

The logo for CSO (Chief Security Officer) features the letters 'CSO' in a large, blue, serif font with a white outline. Below the letters, the text 'THE RESOURCE FOR SECURITY EXECUTIVES' is written in a smaller, black, sans-serif font.

THE RESOURCE FOR SECURITY EXECUTIVES

BREAKFAST



NAVIGATING THE RISKS IN IMPLEMENTING HYBRID CLOUD, AGILE AND PROJECT MANAGEMENT METHODOLOGY

ROB LIVINGSTONE

Principal, Rob Livingstone Advisory
Pty Limited

Fellow, University of Technology,
Sydney



Agenda

- Has business lost patience with Enterprise IT?
- Systemic vs. Technical risk.
- Aligning 'best practice' methodologies and technologies using 'agile'
- Along comes Cloud
- Orchestrating the transition - 5 Pointers



Has business lost patience with Enterprise IT?

"Despite an abundance of IT Project Management (ITPM) resources, such as the PMI Body of Knowledge, IT standards and governance, a large percentage of IT projects continue to fail and ultimately get scrapped. Recent studies have shown an average of 66% IT project failure rate, with 52% of the projects being cancelled, and 82% being delivered late"

Kraft (2008). The Importance of Business Process Alignment for IT Project Management of Commercial Software with Case Studies. Journal of Information Systems Applied Research, 1 (3)



Has business lost patience with Enterprise IT?

The answer has to be **'Yes'**

- Forces actively shaping the transformation of enterprise IT
- Other than the failure rate of enterprise IT projects....
 - The need to 'simplify IT' in the eyes of the users, plus
 - The 'need for speed' , plus
 - The need to cut costs.........Makes cloud particularly appealing compared to internal IT
- This can trump appropriate risk, total cost, project management governance in organisations aggressively shifting to the Cloud
- Where does that put the individual disciplines and conventional methodologies associated with application development, project and risk management?
- **The pressure on enterprise IT is mounting!**



Systemic vs. Technical Risk

Systemic Risks

- Systemic risks are those with the greatest potential impact as they affect the entire system (ie: Organisation, government, country, world...)
- How is that the finance industry, which is one of the more regulated, and invests heavily in risk identification, mitigation and transference could be the cause of the current global financial problems?
- Systemic risk *for the enterprise* is the silent killer and is often the hardest to identify as only a few have a complete, transparent and objective overview of the overall enterprise.
- Mitigation through approaches such as Enterprise Risk Management (ERM), origins in fraud, organisational governance, etc – Applicability to IT is evolving, however



Systemic vs. Technical Risk

Technical (or functional) Risk

- Identifying, categorising and ranking technical and functional risks is core to conventional IT risk assessment approaches:
 - Risk of a specific event = (Impact x Probability of that event occurring) + Risk Adjustment
- Underpins conventional risk certification frameworks e.g. ISO 2700X
- Certification does not necessarily equal security or effectiveness of your risk management model
- Often focusing on the diverse range of technical risks, does not account for the *interaction between risks*.
- Systemic risks are often more significant than the sum of the individual risks



Aligning 'best practice' methodologies and technologies using 'agile'

The focus is on ***agile***

1. What is agile?
2. Core values
3. Why agile?
4. Agile in application development
5. Agile in Project Management
6. Agile in Risk management



Aligning 'best practice' methodologies and technologies using 'agile'

1. What is agile?

Agile is about people, collaboration, working culture

2. Core values

Value **Individuals and interactions** over processes and tools

Value **Working software** over comprehensive documentation

Value **Customer collaboration** over contract negotiation

Value **Responding to change** over following a plan

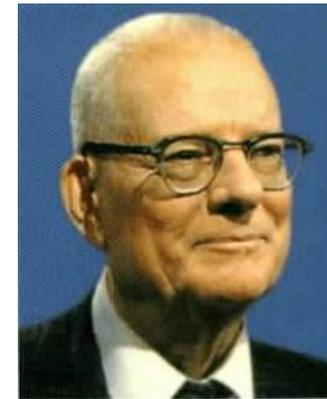
Agile manifesto - Published in 2001, a one-sentence narrative, four core values, and 12 principles
www.agilemanifesto.org

Aligning 'best practice' methodologies and technologies using 'agile'

3. Why agile?

'It is not necessary to change. Survival is not mandatory'

