

CAS RPM 2015

Crossing the Big Data Chasm

Subtitle: this talk is all Frank's fault

Jason Paschalides FIA FCAS

Big Data Video Clip From Youtube

<https://www.youtube.com/watch?v=LrNIZ7-SMPk>

Q: Months Since Originally Posted?

Clues From Clip:

- Youtube Text

Big Data Analytics is not just hype

- Forbes Quote

Big Data has grown up

- CEOs (all sectors)

How can my company use Big Data?

Video Killed The Radio Star



<https://www.youtube.com/watch?v=rS1TuTZ2Qw8>

As Applied To Technical Standards, We Are Not In Nash Equilibrium

http://en.wikipedia.org/wiki/Nash_equilibrium

with thanks to Matthew Lightfoot and CAE, October 2014

In many areas paradigms develop which become entrenched

The physicist Thomas Kuhn suggested how such paradigms develop

Inauguration

- ❖ Event occurs/new concept introduced which gives rise to a paradigm shift

Vigor

- ❖ Paradigm shift gives rise to whole new areas of research, new disciplines and practical applications

Dominance

- ❖ Paradigm comes to dominate activity in the area in which it occurred

Revolution/Evolution

- ❖ Event occurs showing paradigm's limitations and new ideas develop to replace the existing paradigm

Why The Insurance Sector Delay?

“It isn’t a new concept, just a new management consulting buzz phrase”

6.4% of Projects Succeed

Big Data vs
Distributed Data

Harmonizing 2 Data
Strategies

Crossing The Chasm,
Richard Childers

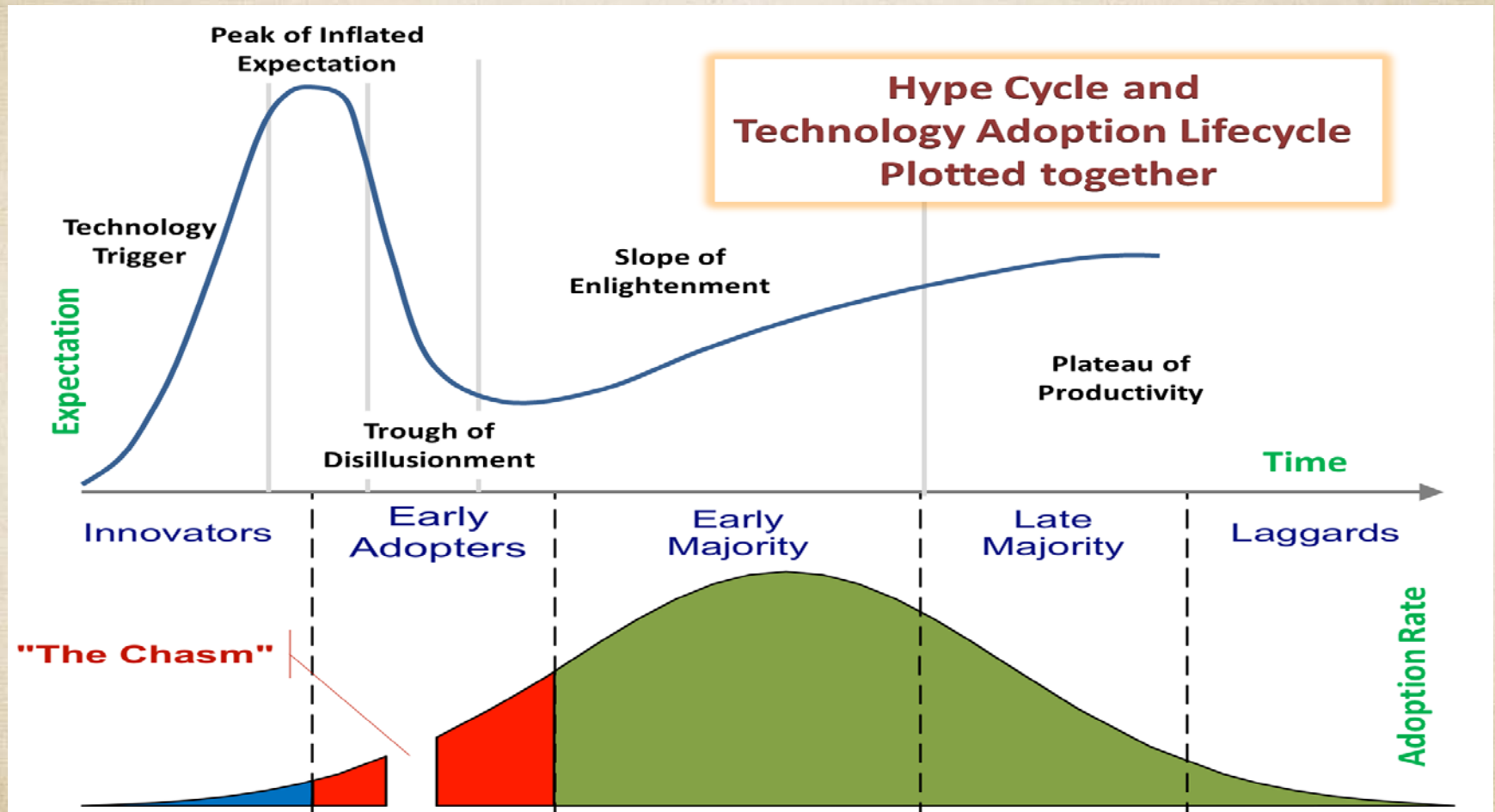
Visionary or
Pragmatist?

