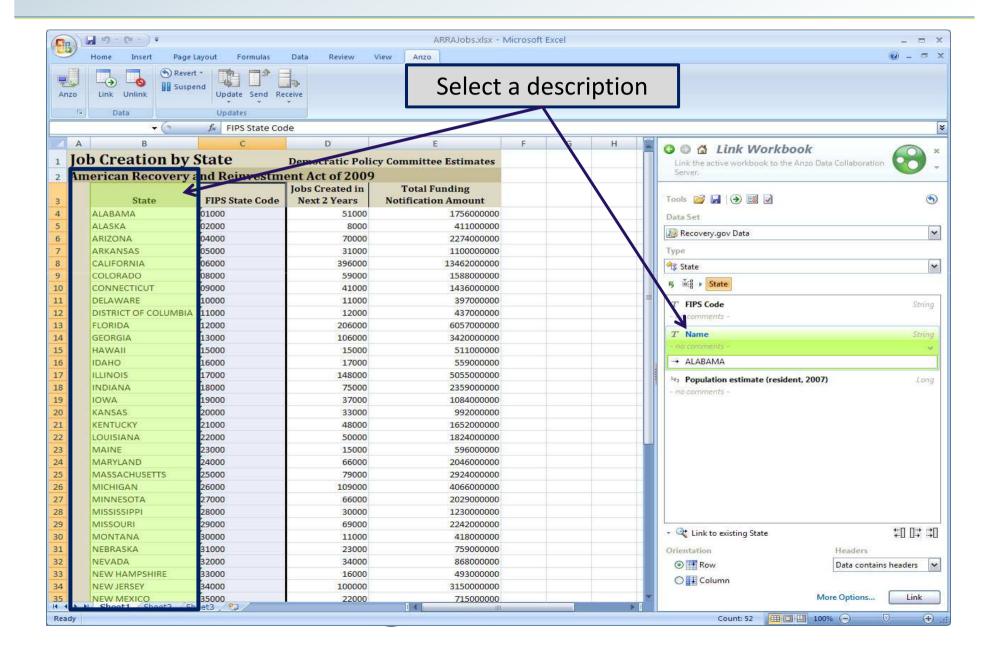
# Linking Source Data is Simple



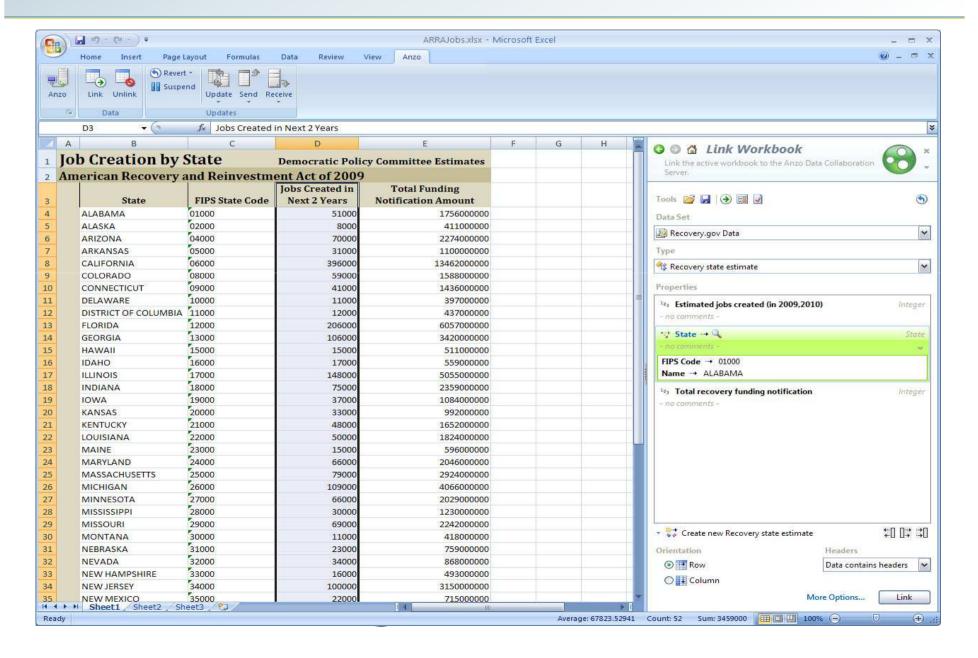
# Different Source, Same Process



