XBRL Database – a technical panel discussion

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Founder

Mark Ludlow

Edgar-Online

Director of Software Development

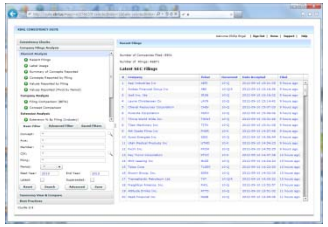
XBRL US Database

SEC RSS Feed

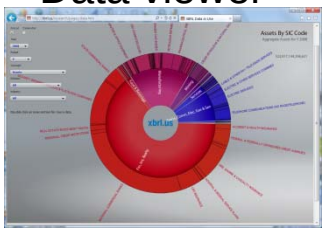
Shred XBRL data and Load

XBRL US Database

CSuite



Data viewer

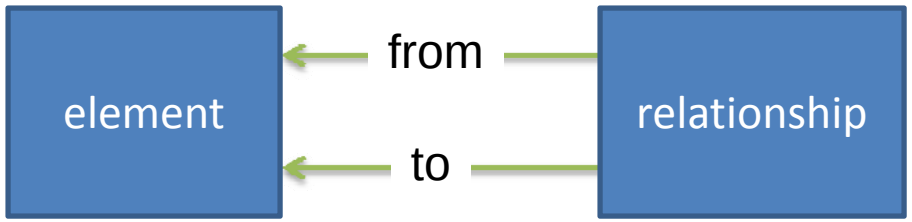


Members

XBRL US Database

Current:

- Collect XBRL data from SEC
  - 46,000 filings
  - 25,000,000 facts
- Generically designed to handle XBRL
- Currently modeled on XBRL
  - Definable things – concepts, labels, references
  - Relationships
  - Facts

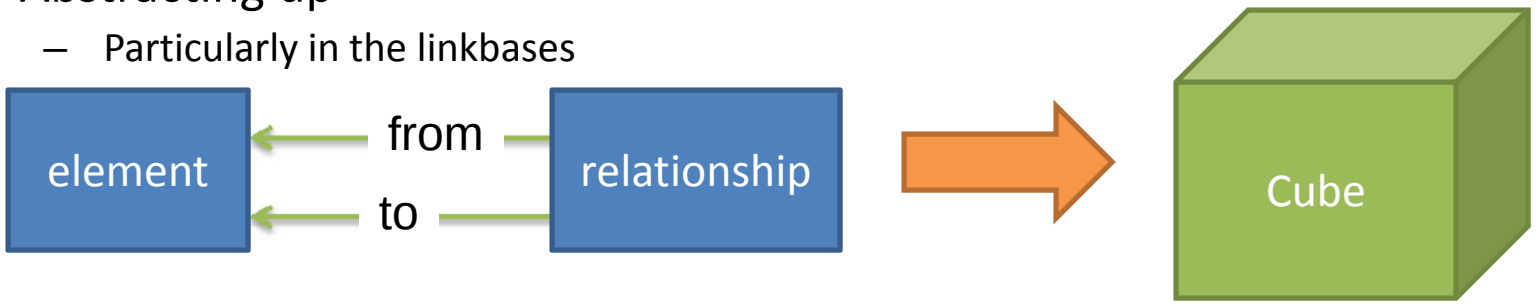


XBRL US Database

- Database functions to extract specific bits of information
  - Document type
- Derived information from base data
  - Fiscal period
  - Calendar aligned period

Moving towards:

- Abstracting up
  - Particularly in the linkbases



- Building a higher level of information that maps back to the XBRL model
- Derived data – calculated, normalized
- Multiple sources of data

XBRL US National Conference Data Forum

XBRL Data Structure

PrimeAim

Qinlin Luo

Founder, Prime Aim Technology

qluo@primeaim.com

2012.09.11 Austin, Texas

Prime Aim

Aggregate XBRL data

Optimize the data for search

Agenda

- XBRL Data – the Extraordinary (80%)
  - For consumption
  - Consumption: Web & Mobile
- Prime Aim's Data Structure (20%)

XBRL Data – The Extraordinary

80 / 20 Rule:

80% of resources on 20% of tasks

Murphy's Law:

Anything that can go wrong,
will go wrong

XBRL Data – The Extraordinary

- About the Extraordinary data:

Problems? – No!

Challenges? – Yes!

The Extraordinary (1)

37 – The size of an instance document (in MB)

- Time to download
- Time to process
- Memory
- Network bandwidth
- Storage

The Extraordinary (2)

AccountsPayableAccruedLiabilitiesAndOtherLiabilitiesDisclosureCurrentTextBlock

AccountsPayableAccruedLiabilitiesAndOtherLiabilitiesDisclosureNoncurrentTextBlock

The Extraordinary (3)

182 – # of characters in a concept name

QualitativeAndQuantitativeInformationAssetsOrLiabilitiesForTransferorsContinuingInvolvementInSecuritizationOrAssetbackedFinancingArrangementNotPreviouslyRequiredFinancialSupportProvided

The Extraordinary (4)

2,206,409 – # of characters in a Textblock

"13. Condensed Consolidating Financial Information"

In Microsoft Word: 375 words, 2,630 characters (including spaces), 2/3 page.

The Extraordinary (5)

7 - Number of Dimensions

(Please do NOT attempt to read this)

