

Introduction

Lesson Introduction

Welcome to the lesson on why Agile has taken the market by storm in today's digital age.

Lesson Overview



- The Agile Mindset
- The Agile Manifesto
- Agile vs. Waterfall
- Misconceptions of Agile

Learning Objectives

By the End of the Lesson You Will Be Able To...

- Explain the **Agile Mindset** and value-driven delivery benefits of Agile
- Differentiate between Doing Agile and Being Agile
- Explain The Agile Manifesto's **4 Paired Core Values**
- Identify and apply the 12 Principles of the **Agile Manifesto**
- Differentiate between **Agile** and **Waterfall** approaches

What We Will Cover In This Lesson

In this lesson, we will focus on the foundational theory behind Agile. We will discuss:

- The Agile Mindset and how it sets the tone for 'Being' Agile versus just 'Doing' Agile
- The Agile Manifesto, and how it is seen as the foundational set of 4 Paired Core Values and 12 Principles that sets the foundation for all Agile Frameworks
- How Agile differs from the more traditional Waterfall approach to product development

We will wrap up the lesson with an important discussion on common misconceptions about Agile.

By the End of the Lesson, You Will Be Able To...

- Explain the Agile Mindset and value-driven delivery benefits of Agile
- Differentiate between Doing Agile and Being Agile
- Explain The Agile Manifesto's 4 Paired Core Values
- Identify and apply the 12 Principles of the Agile Manifesto
- Differentiate between Agile and Waterfall approaches



- The Agile Mindset
- The Agile Manifesto
- Agile vs. Waterfall
- Misconceptions of Agile

What We Will Cover In This Lesson

Why Agile

Why Are Organizations Adopting Agile Part 1

Why Are Organizations Adopting Agile?



Faster Time to Market



- Accelerates product development cycles
- Agile teams are able to release products anywhere from 50-80% faster

Early Return on Investment (ROI)



- Helps squeeze cash out of WIP (Work in Progress)
- Increase project and portfolio returns

Squeeze Cash Out of WIP

- Invest cash flexibly as product evolves
- Less work on non-value added features
- Better prioritization



Increase Returns

- Fail fast/stop early
- Move funds to higher value project
- Better alignment with the market



Feedback From Real Customers



- Focuses the team on the intended goal
- Ensures delivery of high-value features
- Allows the team to accommodate change

<http://theleanstartup.com/>

So, why are forward-thinking organizations rapidly adopting Agile? And why are we seeing that global professional bodies such as The Project Management Institute (PMI) in their PMBOK Guide and The International Institute of Business Analysis (IIBA)'s BABOK Guide, have incorporated and highlighted the importance of Agile in project management, business analysis, and other product delivery activities?

In an increasingly interconnected and competitive global marketplace, I am seeing Agile being leveraged by successful organizations across the globe to thrive in today's digital age. Agile enables organizations to predictably deliver value in a world where we are constantly being challenged with Volatility, Uncertainty, Complexity, and Ambiguity. Organizations that I have seen go through Agile transformation have benefited from the following:

- Faster time to market
- Early ROI
- Feedback from Real Customers

Why Are Organizations Adopting Agile?



Volatility, Uncertainty, Complexity, Ambiguity

Note: You are going to learn more about VUCA later in this lesson.

Why Are Organizations Adopting Agile Part 2

Build The Right Products

- Connects product strategy to execution
- Iterative approach allows for adjustments
- Communication and Collaboration



Early Risk Reduction



- Risks are managed proactively
- Risk reduction accomplished through iterative delivery
- Transparency ensures risks are managed early

Built-in Quality

- Business benefits justify the investment in quality
- Elevated customer satisfaction
- Ability to innovate and scale confidently



Culture and Morale



- Open communication, collaboration and cohesiveness
- Productive sustainable pace
- Motivation to find opportunities that benefit the business

Organizations that go through Agile transformation have also benefited from:

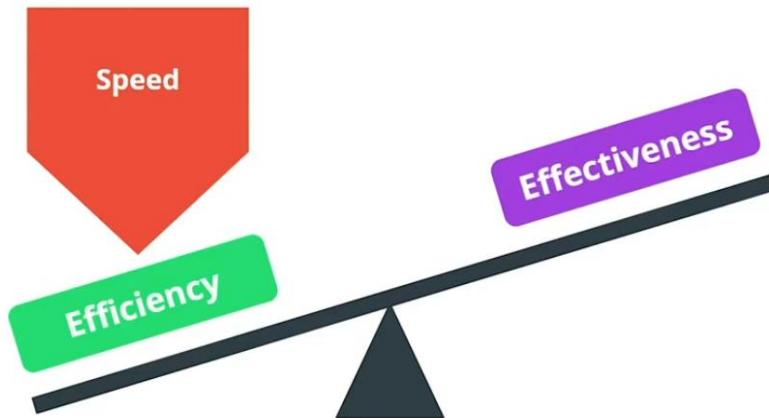
- Build the right products
- Early risk reduction
- Built-in quality
- Culture and morale

