



Current Strategies

# Digital Data

MSBA January 27, 2016



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Owner / Senior Consultant



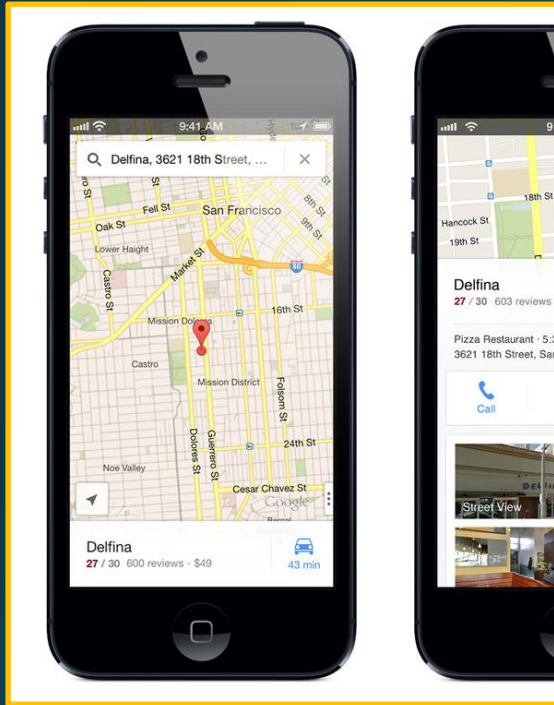
milepost**12** LLC

# digital disruption

## The Digital Disruption Has Already Happened

- World's largest taxi company owns no taxis (Uber)
- Largest accommodation provider owns no real estate (Airbnb)
- Largest phone companies own no telco infra (Skype, WeChat)
- World's most valuable retailer has no inventory (Alibaba)
- Most popular media owner creates no content (Facebook)
- Fastest growing banks have no actual money (SocietyOne)
- World's largest movie house owns no cinemas (Netflix)
- Largest software vendors don't write the apps (Apple & Google)

# consumerization of IT



Main

File Setup View Reports

Lakers Jaguars Ben's AYSO Amber's AYSO

Lakers - Summer 2009 Edit Add

Practices

20 Total Practices New Practice

Date	Description	Edit
01-Jun-2009	Ball Control and Passing	Edit
03-Jun-2009	Shooting	Edit
08-Jun-2009	Dribbling	Edit
10-Jun-2009	Set Pieces	Edit
10-Jun-2009	Goalkeeping	Edit
15-Jun-2009	Passing / Game Situations	Edit

U12 Summer

Games

14 Total Games New Game

Won: 7 Lost: 6 Tied: 1 Our Goals: 38 (2.7) Their Goals: 24 (1.7)

Game	Date	Opponent	Us	Them	Lineups	Results
1	25-Jun-2009	RC - WSC Storm	1	2	Lineups	Results
2	25-Jun-2009	RC - Rampage CL	1	3	Lineups	Results
3	26-Jun-2009	RC - Rampage BC	3	1	Lineups	Results
4	15-Jul-2009	CVC - Sting	1	4	Lineups	Results
5	16-Jul-2009	CVC - Infinity SC 98 Premie	3	0	Lineups	Results
6	17-Jul-2009	CVC - XTreme	2	0	Lineups	Results
7	18-Jul-2009	CVC - Sting	2	1	Lineups	Results
8	30-Jul-2009	PC - Rampage CL	0	3	Lineups	Results
9	30-Jul-2009	PC - Arsenal Strikers TG	2	2	Lineups	Results
10	01-Aug-2009	PC - The Utah Glory	8	0	Lineups	Results
11	19-Aug-2009	SC - Park City MT	10	1	Lineups	Results
12	20-Aug-2009	SC - La Roca RP	4	2	Lineups	Results
13	21-Aug-2009	SC - Sting	0	2	Lineups	Results
14	22-Aug-2009	SC - Sting	1	3	Lineups	Results

Stats

Us Them

Player Name	Half	Goals	
Alyse	1	0	
Amber	1	0	
Ashley	4	0	
Bailee	1	0	
Brinlee	0	0	
Kajay	1	0	
Kam	1	0	
Kelsey	9	0	
Madi	1	0	
Nicole	1	0	
Rochelle	0	0	
Sam	0	0	
Savanna	0	0	0
Savvy	3	4	7
Sydney	0	0	0
	23	15	38