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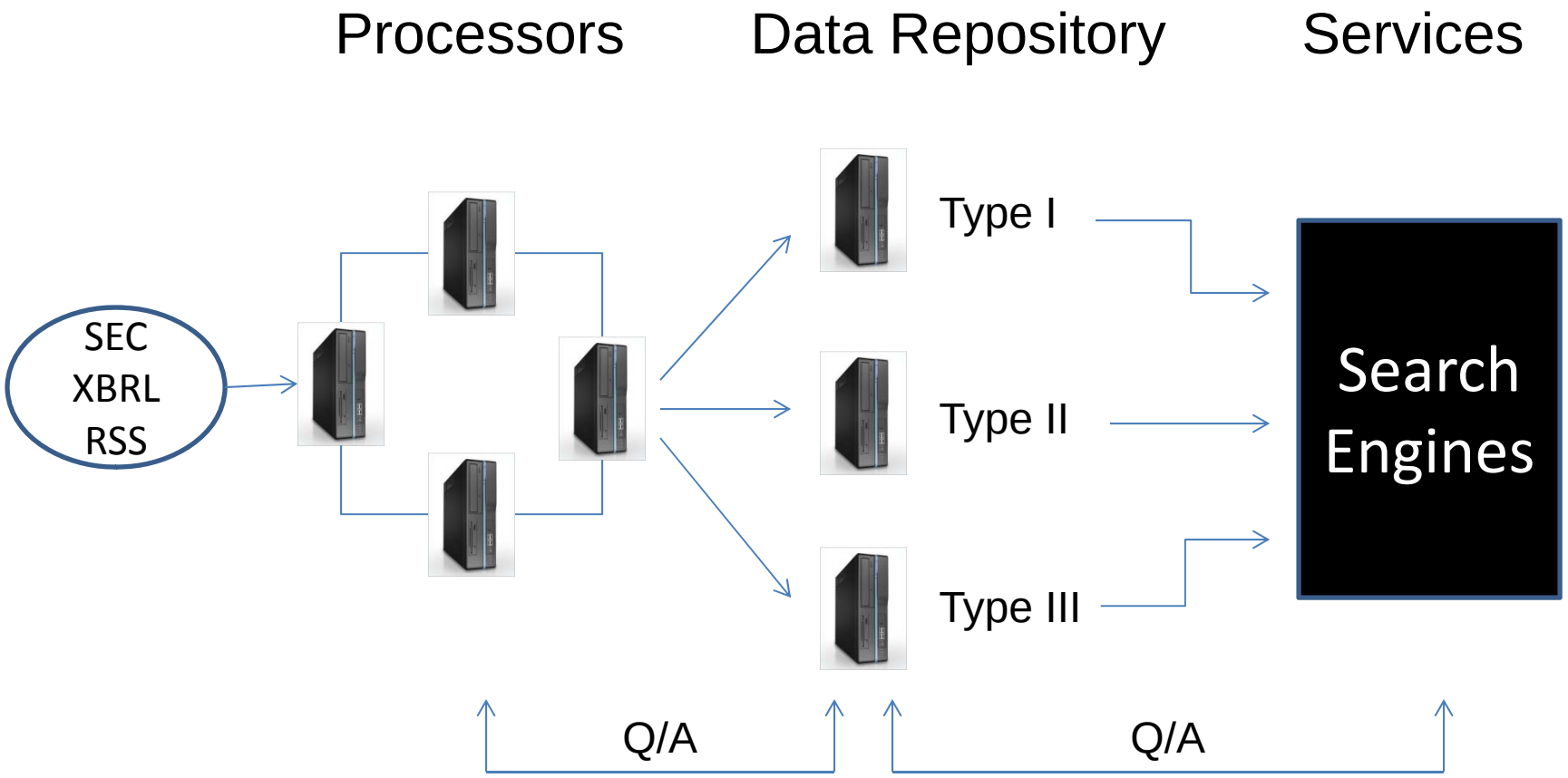
```

XBRL Data – The Extraordinary

Problems? – No!

Challenges? – Yes!

Prime Aim's Data Structure



BTW…

Questions:

- What is the sound of “Q” in Chinese, as in:

  A: ***Q****uick?* – No.

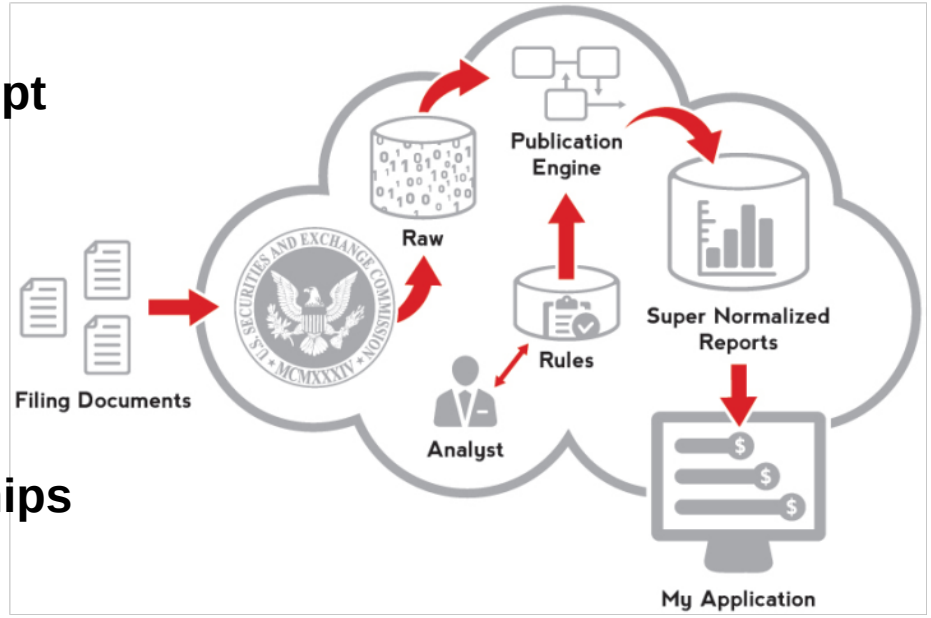
  B: ***Ch****ange?* – **Yes**.

- XBRL data consumption: *Quick? Change?*
- XBRL Data Consumption: What is the “80”, what is the “20”?

Data Forum - Building the Next App
Oxide Solutions – XBRL Processing

Focus on Analysis

- **Process Filings as XML**
- **Cross-reference HTML filings**
- **Normalize All aspects of filing Concept**
    - **Contexts**
        - **Dimensions3**
        - **Facts**
        - **HTML values**
    - **Labels**
    - **Roles**
    - **Link base hierarchical relationships**
        - **Presentation**
        - **Calculations**
        - **Definitions**



Data Forum - Building the Next App
Oxide Solutions – Building Blocks

Focus on Analysis

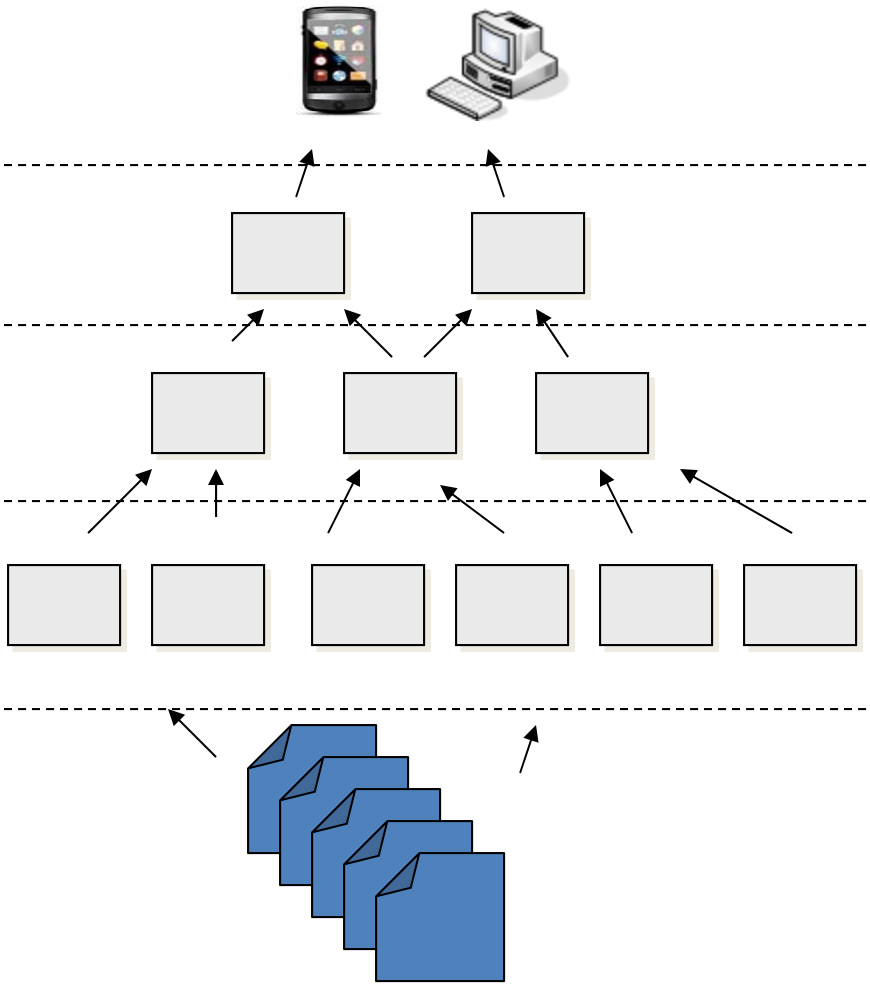
Client Applications

Ratios, Altman Z-Score, Industry Norms, etc.

Common Terms

Super Normalized Concepts

Filing Documents



Calcbench, Inc.

Democratizing Analytics and Information
while
Embracing Complexity

Our Journey

- Who we are
  - Both financial analysts
  - Alex is fundamental
  - Pranav is a “quant”
  - Entrepreneurs at heart
  - We LOVE
    - DATA! (Can’t get enough)
    - To code
    - To research and make decisions
- Officially started Calcbench about a month after we entered the XBRL Challenge
- Built the platform and won the Challenge in February 2012

Calcbench

Enter a symbol or name

Welcome to **Calcbench**!
Our goal: Create the quickest and easiest way to analyze and share corporate financial data.

Welcome alex

CALCBENCH

To get to the data, enter a ticker symbol and go: GO

OR search companies and data with our Explorer

What's new? 2012 XBRL-US Challenge Winner! **Calcbench is proud to be named the 2012 XBRL-US Challenge Winner.** Here's the Press Release.

See the latest filings

Recent filings: See all from today

5/8 Pulse Electronics Corporation 1Q 2012 Rev:+6.9%
5/8 Systemax Inc. 1Q 2012 Rev:-1.8%
5/8 FIRST INDUSTRIAL REALTY TRUST 1Q 2012
5/8 PANTRY INC 2Q 2012 Rev:+8.8%
5/8 AMERIGON INC 1Q 2012 Rev:+261.8%
5/8 FULL HOUSE RESORTS INC 1Q 2012 Rev:+299.4%
5/8 STERLING FINANCIAL CORP /WA/ 1Q 2012
5/8 MATRIX SERVICE CO 3Q 2012 Rev:+34.9%
5/8 TRIMBLE NAVIGATION LTD /CA/ 1Q 2012 Rev:+30.7%
5/8 Medicis Pharmaceutical Corpora 1Q 2012

Recent Activity:

My Workgroups: →create a workgroup →Saved Views
JB104: View Members(5), Add Member, Delete Workgroup

5/8/2012 - **PRANAV GHAI saved a view in:** COLFAX CORP:
→119 - Disclosure - Debt

4/30/2012 - **PRANAV GHAI saved a view in:** NETFLIX INC:
→2410402 - Disclosure - Segment Information (Information On Reportable Segments And Reconciliation To Consolidated Net Income) (Details)

4/28/2012 - **PRANAV GHAI saved a view in:** NETFLIX INC:
→Consolidated Statements Of Operations

4/2/2012 - **ALEX RAPP saved a view in:** DELL INC:
→Consolidated Statements of Income

Team Comments!

Collaborative Model Building

Data from **FIVE** sources

NETFLIX INC VIEW IN SPREADSHEET

Consolidated Statements Of Operations - Quarterly ›Switch to Yearly View

EXPORT Save This View

Link here: www.calcbench.com/t/nflx/i/q

Compare NFLX to:

Available User Created Lines (click to show/hide): (ALL), Ending Subs, Rev Guidance - next per

	2Q 2012 4/1 - 6/30/2012	1Q 2012 1/1 - 3/31/2012	% chg QoQ	4Q 2011 ending: 12/31/2011 *calculated*	% chg QoQ	3Q 2011 7/1 - 9/30/2011	% chg QoQ
	hide	hide		hide		hide	
Revenues	$889,163,000	$869,791,000	2.23%	$875,575,000	(0.66%)	$821,839,000	6.54%
Cost of revenues:							
Subscription	$583,636,000	$564,015,000	3.48%	$512,578,000	10.03%	$471,823,000	8.64%
Fulfillment expenses ext	$59,792,000	$59,918,000	(0.21%)	$62,577,000	(4.25%)	$64,794,000	(3.42%)
Total cost of revenues	$643,428,000	$623,933,000	3.12%	$575,155,000	8.48%	$536,617,000	7.18%
Gross profit	$245,735,000	$245,858,000	(0.05%)	$300,420,000	(18.16%)	$285,222,000	5.33%
Gross Margin %	27.64%	28.27%		34.31%		34.71%	
Operating expenses:							
Marketing	$118,224,000	$135,900,000	(13.01%)	$114,288,000	18.91%	(cmnts:1) $89,108,000	28.26%
Technology and development	$81,547,000	$82,801,000	(1.51%)	$80,783,000	2.50%	$69,480,000	16.27%
General and administrative	$29,810,000	$29,092,000	2.47%	$34,477,000	(15.62%)	$29,792,000	15.73%