Efficiency vs. Effectiveness

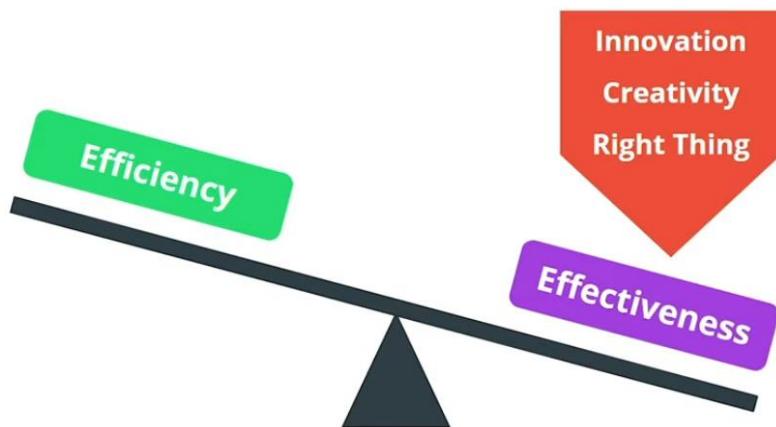
Efficiency vs. Effectiveness



Efficiency vs. Effectiveness



Efficiency vs. Effectiveness



Efficiency vs. Effectiveness



Customer Satisfaction



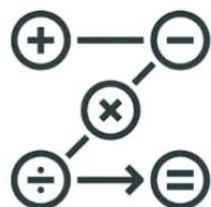
- A key Agile principle
- Value driven high quality product features and functionality
- Customer satisfaction is ensured through Product Owner

Alignment

- Keep the **Vision** in focus
- Helps the business build a decision making framework for prioritization
- Sets clear guidelines for incremental product reviews



Emergent Outcomes



- Works well in developing complex dynamic systems
- Valuable results can emerge
- Agile can accommodate such uncertainty

Predictability

- Low risk and highly predictable approach
- Adaptive planning
- Ensures structure within the '**chaos**' of complexity



Why Companies Are Switching



1. Faster time to market
2. Early ROI
3. Feedback from real customers
4. Build the right products
5. Early risk reduction
6. Better quality
7. Culture and morale
8. Efficiency
9. Customer satisfaction
10. Alignment
11. Emergent outcomes
12. Predictability

Efficiency and effectiveness is a fine balancing act that Agile recommends.

If you're only focused on going fast, you prioritize efficiency.

If you're trying to focus on innovation, creativity, and making sure you're working on the right thing, you need to focus on effectiveness.

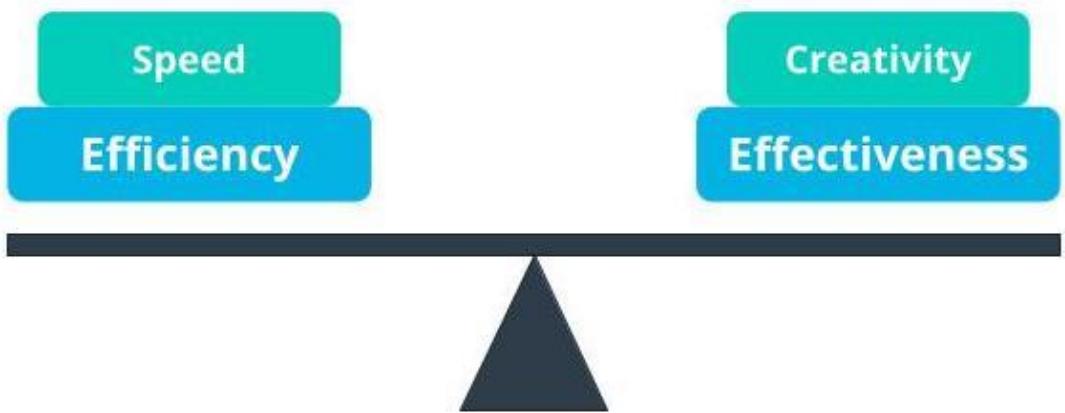
This is often done at the cost of efficiency.

Agile ensures a balanced approach whereby Agile Teams ensure there is a balance between speed and creativity.

Agile transformations also benefit from:

- Customer Satisfaction
- Alignment
- Emergent Outcomes
- Predictability

Organizations want to use Agile to get there by developing products better, faster, and cheaper.



Agile Balances Efficiency And Effectiveness

Quiz Question

TRUE or FALSE: Agile enables organizations to deliver additional value through Business Agility.

TRUE



FALSE

Submit

Quiz Question

Which of the following statements is true about Agile?

[Select all that apply]

The Agile method anticipates change and allows for much more flexibility than traditional methods.

Clients can make small objective changes without huge amendments to the budget or schedule.

The Agile method is based on giving high priority to customer participation, from the very beginning of the development cycle.

Agile is only applicable in software projects.

Submit

New Terms

- **Ambiguity:** Ambiguity refers to a lack of clarity, such as not having a clear understanding of the genuine needs of the customer and end-users
- **Complexity:** Complexity exists when there are many interconnected parts and variables that influence each other
- **Muda:** Lean principles refer to the Japanese term Muda as waste; Agile teams focus on the removal of non-value adding tasks that are seen as Muda
- **Product Owner:** A business proxy or representative of the business users who is the Voice of the Customer (VOC)
- **Return on Investment (ROI):** Return on investment (ROI) is calculated as the ratio between net profit and cost of investment over a defined period of time
- **Uncertainty:** The extent to which an organization can confidently predict or forecast the future; more uncertainty makes it harder to predict
- **Voice of the Customer:** A term used to articulate the steps to capture customer's needs
- **Volatility:** Volatility is when there are unexpected or unstable possibilities that may influence the work being done
- **VUCA:** Volatility, Uncertainty, Complexity, Ambiguity
- **WIP (Work in Progress):** The work that has been started but not yet completed