Simon Moss, Pneuron Corporation

<http://www.wired.com/2014/10/big-data-new-oil-or-snake-oil/>

Crossing The Chasm, Richard Childers

-Everett Rogers Technology Adoption Curve



https://www.linkedin.com/pulse/20141104090919-80844253-2-ways-big-data-can-make-you-happier?trk=tod-home-art-list-large_0

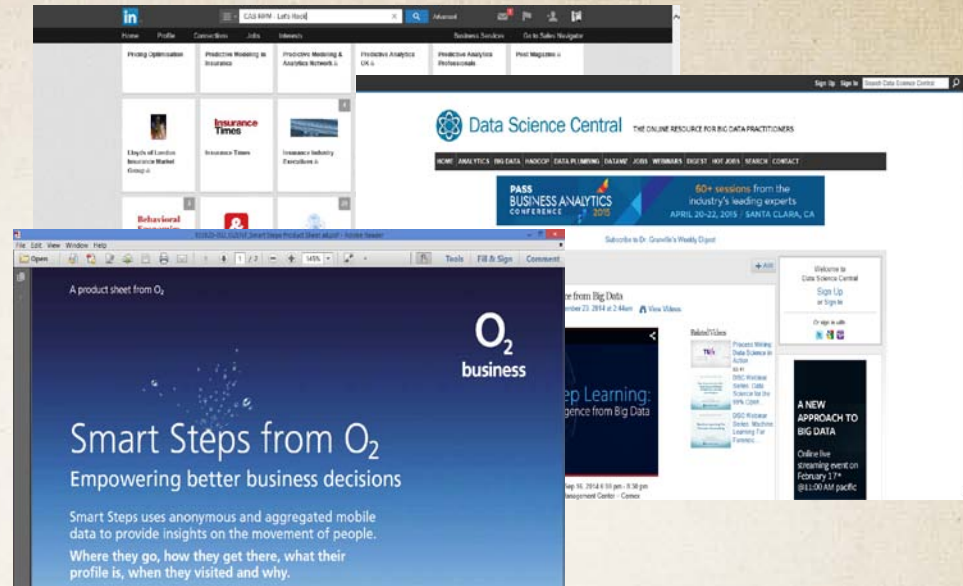
Getting Started – Storage



Getting Started – Access to Data

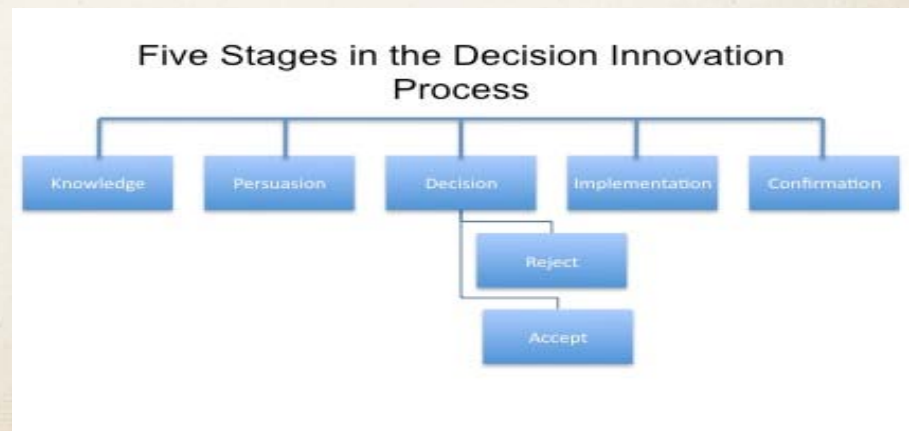
- ❖ Data Sources...no shortage
Open Source Forums
Bureaus
Left Field

<http://www.datasciencecentral.com/profiles/blogs/the-free-big-data-sources-everyone-should-know>



- ❖ The Hard Part?
Organizational Behavior
& Change Leadership

<http://www.bindeasy.com/insurance-automation-changing-culture/>



http://en.wikipedia.org/wiki/Diffusion_of_innovations

Getting Started – Modeling Tools

- Vendor v Open-Source Tools
(and governance)

R v Revolution

SAS v SAS HP

Python, etc.

<http://www.bing.com/videos/search?q=road+trip+the+python+sce+ne&FORM=VIRE5#view=detail&mid=1C4E23AD76324C4753871C4E23AD76324C475387>

- Machine Learning

<http://blogs.msdn.com/b/shishirs/archive/2014/05/30/machine-learning-resources.aspx>

- Visualization Tools

http://www.tableau.com/solutions/big-data-analysis?utm_campaign=Big%20Data%20-%20Big%20Opportunity%20Video%20-%20TEXT&utm_medium=email&utm_source=Eloqua&elq=ba3eb8fc4d1b4312bf250326214d31d6&

