Organisational Transformation to the use of DSDM Atern for Project Management and Delivery

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Why should DSDM Atern be the method of choice for Corporate Strength Agile?
Agenda

- Traditional vs Agile
- Scrum is synonymous with Agile
- Corporate Issues with Scrum-based Agile
- How DSDM Atern addresses these issues without compromising Agility
- Considering an Agile Transformation
The Traditional Approach

Managing the Development of Large Software Systems

Winston Royce 1970

Understand and define requirements
Define and design the solution
Build the Solution
Test the Solution
Get the Solution into live use
The Traditional Waterfall

Characteristics
• Big Up-front Analysis and Design
  ▪ Early and extensive effort to drive out and lock down detail

• Strong process and control
  ▪ Documented output of each step approved before moving on
  ▪ Each step the foundation of plans and intentions for the next
  ▪ All change formally assessed and controlled
  ▪ Heavy-weight documentation the anchor for parallel working and audit

Associated Flaws
• Foundation often proved wrong:
  ▪ Huge effort to create then a tortuous and ineffective approval
  ▪ Based on too many assumptions
  ▪ Fails to stand the test of time

• Inherent resistance to change
  ▪ Massively difficult to validate intention for the next step
  ▪ Labour intensive and restrictive to the point people work around it
Typical Outcomes

- Late & Over Budget*
  - Average: + 89%
- Poor Quality
  - Testing Squeezed
- Not Meeting the need
  - Scope Management with Waterfall Practices. No. 1 cause of failure for 82% of projects

Taylor, BCS Bulletin * 2001
A Surprise?

Well, it shouldn't have been
In case you were wondering...

This was Royce’s actual recommendation! Workableé But only in a slower paced world.
Agile: An Empirical Alternative

- Less emphasis on:
  - The futile quest for ‘the perfect specification’
  - Plans comprehensive enough to be executed by the unthinking
  - Trying to lock everything down in the vain hope that things will be easier to control

- More emphasis on:
  - Collective understanding of the need (rather than the requirement)
  - Harnessing the expertise and creativity of empowered teams to solve problems and build the right solution for the day of delivery
  - All roles and all disciplines involved throughout eliminating silos
We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

**People and Interactions** over Processes and Tools

**Working Software** over Comprehensive Documentation

**Customer Collaboration** over Contract Negotiation

**Responding to Change** over Following a Plan

That is; while there is value to the items on the right we value the items on the left more.

Kent Beck, Mike Beedle, Arie van Bennekum, Alistair Cockburn, Ward Cunningham, Martin Fowler, James Grenning, Jim Highsmith, Andrew Hunt, Ron Jeffries, Jon Kern, Brian Marick, Robert C. Martin, Steve Mellor, Ken Schwaber, Jeff Sutherland, Dave Thomas
With an acceptance that:

Documentation ≠ Understanding

Formality ≠ Discipline

Bureaucracy ≠ Quality
1970
Royce’s Waterfall
Adopted by US DOD

1980
Waterfall is the Global Standard

1988
Barry Boehm proposes iterative ‘Spiral’ Model

1990
DSDM Consortium introduces DSDM

1993
Kent Beck publishes Extreme Programming Explained

1999
DSDM Consortium introduces DSDM

2001
Agile Alliance Founded

2011
‘Agile’ is 10 years old
Scrum

- The most popular of the Agile Approaches
  - Wellé Scrumbut is probably more popular stillé

- With key eXtreme Programming practices embedded, Scrum is becoming synonymous with Agile for many

- A release cycle wrapping a delivery cycle wrapping a collaborative iterative development process
Scrum Overview

- Product Backlog
- Sprint Backlog
- Daily Scrum
- Sprint
- Burndown Chart
- Potentially Shippable Product Increment
- Sprint Planning
- Review
- Retrospective
The appeal of Scrum

Roles
- Scrum Team
- Scrum Master
- Product Owner

Ceremonies
- Sprint Planning
- Daily Scrum Meeting
- Sprint Review and Retrospective

Artefacts
- Product Backlog
- Sprint Backlog
- Burndown Chart

Values
- Commitment
- Focus
- Openness
- Respect
- Courage

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So why do so may organisations struggle to make it work?