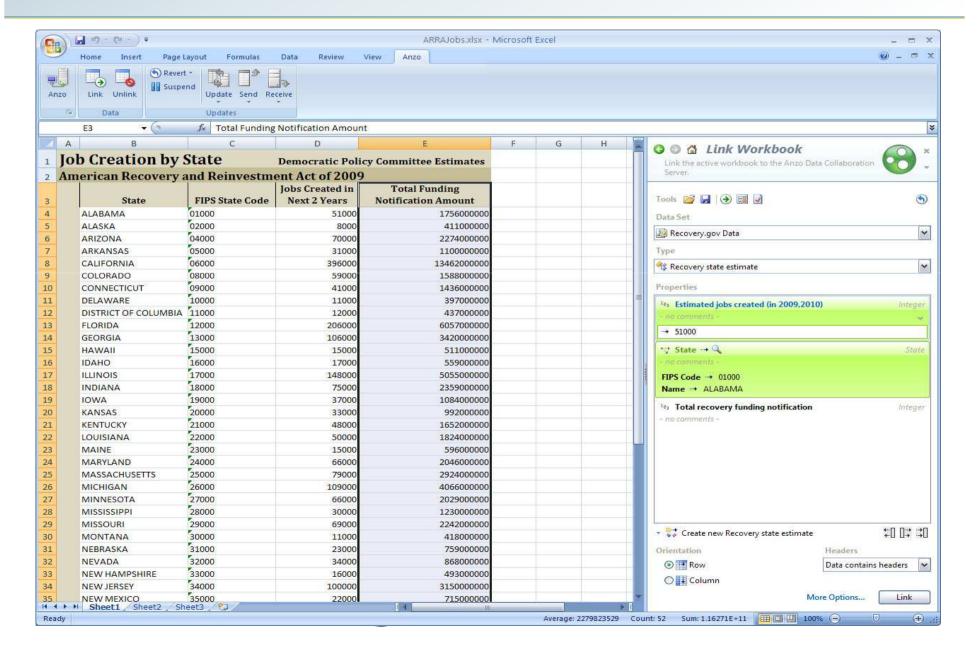
#### Select a Data Set



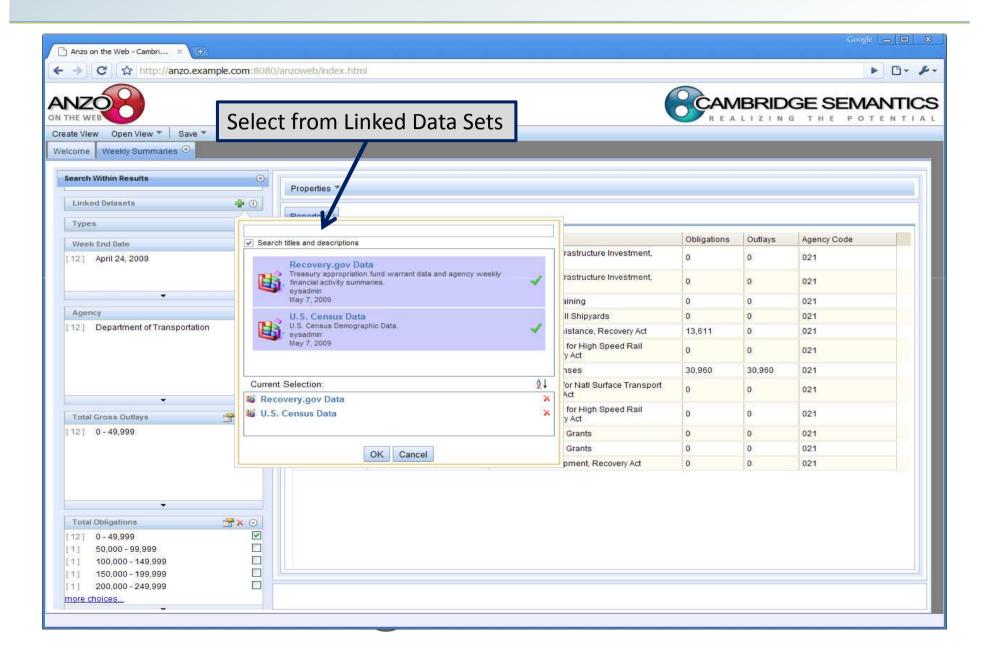
## Repeat the Process



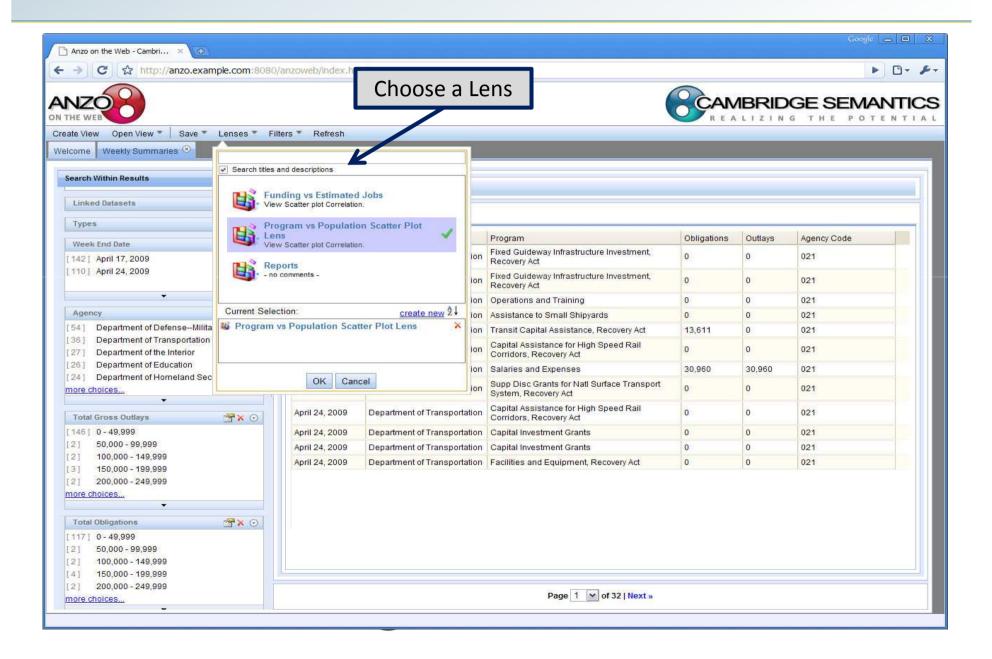