11:58:27 - Season Retrieved (258 ms)



## ESC Training Uniform



- Black ESC Training Shirt
- Black or White ESC Game Shorts
- Black or White Soccer Socks
- Shinguards (always required)

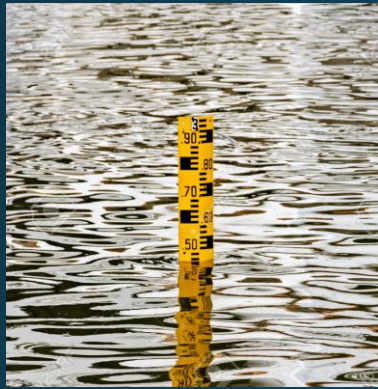




# types of data



archives



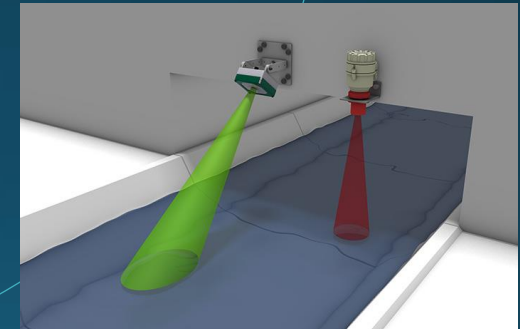
hand measurements



laboratory data



remote telemetry / real-time



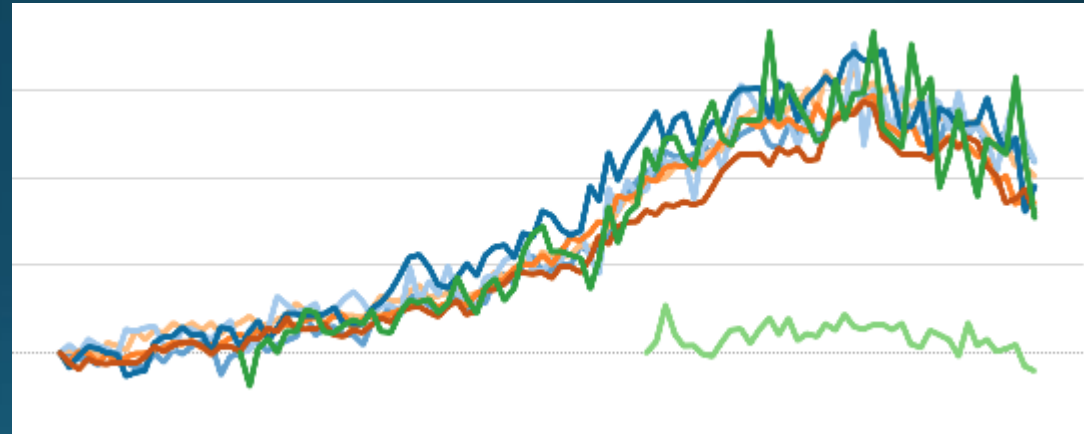
depth, flow and ...



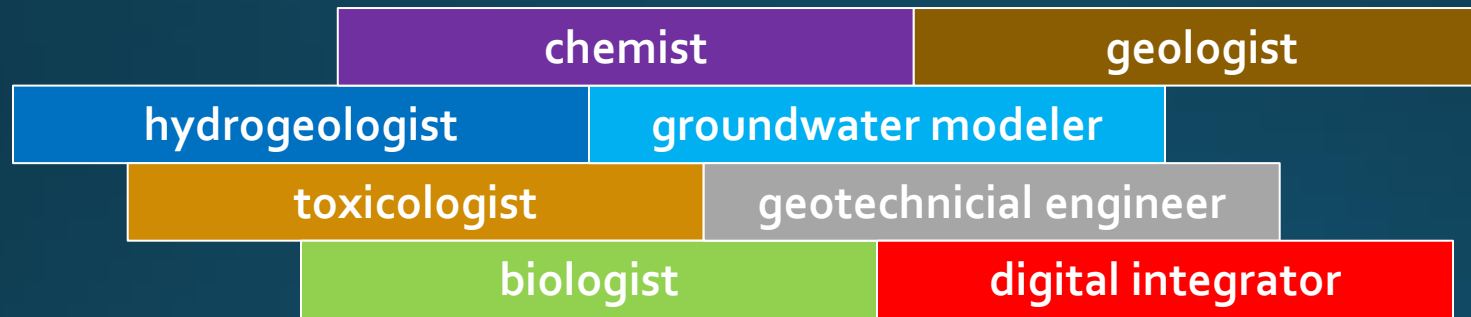
transducers

# holistic approach

- integrate all aspects of project data so it can be cross referenced
- multi-discipline approach
- supports telling 'your story'
- document repository
- team communications

