

Best Practices for Visual Analytics Projects



Yogi Schulz

Biography

- ❑ Partner in Corvelle Consulting
- ❑ Information technology related management consulting
- ❑ IT World Canada & Microsoft columnist
- ❑ Industry presenter:
 - Project World - 6 years
 - PMI – SAC - 4+ years
 - PMI - Information Systems SIG - 2 years
 - PPDM Association - several years

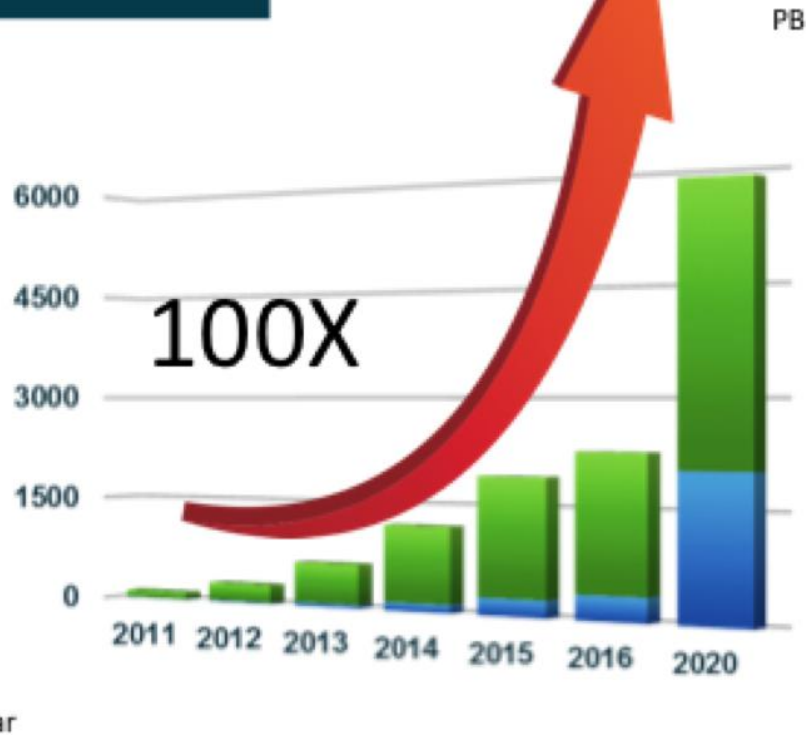


Digital Oil Field Survey

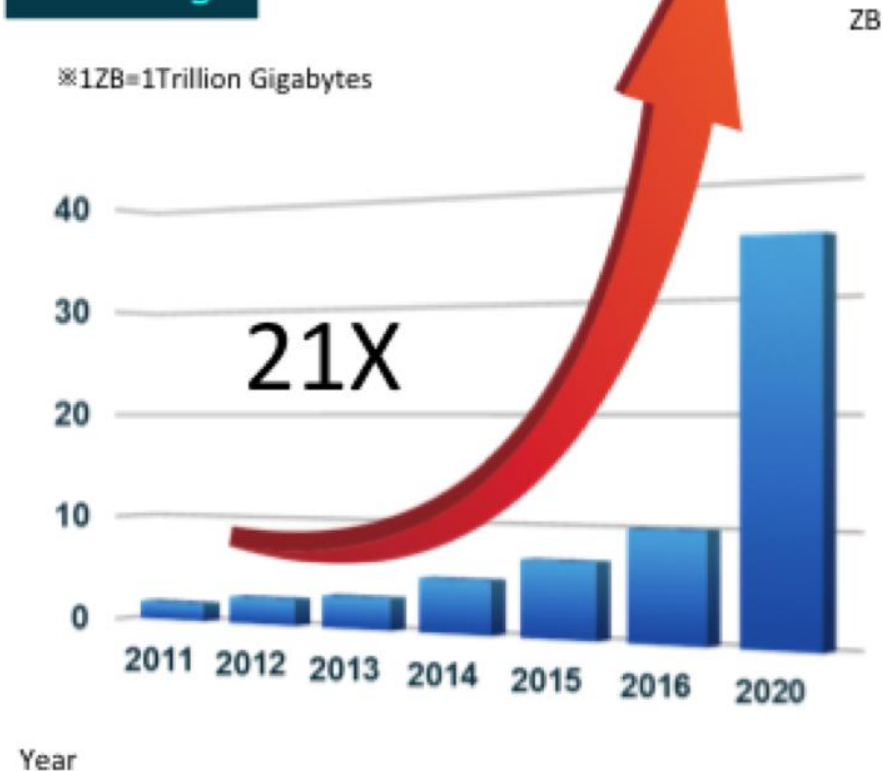
- ❑ Upstream companies struggle managing information for analytical purposes
- ❑ Data stored in applications in nonstandard formats
- ❑ Data trapped within organizational silos
- ❑ Real-time data is managed independently
- ❑ Progress in analytics requires action across multiple organizational silos