Total operating expenses	$229,581,000	$247,793,000	(7.35%)	$238,548,000	3.88%	$188,380,000	26.63%
Operating income	$16,154,000	($1,935,000)	(934.83%)	$61,872,000	(103.13%)	$96,842,000	(36.11%)
Name: Adjusted Operating Inc X share	$16,082,000						
Operating Margin %	1.82%	(0.22%)		7.07%		11.78%	
Other income (expense):							
Interest expense	($5,006,000)	($4,974,000)	0.64%	($4,942,000)	0.65%	($4,915,000)	0.55%
Interest and other income (expense)	($493,000)	($116,000)	325.00%	($95,000)	22.11%	$1,696,000	(105.60%)
Income before income taxes	$10,655,000	($7,025,000)	(251.67%)	$56,835,000	(112.36%)	$93,623,000	(39.29%)
Provision for income taxes	$4,491,000	($2,441,000)	(283.98%)	$21,616,000	(111.29%)	$31,163,000	(30.64%)
Net income	$6,164,000	($4,584,000)	(234.47%)	$35,219,000	(113.02%)	$62,460,000	(43.61%)
Net Income Margin %	0.69%	(0.53%)		4.02%		7.60%	

Company specific items as reported (not normalized)

User created content

Analysis

Peer Analysis

COCA COLA CO VIEW IN SPREADSHEET

CONDENSED CONSOLIDATED STATEMENTS OF INCOME - Quarterly Switch to Yearly View

EXPORT Save This View
Link here: www.calcbench.com/t/ko/i/q
Compare KO to: COCA COLA CO

Statement	2Q 2012 3/31 - 6/29/2012	COMPARE TO COMPANY: PEPSICO INC 2Q 2012 3/25 - 6/16/2012
	hide	
NET OPERATING REVENUES	$13,085,000,000	$16,458,000,000
Cost of goods sold	$5,224,000,000	$7,915,000,000
GROSS PROFIT	$7,861,000,000	$8,543,000,000
Gross Margin %	60.08%	51.91%
Selling, general and administrative expenses	$4,497,000,000	$6,136,000,000
Other operating charges est	$70,000,000	...
OPERATING INCOME	$3,294,000,000	$2,377,000,000
Operating Margin %	25.17%	14.44%
Interest income	$112,000,000	$0
Interest expense	$112,000,000	($209,000,000)
Equity income (loss) - net	$245,000,000	$0
Other income (loss) - net	$84,000,000	$0
INCOME BEFORE INCOME TAXES	$3,623,000,000	$2,169,000,000
Income taxes	$823,000,000	$668,000,000
CONSOLIDATED NET INCOME	$2,800,000,000	$1,501,000,000
Less: Net income attributable to noncontrolling interests	$12,000,000	$13,000,000
NET INCOME ATTRIBUTABLE TO SHAREOWNERS OF THE COCA-COLA COMPANY	$2,788,000,000	$1,488,000,000
Net Income Margin %	21.31%	9.04%
BASIC NET INCOME PER SHARE (in dollars per share)	1.24	0.95
DILUTED NET INCOME PER SHARE (in dollars per share)	1.21	0.94
DIVIDENDS PER SHARE (in dollars per share)	0.51	0.54

PEPSICO INC	2Q 2012 3/25 - 6/16/2012
Net Revenue	$16,458,000,000
Cost of sales	$7,915,000,000
Selling, general and administrative expenses	$6,136,000,000
Amortization of intangible assets	$30,000,000
Operating Profit	$2,377,000,000
Operating Margin %	14.44%
Interest expense	($209,000,000)
Interest income and other est	$1,000,000
Income before income taxes	$2,169,000,000
Provision for income taxes	$668,000,000
Net income	$1,501,000,000
Less: Net income attributable to noncontrolling interests	$13,000,000
Net Income Attributable to PepsiCo	$1,488,000,000
Net Income Margin %	9.04%
Net Income Attributable to PepsiCo per Common Share	
Basic	0.95
Diluted	0.94
Weighted-average common shares outstanding	
Basic	1,563,000,000.00
Diluted	1,581,000,000.00
Cash dividends declared per common share	0.54

Coca Cola

Dare to Compare?

Pepsi

Common Metrics / Tag Matching

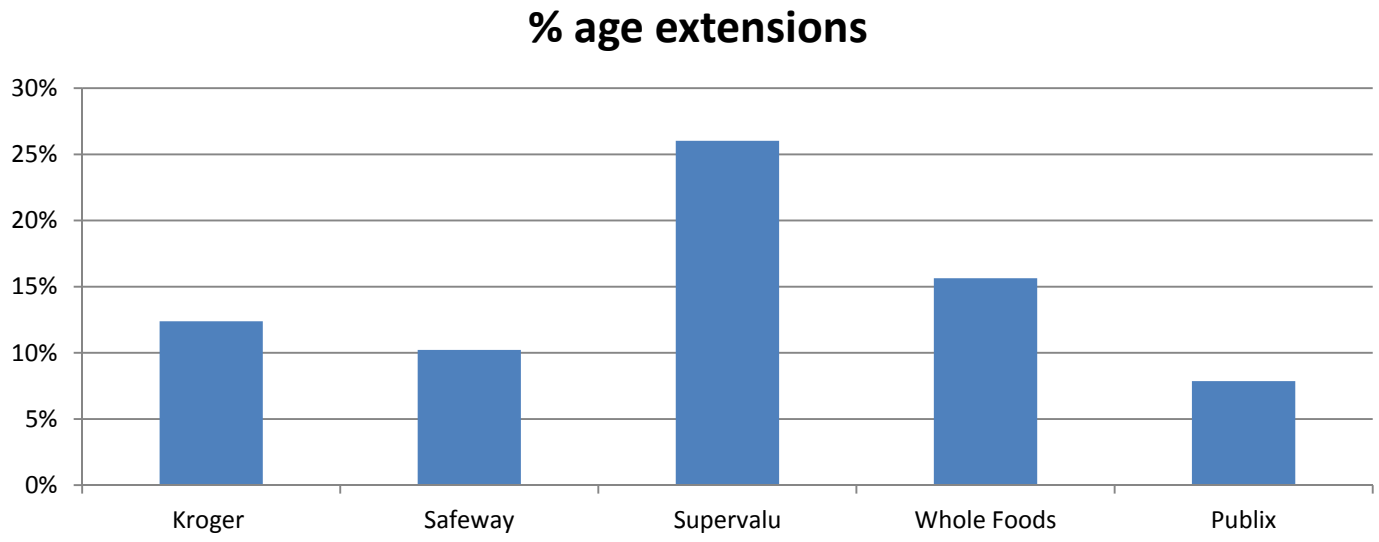
"Missing" values are auto-calculated

Two firms in the same industry. Line them up and analyze in seconds.

Research?

- Question: In an industry group (Food Stores) who uses the most non-FASB elements?
  - Pick five biggest firms: by 2011 revenue Kroger, Safeway, Supervalu, Whole Foods, Winn-Dixie
  - Get all tags from the latest 10-Q's (XBRL filings) and see what's there
  - It's the same business after all right?

- Not so fast!



Inference?

- What inferences can be drawn from extensions?
  - Management is being more transparent?
  - Business is complicated?
  - No one is minding the store?? (Yes on the pun)

Tag
RestrictedStockAwardsValue'
CapitalExpenditures'
LongTermDebtIncludingObligationsUnderCapitalLeasesAndFinancingObligations'
OperatingGeneralAndAdministrativeExpense'
SalesRevenueNetPercentToNetSales'
FixedChargeCoverageRatio'
LeverageRatio'
SegmentOperatingIncomeLossPercentToSegmentNetSales'
ContingentConsiderationFairValueDisclosure'
CarryingValueOfLongLivedAssetsWhichWereImpairedDuringPeriod'
DefinedBenefitPlanAccumulatedOtherComprehensiveIncomeLossPeriodicRecognitionOfPensionActuarialLossGainNetOfTax'
FairValueOfLongLivedAssetsWhichWereImpairedDuringPeriod'
NumberOfStoresSold'