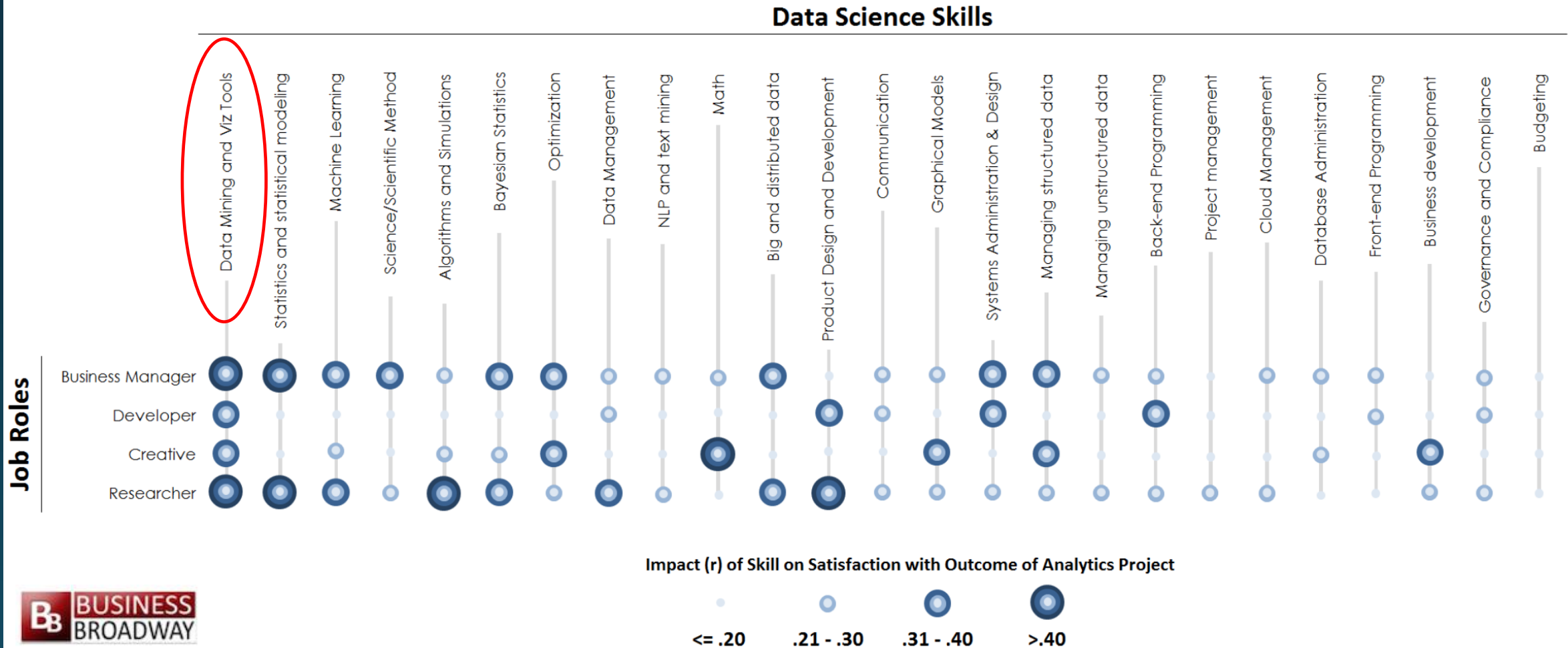


# discipline vs. support function



# research / trends

## Importance of Data Science Skill to Project Outcome





# research / trends

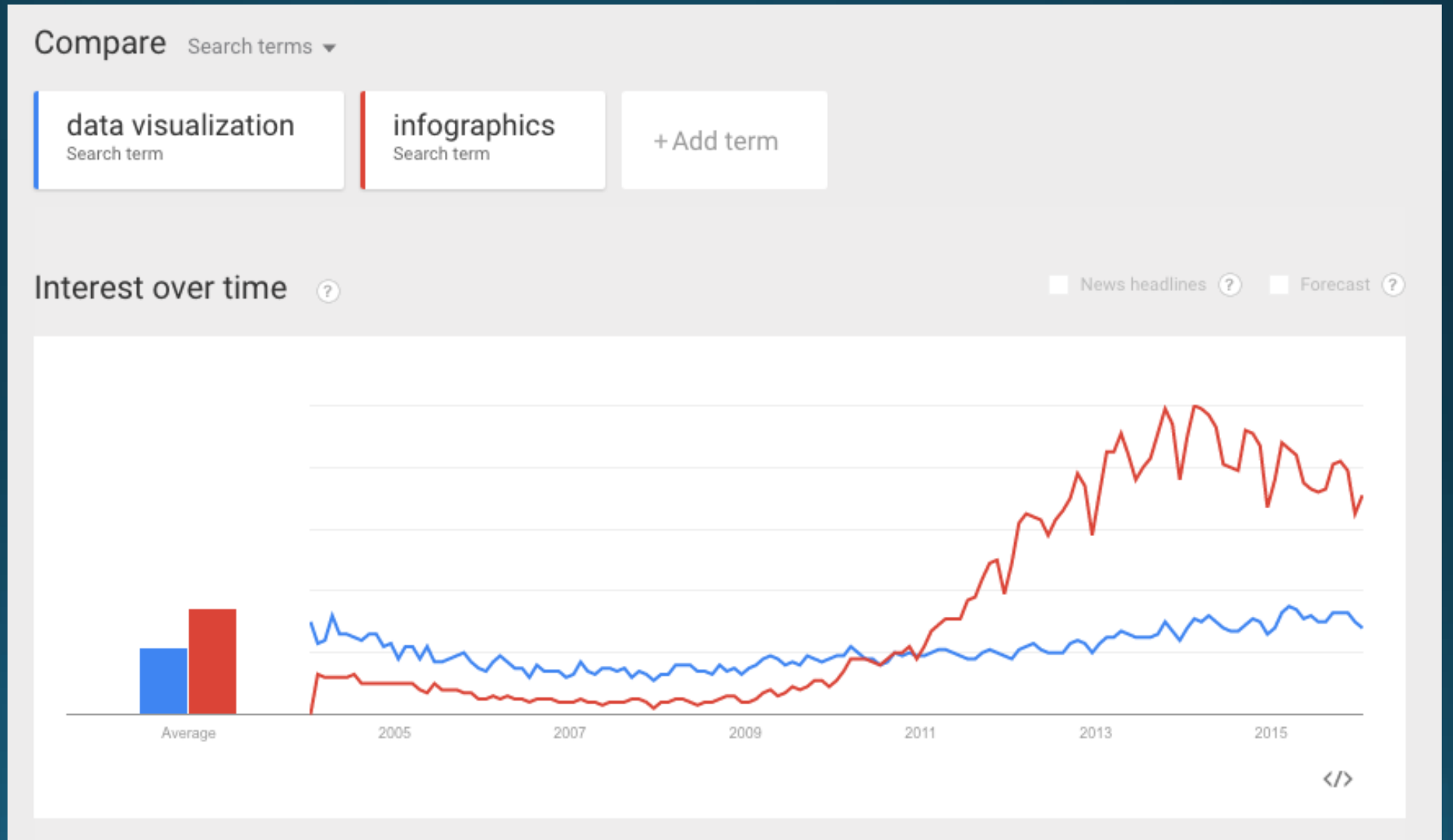


Bill Shander / Beehive Media

“2016 – A Watershed Year for Data Visualization”

1. Pace of research, publications, and reference has increased dramatically
2. More university programs and positions
3. Data driven story telling is on the rise
4. Rapid advancement in tools (Tableau)
5. Books, courses, workshops, and available resources on the rise

# research / trends



# know your data

Rows: 11 of 11 [Comment Rows]

