Big Data in the Big Apple

Emerging Importance of the Power Data Analyst
June 13th 2014

Jim Kanzler – CEO Meta5

Introduction

◈ Jim Kanzler – CEO Meta5

◈ Meta5 Core Technology
  - Developed by ex-Xerox Parc employees
  - Over $100 Million in development effort has gone into our technology to date

Some Classes of BI Users

◈ Report consumers / managers

◈ Report Analysts

◈ Report Developers

◈ They all do great useful work, no question

◈ And then? There are "***Power Data Analysts***"

Example; Power Data Analyst

◈ Data analyst creates Competitive Briefing Book

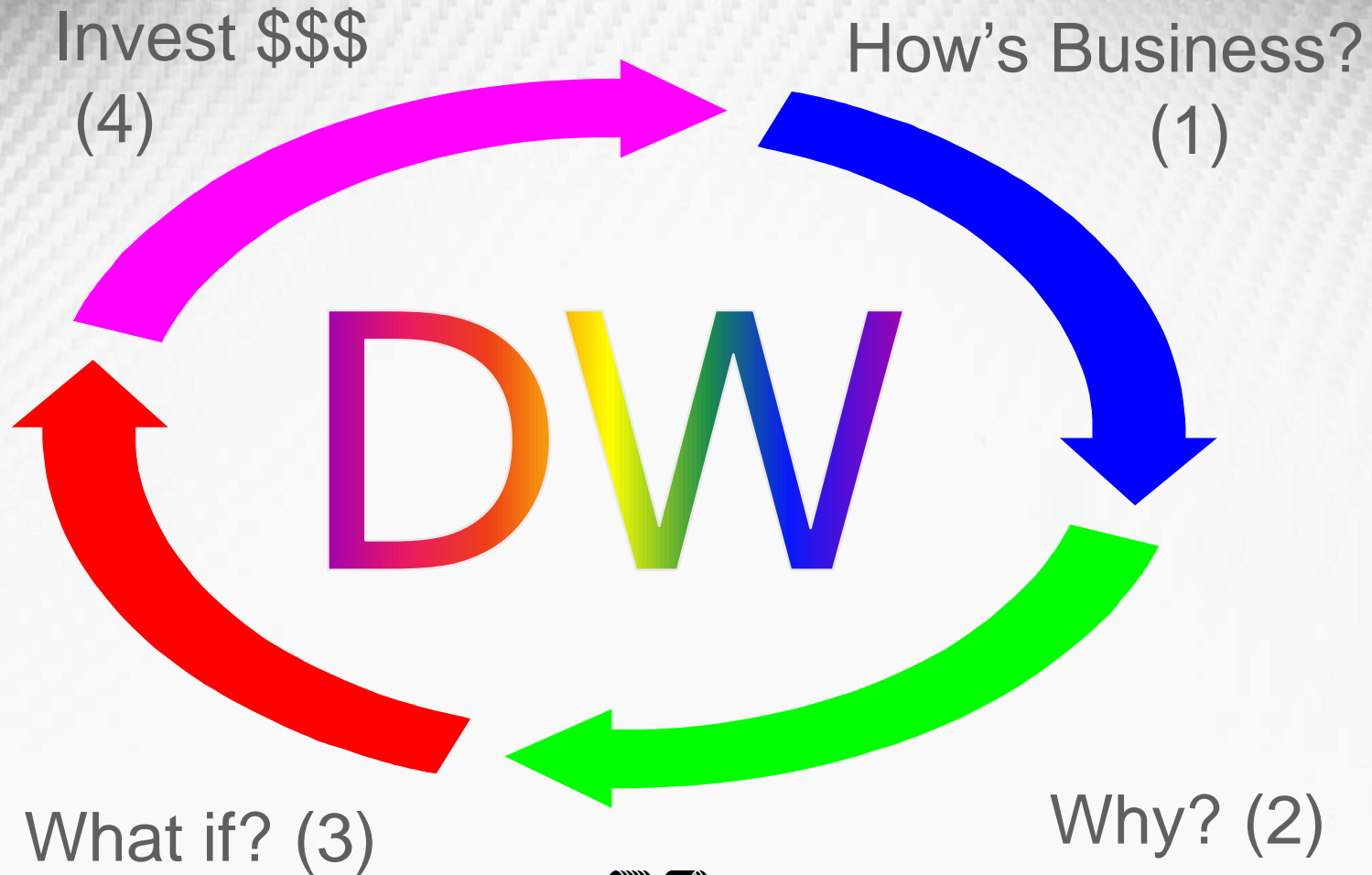◈ Used in Quarterly Board Meetings

◈ Just gets the job done, no excuses

