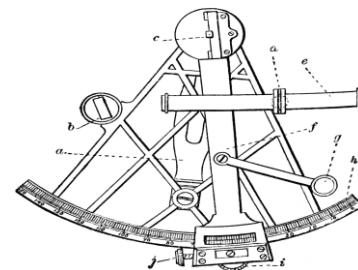


10 Steps to Success with Big Data in Pharma



1. Invest in Discovery

- Big Data Analytics = Discovery Analytics
 - Separate signal from the noise
 - Ask new (previously unanswerable) questions
- Just like lab tests that will inform drug development, do discovery that will inform / change / improve what you do
- Move from focus only on single process to interactions
 - What steps in development result in biggest progress?
 - What does it take to fail a potential drug candidate fast?



2. Start with ALL your enterprise data

- Big data analytics isn't just a skunk works project
- Start with your cleansed data that has been integrated in your enterprise data warehouse
- Are there hidden treasures in the data you've already invested in? That's what our customers have consistently told us.



3. Make it easy!

- Big data analytics in healthcare does not have to be
 - Hard labor
 - Time consuming
- Choose big data analytics technologies that
 - Support iterative analysis with very short cycles
 - Connect to familiar BI & stats tools
 - Shorten time-to-answer (and run-time)



How do we do that?

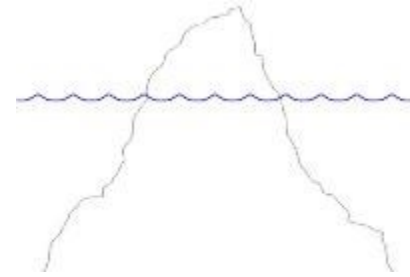
We connect your favorite BI & Stats tools to ALL the data using the latest analytics power tools

4. Embrace multi-structured data

- There's nothing to be afraid of – text, sensor, web-log, social media data doesn't bite
- You may have to learn new data management or analytics techniques
- There is a lot of it – estimates range from 70%-90% of enterprise data is multi-structured

How do we do that?

We offer ONE place for analytics on all your multi-structured & relational data



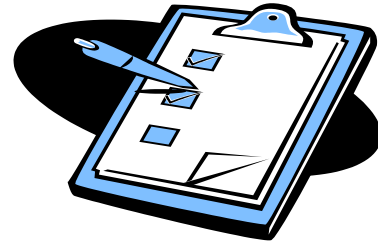
5. Best practices apply - don't forget them

- They may seem boring, yesterday's best practice domain of IT, but ignore these at your own peril
 - Data governance
 - Data integration
 - Data management
 - Testing, reconciliation
- No-schema approach to analytics has many benefits – use in the right place

GOOD
BETTER
BEST

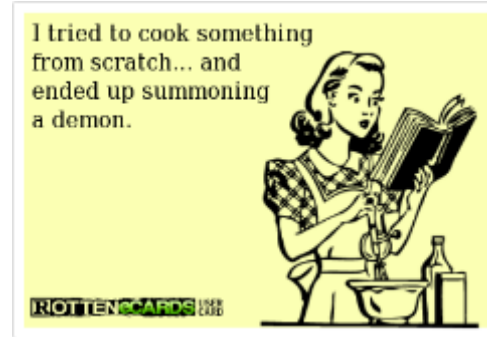
6. Set clear business objectives

- "If you don't know where you are going, you will wind up somewhere else." Yogi Berra
- Set out to prove that big data analytics can solve a riddle



7. Beware of solutions made from scratch

- “from scratch” might work for a great meal, but it takes too long for analytics
- Hand-made works for fancy shoes and boots, but not for Big Data Analytics
- Relational or Hadoop? = wrong question; use them together

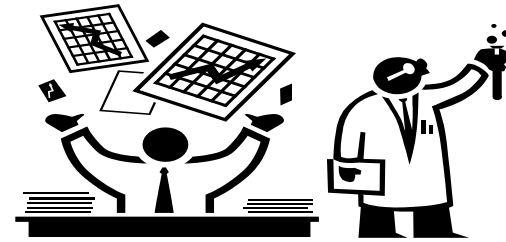


How do we do that?

Our Big Data Reference Architecture offers ONE place for analytics on all your data

8. Ramp up with an experienced team

- You have a very capable IT staff and brilliant healthcare analytics leaders – still, ask for help to get started
- Specific technology, tool and data scientist experience will jump-start your project
- Shadow the experienced team, learn and take over if you like

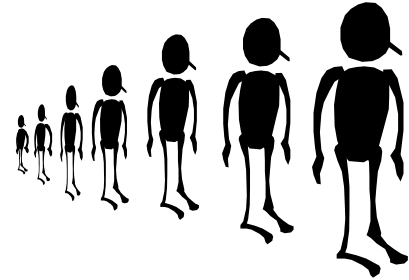


How do we do that?

We have one of the largest professional workforces dedicated to big data analytics

9. Plan to democratize analytics

- Open it up – don't limit analysis to a few highly paid data scientists
- You don't have to send every business analyst to training for Hbase, MapReduce, Impala, Hive, and Pig
- This early decision will affect the tools and partners you choose



How do we do that?

*your favorite BI & Stats tools
connect to all the data using the
latest analytics tools*

10. Try before you buy

- Choose a vexing business problem that you've already tried to solve with traditional approaches / tools / staff
- Ask others to show how they would solve it, and then pick the best according to what's important to you



How do we do that?

We want you to be convinced with the value by answering your questions on your data

Comments, Questions?

- Let me know if I can help