- Conflicting philosophies
  - Agile different to the status quo
  - Requires a change in culture

- Also, *out of the box*, Scrum has:
  - Limited Project context
  - No Business Change context
  - No Governance context
  - Poor Scalability
Empowered, multi-disciplined, self-directed teams focused on and committed to incremental delivery of valuable software

In an environment where individuals exploit openness, mutual respect and trust and have the courage to do what is right rather than what is expected

What do we get if we duck those challenges?
Typical corporate philosophy?

teams committed to delivery of software

In an environment where individuals exploit and have the courage to do what is expected
Project Context

- Where does the backlog come from?
  - What is the big picture?
  - How is it shared and/or agreed?

- And before we starté
  - How long do we think the work will take?
  - What do we think the work will cost?
  - What is our predicted return on investment?

- And how about dependencies/constraints across projects
  - How are those identified?
  - How are they managed?
Business Systems Solutions are about:

- The software
- How the software is used for business advantage

Scrum is great for orchestrating development of software:

- Who identifies the business change required?
- Who builds that part of the solution?
- Who manages the implementation?
Governance Context

Doing the right things
- Prioritisation of projects in the portfolio
- Managing the allocation of resources to projects

Doing it right
- Business and System Architectures
- Legislative Compliance (auditable)

Being in control
- Controlled change to test and production environments
- Requirements Traceability (auditable)
Somebody else’s problem?

ï No!
ï Projects need to deal with all of these things

But that stuff doesn’t fit with [our view of] Agile
ï Tough!
ï That’s your problem!
Can we:

- Just ignore this stuff?
  - No not really
  - We have to be able to hook in to the corporate context

- Just wrap Agile with our current processes and guidelines?
  - No not really
  - The philosophies will be different probably fundamentally so
Solving the problem...

Real optionsé Can we:

- Make up our own wrapper?
  - Possiblyé
  - But this will take a lot of effort and great skill
- Use an approach from a consultancy or thought leader?
  - Possiblyé
  - But choose wisely é look for a real track record of success
- Use a tried and tested approach?
  - Ahé That will be DSDMé
  - An Agile approach developed by corporates for corporates
Corporate Strength Agile

- More sophisticated structure of roles and responsibilities
  - Aligning with corporate norms for responsibility and accountability

- Enhanced ceremonies, processes and artefacts
  - Providing demonstrable control, traceability and auditability

- A full project perspective
  - From concept through to benefit realisation

- Dovetailing with and in no way inhibiting
  - The Agile values so clearly defined in the Agile Manifesto
  - The Agile philosophy so eloquently defined by Scrum
Same team level delivery concept as scrum

Some of the names are different, of course

- **Sprint** = Timebox*
- **Product Backlog** = Prioritised Requirements List
- **Sprint Backlog** = Timebox Plan
- **Daily Scrum** = Daily Standup
- **Product Increment** = Evolving Solution

* Timebox is often more structured than a Sprint later
Roles

DSDM Atern

Business Domain

Product Owner

Solution Domain

Team

Scrum Domain

Scrum Master
Key DSDM Roles

- **Business Sponsor**
  - Responsible for the Return on investment

- **Business Visionary**
  - Big picture for the enhanced business

- **Technical Coordinator**
  - Technical quality and coherence

- **Project Manager**
  - Managing the world around the project

- **Business Ambassador**
  - Day-to-day guidance and assurance

- **Business Advisor**
  - Specialist input

- **Solution Developer / Tester**
  - Build the right solution

- **Business Analyst**
  - Facilitates shared understanding across roles

- **Team Leader**
  - Keeps the team focussed
With DSDM Atern, typically the Exploration and Engineering considerations are addressed together in a single timebox as they are in Scrum Sprint.
Soé If desired Scrum can simply be slotted into the wider-ranging DSDM Atern Process.
Get straight on with the next release