4

Who is the Power Data Analyst

◈ Very knowledgeable about the business

◈ Influencer, attends important meetings

◈ Typically and Excel expert / maybe small DB too

5
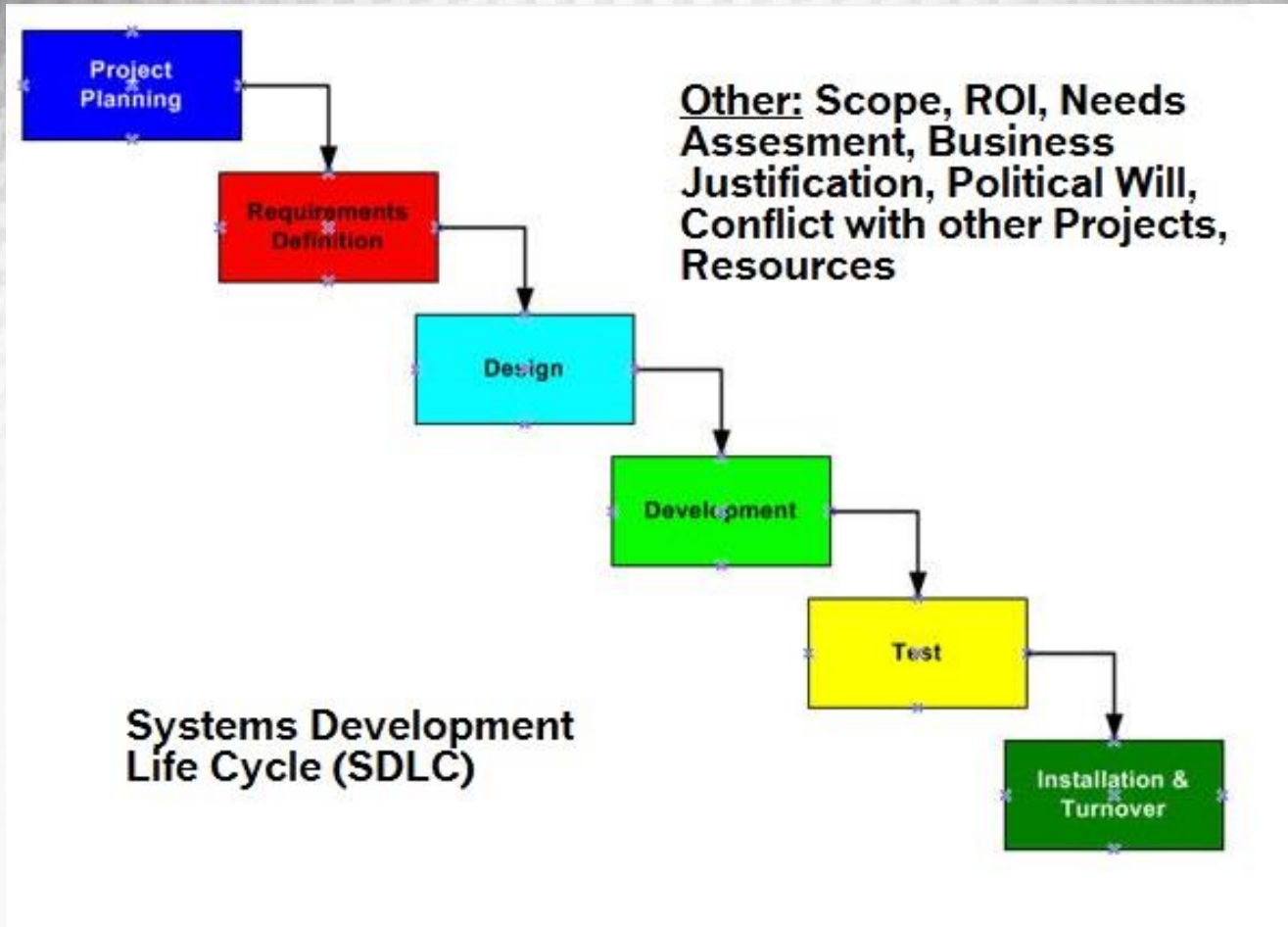
Management Decision Making Process

Invest $$$ (4)

How's Business? (1)
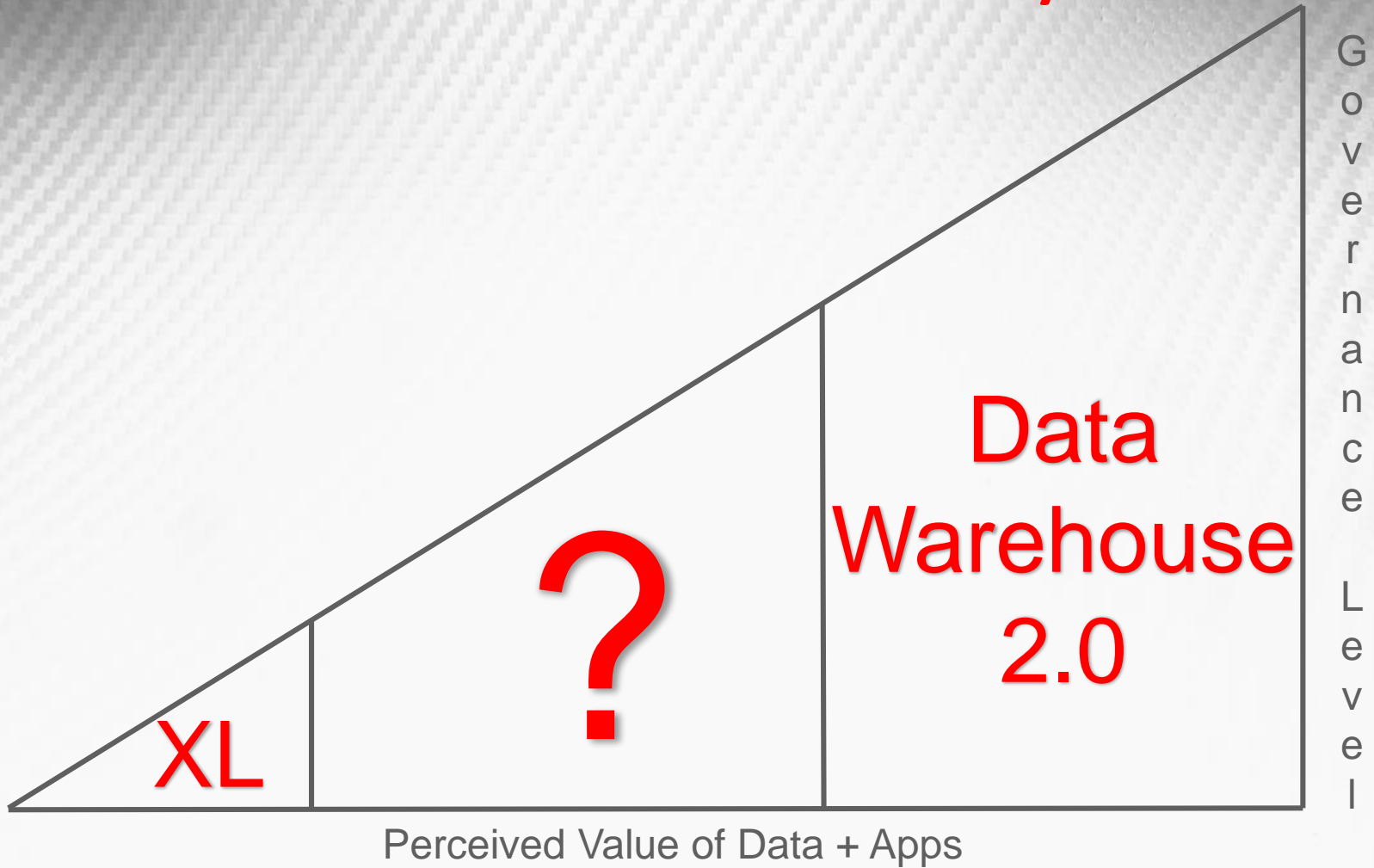
What if? (3)