Data Volumes Growing every Year

Mobile Traffic



IT Storage



+ HORUS

End-users Love Visual Analytics Output



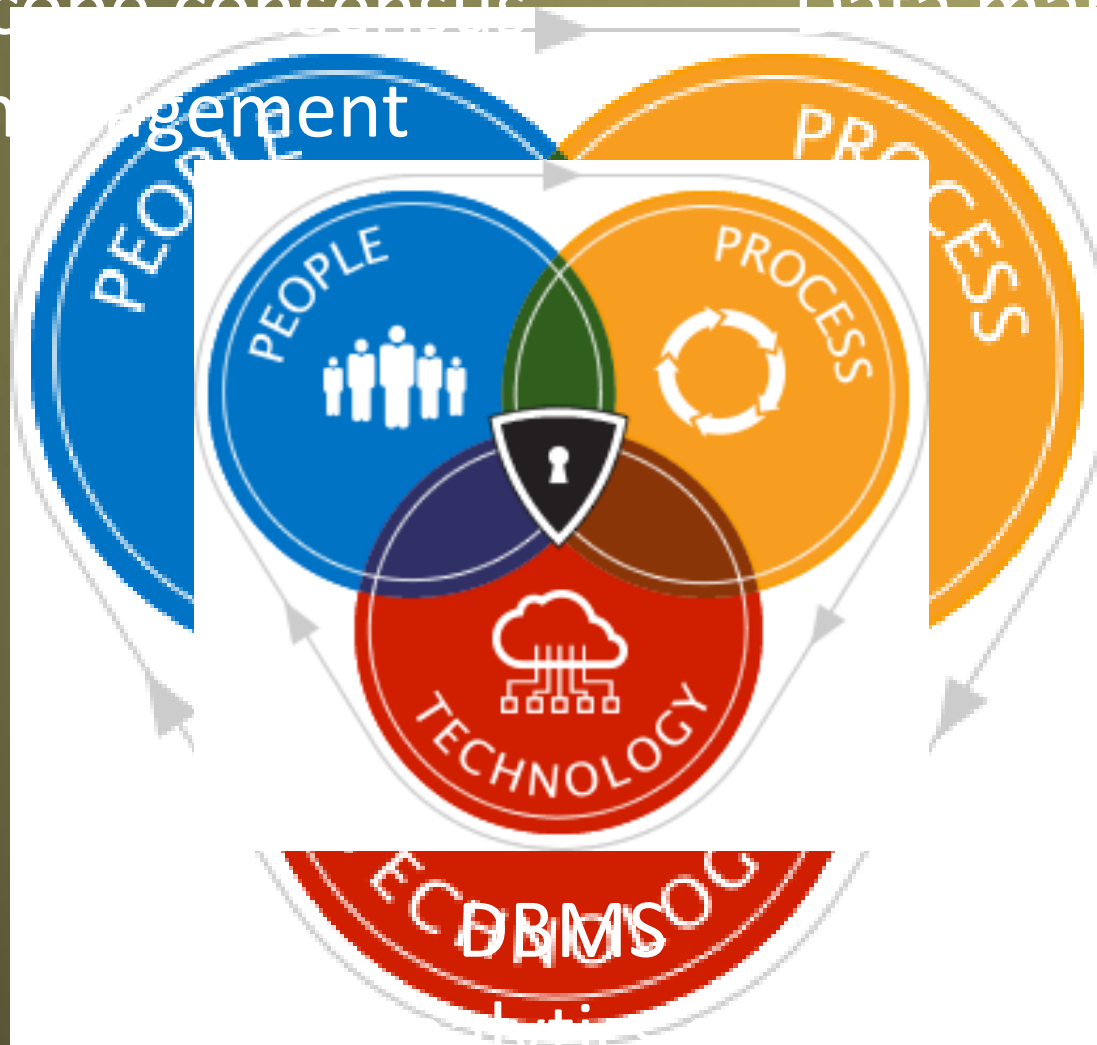
Achieve Success with Visual Analytics

Project scope consensus

Data management

Project management

Data quality



People

Project Scope Consensus



People

Project Management

❑ Don't

- Bel

- Let

- Inv

❑ Do's:

- Del

- Exp

- Plan



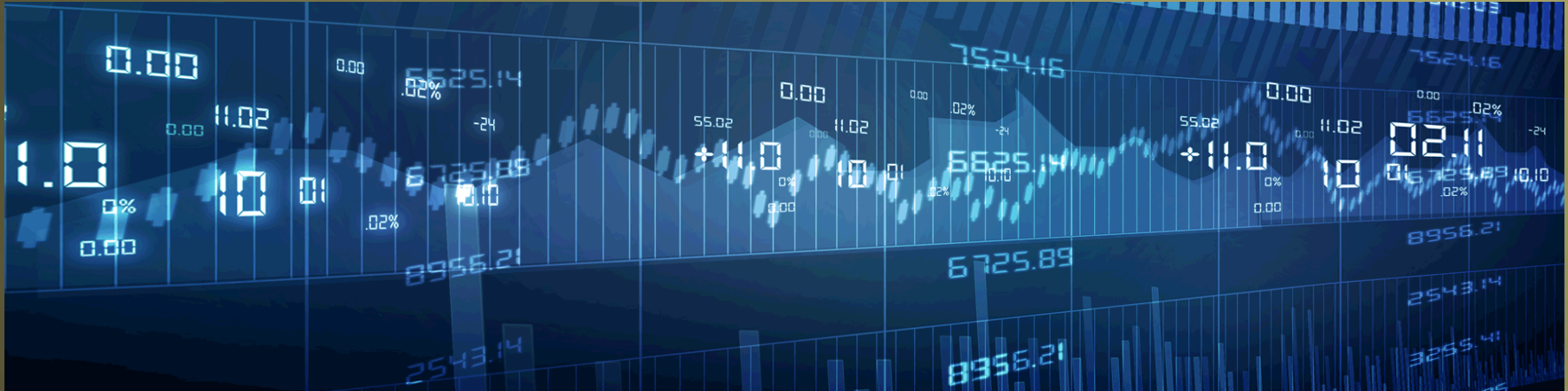
Any chance you can give me
better project management
for my visual analytics projects instead?



People

How do project managers combat unrealistic expectations?

- A. Diplomatically educate on effort required?
- B. Demo new capabilities annually?
- C. Constantly communicate goals & benefits?
- D. Agree with those who claim project is easy?
- E. Coach project sponsor to communicate?
- F. Attend few meetings with vendors?



□ Do's:

- Plan to strengthen data
- Build data management



❑ Don'ts:

- Think
- Assume



❑ Do's:

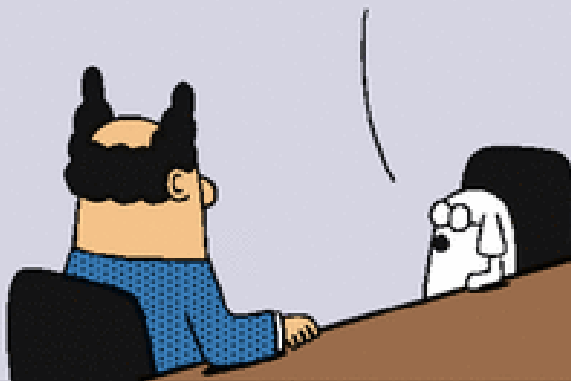
- Plan
- Develop
- Build



You need a visual way to track your key metrics.



THAT WAY YOU'LL HAVE MORE DATA TO IGNORE WHEN YOU MAKE YOUR DECISIONS BASED ON COMPANY POLITICS.



Analytics in the world of Dilbert

WILL THE DATA BE ACCURATE?



OKAY, LET'S PRETEND THAT MATTERS.



Process

How do project teams respond to scope creep?