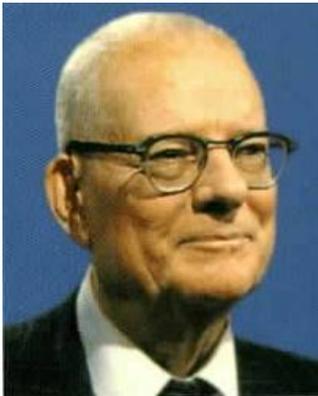
- W. Edwards Deming



William Edwards Deming
(1900 – 1993)

Aligning 'best practice' methodologies and technologies using 'agile'

3. Why agile?

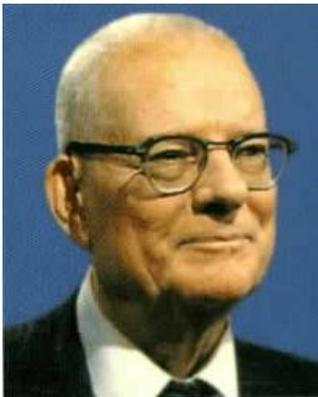


William Edwards Deming
(1900 – 1993)

- Agile has its roots in postwar Japan, and was embodied in the concept of Kaizen, or 'continuous improvement'.
- The father of agile was William Edwards Deming, who had a rather unique approach to that elusive attribute of **quality**

Aligning 'best practice' methodologies and technologies using 'agile'

3. Why agile?



William Edwards Deming
(1900 – 1993)

Kaizen has spawned a vast array of methodologies

- 'Lean'
 - JIT - Just in Time [manufacturing]
 - BPR - Business process reengineering
 - **Agile** (commonly refers to software development)
 - Six Sigma
 - Value stream mapping
- ... and many others



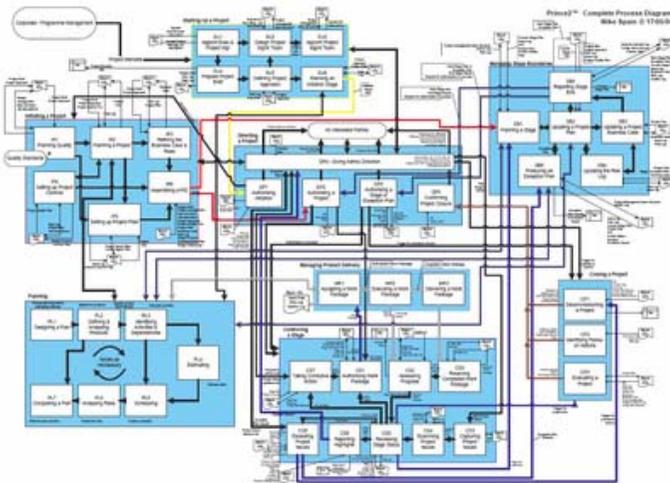
Aligning 'best practice' methodologies and technologies using 'agile'

4. Agile in application development

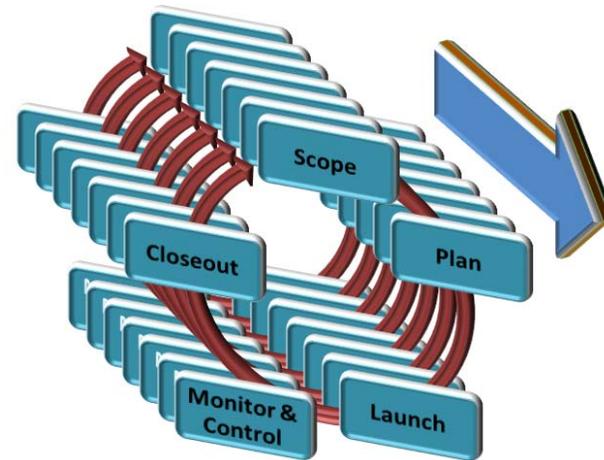
- Alternative to the 'waterfall' development methodology
- Agile variants include Scrum, Adaptive Software Development, eXtreme Programming (XP), Dynamic Systems Development, and Feature Driven Development
- Most commonly deployed version of 'agile' is in software development

Aligning 'best practice' methodologies and technologies using 'agile'

5. Agile in Project Management



Vs.