NumberOfStoresClosed'
NumberOfStoresPlannedToCloseOrSell'
RemainingNumberOfStoresPlannedToCloseOrSell'

Analytics

- What about the industry's asset turnover or profitability?
- Adjust for a few things – Cash, goodwill ?

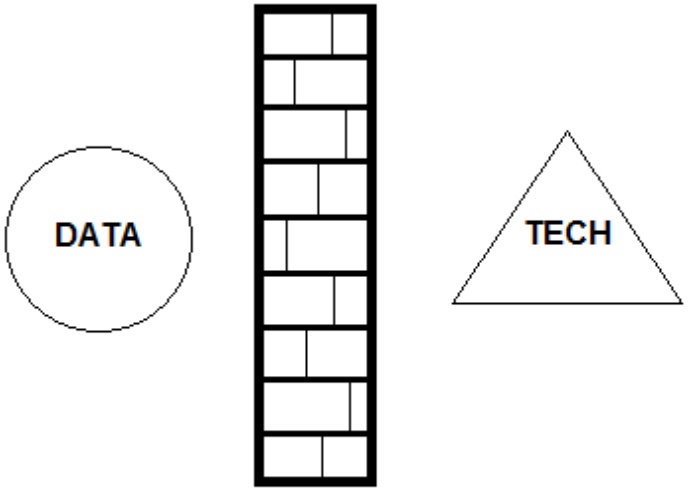
ticker	entity_id	sic_code	SIC_Stub	fiscal_year	Assets	Cash	Revenue	Goodwill	Asset_TO	rank_ATO	Adj. ROE	Notes
ardna	4607	5411	541	2011	1.35E+08	30675000	4.29E+08	0	4.114294	1	28%	
kr	5060	5411	541	2011	2.35E+10	188000000	9.04E+10	1138000000	4.08009	2	0.226741	
toph	4116	5411	541	2011	6.47E+08	19181000	2.36E+09	0	3.750598	3	-7%	
cik0000882829	6450	5411	541	2011	1.23E+09	235784000	3.69E+09	0	3.704482	4	-17%	
svu	7183	5411	541	2011	1.38E+10	172000000	3.75E+10	1984000000	3.235131	5	1.85049	
swy	6251	5411	541	2011	1.51E+10	729400000	4.36E+10	469800000	3.144654	6	0.208019	
wfm	6285	5411	541	2011	4.29E+09	212004000	1.01E+10	662938000	2.957972	7	0.161887	
wmk	606	5411	541	2011	1.03E+09	37392000	2.75E+09	35162000	2.877833	8	11%	
QKLS	5867	5411	541	2011	1.65E+08	9037550	3.71E+08	26346942	2.850602	9	-28%	
ck0000081061	5878	5411	541	2011	1.13E+10	366853000	2.72E+10	0	2.493149	10	0.257593	PUBLIX
htsi	6210	5411	541	2011	1.98E+09	164479000	4.29E+09	0	2.354796	11	11%	
imkta	5021	5411	541	2011	1.62E+09	12421250	3.56E+09	0	2.216737	12	9%	
Industry Avg.					**7.47E+10**	**2177226800**	**2.26E+11**	**4316246942**	**3.318416**		**0.110987111**	

Conclusion

- Unparalleled transparency
- Complex data set
- Q: Why isn't XBRL usage on fire?
  - A1: People don't know the power?
    - We're ALL working on that
  - A2: They don't trust the data?
    - This needs to change.
  - A3: The time series is not long enough yet…

Fundamental X

Jim Truscott



IFRS

XBRL

XBRL

- Completely accurate
- Completely transparent
- Completely complete!
- Totally instant

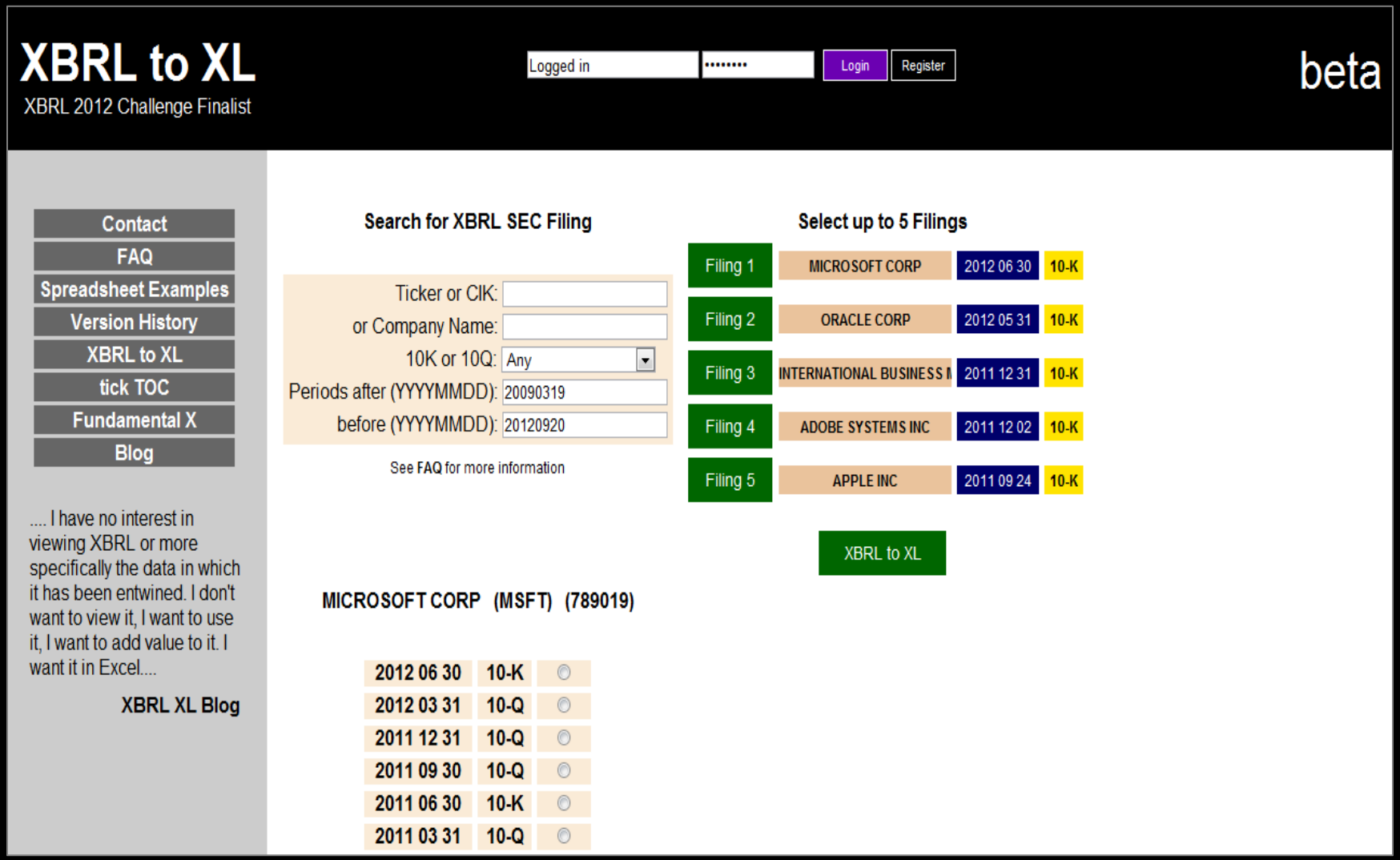
Fundamental X

Accessible

Transparent

Comparable

XBRL to XL



Standardized in Excel

20		*xbrl tag*	Filing (1)	Filing (2)
21	Relative Year		0	0
22		*entityregist*	MICROSOFT CORP	APPLE INC
23	Year Date	*year*	2011	2011
24	Revenues - Sales	*salesrevenu*	69943000000	108249000000
25	Total Revenues		69943000000	108249000000
26	R & D	*researchan*	9043000000	2429000000
27	Tax	*incometaxe*	4921000000	8283000000

Model | **Standard** | Tags | Filing (1) | Filing (2) | Filing (3)

Linking back to the disclosure

31		**STATEMENTOFINCOMEALTERNATIVE**		
32	us-gaap	salesrevenuenet	Revenue	69943000000
33		**costsandexpensesabstract**	**Operating expenses:**	
34	us-gaap	costofrevenue	Cost of revenue	15577000000
35	us-gaap	researchanddevelopmentexpense	Research and development	9043000000
36	us-gaap	sellingandmarketingexpense	Sales and marketing	13940000000
37	us-gaap	generalandadministrativeexpense	General and administrative	4222000000
38	us-gaap	costsandexpenses	Total operating expenses	42782000000

Model | Standard | Tags | **Filing (1)** | Filing (2) | Filing (3) | Filing (4) | Filing (5)

A Recipe For Data Businesses

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the era of BIG DATA.

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Large **volume**, high **velocity**, complex and **variable**, high **value.**

For the first time in history there is a confluence of **big data, cheap storage,** out-of-the-box **analytics** and **visualization tools,** and **market forces.**

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Apple generates **8 million** log entries **per second** from Siri.

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BIG DATA
innovation.

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Innovate: \in·no·vate\, v. To begin or introduce something for the first time.

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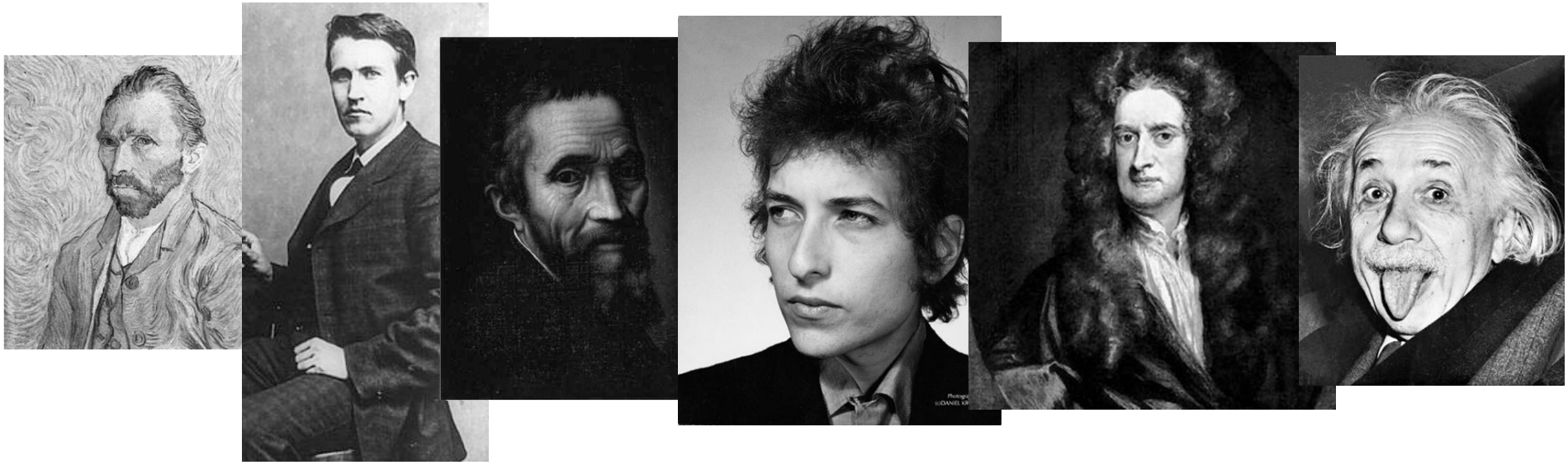

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new MARKETS.

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Data held centrally at HQ or **fragmented** across multiple data stores.

The **front line** with hands-on analysis output and monitoring.

Analysis paralysis with limited value and insights.

Focused, **benchmarked** approach leads to prioritized moves.

Looking **backwards** at what went wrong.

Predicting greatest impact going **forward** across comprehensive set of levers.

Time consuming, **one-off** hypothesis-driven efforts.

Repeatable, standardized metrics and templates.

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building MARKET AUTHORITY.

