Learning Objectives

During our time together we will:

1. Discuss why we keep talking about Agile.

2. Learn the background of Waterfall and Agile & how they differ

3. Read the Agile Manifesto and discover the foundation of an agile mindset

4. Understand the 12 principles that guide agile business analysis and their relationship to The Business Analysis Core Concept Model ™ (BACCM)

5. Explore the Three Horizons of Agile Business Analysis
Agile is **NOT A SILVER BULLET.**
Studies of projects between 2011-2015 show the fail rate of traditional projects is more than 3X higher than agile methods.

Comparative Statistics

**Waterfall STATISTICS**
- Successful: 11%
- Failed: 29%
- Challenged: 60%

**AGILE STATISTICS**
- Successful: 39%
- Failed: 9%
- Challenged: 52%

Recent Improvements

WATERFALL STATISTICS

- Successful: 26%
- Challenged: 53%
- Failed: 21%

AGILE STATISTICS

- Successful: 42%
- Challenged: 50%
- Failed: 8%

Statistical source: The Standish Group, The Chaos Report, 2018 per Vitality Chicago
Waterfall methodology is a traditional sequential software development life cycle. This is the predominant development method that has been used for decades.

- The scope and plan is laid out at the beginning of the project.
- Each step must be completed before moving on to the next step.
- The project is tracked by scheduled milestones.
- “Water does not flow uphill.”
During the 1980's the software industry was dominated by industrial views and beliefs.
This meant that software development was treated the same as traditional manufacturing.
- Structure is clear and simple.
- The final product is completely defined early before construction begins.
- It is very methodical so it is well organized and heavily documented.

Expectation was for the team to simply execute tasks that were predetermined.
The Agile Mindset

The History of Agile

Waterfall Model (Winston W. Royce)

1970 - 1974

Concept of “Adaptive Software Development” (Edmonds, E. A.)

1980

Rapid App. Development (James Martin)

1990

Scrum (Ken Schwaber, Jeff Sutherland)
Adaptive Software Development (ASD) (Jim Highsmith, Sam Bayer)
FDD (Jeff De Luca)
DSMD (DSDM Consortium)

1991 - 1996

Crystal Clear (Alistair Cockburn)
XP (Kent Beck, Ward Cunningham and Ron Jeffries)

2000

Agile Manifesto

2001

Lean SW Dev. (Mary & Tom Poppendieck)

Source: www.visual-paradigm.com
The Agile Manifesto

“We are discovering better ways of developing software by doing it and helping others do it.”

Through this work we have come to value:

- We value **customer collaboration** over contract negotiation.
- We value **individuals** over processes and tools.
- We value **responding to change** over following a plan.
- We value **working software** over full documentation.

**REMINDER:** “Over” is not the same thing as “instead of”.
# The Agile Mindset

## Waterfall vs. Agile

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Philosophy</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Methods</td>
<td>• A comprehensive system of beliefs.</td>
</tr>
<tr>
<td>• Practices</td>
<td>• View</td>
</tr>
<tr>
<td>• Rules</td>
<td>• General principle</td>
</tr>
</tbody>
</table>

![Diagram of Philosophy, Approach, and Methodology](image)

 Philosophies:

- Philosophy: A comprehensive system of beliefs.
- Approach: A way of working that is adaptable and iterative.
- Methodology: A set of practices and rules for following the approach.
Agile software development is a philosophy based on an incremental, iterative approach.

