Mission Not Impossible: Coaching Data Warehousing (DW)/Business Intelligence (BI) Teams

Scott Ambler
Scott Ambler

• Helps enterprise-class organizations around the world to improve their processes and organization structures
• Thought leader of:
  – Agile Modeling (AM) method
  – Agile Data (AD) method
• Co-creator of the Disciplined Agile (DA) toolkit
• Author of 20+ books
• scott [at] scottambler.com
• Advisory Board Member
  – SEMAT
  – ScaleFree
  – Architectural Thinking Framework
Results of this session will be blogged about at

DisciplinedAgileDelivery.com
Agenda

• Introduction to DW/BI
• Our Challenges
• Skills/Knowledge for Agile DW/BI Coaching
• Successfully Engaging with Agile DW/BI Teams
• Hiring an Agile DW/BI Coach
• Parting Thoughts
Introduction to DW/BI
High-Level Logical DW/BI Architecture

Data Warehousing

- Operational Data Source (ODS)
- Extract and Load (EL)
- Staging Area
- Extract Transform Load (ETL)
- Data Warehouse/Data Vault
- ETL
- Data/Info Mart(s)
- Raw Data Mart(s)

Business Intelligence (BI) Environment
- Ad-hoc queries
- Ad-hoc report
- Enterprise reports
- Multi-dimensional analysis
- Data mining
- Statistical analysis
- What-if reporting
- Analytics
- Dashboards
- ...

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Our Challenges
Exercise: What Challenges Do You Face?

• 8 minutes

• Round table discussion:
  – What challenges are you currently facing, or believe you will face, when coaching DW/BI teams to become more agile?

• Capture top 5 challenges, one per sticky

Concise Idea

Long winded description that nobody will read or if they do will not understand because you still didn’t capture the context of your discussion
Please Share Your Challenges

• Please bring your stickies up to the flip chart

• When you place your stickies, look at the existing ones first and try to place any similar ideas together (affinity grouping)
Cultural Impedance Mismatch

- Developers
  - Have embraced evolutionary, and now agile and lean, strategies for over two decades
  - Are generally weak on data skills
- Data professionals
  - Just now starting to embrace agile strategies for DW/BI
  - Are generally weak on development skills

Source: Agiledata.org/essays/culturalImpedanceMismatch.html
Current State: Database Testing

- 88% of organizations considered data to be a corporate asset

- Of those that do, only:
  - 66% were doing manual testing of their data sources
  - 49% had automated checks on external data
  - 45% were doing automated regression testing of data sources
  - 36% were doing data security/privacy testing

Source: SA+A 2018 Data Quality Survey
93% of respondents indicated that their organization had data quality problems

Their strategy to fix the problems:

- **Database refactoring**: 44%
- **No strategy to fix**: 27%
- **Hope we don't make it worse**: 29%
- **Rewrite all applications at once**: 0%

Source: SA+A 2018 Data Quality Survey
Skills/Knowledge for Agile DW/BI Coaching
Exercise: What Skills/Knowledge Do We Need?

• 8 minutes

• Round table discussion:
  – What skills/knowledge does someone require to successfully coach an Agile DW/BI team?

• Capture top 5 skills/knowledge areas, one per sticky

Concise Idea

Long winded description that nobody will read or if they do will not understand because you still didn’t capture the context of your discussion
Please Share Your Ideas

• Please bring your stickies up to the flip chart

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The Agile Database Techniques Stack for DW

Resource: AgileData.org
Business Intelligence (BI) Skills

- Critical Thinking
- Data Analytics
- Data Visualization
- User Experience (UX) Design
- Tooling
- Machine Learning
- System Thinking
Successfully Engaging With DW/BI Teams
Exercise: How Can We Successfully Engage?

- 8 minutes

- Round table discussion:
  - What does an agile coach need to do to successfully engage with an agile DW/BI team?

- Capture top 5 strategies, one per sticky

Concise Idea

Long-winded description will not be read or understood because you still didn’t capture the context of your discussion.
Please Share Your Strategies

• Please bring your stickies up to the flip chart

• When you place your stickies, look at the existing ones first and try to place any similar ideas together (affinity grouping)
Hiring an Agile DW/BI Coach
Exercise: Hiring an Agile DW/BI Coach?

• 5 minutes

• Round table discussion:
  – You’ve been asked to help write a job ad for an Agile DW/BI coach. What quality should candidates have?

• Capture top 5 qualities, one per sticky
Please Share Your Strategies

• Please bring your stickies up to the flip chart

• When you place your stickies, look at the existing ones first and try to place any similar ideas together (affinity grouping)
Parting Thoughts
Coaching agile DW/BI teams requires flexibility, skill, experience, and significant support.
Start where you are,
do the best that you can given the situation that you face,
and always strive to learn and improve over time.
Questions?
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Thank You!

scott [at] disciplined-agile.com
Twitter: @scottwambler

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