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- NEW REPORT ANALYZES SECOND MONTH OF IMPROVEMENT NOTED IN LATEST S&P CASE-SHILLER U.S. HOME PRICE INDICES
- TWO U.S. COMPANIES MISSED INTEREST PAYMENTS THIS WEEK, BRINGING THE GLOBAL CORPORATE DEFAULT TALLY TO 211, ARTICLE SAYS
- S&P EQUITY RESEARCH SERVICES ADDS DETAILED BOND RESEARCH OFFERING TO MARKETSCOPE® ADVISOR
- STANDARD & POOR'S LEADERSHIP ACTIONS

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The individual components of The Dow are among the biggest, best-known, most prominent companies in the United States. No wonder The Dow can claim bragging rights as one of the most popular icons in American culture, the financial equivalent of baseball and apple pie.

DJI 9441.27 96.66 1.03% DJC 3257.75 37.81 1.17%

2009 Dow Jones **Industrial Average** component changes

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Dow Jones Industrial Average

Today 5d 1m 3m 1y 5y 10y

Current Component Report

Open:	9345.36	**Last:**	9441.27
Change:	96.66	**% Change:**	1.03
High:	9445.72	**Low:**	9321.63
YTD Change:	664.88	**% YTD Change:**	7.58
Volume:	152399152		

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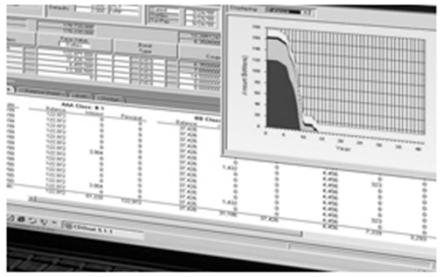
UNPARALLELED STRUCTURED FINANCE SOFTWARE, DATA, AND VALUATION SERVICES

MWSA's software and data products are widely recognized for their unique abilities to support detailed analysis of the most sophisticated structured debt products including asset-backed securities (ABS), mortgage-backed securities (MBS, CMBS & RMBS) and collateralized debt obligations (CDO / CLO).
Our valuations team assists clients in understanding the values of these complex instruments through a combination of industry, market, and technical knowledge.



US RMBS Waterfall Library

MWSA's Structured Finance Workstation (SFW) now offers an extensive deal library with integrated loan-level data for US subprime RMBS transactions. MWSA is expanding the library to include Prime, Alt-A, and ABS in the US and EMEA. MWSA already offers a comprehensive library of CDO transactions.

The SFW provides its users integrated analytics including: user-defined prepayment/default/loss rates, price/yield tables, sensitivity analysis, a first loss calculator, and break-even analysis.

The SFW also enables users to view and edit the waterfall script for each deal. This feature allows investors to be certain that waterfalls and associated payment rules are coded properly according to each deal's prospectus, and to fully understand the payment rules associated with each securitization.

Click here for more information on the SFW and RMBS deal library

LATEST NEWS

February 09, 2009
MWSA enhances Structured Finance Workstation with forecasts from Moody's Economy.com and M...

May 14, 2008
Moody's Adds Waterfall and Loan-Level Data to US RMBS Cashflow Analytics Tool

November 15, 2007
Moody's Launches Credit Values DCV Service for Structured Finance

 Sitemap design: www.deep.co.uk

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the RECIPE.

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1. Observe Market Forces / Timing
2. Identify an Industry Standard Dataset, Provenance, and Predictable Data Collection Process from Multiple Sources
3. Hire Top Talent / Skills
4. Explore and Develop Metrics, Benchmarks and Indicators
5. Incorporate Insights into Product Delivery / Distribution
6. Build Market Authority through Professional, Broad-based Self Publishing, Media and Industry Relationships
7. Narrow, Targeted, Persona-Based Marketing
8. Establish Subject Matter Expertise at Seminars and Events
9. Disco

A Recipe For Data Businesses

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XBRL Software and Data

Phillip Engel

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Co-Founder

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XBRL US, Inc.

President and CEO

David vun Kannon

Deloitte

Director

XBRL Software and Data

David vun Kannon

Director

Deloitte & Touche, LLP

Analyzing XBRL Data

What differentiates XBRL?

The fundamental kinds of analysis

Pre-processing XBRL

What differentiates XBRL?

- Depth
  - Fine grained base taxonomy
  - Extension taxonomies
  - Still need several more years of time series data
- Scope
  - All filers
- Variety
  - 10-K, -Q, Form SD, FDIC, other regulators, extensions

Fundamental types of analysis

Instance document data

- Conceptual consistency
  - Example – ‘risk free rate’