- A. Accept all additional scope proposals?
- B. Sarcastically reject all scope proposals?
- C. Evaluate scope proposals?
- D. Defer all scope proposals to the next release?
- E. Remove scope for every scope proposal approved?
- F. Insist all scope proposals be approved by project steering committee?

Technology

Database Management System (DBMS)



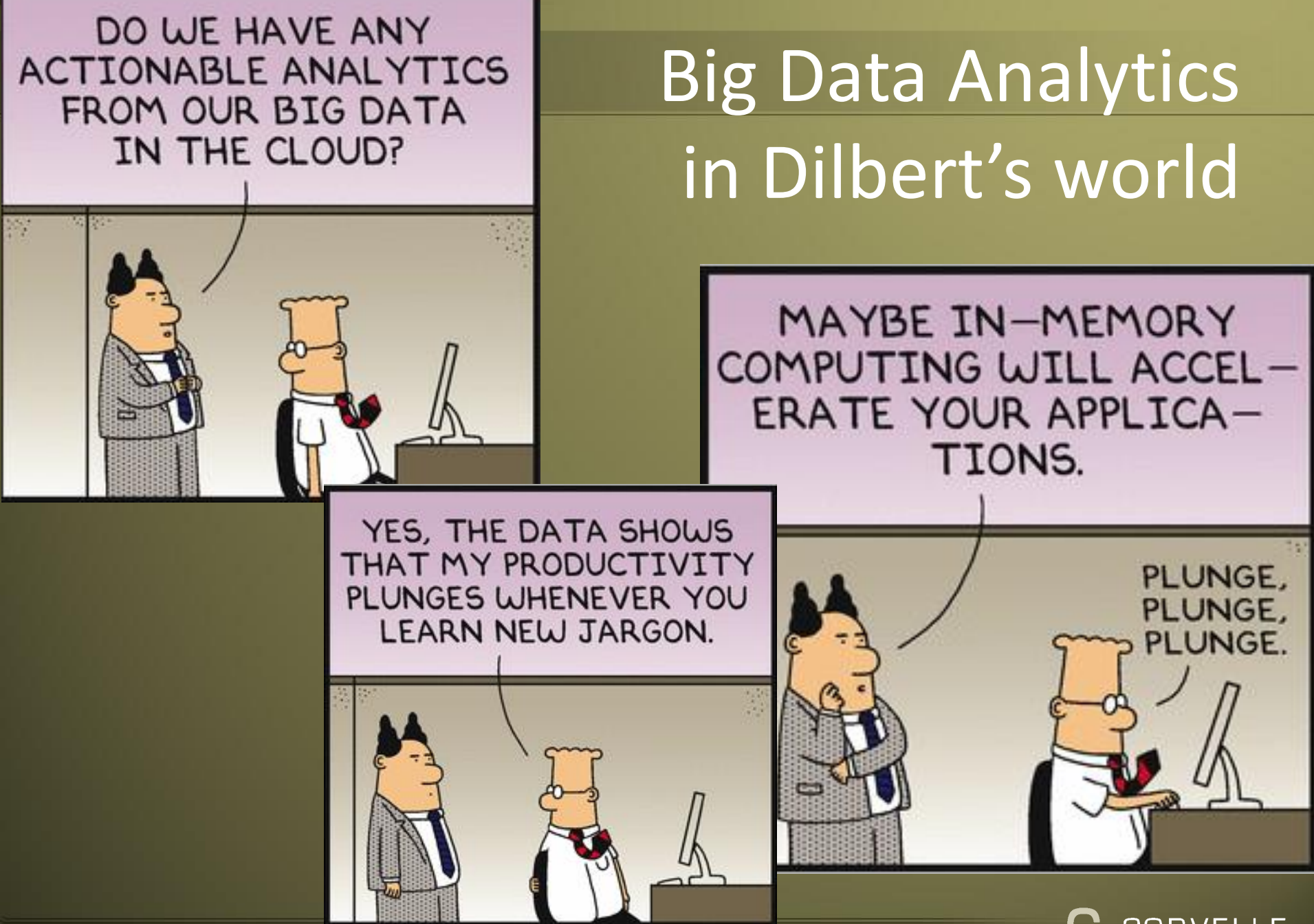
Technology

Visual Analytics Software

- ❑ Don'ts:
 - Let
 - Ma
 - Let is critical to the solution
- ❑ Do's:
 - Decide if additional softw
 - Expect to require a dedic
 - Favor license over build



Big Data Analytics in Dilbert's world



Technology

How do project teams explain visual analytics?