Additional Resources

- [The Lean Startup](#) by Eric Ries

How Experts Approach Agile

Thinking About Agile

How Experts Approach Agile



How Experts Approach Agile



Traditional Thinking

Looks at the parts separately



System Thinking

Looks at interdependent and connected components of a system

Considers how systems interrelate and influence each other

How components come to deliver a solution together



Systems Thinking

Components of a system must come together to deliver a cohesive solution



- Team understands that optimizing a component does not optimize the entire system
- Demos help team visualize the actual user experiences

Growth Mindset

Abilities can be developed through dedication and hard work



- Promotes resilience and passion for learning
- Balanced with ethics, principles and values
- integrity, commitment and respect are **not** compromised for speed

Agile Is Based on a Systems Thinking Approach and a Growth Mindset

- Agilists adopt a practical and realistic approach to delivering the best value, and quality, in the shortest sustainable time.
- A Systems Thinking approach, reinforced by a Growth Mindset, helps Agile experts deliver optimal business value.
- Systems thinking takes a holistic approach in which the Agile Team looks at the way a system's components interrelate and influence each other and how these components come together within the context of larger systems to deliver a solution.

- In a growth mindset, individuals on a team have the mindset that their abilities can grow through dedication and hard work.



Systems Thinking + Growth Mindset = Optimal Business Value

Quiz Question

What delivers optimal business value in Agile teams?

<input checked="" type="checkbox"/> Systems Thinking	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Growth Mindset	<input checked="" type="checkbox"/>
<input type="checkbox"/> Traditional Mindset	
Submit	

New Terms

- **Growth Mindset:** The mindset that an individual's abilities can grow through dedication and hard work
- **Systems Thinking:** A holistic approach that looks at the way a system's components interrelate and influence each other and how these components come together within the context of larger systems to deliver a solution

Additional Resources

- Brad Smith and Carol Ann Browne. ***Tools and Weapons: The Promise and the Peril of the Digital Age***. Penguin, 2019.
In this book, Brad Smith and Carol Ann Browne share how one of

the world's largest and most powerful companies leverages Agile practices to overcome today's challenges in the global marketplace.

The Agile Mindset

What Is the Agile Mindset?

The Agile Mindset



What is Agile?

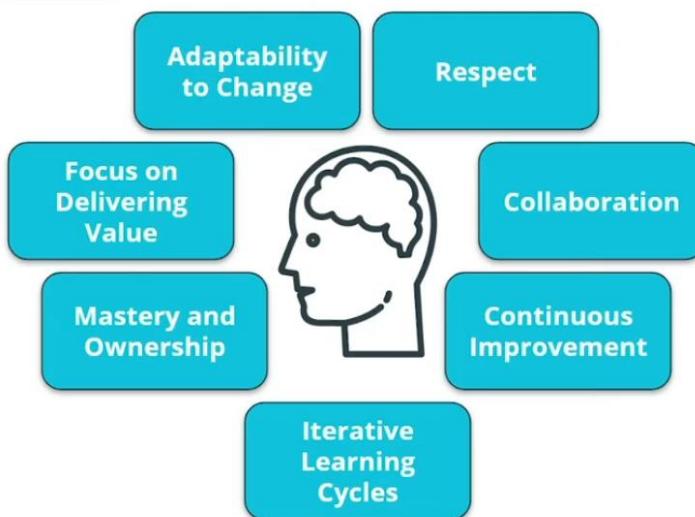
A set of value and principles that guide how we as individuals and organizations think about and act upon the work that we do

What Is Business Agility?



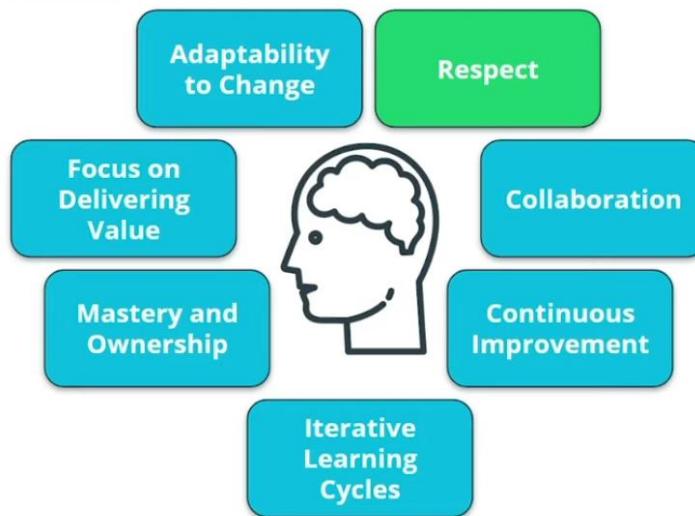
- Adapt to market changes
- Respond to customer demands
- Cost-effective without compromising quality