- Reporting consistency
  - Same data point reported multiple times across filings
  - Can change due to restatement, slipstreaming accounting change
- Time series
  - Not enough data yet
  - Impeded by element switching, renaming in taxonomies
- Unit analysis
  - Dimension analysis

Fundamental types of analysis

Instance document data

- Ratio analysis
  - Example – Altman Z-score
- Peer group analysis
  - Industry benchmarking
- Accounting policy change analysis
  - Example – lease accounting
- Text mining
  - “Unexpected”
  - Footnote specific searching

Fundamental types of analysis

Taxonomy data

- Period-to-period consistency
  - Example – element naming
- Usage ratios
  - Primary items
  - Dimensions
- Disclosure structure
  - ‘height’ of extensions
  - Label content

Pre-processing XBRL

- Recreating CompuStat
  - But with traceability
- Pivoting data
  - Coalescing similar concepts
  - Using presentation and calculation when lacking definition clues
- Denormalizing the data
  - Classic tradeoff of operational vs analytic database design
  - Textual facts separated and indexed

Pitfalls

- Data Quality
  - Do we fix the problems
  - How do we get them fixed
- Dealing with Extensions
- Normalization of Elements
- Aligning Data

Handling the Data - Dates

- Date Alignment
  - Fiscal
  - Calendar Alignment
  - Calendarization
  - Last Twelve Months (LTM)
- 4th Quarter Data
  - Some provide some do not
    - Can be in the MD&A (NO XBRL) or Financial Statements – Exxon.

Handling the Data - Dates

- Accumulation of period Data
  - Companies report individual transaction at a date smaller than a quarter.
    - How do you handle this for date alignment

Handling the Data - Concepts

- Normalization of Elements
  - Create tree to Normalize data
  - data.xbrl.us
  - Tracing normalized values to the source
- Different Normalization depending on :
  - Report Type
  - Industry (Some concepts do double duty)

Handling the Data - Concepts

- Normalize concepts with Dimensions
  - Dimensions change the nature of the element and need to be integrated into the processing logic
- Normalize Extension Concepts

Handling the Data - Units

- Conversion of Units
  - Currency Conversion
    - Methods for Instant and Duration concepts
  - Other Unit conversion

Handling the Data - Changes

- Restatements
  - Need to identify replaced values
  - Issues associated with this
    - Replacement Filing
- Latest Value
  - How to identify the latest value
  - Problems with using hash

XBRL Software and Data

XBRL Data Forum

About us

Alex Rapp, Calcbench

- www.calcbench.com
- alex@calcbench.com – please email me!
- @calcbench on twitter
- In New York and Cambridge, MA
  - DPL, MassChallenge
- Special thanks to:
  - XBRL-US, Microsoft, Wharton Research Data Svcs

XBRL Software and Data

XBRL Data Forum

Thanks to:

Calcbench International HQ

XBRL Software and Data

XBRL Data Forum

About us

SEC XBRL DATA REPOSITORY

Calcbench Engine receives and processes all new filings within seconds, including:

- error correcting — artificial intelligence
- normalizing — machine learning
- analytics & reporting — big data
- storage in our proprietary data universe

More comprehensive data & analytics for immediate decision making

- Investors
- CFOs
- Auditors
- Academics

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About us

Data from **FOUR** sources

NETFLIX INC VIEW IN SPREADSHEET

Consolidated Statements Of Operations - Quarterly ›Switch to Yearly View

EXPORT Save This View

Link here: www.calcbench.com/t/nflx/i/q

Compare NFLX to:

Available User Created Lines (click to show/hide): (ALL), Ending Subs, Rev Guidance - next per

	2Q 2012 4/1 - 6/30/2012	1Q 2012 1/1 - 3/31/2012	% chg QoQ	4Q 2011 ending: 12/31/2011 *calculated*	% chg QoQ	3Q 2011 7/1 - 9/30/2011	% chg QoQ
	hide	hide		hide		hide	
Revenues	$889,163,000	$869,791,000	2.23%	$875,575,000	(0.66%)	$821,839,000	6.54%
Cost of revenues:							
Subscription	$583,636,000	$564,015,000	3.48%	$512,578,000	10.03%	$471,823,000	8.64%
Fulfillment expenses ext	$59,792,000	$59,918,000	(0.21%)	$62,577,000	(4.25%)	$64,794,000	(3.42%)
Total cost of revenues	$643,428,000	$623,933,000	3.12%	$575,155,000	8.48%	$536,617,000	7.18%
Gross profit	$245,735,000	$245,858,000	(0.05%)	$300,420,000	(18.16%)	$285,222,000	5.33%
Gross Margin %	27.64%	28.27%		34.31%		34.71%	
Operating expenses:							
Marketing	$118,224,000	$135,900,000	(13.01%)	$114,288,000	18.91%	(cmnts:1) $89,108,000	28.26%