## Repeat the Process



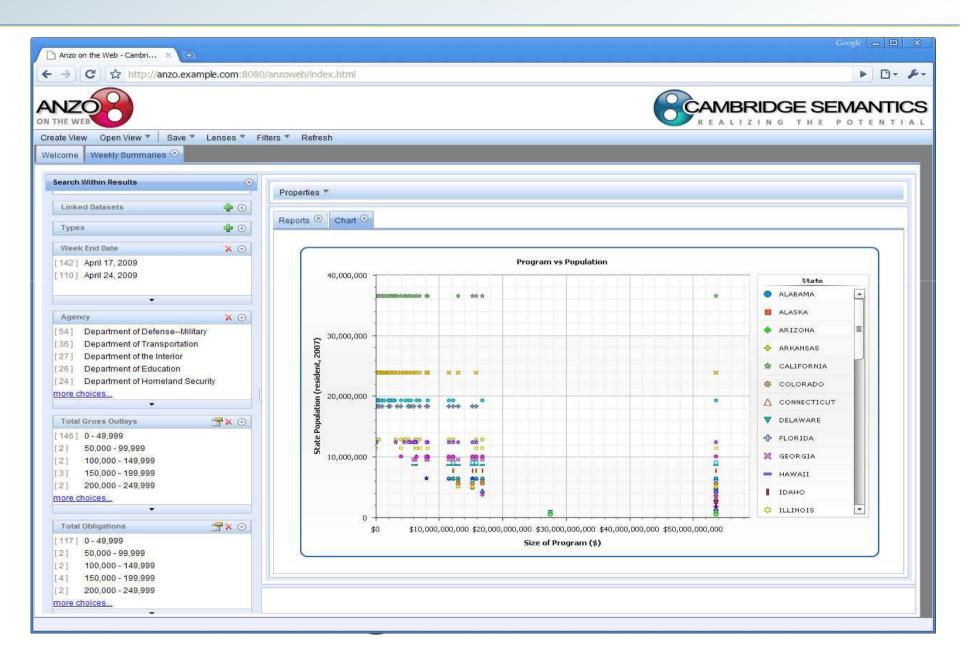
#### Anzo on the Web Can Work With It



#### Lenses Allow Various Views