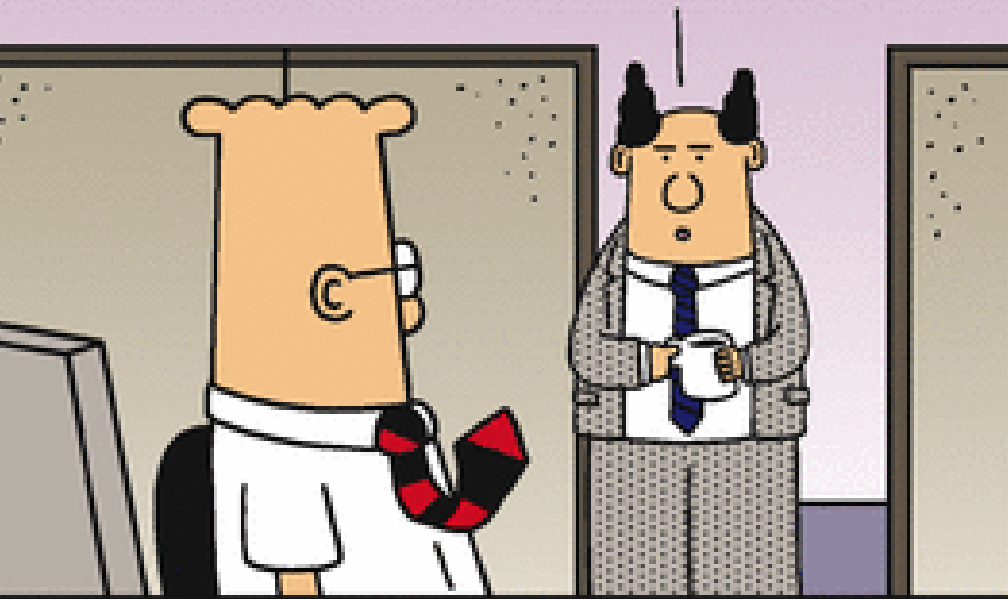
- A. Displaying data as pretty pictures?
- B. Using overly complex terms as a way of over-stating their importance?
- C. Representing data for analysis and insights in ways that resonate?
- D. Over-analyzing data to avoid reaching any actionable conclusions?
- E. Using a superior alternative to Excel?

Conclusions

- ❑ Best practices produce project success
- ❑ Visual analytics is a valuable technology
- ❑ Visual



I NEED YOU TO
ASSEMBLE A HUGE
AMOUNT OF TOTALLY
INCOMPREHENSIBLE
DATA.



Questionable Analysis Goals

MAKE IT BORING
SO NO ONE LOOKS AT
IT TOO CLOSELY. I'M
AIMING FOR QUANT-
ITY OVER QUALITY.



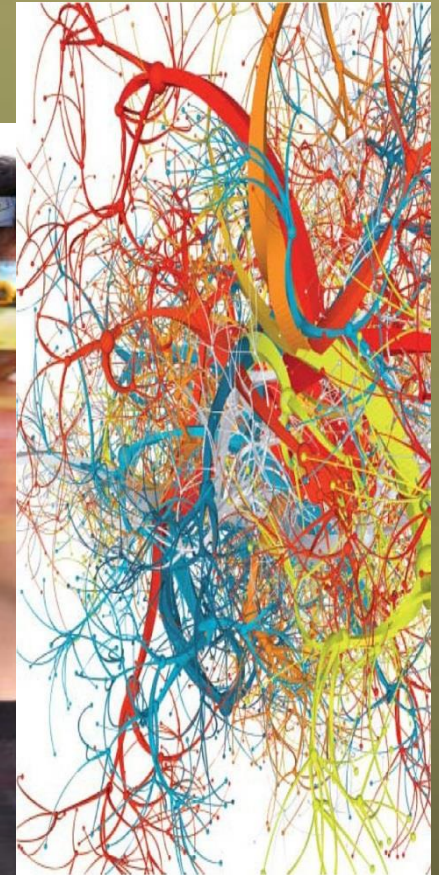
Recommendations

❑ Mitigate common project risks:

- Ultra-high expectations
- Uneven data integration
- Inadequate project staffing
- Insufficient data quality

❑ Avoid over-investing in tech

- DBMS & ETL
- Data warehouse
- Visualization development soft



Questions & Discussion

PLEASE
DON'T ASK
ANY
QUESTIONS.