- Open to changing requirements over time.
- Encourages constant feedback from the end users.
- Seeks continuous improvement.
- Progress is tracked by the production of working software.
Cone of Uncertainty

Source: Matt Montemurro, CIC BA
The Agile Mindset

Light Weight

- Scrum
- Lean software development
- Kanban (process + method)
- Extreme Programming (XP)
- Continuous Integration (CI)
- Continuous Delivery (CD)
- Feature Driven development (FDD)
- Test Driven Development (TDD)
- Crystal Clear

Multi-Team Approaches

- Scrum-of-Scrums
- Scrum at Scale (Scrum@Scale)
- Large-scale Scrum (LeSS)
- Scaled Agile Framework (SAFe)
- Disciplined Agile Delivery (DAD)
- Dynamic Systems Development Method (DSDM)
- Agile Project Management (AgilePM)
- Agile Unified Process (AUP)
- Open Unified Process (OpenUP)
How do we move this?
$$X = 3 + \frac{6(11 + 1 - 4)}{8 \times 2}$$
Mathematical Order of Precedence (PEMDAS)

\[ 3 + \frac{[6(11+1-4)]}{8 \times 2} \]

\[
3 + \frac{[6(11+1-4)]}{8 \times 2} \\
3 + \frac{[6(8)]}{8 \times 2} \\
3 + \frac{48}{8 \times 2} \\
3 + \frac{6 \times 2}{8 \times 2} \\
3 + 12 \\
6x2 = 12 \\
[6(8)] = 48 \\
(11+1-4) = 8 \\
48/8 = 6 \\
3+12 = 15
\]
15 = 3 + [6(11+1-4)]/8 \times 2
The Agile Mindset

Mathematical Order of Precedence (PEMDAS)

Show Your Work

3 + [6(11 + 1 - 4)] / 8 * 2
The Agile Mindset

1. **Satisfy the customer**

2. **Welcome change**

3. **Deliver frequently**

4. **Work together**

5. **Trust and support**

6. **Face-to-face conversation**

7. **Working software**

8. **Sustainable development**

9. **Continuous attention**

10. **Maintain simplicity**

11. **Self-organizing teams**

12. **Reflect and adjust**
The Agile Mindset

Members of the Northeastern women’s basketball team help push their bus out of a jam during a snow storm in Philadelphia on March 7, 2018. Courtesy of Northeastern University. Stephen Hewitt, Boston Herald  Wednesday, March 07, 2018

The Agile Manifesto
The Agile Mindset

Agile Extension to the BABOK® Guide

“The 7 Fundamentals of the Agile Mindset”

Source: IIBA BABOK 3.0
International Institute of Business Analysis™ (IIBA®)

Source: IIBA The Agile Extension v2.0
International Institute of Business Analysis™ (IIBA®)
Strategic Horizons

Work at the organizational level.

Jill Peters, Artist
Help make informed decisions regarding the organization's business goals.

- Scope of analysis is broad.
- Level of detail stops before getting into details of specific initiatives.
Some Extension Techniques:
- Planning Workshop
- Product Roadmap
- Relative Estimating (S,M,L)
- Value Stream Mapping
- Visioning

BABOK Techniques:
- Backlog Management
- Benchmarking
- Business Cases
- KPIs
- Organizational Modelling
- Risk Analysis
- SWOT Analysis
- Vendor Assessment
The Agile Mindset

Agile Extension Horizons

INITIATIVE
Work needed to deliver a specific product.

Jill Peters, Artist
The Agile Mindset

INITIATIVE HORIZON

Help make informed decisions surrounding the definition and delivery of a solution that satisfies a need identified at the Strategy Horizon.

- Scope of analysis surrounds the identification and definition of a solution that satisfies a need identified at the Strategic Horizon
- Level of detail is the list of components and their priority
- Mid-term outlook: generally a 1 – 3 months
<table>
<thead>
<tr>
<th>Some Extension Techniques:</th>
<th>BABOK Techniques:</th>
<th>BABOK Techniques:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning Workshop</td>
<td>Backlog Management</td>
<td>Interviews</td>
</tr>
<tr>
<td>Story Decomposition</td>
<td>Brainstorming</td>
<td>Prioritization</td>
</tr>
<tr>
<td>Relative Estimating</td>
<td>Data Dictionary</td>
<td>Process Modeling</td>
</tr>
<tr>
<td>Value Stream Mapping</td>
<td>Data Modeling</td>
<td>Prototyping</td>
</tr>
<tr>
<td>Personas</td>
<td>Functional Decomposition</td>
<td>Stakeholder / Personas</td>
</tr>
<tr>
<td>Retrospectives</td>
<td>Glossary</td>
<td>Risk Analysis</td>
</tr>
<tr>
<td></td>
<td>Vendor Assessment</td>
<td></td>
</tr>
</tbody>
</table>
DELIVERY
Work happens.