Line	sys_sample_code	sample_name	sample_matrix_code	sample_type_code	sample_source	parent_sample_code	sample_delivery
1	#SYS_SAMPLE_CODE	sample_name	sample_matrix_code	sample_type_code	sample_source	PARENT_SAMPLE_COD	sample_delivery
2	#TEXT(40)	Text(30)	Text(3)	Text(3)	Text(10)	TEXT(40)	Text(10)
3	B-30_20080325		WG	N	FIELD		
4	B-31_20080325		WG	N	FIELD		
5	B-33_20080325		WG	N	FIELD		
6	B-38_20080325		WG	N	FIELD		
7	B-45_20080325		WG	N	FIELD		
8	TRIPBLANK_20080325		WQ	TB	FIELD		
9	B-30_20080325_FD		WQ	FD	FIELD	B-30_20080325	
10	B-45_20080325_MS		WG	MS	LAB	B-45_20080325	
11	B-45_20080325_MSD		WG	MSD	LAB	B-45_20080325_MS	

Warning: Sys\_sample\_code should exist in the database if rt\_sample\_type.sample\_class is not 'LQ' based on sample\_type\_code.

Springfield6\Springfield

# know your data



**Validation report**

Parameter | Sample Location | SampleDate | Qualifier | Medium/Unit | **Result Value** | Finalize

Field(s) for Duplicates Checking

- SampledBy
- FieldSampledD
- Units
- NumericResult
- GraphicResult
- DetectionLimit
- Medium
- SampBegDepth
- SampEndDepth
- Modifier
- CustomFlag
- Laboratory
- LabSampleD
- PrepType

New added columns are all non-empty  
 SampleLocation  
 SampleDate  
 Parameter  
 TextResult

Select numeric field: NumericResult  
 Select sample location: CHECK SAMPLE  
 Select sample parameter: 1,1,1-Trichloroethane

No records returned.

Y Axis #1

X Axis

**Setup report (Step 1 of 4)**

Fields in table

- ID
- SampledBy
- SampleLocation
- FieldSampledD
- Parameter
- Units
- TextResult
- NumericResult
- GraphicResult
- DetectionLimit
- Medium

Column Data (Row Heading)

SampleDate

Sample

SampleDate	Header1	Header2	Header3	Header4
SampleDate1				
SampleDate2				
SampleDate3				
SampleDate4				

**Set up query criteria**

**Location:**  Single Location  Location Group

**Parameter:**  Single Parameter  Parameter Group

**Time:** Start: Mar 29, 1900 12:00 AM - Thu; End: Sep 26, 2007 12:00 AM - Wed

**Sort Order:**

Item	Order	ASC / DESC
Location		ASC
SampleDate		ASC
NumericResult		ASC
		ASC
		ASC

**Depth Query:**  Whole  Partial

**Exclude / Include:**

Item	Value	Exclude	Include	And Null
Modifier	All	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Qualifier	All	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Source	All	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Custom Flag	All	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