The Agile Mindset



The set of attitudes supporting an Agile working environment

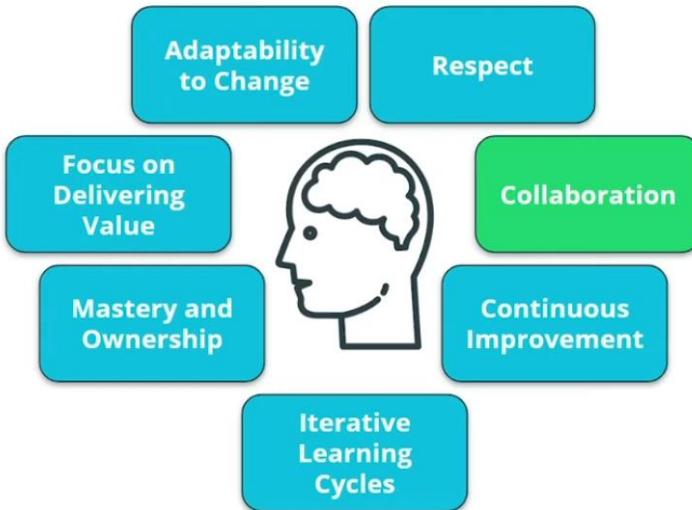
The Agile Mindset



Respect

- All levels of the organization
- Customers
- Backlog

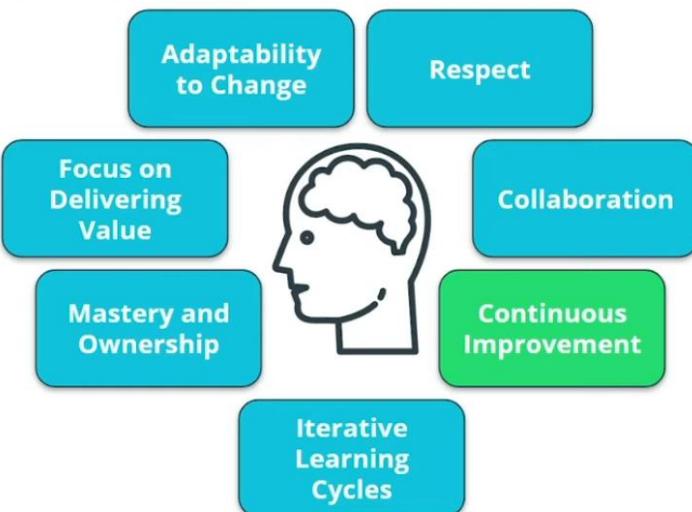
The Agile Mindset



Collaboration

- Cross-functional, skilled teams are critical
- Collaboration improves the efficiency of handoffs

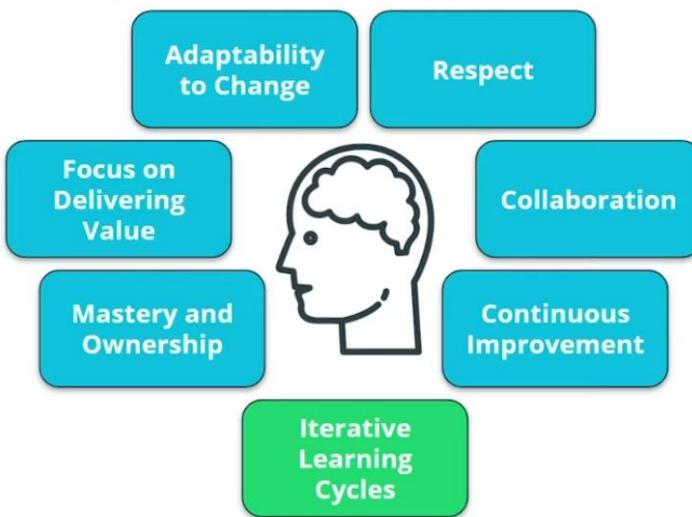
The Agile Mindset



Continuous Improvement

- Focus on quality is habitual
- Always room for improvement

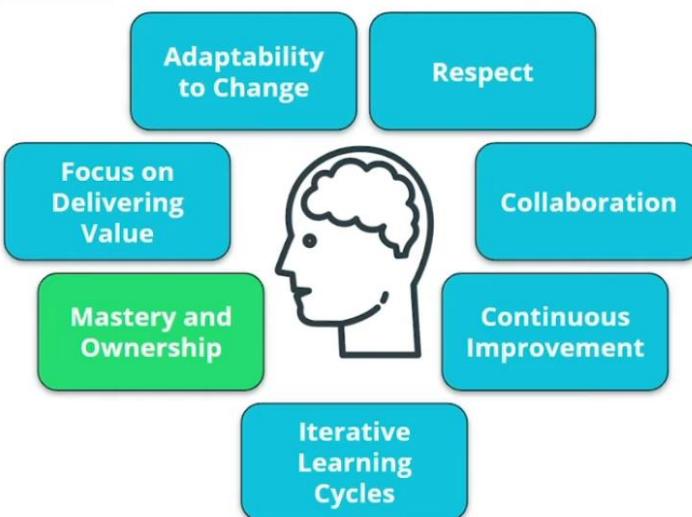
The Agile Mindset



Iterative Learning Cycles

- Use a growth mindset
- Turns failures into opportunities for learning
- Abilities evolve over time