What?

Why?

When?

<http://www.verisk.com/isonet/insurers-looking-for-experts-to-handle-big-data-according-to-new-study.html>

http://blogs.msdn.com/b/shishirs/archive/2015/02/07/some-resources-to-get-started-with-machine-learning-using-azure-ml.aspx?utm_content=buffer35598&utm_medium=social&utm_source=linkedin.com&utm_campaign=buffer

<http://www.datasciencecentral.com/profiles/blogs/new-selection-of-40-machine-learning-big-data-resources-and>

http://www.datasciencecentral.com/profiles/blogs/64-new-external-resources-and-articles-about-data-science-big?xg_source=activity

<http://www.datasciencecentral.com/profiles/blogs/great-list-of-resources-data-science-visualization-machine>



Don't forget to download
Tableau Desktop



Getting Started – Further Education

- Why?

<http://www.analyticbridge.com/profiles/blogs/the-curse-of-big-data>

- Tertiary Education Courses

CAS Statistics Syllabus

<http://www.datasciencecentral.com/video/deep-learning-intelligence-from-big-data>

<http://www.analyticbridge.com/group/analyticscourses/forum/topics/mit-online-class-on-big-data>

- Data Science and Actuarial Groups

Common interest groups – CAS initiatives?

<http://deeplearning.net/tutorial/deeplearning.pdf>

Working Parties...