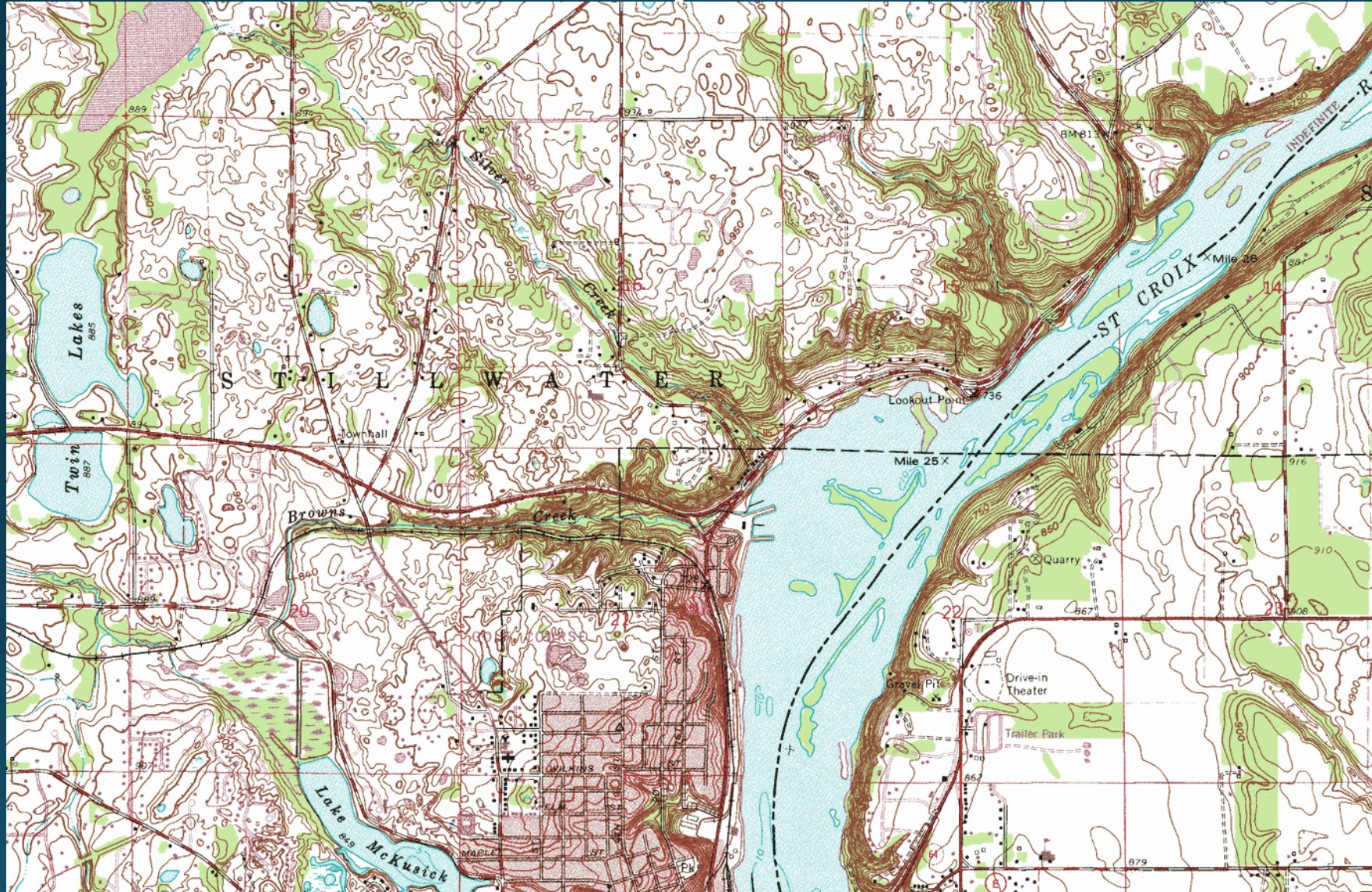
**Limit Exceeds:**  Actual  Potential

**Others:** Set Limit: Numeric, Graphic

Open query result as read only  
 Show Advanced Query Options



# communicate your data





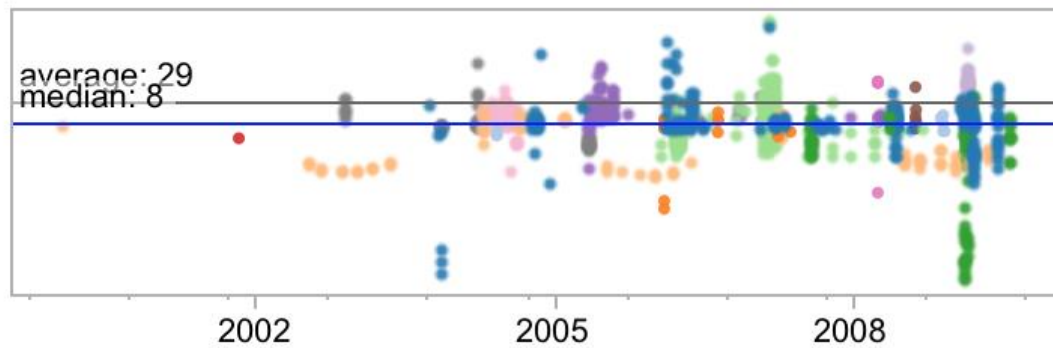


### Sample Type

Arsenic

### UOM

(All)



### Laboratory Name

- A4 Scientific Inc, The Woodlan...
- Analytical Resources Inc (ARI)...
- Battelle Marine Sciences Lab, ...
- CCI - ALS Laboratory Group, ...
- Columbia Analytical Services (...)
- Dept of Ecology Manchester F