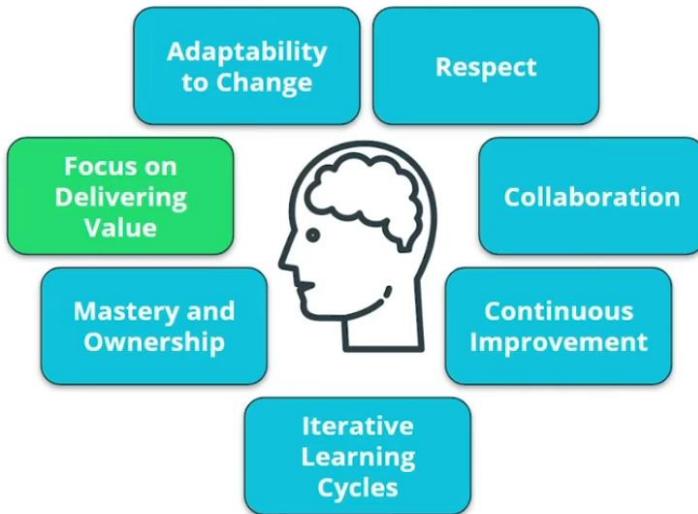
The Agile Mindset



Mastery and Ownership

- Increases desire to deliver high quality work

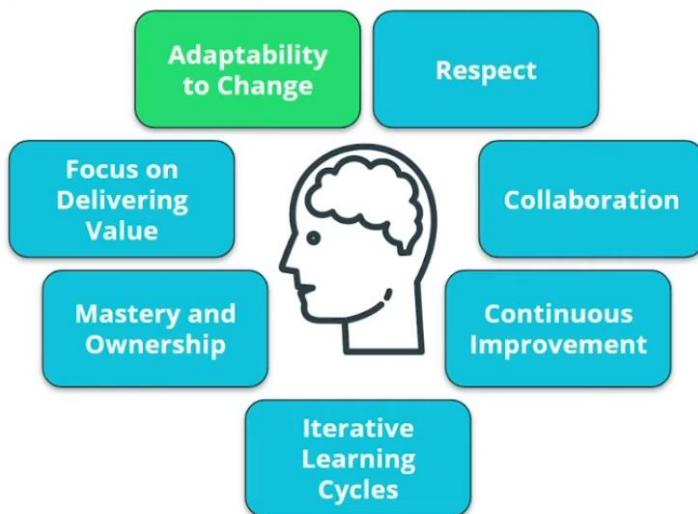
The Agile Mindset



Focus on Delivering Value

- Maintain a customer satisfaction-centric culture
- Customer's needs are paramount

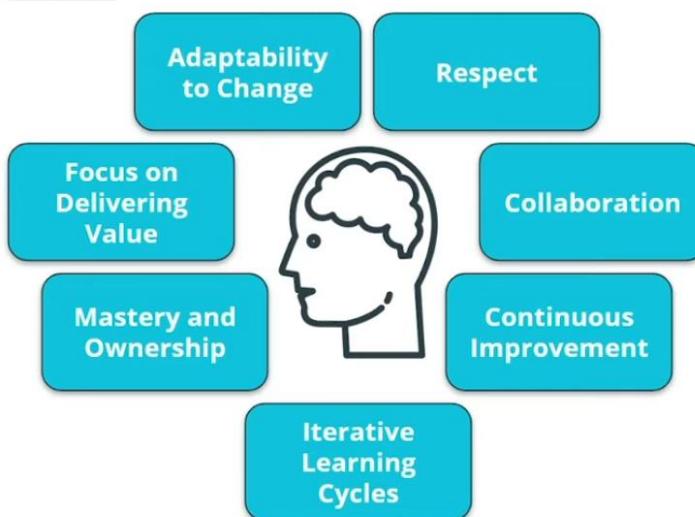
The Agile Mindset



Adaptability to Change

- Processes should not be impediments to change

The Agile Mindset



Value for
customers
and business
owners

Doing Agile

- Adopting practices
- No commitment to principles and values



Being Agile

- Agile Mindset
- Agile Manifesto
- Agile Principles



Agile Teams

- Are aligned with vision
- Have autonomy to self-direct
- Cultivate mastery



Agile permits teams to flourish in an environment that is increasingly Volatile, Uncertain, Complex, and Ambiguous, also known as VUCA.

- Volatility is when there are unexpected or unstable possibilities that may influence the work being done
- Uncertainty refers to the extent to which an organization can confidently predict or forecast the future
- Complexity exists when there are many interconnected parts and variables that influence each other
- Ambiguity refers to a lack of clarity, such as not having a clear understanding of the genuine needs of the customer and end-users

V

VOLATILITY

Unexpected or unstable possibilities

U

UNCERTAINTY

Unknown future

C

COMPLEXITY

Interconnected parts

A

AMBIGUITY

Lack of clarity

Volatility, Uncertainty, Complexity, Ambiguity (VUCA)

Business Agility

Agile is a set of principles that guide how we as individuals, as teams and as organizations think about, as well as act upon, the work that we do.

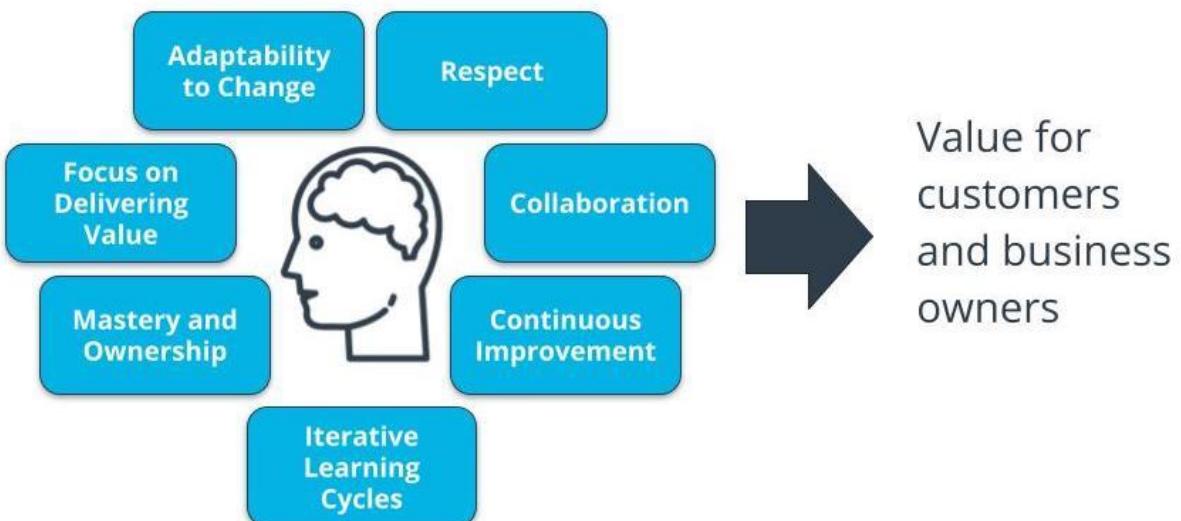
Business agility is the ability of an organization to:

- Adapt quickly to market changes
- Respond rapidly and flexibly to customer demands that make business sense
- Adapt and lead change in a productive and cost-effective manner with no compromise to quality

The Agile Mindset

When we talk about an Agile Mindset, we include:

- Respect
- Collaboration
- Continuous Improvement
- Iterative Learning Cycles
- Mastery and Ownership
- Focus on Delivering Value
- Adaptability to Change



The Agile Mindset

Doing Agile vs. Being Agile

Some organizations and Agile Teams unfortunately just focus on Doing Agile. This equates to simply adopting the practices without committing to or exhibiting agile principles and values.

Being Agile is the foundation that truly elevates individuals, teams, and organizations to unleash their latent potential to deliver monumental and focused value.

New Terms

- **Agile Mindset:** The set of attitudes supporting an agile working environment
- **Being Agile:** When an Agile team lives & breathes Agile principles and values through Agile practices consistently every day
- **Business Agility:** The ability of an organization to adapt quickly to market changes, respond rapidly and flexibly to customer demands that make business sense, as well as adapt and lead change in a productive and cost-effective manner with no compromise to quality

- **Doing Agile:** When an Agile team adopting the practices without committing to or exhibiting Agile principles and values

Additional Resources

- Gil Broza, ***The Agile Mind-Set: Making Agile Processes Work***, 3P Vantage Media, 2015.
This book clearly articulates how the missing piece in successfully transforming organizations to Agile is the Agile Mindset.

Quizzes: The Agile Mindset

Thinking About the Agile Mindset

Quiz Question

Which of the following is NOT fundamental to an Agile Mindset?

- Welcome change
- Learn through experimenting and doing

- Follow the process strictly



- Deliver value incrementally

Submit

X



Thanks for completing that!

You got it! The concepts of welcoming change, learning through experimenting and doing, and incremental delivery of value are all fundamental to an Agile Mindset.

Continue

Quiz Question

An Agile Mindset is the set of attitudes supporting an Agile working environment. These include:

- | | |
|---|---|
| <input checked="" type="checkbox"/> Respect | ✓ |
| <input checked="" type="checkbox"/> Collaboration | ✓ |
| <input checked="" type="checkbox"/> Improvement and learning cycles | ✓ |
| <input checked="" type="checkbox"/> Pride in ownership | ✓ |
| <input checked="" type="checkbox"/> Focus on delivering value | ✓ |
| <input checked="" type="checkbox"/> The ability to adapt to change | ✓ |

Submit

X



Thanks for completing that!

Yes! This mindset is the environment within which Agile teams deliver monumental results. If this Agile Mindset is adopted by the team, they will deliver amazing results. It becomes the perfect combination of satisfied employees delivering results that satisfy customers.

Continue

Exercise: The Agile Mindset

Applying the Agile Mindset

Exercise Scenario: SocialKare.gov

SocialKare.gov was launched to allow citizens of Nunamerica to enroll in Social Services provided by the government as a result of a devastating pandemic. Unfortunately, the launch of SocialKare.gov was seen as a disaster from all project management metrics, as well as by its key stakeholders' low satisfaction ratings. Read what happened in the [SocialKare.gov Case Study](#).

You'll also want to download the [Agile Foundations Course Workbook](#).

This workbook is in a `.docx` format, which can be used in most word processing programs including Microsoft Word and Google Docs. To use the workbook in Google Docs, just upload the workbook to your Google Drive and open the document using Google Docs.

We will be using this scenario and workbook for most of the exercises in this course. We will indicate which worksheet you should fill out for each exercise.



Agile Mindset Anti-Patterns

Is the SocialKare.gov team operating with an Agile Mindset? Review the Case Study and your notes on the Agile Mindset. What Agile Mindset anti-patterns do you see at SocialKare.gov? Anti-patterns are practices that preventing the Agile mindset from being present and make things worse.



The Agile Mindset at SocialKare.gov

Read the SocialKare.gov case study carefully. What anti-patterns are preventing the Agile mindset from being present on the SocialKare.gov team?