Jill Peters, Artist
Elaborate on user stories for the team to implement as working increments of the solution.

- Scope of analysis surrounds the successful delivery of backlog items.
- Detail Level for daily team support and focus.
- Short term outlook: Focuses on day-to-day delivery of backlog items.
Some Extension Techniques:
- Story Decomposition
- Story Mapping
- Relative Estimating
- Value Stream Mapping
- Personas
- Retrospectives

BABOK Techniques:
- Backlog Management
- Brainstorming
- Data Modeling
- Functional Decomposition
- Glossary
- Interface Analysis
- Interviews

- Prioritization
- Process Modeling
- Prototyping
- Stakeholder / Personas
- Risk Analysis
Figure 3.2.1: Three Planning Horizon

**Strategy Horizon**
- Decisions:
  - Is a need worth satisfying
  - Create a new initiative
  - Change existing initiatives
  - Cancel existing initiatives

**Initiative Horizon**
- Decisions:
  - What features should we deliver and in what order
  - Continue, change or cancel the initiative

**Delivery Horizon**
- Decisions:
  - What aspects of the feature should we work on and in what order
  - Do we have enough to deliver

Source: IIBA The Agile Extension v2.0
International Institute of Business Analysis™ (IIBA®)
New IIBA Certification: IIBA Agile Analysis Certification (IIBA – AAC)

IIBA – AAC Introduction Summer 2018

Target Audience:
• Business Analysts
• Agile Team Members
• Anyone wishing to understand business analysis in the agile environment

Why Now?
• According to the 2017 IIBA Annual Business Analysis Survey, Agile was one of the top 3 areas that BA professionals perform their work.
• More organizations are adopting agile approaches.
• Business analysis is often the key skill missing from most agile environments.
• Many organizations don’t know how business analysis fits into agile.
New IIBA Certification: IIBA Agile Analysis Certification (IIBA – AAC)

• No eligibility experience required. However, 2-5 years of Agile related experience is recommended.

• Steps:
  1. Complete registrations form
  2. Pay exam fee
  3. Schedule the exam
  4. Take exam
  5. Pass exam
  6. Recertify every 3 years
IIBA – AAC EXAM

- Based on the IIBA Agile Extension Guide 2.0
- You can save 15% on a PDF version now until August 31
- 85 multiple choice questions
- Scenario Based
- 2 hour duration
- Delivered via remote online proctoring

<table>
<thead>
<tr>
<th>TOPIC AREA</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agile Mindset</td>
<td>30%</td>
</tr>
<tr>
<td>Strategy Horizon</td>
<td>10%</td>
</tr>
<tr>
<td>Initiative Horizon</td>
<td>25%</td>
</tr>
<tr>
<td>Delivery Horizon</td>
<td>35%</td>
</tr>
<tr>
<td>Technique Related Questions</td>
<td>35%</td>
</tr>
</tbody>
</table>
## IIBA – AAC Fees

<table>
<thead>
<tr>
<th>Fee</th>
<th>IIBA Member</th>
<th>Non Member</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam</td>
<td>$250</td>
<td>$375</td>
</tr>
<tr>
<td>Retake</td>
<td>$200</td>
<td>$325</td>
</tr>
<tr>
<td>Recertification</td>
<td>$85</td>
<td>$120</td>
</tr>
</tbody>
</table>

- 20% discount if exam is taken before June 30, 2018
- Visit IIBA.org to download the IIBA Agile Analysis Certification Guide
Acknowledgement

IIBA®, the IIBA® logo, BABOK® Guide and Business Analysis Body of Knowledge® are registered trademarks owned by International Institute of Business Analysis.
Questions are guaranteed in life;

Answers are not.