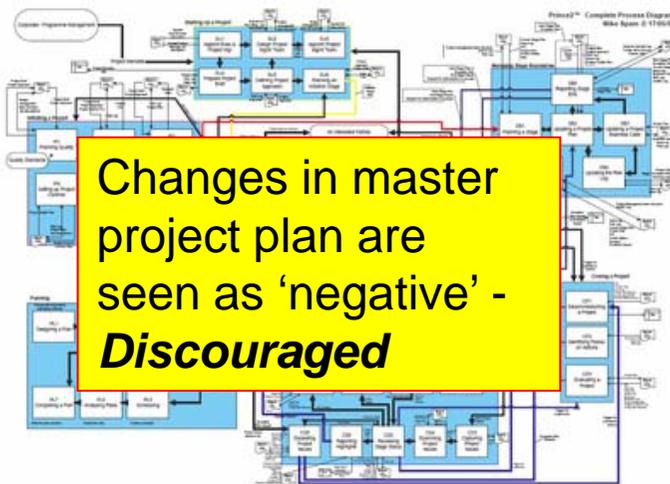


One-size-fits-all approach (PMBOK, PRINCE2)

Agile

Aligning 'best practice' methodologies and technologies using 'agile'

5. Agile in Project Management



Vs.



One-size-fits-all approach (PMBOK, PRINCE2)

Agile



Aligning 'best practice' methodologies and technologies using 'agile'

5. Agile in Project Management

Based on two important concepts.

1. Minimising risk by working on short iterations of clearly defined deliverables.
2. Direct communication between players in the development process is the default. (ie: Not exhaustive project documentation).

Rationale: Project team can rapidly adapt to the volatility in changing requirements or environment



Aligning 'best practice' methodologies and technologies using 'agile'

6. Agile in Risk Management

- Time horizon misalignments:
 - Agile is based on short time cycles
 - Conventional Risk Management: Time to identify, plan mitigation and implement Risk management over a comparatively long timeframe
- Categorisation of risks as part of the conventional Risk Management process not helpful in identifying the enterprise-wide systemic risks



Along comes Cloud....

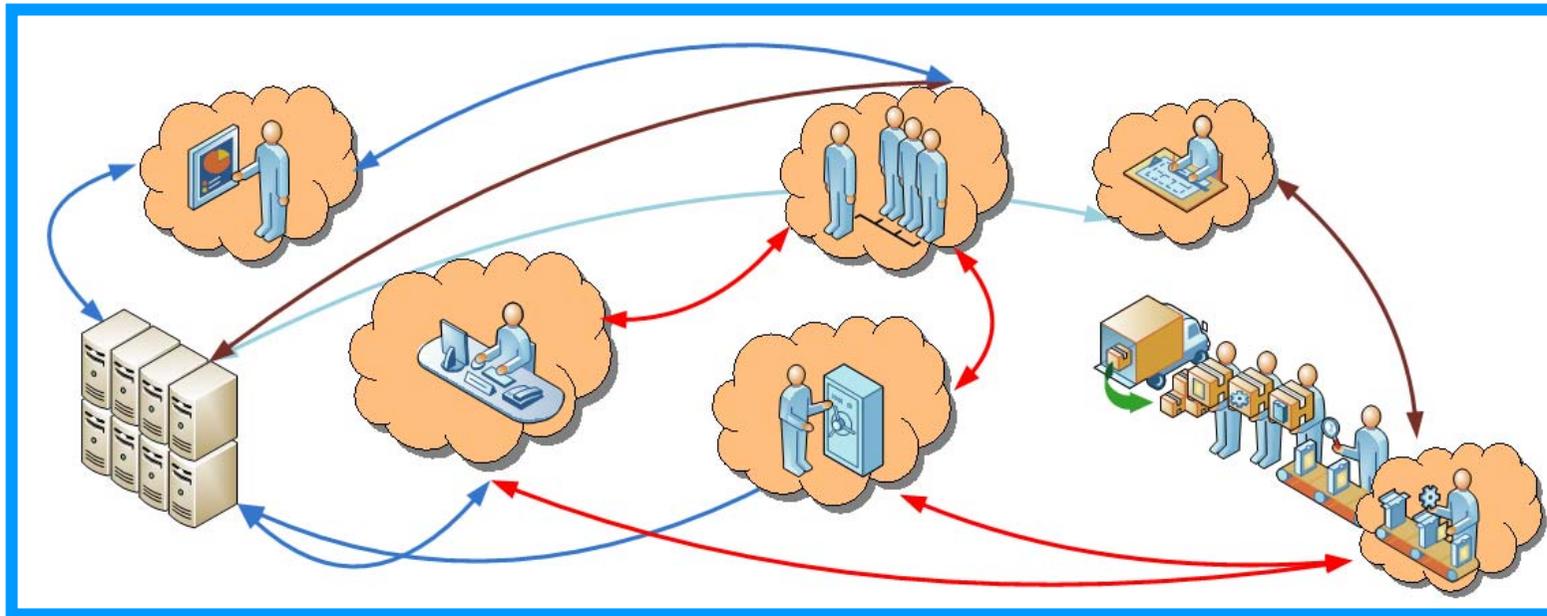
Hybrid will be the dominant form in the enterprise