Why? (2)

How are New Projects Started

Battle Between IT and Bus Users

◈ Battle of the Titans

◈ Conflicting concerns

◈ Business Users
 - Need it now

◈ IT
 - Application Control

Where are we today?

XL

?

Data Warehouse 2.0

Governance Level

Perceived Value of Data + Apps

What is the impact of "Big Data"

◈ Definition of "Big Data"

  ▲ Volume, Velocity, Variety, Veracity

◈ From Wikipedia.

  ▲ In 2012, Gartner updated its definition as follows: "Big data is high volume, high velocity, and/or high variety information assets that require <u>new forms of processing to enable enhanced decision making</u>, insight discovery and process optimization." Additionally, a new V "Veracity" is added by some organizations to describe it."

Why is it getting Worse?

◈ For DW each new data source requires:

◈ This takes time, money and IT people

◈ Growing and Growing…

Ok Jim

Good Problem Definition

Your Proposed Solution?

A New Way

◈Support Middle Tier operations

◈Skunk Works

◈Quick Agile

◈Combine Business and IT

◈Land of Power Data Analyst

Role it Plays

◈ Test new Ideas Quickly

◈ Reduce the Governance

◈ Get to some meaning new Results Quickly

◈ Alleviate Bottle Neck of IT

Why Have an "Idea Factory"?

◈So your business will improve

◈It could be the difference between success and failure

What are the outcomes?

◈ What are the results of this type of Agile, quick response environment, should all projects start here?

◈ Ends up being a big project out of control more people using it!
   That is GREAT!
      Now we have vetted the scope and requirements
      Real business input and iterations happen here.

◈ Value of data and or project not as big a deal as we thought.
   That's GREAT!
      Keep it there, its working limited in use and cost

◈ Project was a dud
   That's GREAT!
      We saved a lot of money not trying to do this on a large scale

Benefits of Idea Factory

◈ Quick turn around of ideas

◈ Cost effective ways to cull out the variety of Big Data

◈ IT Backlog reduced.

◈ Sets proper expectations to users regarding governance, accuracy and speed of performance

◈ Gets immediate value from ideas and information, instead of waiting

◈ Quick response to new business opportunities or problems

Tools for New Way

◈ Ad hoc data analysis of new data

◈ No or little need to write code

◈ Access to Data Warehouse

⮝ All existing Data warehouse data to be easily available

⮝ Including Unstructured/Complex data, Hadoop, XML, text etc

◈ Ability to integrate point applications in re-runnable fashion

⮝ So many tools are available: Need Business Intelligence Integration

◈ Ability to be semi production environment

⮝ A working sandbox, working prototype, "good enough"

◈ A learning based environment

⮝ All work should be easily leveraged by interested parties

⮝ We should not forget what did not work and why

Features for New Way

◈ *SPEED* of getting results

◈ MS Office Integration

- It is time for IT to embrace Excel/Word inside BI
- Downloading to Excel/Word is not "integration"