- Download the [SocialKare.gov Case Study](#)
- Download the [Agile Foundations Course Workbook](#) and find the [Agile Mindset Anti-Patterns worksheet](#)
- Review the SocialKare.gov case study
- In the worksheet, list at least three anti-patterns that prevented the Agile mindset from being present
- Explain why each anti-pattern is problematic

Solution: The Agile Mindset

My Solution

Agile Mindset Exercise

- Identify three anti-patterns
- Explain why each anti-pattern is problematic



Anti-Pattern 1: Environment

Team was not self-directed and self-organized



Evidence:

- Each team member worked on their own list of tasks
- The Project Manager monitored everyone's progress individually
- PM stepped in to troubleshoot technical problems

Results:

- Team had no opportunity to build autonomy and confidence
- Team morale was low

Anti-Pattern 2: Quality

Quality was not built-in



Evidence:

- Major coding flaws
- Supporting systems integration testing was patchy

Results:

- Delays in going to production
- End user frustration
- Issues were identified after going to production

Anti-Pattern 3: Demos

Working solutions not presented frequently



Evidence:

- Product team did not get an opportunity to obtain feedback from user groups
- No properly vertically sliced demos were conducted

Results:

- Incomplete feature set in production
- Complaints from end users after going to production
- Team had to rush in and react

Anti-Pattern 4: Documentation

Excessive and Unnecessary documentation



Evidence:

- A lot of process driven paperwork
- Oversight was inadequate
- Team dedicated time to excessive documentation

Results:

- Time taken away from working on actual product deliverables
- Paper trail was not effective

Anti-Pattern 5: Vetting of Requirements

Inadequate vetting of requirements



Evidence:

- Key requirements uncovered after going to production
- Several requirements that were built not useful

Results:

- Resources wasted on low priority requirements
- Higher priority needs were not met

The Anti-Patterns I Found:

- The Project Manager did not build an environment of making the team self-directed and self-organized. As a result, the team did not get an opportunity to build autonomy and confidence without relying on the Project Manager to step in to troubleshoot.
- Quality was not built-in iteratively in the product development life cycle. This resulted in delays in going to production, which frustrated both the business leadership and the end-users.

- Interim working solutions were not presented frequently to the business and end-users for proactive buy-in and feedback. This resulted in an incomplete set of features going to production.
- Excessive and not so valuable documentation was required by the project. As a result, the product results were disappointing.
- There was little in the way of ensuring these requirements made business sense throughout the project life cycle. As a result, the resource effort put into lower priority requirements ended up pushing out the higher priority needs.

Thinking Like an Agilist



Have you seen any of these or other Agile anti-patterns in any projects you have worked on?

Your reflection

Yes. I saw more than one of these anti-patterns in every project I have worked on. For example Lack of communication (the team is multiethnic, multicultural, and not all the members of the team, speak the same language. Another example is that the project manager did not build an environment of making the team self-directed.



Things to think about

Now that you understand the Agile Mindset you will be more aware of dysfunctional patterns on teams. You should try to bring the Agile Mindset into any team you work with.

The Agile Manifesto

What Is the Agile Manifesto?

Before The Agile Manifesto...

Waterfall method based on adherence to strict processes



The Waterfall Process



Gathering Requirements

Focus on Development and Customer Team



Products Get More Complex

Features May Not Work as Expected



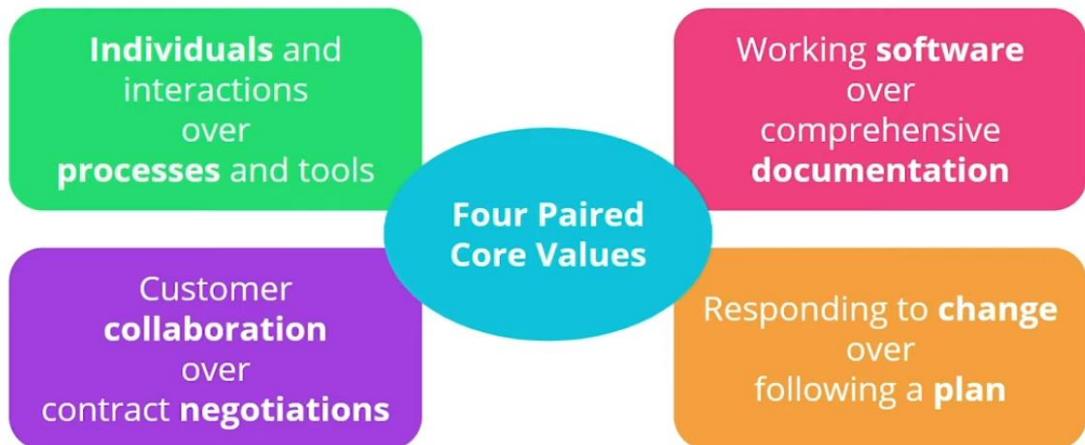
Before The Agile Manifesto...



Process Centric
not Product Centric



Four Paired Core Values



Adapted from: www.agilemanifesto.org

Four Paired Core Values

Individuals and interactions over processes and tools



Adapted from: www.agilemanifesto.org

Four Paired Core Values

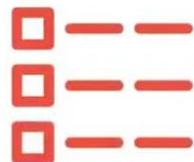
Working **software** over comprehensive **documentation**



Adapted from: www.agilemanifesto.org

Four Paired Core Values

Customer **collaboration** over contract **negotiations**



Four Paired Core Values

Customer **collaboration** over contract **negotiations**



Four Paired Core Values

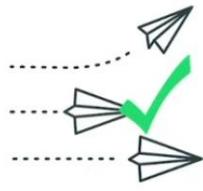
Responding to **change** over following a **plan**



Adapted from: www.agilemanifesto.org

Four Paired Core Values

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



Adapted from: www.agilemanifesto.org

Up until the late 1990s, a majority of product development followed a waterfall-style project development life cycle that was based on adhering to strict processes.

The whole product procedure was process-centric with the goal of delivering the product successfully rather than focusing on delivering a successful product. This is what lead 17 experts to get together and finalize the Agile Manifesto at a meeting in Utah back in 2001.

Up until the late 1990s, a majority of product development followed a waterfall-style project development life cycle that was based on adhering to strict processes.