“Within five years, it will be primarily deployed by enterprises working in a hybrid mode”. - Gartner

Gartner "Predicts 2012: Cloud Computing Is Becoming a Reality"
(Published: 8 December 2011 ID:G00226103)

Along comes Cloud....

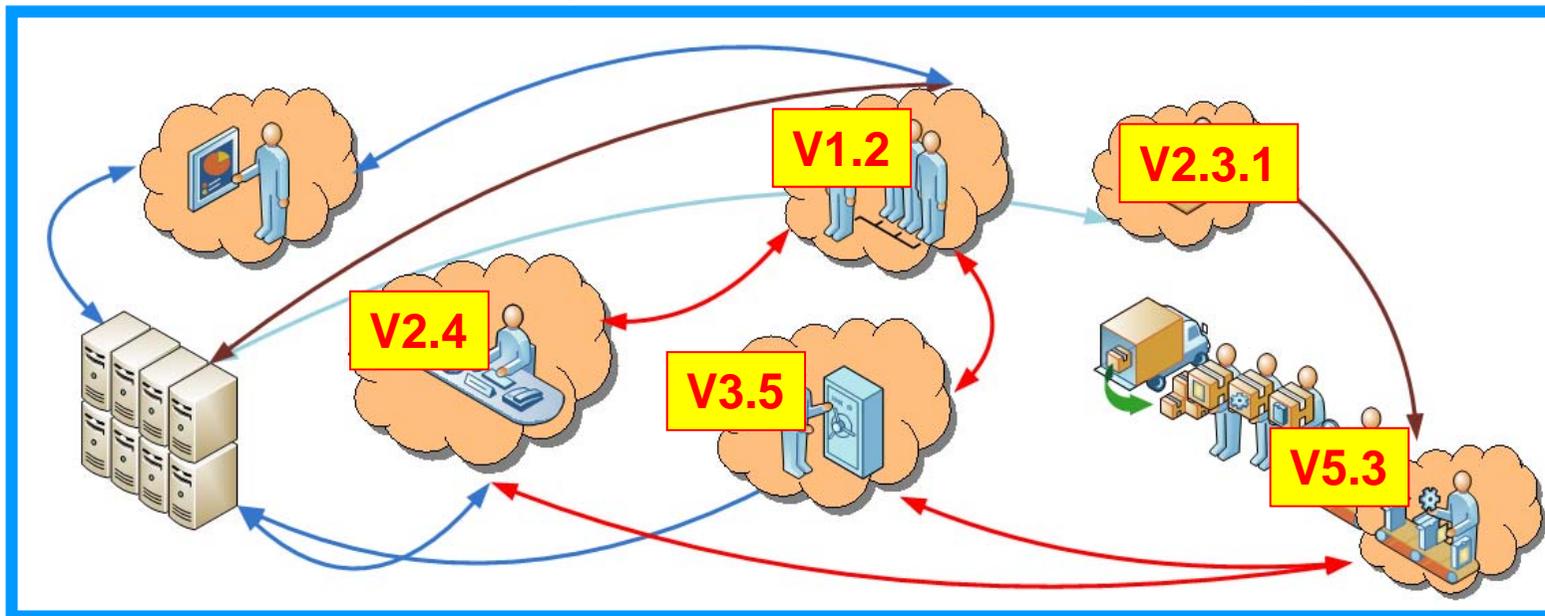
.... And with the Hybrid Cloud comes complexity....



Managing this ecosystem is not simple

Along comes Cloud....