◈ MS Office Automation

- Remember the Competitive Briefing Book?
- A month of work converted to an app in 6 hours?
- No macros, no links, none of the usual Excel problems
- Need Excel Automation without the problems of Excel

◈ Ad Hoc Data Integration/ETL

- Agile development of "ETL" without using the DW ETL tools
- PDAs must have Ad Hoc ETL minus "cutting and pasting

Example Briefing Book

◈ Power Data Analyst complains in earshot of a Meta5 user

◈ Meta5 user replicates this work as an app in 6 hours

◈ Briefing Bk create time goes from 1 month to 2 hours

◈ Board gets a three month decision cycle advantage

◈ Meta5 user requested to attend board meetings

    ▲ Given 5 minutes to answer any question raised. Success rate is 95%.

    ▲ Really supports the goal of delivering value to the Management Decision Process

But I can do that already

◈ Really? Probably can, but time is critical

◈ Sounds like 1990 all over again

◈ But who has heard of:

- ⮝ Replacing a months excel work with an app in 6 hours?
- ⮝ Being able to rerun that work quarterly in a few hours?
- ⮝ Moving the board meeting up a month?
  - ◆ Thereby giving your company a competitive advantage?
- ⮝ Answering Board Member questions in 5 minutes 95% of the time?

◈ Project Sponsor Business Requirements

- ⮝ "I want the answer to any question I ask before I forgot why I asked the question. And no, I don't know what questions I will ask."
- ⮝ "If I finish my coffee before I get the answer? That's too long!"

Sobering Lessons

◈ What happens when you run out of good ideas?

◈ What happens if you can't do the MDMP fast enough?

  ▴ Ask GM, Ford, Crysler, Xerox, Kodak
  ▴ Ask IBM, Fanny May, Freddie Mac

◈ What happens when you have lots of good ideas **_and_** you can execute on them?

  ▴ Ask Apple, Google, Facebook, Oracle, SAP, MSFT, Samsung, Acer

◈ Good ideas + rapid MDMP = Business Success

◈ Where do you get "reliable inspiration"?

◈ How do you make MDMP rapid?

Increasing Importance of PDA

- ◈ Competition is becoming more information based
  - ▲ As opposed to product based
- ◈ Competition cycles are getting faster
- ◈ Product advantage is quickly eroded
  - ▲ iPhone vs Galaxy, HTC et al
- ◈ Customer touch points/channels are exploding
  - ▲ Google, Facebook, Twitter and other social networks
  - ▲ Phone, email, website, even catalogues
- ◈ Immediate response to situations can reap huge rewards
- ◈ Data volume, complexity, variety are increasing
  - ▲ Longer learning curves to master data in a company
- ◈ There is a better way, a new way
- ◈ "Idea Factory" of PDAs will be a competitive advantage

The Better Way

◈ Remain focused on the goal: ***Speed*** of MDMP

◈ Attack Big Data problems from the middle tier

◈ Use tools to enable Agile Big Data

◈ Invest to generate new ideas via "Idea Factory"

◈ Staff "Idea Factory" with PDAs from both Business & IT
- ⌃ Make the search for new ideas a real partnership

◈ Reward people for new ideas when they work
- ⌃ Both social and financial rewards

◈ "Think different" Most great ideas seem crazy at first!

Summary and Conclusions

◈ Recognize that there is a growing "mid tier" for data+apps

◈ You need to find a better way to keep up, the old way is just not working

◈ Big Data will give us a 10x variety problem

 ⌃ The variety of data has been exploding, it is not slowing up

◈ Big Data is a game changer, either learn to understand it, and evaluate it or someone else will

◈ Support your Power Data Analyst

◈ Include both business and IT you both have a lot to gain from this

◈ Change your corporate culture to mandate this

◈ Get the proper tools to support this group, just like 1990 they are out there

Thank You For Your Time

Emerging Importance of the Power Data Analyst
June 13th 2014

Jim Kanzler – CEO Meta5