QUESTION!

JUST DO EVERY-
THING SOON AND
PERFECTLY!!!

Can you help us
achieve value from
visual analytics?

Please
fill out
evaluation
form

Best Practices for Visual Analytics

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Information technology related
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Microsoft Canada columnist & CBC
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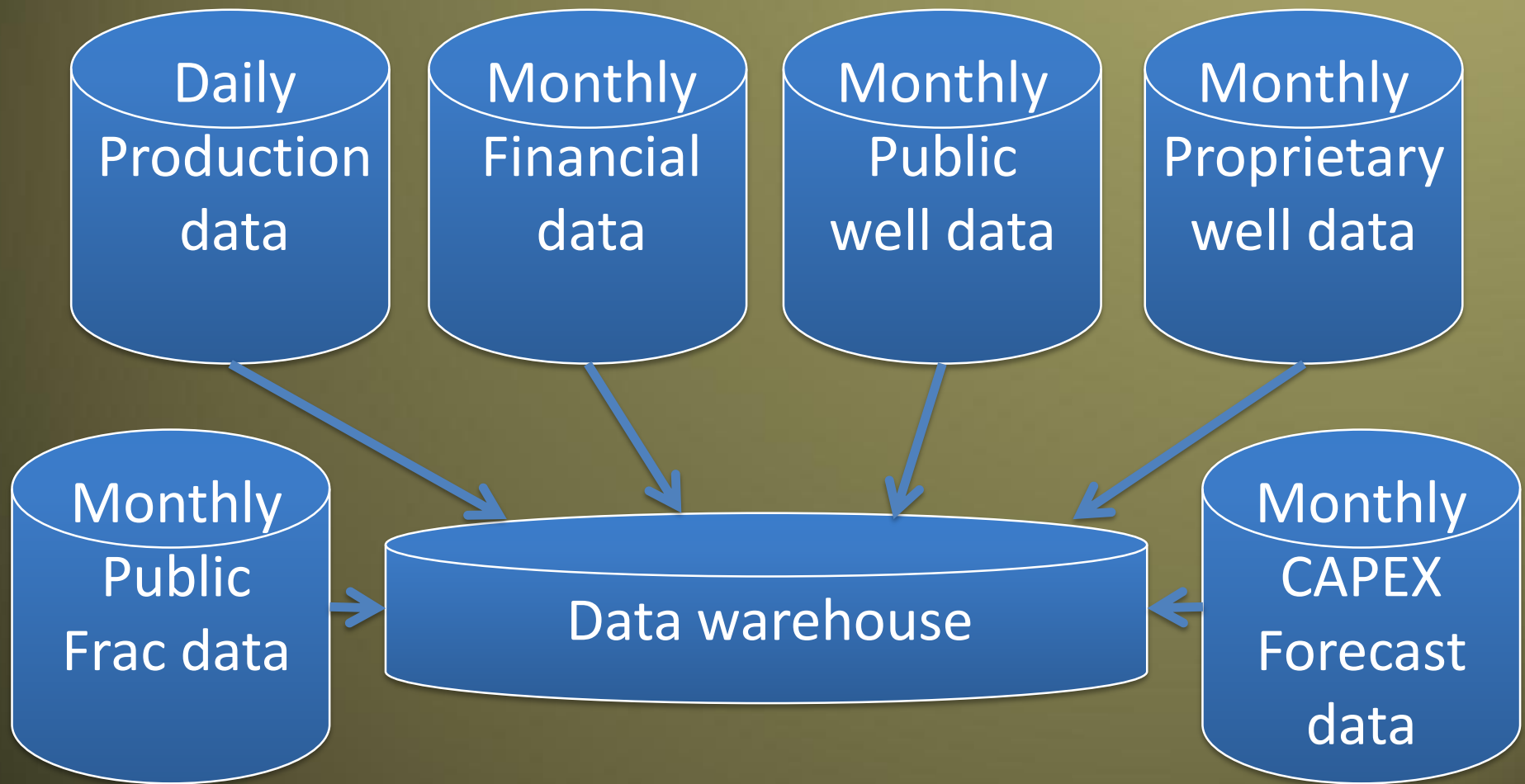