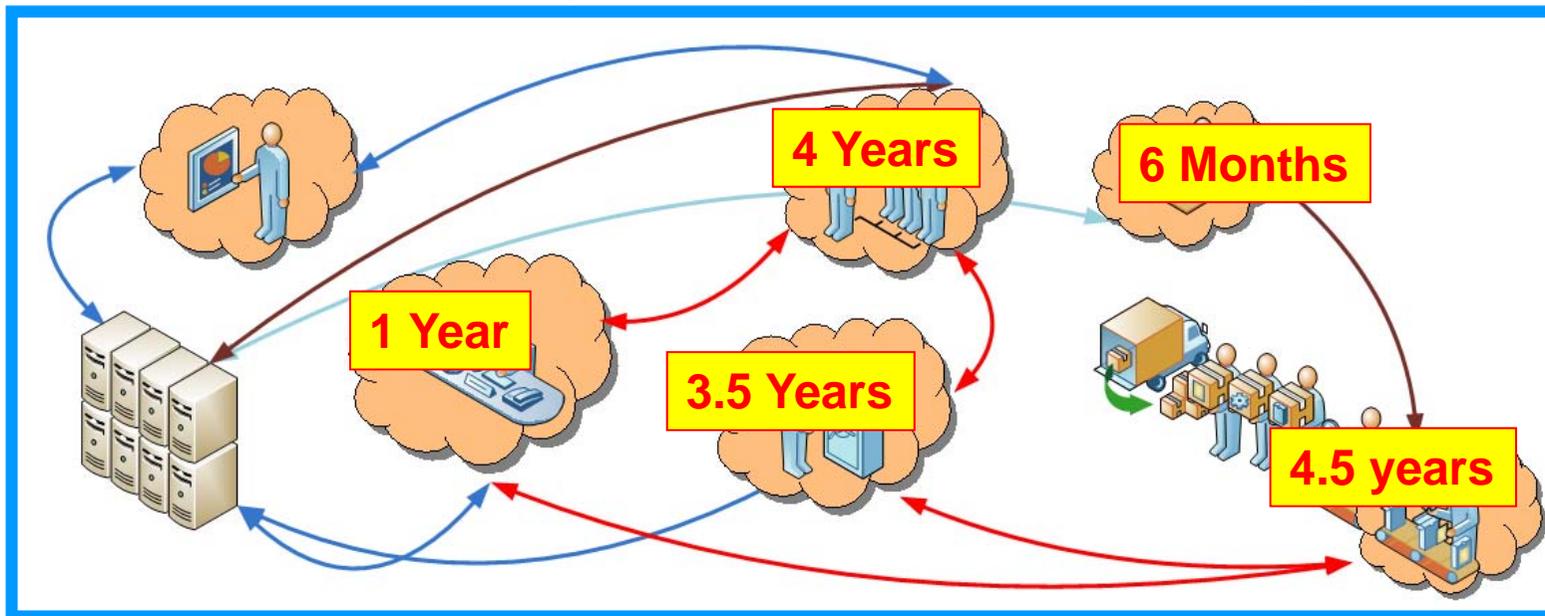
.... And with the Hybrid Cloud comes complexity....



Orchestrating versioning, change control and rollback

Along comes Cloud....

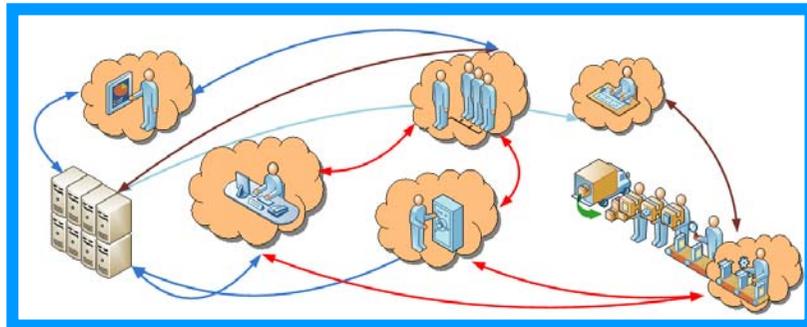
.... And with the Hybrid Cloud comes complexity....



Life expectancy

Along comes Cloud....

.... And with the Hybrid Cloud comes complexity....