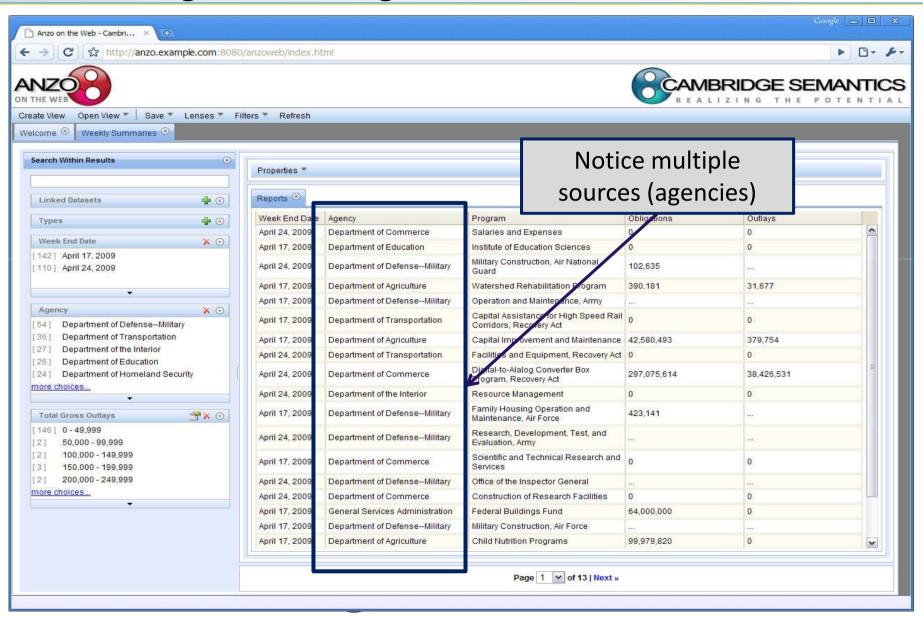


## **Combined Data Displayed Graphically**

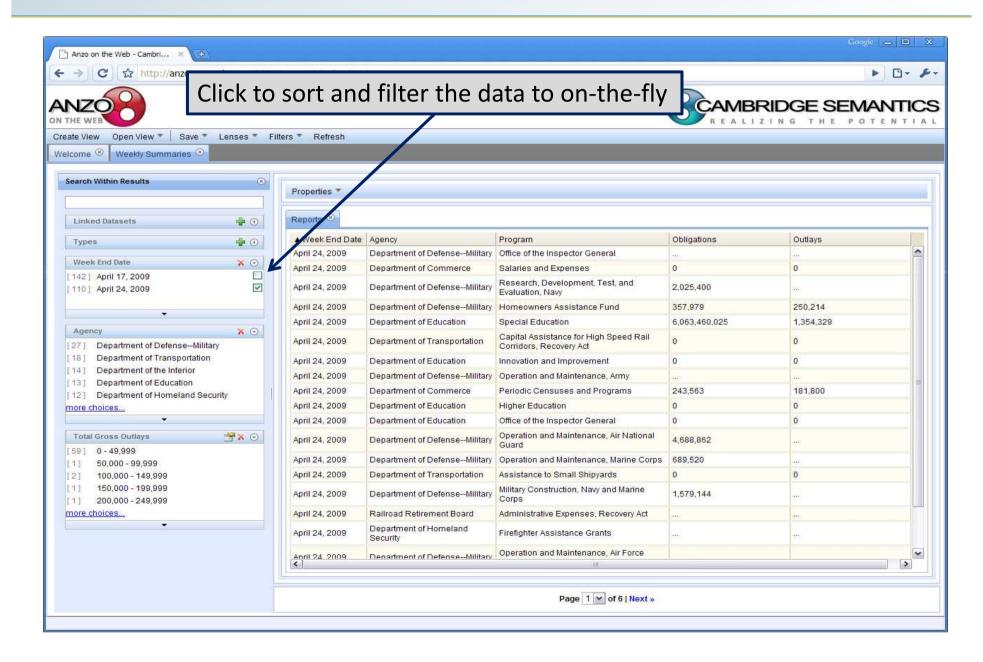