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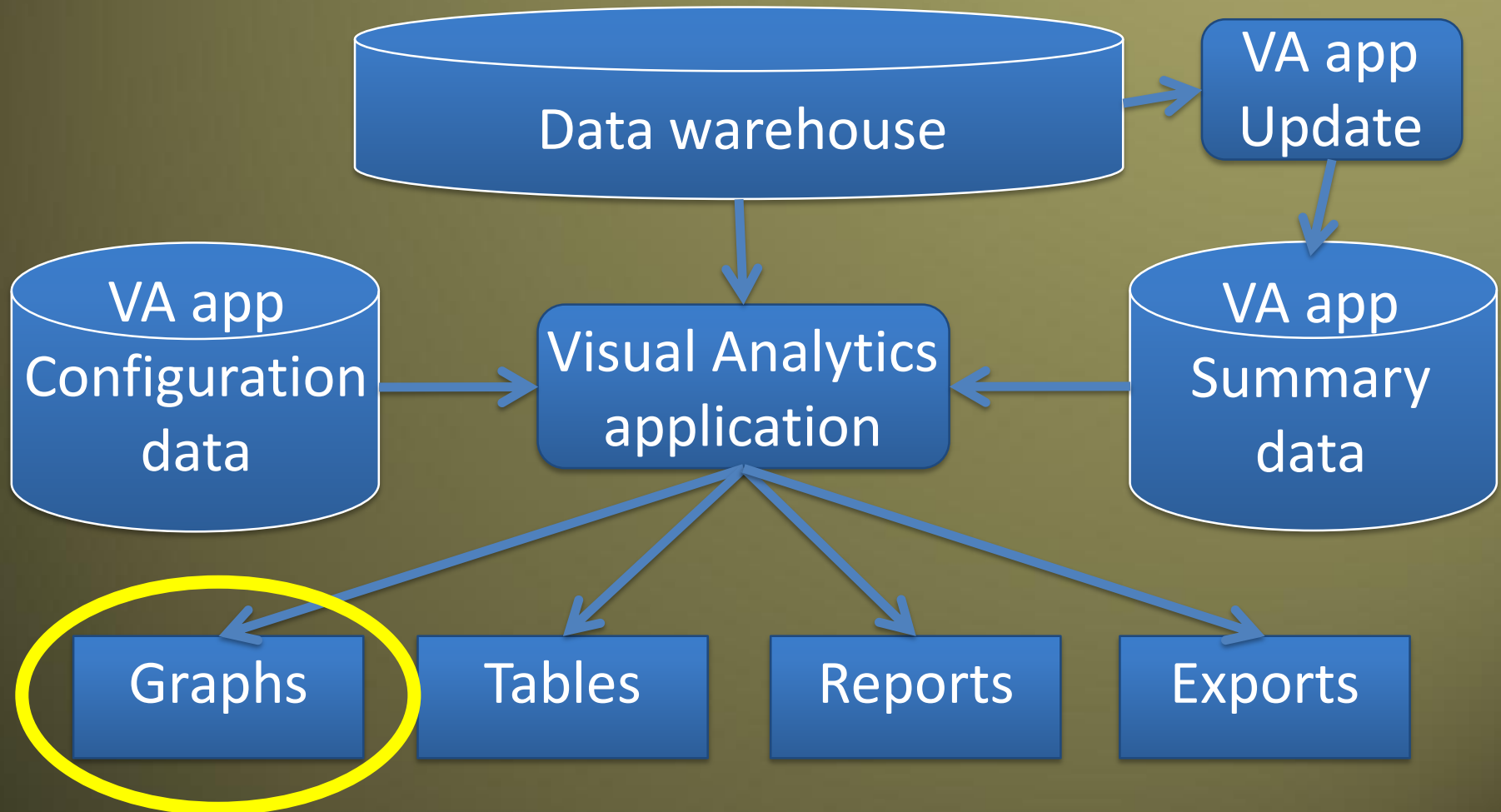
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Oil & Gas Data Warehouse

Context Diagram



Visual Analytics Application Context Diagram



Value of Visual Analytics

- ❑ Make data-driven decisions “very frequently”
- ❑ Make decisions “much faster” than market peers
- ❑ Execute decisions as intended “most of the time”



Vendor Demo Risk