Technology and development	$81,547,000	$82,801,000	(1.51%)	$80,783,000	2.50%	$69,480,000	16.27%
General and administrative	$29,810,000	$29,092,000	2.47%	$34,477,000	(15.62%)	$29,792,000	15.73%
Total operating expenses	$229,581,000	$247,793,000	(7.35%)	$238,548,000	3.88%	$188,380,000	26.63%
Operating income	$16,154,000	($1,935,000)	(934.83%)	$61,872,000	(103.13%)	$96,842,000	(36.11%)
Name: Adjusted Operating Inc X share	$16,082,000						
Operating Margin %	1.82%	(0.22%)		7.07%		11.78%	
Other income (expense):							
Interest expense	($5,006,000)	($4,974,000)	0.64%	($4,942,000)	0.65%	($4,915,000)	0.55%
Interest and other income (expense)	($493,000)	($116,000)	325.00%	($95,000)	22.11%	$1,696,000	(105.60%)
Income before income taxes	$10,655,000	($7,025,000)	(251.67%)	$56,835,000	(112.36%)	$93,623,000	(39.29%)
Provision for income taxes	$4,491,000	($2,441,000)	(283.98%)	$21,616,000	(111.29%)	$31,163,000	(30.64%)
Net income	$6,164,000	($4,584,000)	(234.47%)	$35,219,000	(113.02%)	$62,460,000	(43.61%)
Net Income Margin %		(0.53%)		4.02%		7.60%	

Company specific items as reported (not normalized)

User created content

Analysis

www.calcbench.comn/t/nflx/i

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Shortcuts

www.calcbench.com/t/ **intc** /i

intc: ticker

i: i, b, or c (statement type)

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Dealing with quality/complexity

- Artificial Intelligence
  - Present information ‘correctly’ in an unstructured data environment requires a ‘smart’ process.
- Machine Learning:
  - ‘Supervised’: teach computer what an error looks like, how to fix it.
  - ‘Un-supervised’: tell me something I don’t know about this company or industry

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A Few Statistics from our database

- Full universe of U.S. SEC XBRL data:
  - 25,195,892 total facts as of 9/6/2012
    - 22,995,943 numeric facts
    - 2,199,949 text facts
- "Size" of the data universe in our DB:
  - ~75 GB (of which roughly half is text facts)

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A Few Statistics from our database

- Top 10 most ‘popular’ tags: (*% of filings they appear in)

98% Assets
97% LiabilitiesAndStockholdersEquity
90% NetCashProvidedByUsedInOperatingActivities
89% CashAndCashEquivalentsAtCarryingValue
88% NetCashProvidedByUsedInFinancingActivities
87% CashAndCashEquivalentsPeriodIncreaseDecrease
87% NetIncomeLoss
86% StockholdersEquity
85% CommonStockValue
83% NetCashProvidedByUsedInInvestingActivities

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- Errors:
  - *DEI*: way too common…3-5% of all filings!
  - *Sign*: common
  - *Scale*: rare but *shocking*
  - Actually getting the value itself wrong…very rare

Acc ID	entity	doc type	rest idx	per idx	FY end date	fiscal_year	end_date	fperiod
46627	CITY NATIONAL BANCSHARES CORP	10-Q	1	1	12/31/2012	2011	3/31/2012	1
39492	CITY NATIONAL BANCSHARES CORP	10-K	1	2	12/31/2011	2011	12/31/2011	4
23177	CITY NATIONAL BANCSHARES CORP	10-Q	1	3	12/31/2012	2011	9/30/2011	3
10372	CITY NATIONAL BANCSHARES CORP	10-Q/A	1	4	12/31/2012	2011	6/30/2011	2

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Errors – Document and Entity Information

Current Fiscal Year End Date	--12-31
Entity Well-known Seasoned Issuer	Yes
Entity Voluntary Filers	No
Entity Current Reporting Status	Yes
Entity Filer Category	Large Accelerated Filer
Entity Public Float	
Entity Common Stock, Shares Outstanding	
Document Fiscal Year Focus	2011
Document Fiscal Period Focus	FY
Document Type	10-Q
Amendment Flag	false
Document Period End Date	Sep. 30, 2011

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Errors – Improper use of signs

CONSOLIDATED STATEMENTS OF OPERATIONS (USD $) In Thousands, except Per Share data, unless otherwise specified	3 Months Ended		6 Months Ended	
	Jul. 29, 2012	Jul. 31, 2011	Jul. 29, 2012	Jul. 31, 2011
Net revenue	$ 282,634	$ 212,323	$ 568,333	$ 399,103
Cost of goods sold	126,879	90,256	255,314	167,310
Gross profit	155,755	122,067	313,019	231,793
Selling, general and administrative expenses	85,567	62,584	169,766	120,623
Income from operations	70,188	59,483	143,253	111,170
Other income (expense), net	1,166	597	2,076	1,501
Income before provision for income taxes	71,354	60,080	145,329	112,671
Provision for income taxes	13,652	21,462	40,653	40,537
Net income	57,702	38,618	104,676	72,134
Net income attributable to non-controlling interest	480	239	811	383