## **Another Option...**

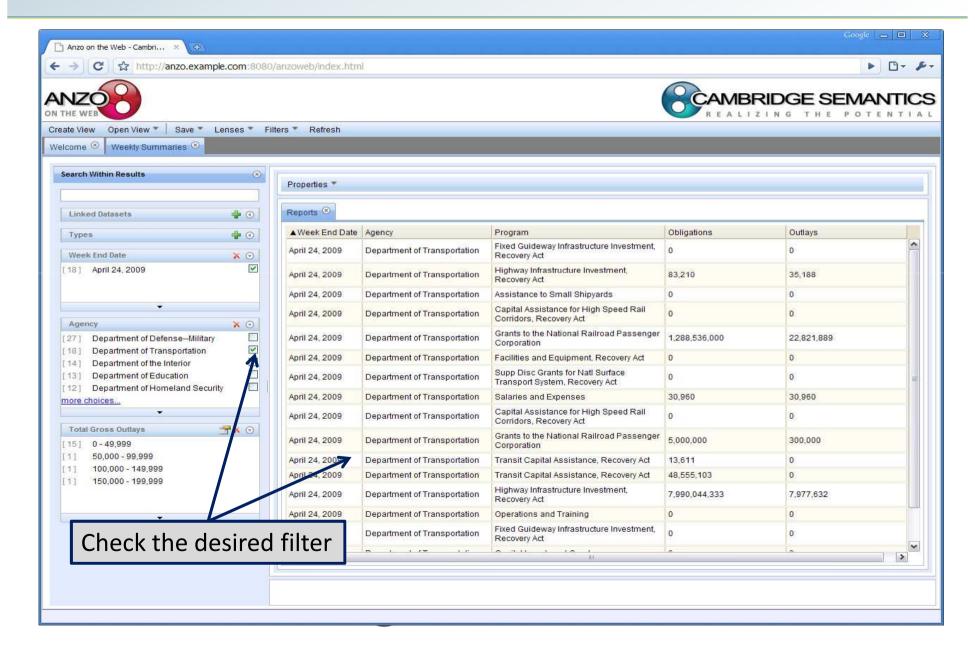
#### Combining and Filtering Data



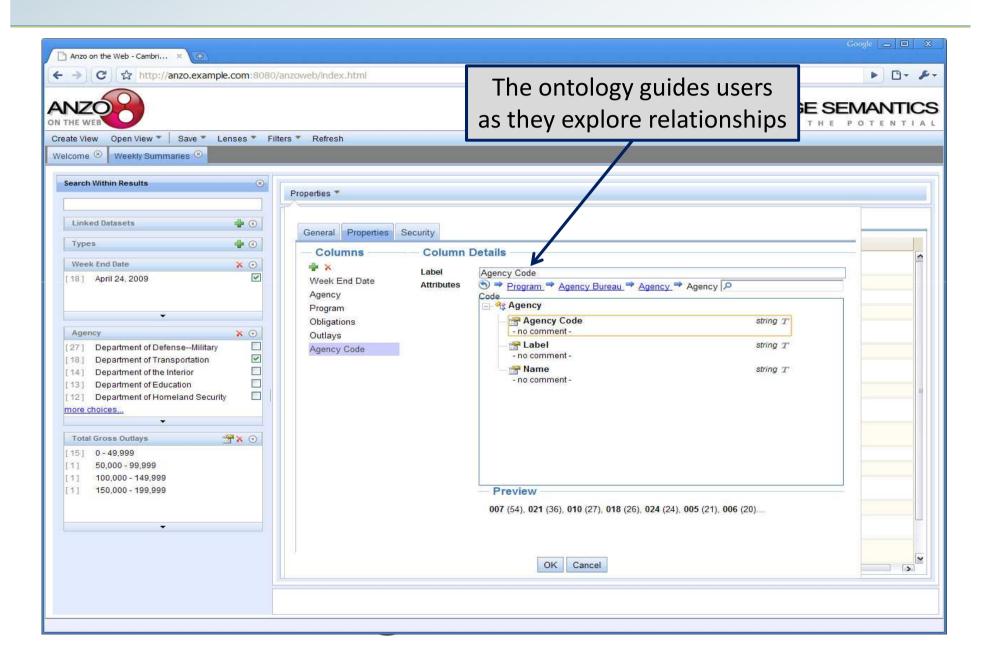
## Manipulate As Desired