Advancing Predictive Modeling



ASTIN Working Group(s)

Current Development Themes, Crowd Sourcing Global Input

Big Data / Complex Analytics / Data Analytics /
Data Mining / [Insert Another Synonym Here]

Working party with the snappiest working title

Wide topic, any predictive modeler can contribute

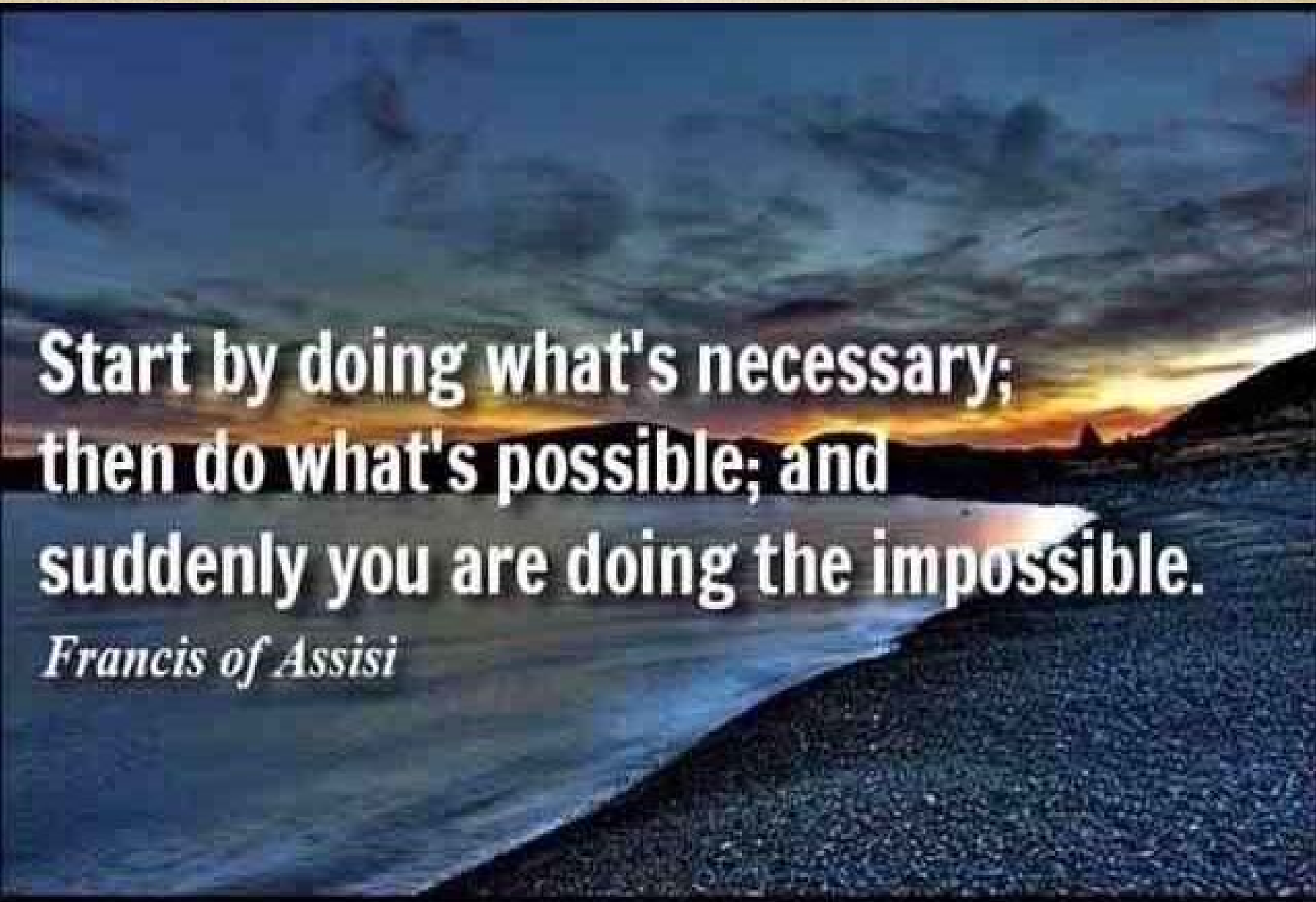
Phase 1: 5 actuaries, 1 data scientist, 1 data expert



Phase 2 Needs Your Input

[http://iaaastin.wikia.com/wiki/Main%20Page?wiki-welcome=1.](http://iaaastin.wikia.com/wiki/Main%20Page?wiki-welcome=1)





**Start by doing what's necessary;
then do what's possible; and
suddenly you are doing the impossible.**

Francis of Assisi