Also:

- Business Continuity
 - Security
 - Identity Management
 - Due diligence
 - Forensics
 - BYOD
 - Mobility
 - Legislative / Jurisdictional
 - Contractual complexity
- To name but a few



Orchestrating the Transition

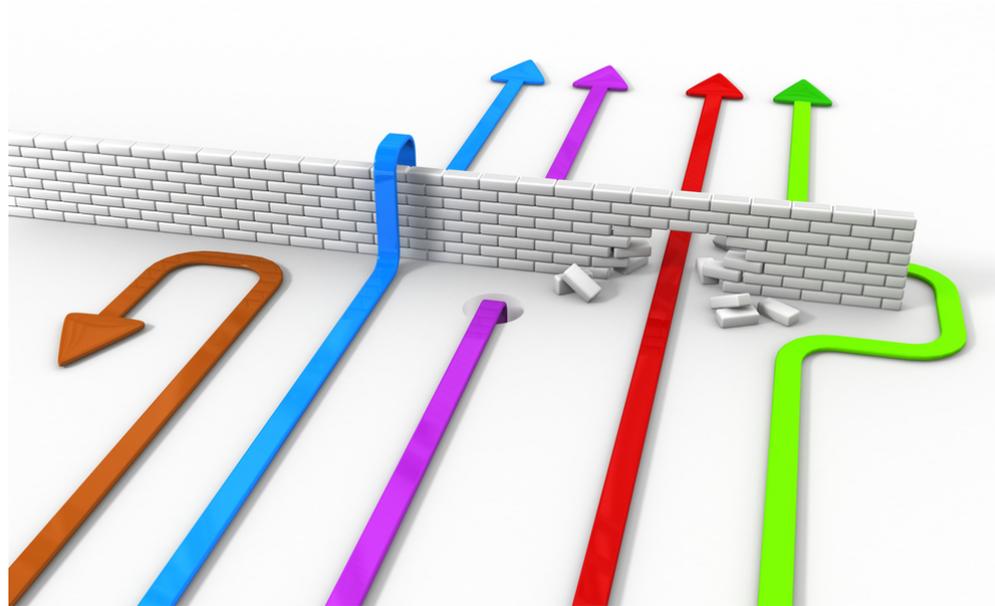
- **Agile*** is the expectation of enterprise IT by the business irrespective whether facilitated by Cloud or not.
- **Business and environmental volatility and uncertainty shortens investment cycles, and drives a focus on fast ROI**

What can senior executives do to ensure they can meet the perfect storm of enterprise IT ?

* The sentiment, not the methodology

Orchestrating the Transition

Consider these 5 pointers:





Orchestrating the Transition

#1: Adopt an integrated approach to function specific methodologies

- Standardised, traditional methodologies within specific disciplines such as Project Management, agile and information security, in and of themselves, are *self limiting*.
 - Each discipline is only really effective when applied in a coordinated orchestration with the other key moving parts of the organisation
- *Harmonization of functionally specific methodologies unleashes value and eliminates waste*



Orchestrating the Transition

#2: Manage the conflicting messages

- 24% of CEOs surveyed in the 2012 PWC CEO Survey expect ‘major change’.
 - The eighth annual KPMG 2012 Audit Institute Report identified “IT Risk and Emerging Technologies” as the second-highest concern for audit committees, which is unprecedented in the history of the report.
 - Cloud evangelists see cloud as imperative, others not
- *Develop an effective mechanism for interpreting these messages in the **context of your business***



Orchestrating the Transition

#3: Actively identify, embrace and managing shadow IT

“Shadow IT can create risks of data loss, corruption or misuse, and risks of inefficient and disconnected processes and information” – Gartner*

- *Embrace shadow IT, and define what and what is not eligible to be considered enterprise IT*

*CIO New Year's Resolutions, 2012 ID:G00227785)



Orchestrating the Transition

#4: Identify systemic risks across the organisation

- Systemic risks can kill your business
 - *Ensure your executives and key decision makers are aware of long term, systemic risks*
 - *Consider implementing Enterprise Risk Management (ERM)*



Orchestrating the Transition

#5: Don't gloss over complexity

- Senior managers with functional responsibility over specific vertical silos of the organisation may underestimate the overall complexity of their own business as a whole.
 - From a functional perspective, specific methodologies exist to support specific activities.
- Don't believe that simple IT solutions can paper over underlying business complexity. Test assumptions if critical.