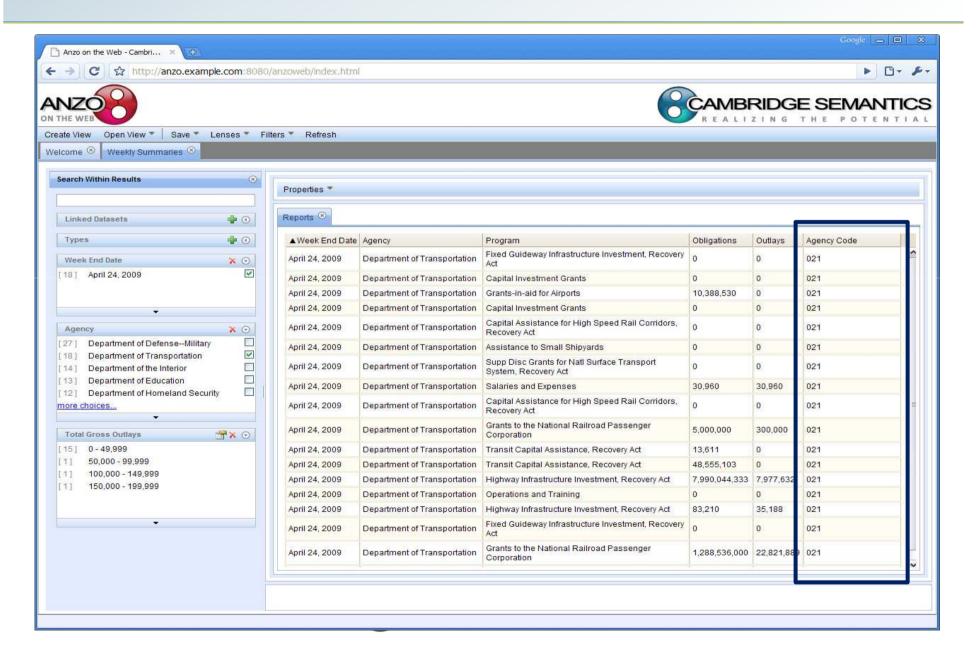
# Apply a Finer Filter



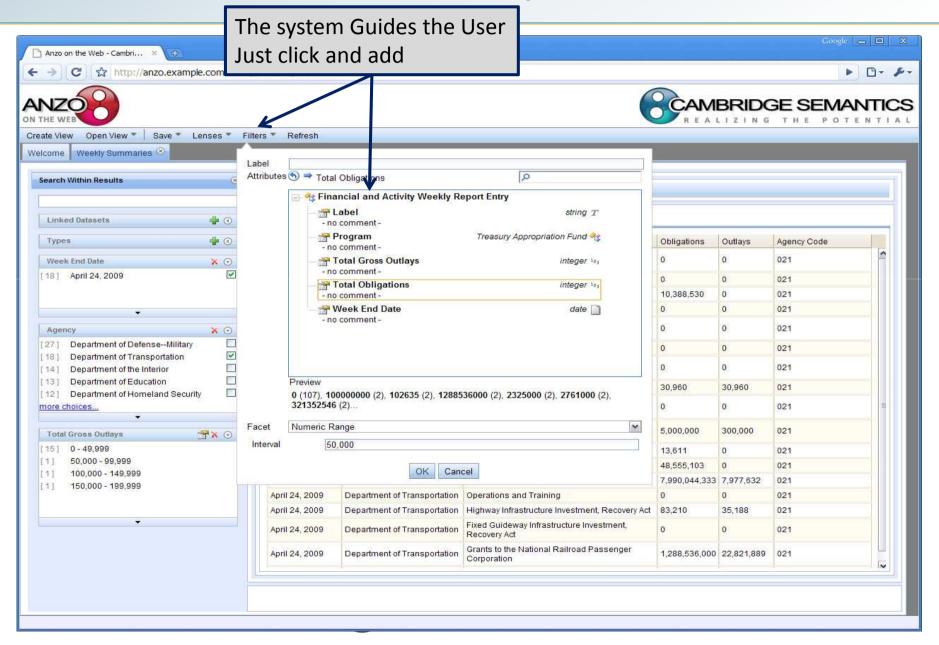
#### Add More Data to Your View