# Production Surveillance

## Production Measure

Gas Production

## Well Name

All

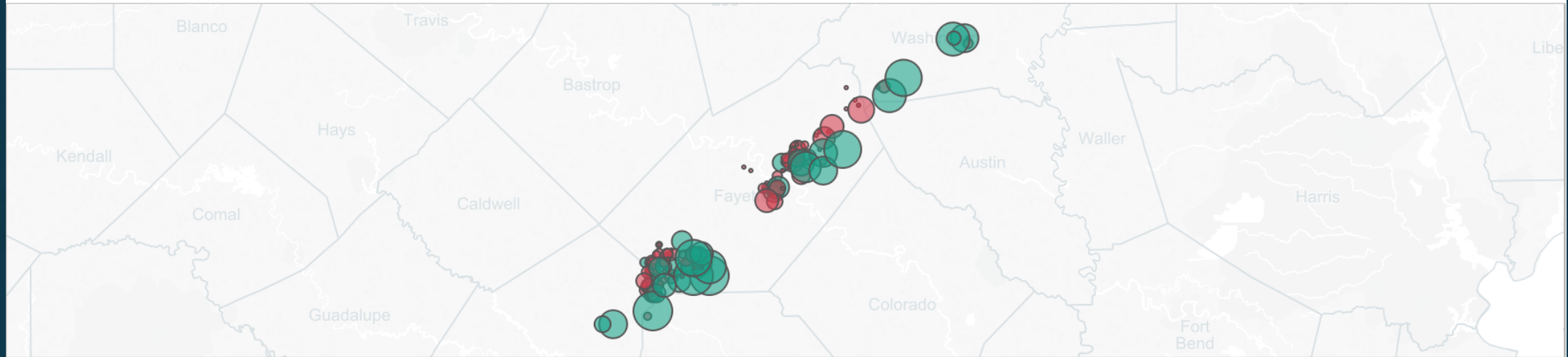
## Production Date

7/15/2010 12:00:00 AM to 12/12/2011 11:59:59 PM

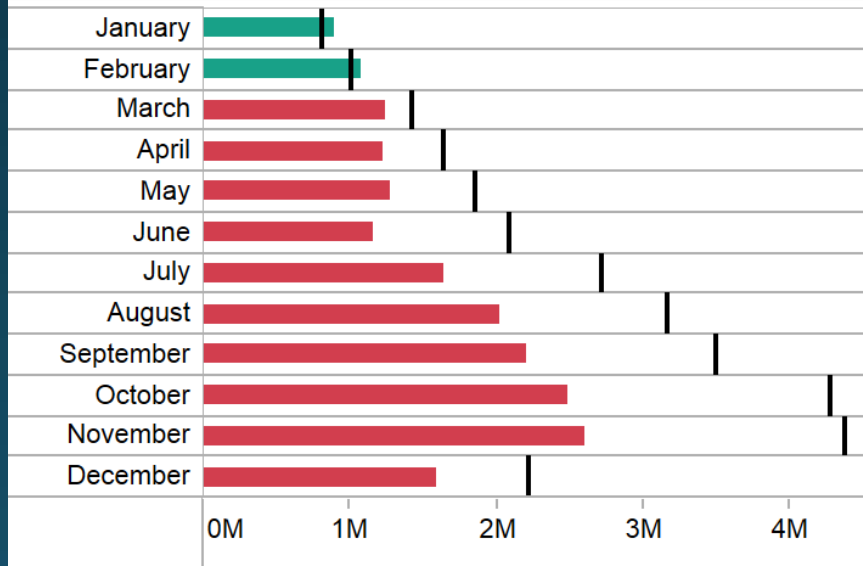
■ Above Target

■ Below Target

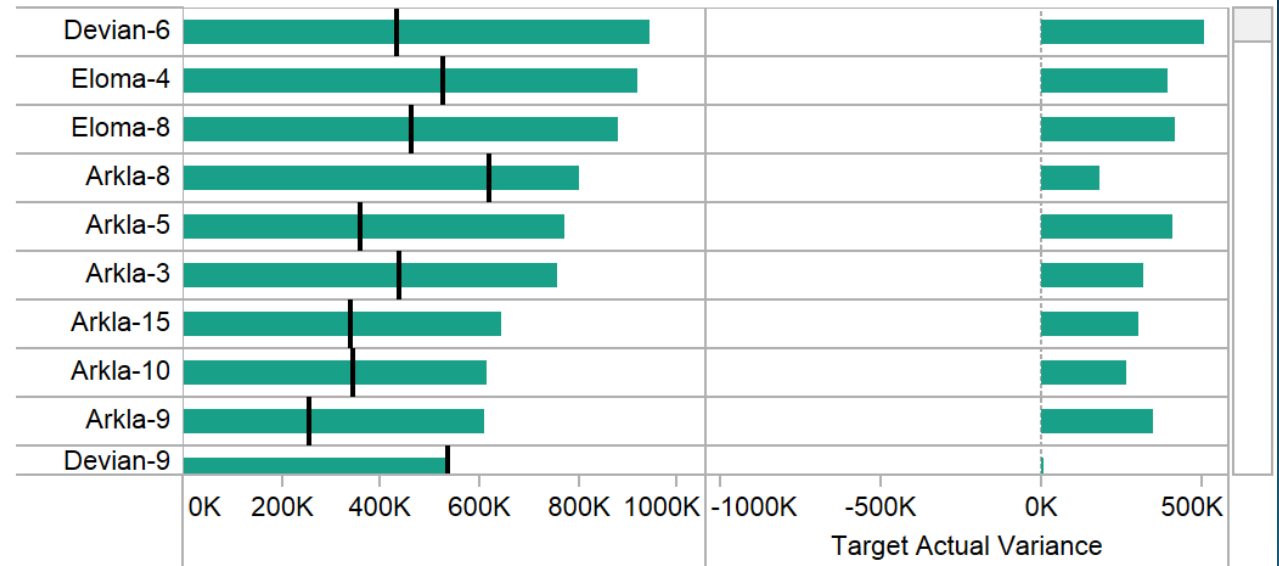
## Gas Production Field View



## Gas Production Target vs Actual by Month

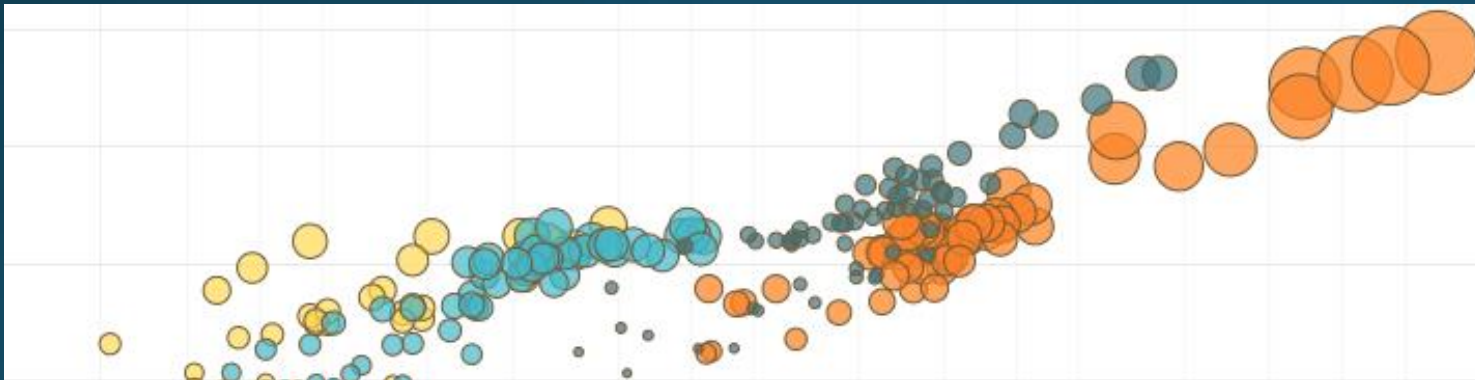


## Gas Production Target vs Actual and Variance by Well



# take aways

- **digital disruption** happens: leverage it
- consumerization of IT is impacting business sector
- **holistic approach** to integrating data
- information technology: **discipline vs. support function**
- know your data
- consume / communicate your data: **data visualization**





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