Revisit Foundations to validate/shape next release
Also align with the three domains

- **Business**
  - The what and the why

- **Management**
  - Planning and coordination

- **Solution**
  - Development and QA

Great depth and detail available in product set but **only to be created where they add value**

Decide on something as simple as Scrum where that is appropriate and/or use the depth and detail as required
The Corporate Challenges

How does DSDM address the corporate challenges?
- Project Context
- Business Change Context
- Governance Context

Through:
- Comprehensive and structured roles and responsibilities
- High level up-front work in Feasibility and Foundations
- Appropriate use of the rich product set
- Sophisticated Agile techniques to drive predictability:
  - MoSCoW Prioritisation
  - Timeboxing
DSDM Atern: Up-front Work

- Feasible solution (business and technical perspectives)
- Identify benefits likely to arise
- Outline possible approaches for delivery
- First cut estimates of timescales and costs
- Firm Business Foundations
- Firm Foundations for the Solution
- Firm Foundations for management of the project

High level only, not the detailed up-front analysis and design of traditional approaches
DSDM Atern: Rich Product Set

- Business Foundations
  - Business Vision
  - Business Case
  - Prioritised Requirements List
- Solution Foundations
  - Business Area Definition
  - System Architecture Definition
  - Development Approach Definition
- Management Foundations
  - Management Approach
  - Delivery Plan
  - Delivery Control Pack

Documents created where they add value, not by default
MoSCoW and the Business Case

- **Must Have**: Maximum 60% of total effort. Cover all the benefits agreed in the Business Case for the project.
- **Should Have**: Maximum 80% of total effort. Additional benefit not accounted for in the Business Case might be delivered.
- **Could Have**: Maximum 100% of total effort.
DSDM Atern: Timeboxing

- More Structure than other Agile approaches
- Control points: Auditable Timebox Review Records

Formal reviews include expert participants responsible for assessing whether the evolving solution is fit for purpose and meeting regulatory and other governance requirements.
Formality where appropriate

- Light, Focussed, Contemporary, Accessible

Example: Project Manager’s Workbook

- Created by the nlighten team and practitioners at Daiwa Capital Markets in Europe
Easier to sell to many corporates

- Built in project focus and governance hooks
- Broader scope than software integrated business change
- Appears less radical than other Agile approaches
- The same Agile heart as the others but with more structure
- Less Fragile at scale

However:

- Still requires a major change of mind-set for many people
- Full adoption takes skill, effort and commitment
Is far more about people than it is about process

- Defining and publishing a standard is easy
- Getting people to buy into and ultimately exploit a new way of working is difficult
- The former is a waste of time, effort and money without the latter

Everybody needs to understand and buy into:

- The detail of the new philosophy
- The implications of adopting that philosophy
- The day-to-day role they need to play in order to make it a reality
Leading Change

Based on the 8 Stage Process of Creating Major Change by John P. Kotter

1. Establish a sense of urgency
   - Expose problems with the status quo

2. Create a Guiding Coalition
   - Strong leadership by powerful players

3. Develop a Vision and Strategy
   - To frame and track effective change

4. Empower broad-based Action
   - Break the status quo & encourage creativity

5. Communicate the Vision and Progress towards it

6. Generate Short-term wins
   - Demonstrate success with pilot projects

7. Consolidate Gains
   - Reward successful behaviours
   - Push further and deeper into the Vision
   - Generate more Change
   - Promote & develop staff to new paradigm

8. Institutionalise the Change
   - Formalise the new way
   - Guard against regression

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Kotter’s Eight Causes of Failure

- Allowing too much complacency
- Failing to create a sufficiently powerful guiding coalition
- Under-estimating the power of Vision
- Under-communicating the Vision
- Permitting obstacles to block the vision
- Failing to create short-term wins
- Declaring victory too soon
- Neglecting to anchor the changes in the organisational culture
Thank you

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