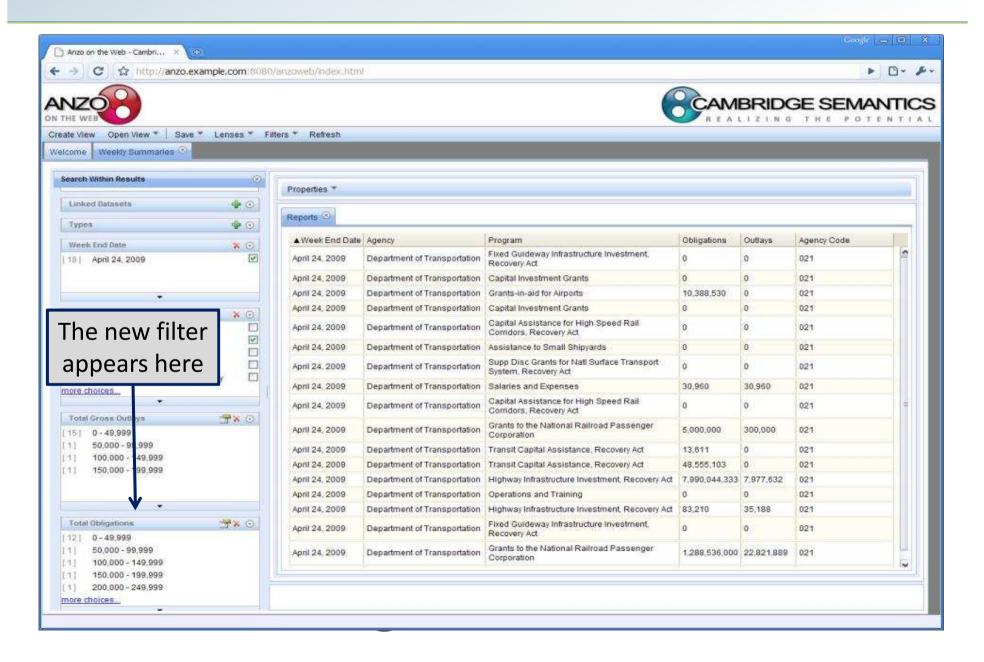
### The New Data is Immediately Available



# Add Filters on the Fly



#### The Filter is Added



# ...and Works Immediately