```
<us-gaap:SalesRevenueNet contextRef="eol_PE742560--1210-Q0006_
4865DEC5FD7F_1_0">-282634000</us-gaap:SalesRevenueNet>
```

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A Few Statistics from our database

- Extensions:
  - ~22,500 'officially sanctioned' tag names (FASB)
  - ~833,000 extension tag names
- Most Popular NUMERIC Extensions (by # of entities using):

WeightedAverageNumberBasicDilutedSharesOutstanding	380
AccruedExpensesAndOtherCurrentLiabilities	223
StockIssuedDuringPeriodSharesStockWarrantsExercised	137
StockIssuedDuringPeriodValueStockWarrantsExercised	133
ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsVestedInPeriod	131
ConsultingFees	124
TotalOtherAssets	118
ReportingSegmentsNumber	108
FairValueAssetsMeasuredOnRecurringBasis	104
WeightedAverageNumberOfSharesOutstandingBasicAndDiluted1	100

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A Few Statistics from our database

- Extension Usage: (as a % of all facts)

Q2 2011:	17.5%
Q3 2011:	17.5%
Q4 2011:	18.75%
Q1 2012:	17.5%
Q2 2012:	22.35%

Detail tagging started this quarter

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A Few Statistics from our database

- Fix the 'problem' of extensions?
  - Goal should not be to 'make them go away'
  - But need to make sure info is not lost!!!!!!
  - How about a naming convention?

Your extension: **PricelessArtCollection**

The FASB tag being extended:
IndefiniteLivedIntangibleAssetsExcludingGoodwill

New tag name:

IndefiniteLivedIntangibleAssetsExcludingGoodwillEXTPricelessArtCollection

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Using the calculation arc

www.calcbench.comn/t/cbst/i/c

CUBIST PHARMACEUTICALS INC VIEW IN SPREADSHEET

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME - Quarterly →Switch to Yearly View

EXPORT (log in to post comments, save data)

Link here: www.calcbench.com/t/cbst/i/q

Compare CBST to:

	2Q 2012 4/1 - 6/30/2012
	hide
Income (Loss) from Continuing Operations before Equity Method Investments, Income Taxes, Extraordinary Items, Noncontrolling Interest	$50,248,000
Operating Income (Loss)	$61,521,000
Operating Margin %	26.68%
Revenues.	$230,567,000
Domestic Revenue ext	$209,886,000
International Revenue ext	$11,363,000
Sales Revenue, Services, Net	$8,665,000
Other Revenue, Net	$653,000
-Costs and Expenses	$169,046,000
Cost of Goods and Services Sold	$58,891,000
Research and Development Expense	$67,206,000
-Business Combination, Contingent Consideration Arrangements, Change in Amount of Contingent Consideration, Liability	($2,694,000)
Selling, General and Administrative Expense	$40,255,000
Nonoperating Income (Expense)	($11,273,000)
Investment Income, Interest	$742,000
-Interest Expense	$8,902,000
Other Nonoperating Income (Expense)	($3,113,000)
-Income Tax Expense (Benefit)	$7,125,000

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Final Thoughts

U.S. Legislative Update

Passed and Pending Rules with an Impact on Data

Campbell Pryde, President and CEO, XBRL US

Why Standardize Data?

- Standards are everywhere
  - Shipping Container
  - Electrical Plug
  - Internet Protocol
- Modern Life is Impossible without them
  - Create a level playing field
  - Reduce Information Search Costs
  - Reduce Production and Usage Costs
  - Necessary for diffusion of new technologies

Why Standardize Financial Data

- Standards Create Compatibility
  - Containers
  - Track Gauge
  - XBRL (Do not need multiple data interfaces)
  - Allows Specialization
  - Allows Scale
  - Reduces Cost
- Standards Create Comparability
  - Increases Confidence
  - No one can Cheat
  - Allows Measurement and Comparison

Why Standardize Financial Data

Today	Tomorrow
Manual	Automated
Periodic Delay	Instantaneous
Hard to Search	Easy to Search
Comparison Problems	Comparable
Transferability Issues	Easily Transferred
Expensive	Cheap
Uncompetitive	Competitive

Why Standardize Government Data?

- Issues
  - High administrative costs in allocation of Government Funds
  - Poor accountability
  - Poor evaluation of effectiveness and efficiency
  - Double counting of benefits delivered
  - Funds used for unintended purposes
  - Reporting of performance is untimely
  - Expense cost of data collection
  - Limited ability to search and analyze Government data

Why Standardize Government Data?

- Benefits
  - Electronically available for automated analysis
  - Improved comparability of performance
  - Ability to check double counting by consolidating entity information automatically
  - Ability to quickly identify abnormally high costs like legal expenses
  - Ability to improve timing and analysis of reports
  - Data collection and reporting can be automated
  - Ability to search and analyze Government across agencies, grantees and contractors

Who benefits and how?

- Existing standard with “built-in” market of creation and analysis tools in a competitive marketplace
- Use of a free, open standard means participants not locked in to single vendor, can access open marketplace
- XBRL digital dictionary can be used for multiple reporting needs
- When taxonomy is revised/updated, database, creation and analysis tools are automatically updated as well, in real time

Legislation Passed

- ***Public Law No. 112-34 –*** introduced as H.R. 2883 and S. 1542, Child and Family Services Improvement and Innovation Act – signed into law by President Obama, 9/30/2011.

Legislation In Process

- H.R. 2146, Digital Accountability and Transparency Act (DATA Act) (House of Representatives version) and S. 1222, Digital Accountability and Transparency Act or DATA Act (Senate version of identical bill)
- Status:
  - Passed U.S. House of Representatives
  - Senator Mark Warner, sponsor of S. 1222, intends to reintroduce a revised bill soon

Legislation Pending

- H.R. 3339, Standard Data and Technology Advancement Act or Standard DATA Act
- H.R. 3630, Middle Class Tax Relief and Job Creation Act of 2011
- H.R. 3659, Welfare Integrity and Data Improvement Act
- H.R. 1745 and S. 904, JOBS Act of 2011

Why should Government use XBRL

- XBRL is
  - successfully in use today by many Governments.
  - adaptable to many reporting situations.
  - a free and open standard.
- Lower implementation costs driven by standardized software.
- Systems and data model can change through time without expensive system changes
- Thousands of organizations are already reporting in XBRL to the SEC and FDIC
- Can allow government to capture data in real time and be continuously adapted to meet reporting requirements.

Key Messages

- Critical time with interest from both Congress and the Administration
  - Save money
  - Transparency
- Advocate for broader use in USA and elsewhere
- Policymakers interested with other implementations
- Success for one invites more success for all