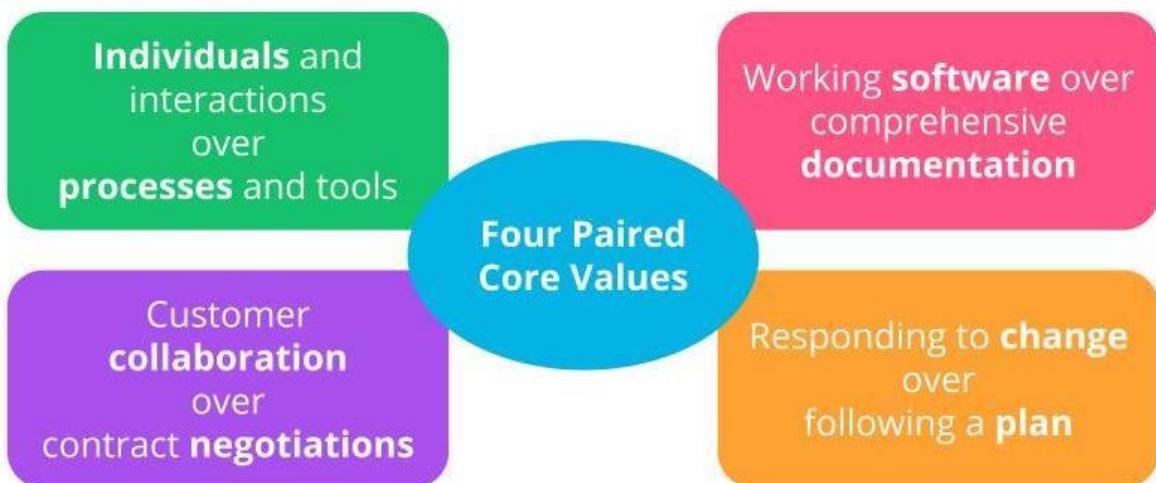
The whole product procedure was process-centric with the goal of delivering the product successfully rather than focusing on delivering a successful product. This is what lead 17 experts to get together and finalize the Agile Manifesto at a meeting in Utah back in 2001.

The 4 Agile Core Values

These were developed by 17 industry experts and finalized in 2001. They are:

- **Individuals and interactions over processes and tools:** Agile places more importance and emphasis on people and their interactions over processes and even tools.

- **Working software over comprehensive documentation:** Documentation requires a time and resource commitment that might be wasteful.
- **Customer collaboration over contract negotiation:** Agile promotes a collaborative outlook when product owners work with their customers in reaching an agreement on the details of the product delivery.
- **Responding to changes over following a plan:** Agile embraces the change that makes business sense.



Adapted from: www.agilemanifesto.org

Four Paired Core Values

The Agile Manifesto Principles

The Agile Manifesto's 4 paired core values and its associated 12 guiding principles set a solid foundation for the various Agile Frameworks that are currently being practiced by successful organizations in today's digital age.

The Agile Manifesto Principles

- 1** Our highest priority is to satisfy the customer through early and continuous delivery of valuable software. 
- 2** Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage. 
- 3** Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale. 
- 4** Business people and developers must work together daily throughout the project. 

Adapted from: www.agilemanifesto.org

The Agile Manifesto Principles

- 5** Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done. 
- 6** The most efficient and effective method of conveying information to and within a development team is face-to-face conversation. 
- 7** Working software is the primary measure of progress. 
- 8** Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely. 

Adapted from: www.agilemanifesto.org

The Agile Manifesto Principles

9 Continuous attention to technical excellence and good design enhances agility.



10 Simplicity--the art of maximizing the amount of work not done--is essential.



11 The best architectures, requirements, and designs emerge from self-organizing teams.



12 At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.



Adapted from: www.agilemanifesto.org

Four Paired Core Values Drive 12 Agile Principles

Individuals and interactions over processes and tools

Working software over comprehensive documentation

Customer collaboration over contract negotiations

Four Paired Core Values

Responding to change over following a plan

AGILE PRINCIPLES

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

Adapted from: www.agilemanifesto.org

The 12 Agile Principles

The Agile Manifesto's 4 paired core values drive the 12 Agile Principles. Let's look at the principles in detail.

1. **Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.** The goal of product development is the development of successful products.
2. **Welcome changing requirements, even late in development.** Agile processes harness change for the customer's competitive

- advantage.** Due to the dynamic competitive landscape, requirements can and will change throughout product development.
3. **Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter time scale.** Frequent and iterative delivery of working products provides the business with practical feedback.
 4. **Business people and developers must work together daily throughout the project.** The Product Owner and the Agile Team adopt practices that ensure inclusive and joint practices.
 5. **Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.** Agile leaders build Agile teams with skilled resources who are willing to work together collaboratively with a growth mindset.
 6. **The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.** For a product development team to succeed its members must communicate and collaborate effectively.
 7. **Working software is the primary measure of progress.** The primary measure of product development should be the delivery of working product increments, which meet the evolving needs of the business.
 8. **Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.** A highly skilled team simply just cannot be expected to successfully develop a product by compelling people to work overtime for extended periods.
 9. **Continuous attention to technical excellence and good design enhances agility.** Built-in quality practices have enormous benefits. It allows for easier maintenance and scalability of the product.
 10. **Simplicity - the art of maximizing the amount of work not done - is essential.** With the guidance of the Product Owner, Agile Teams focus on high-value activities, which allows them to focus on the high business value needs.
 11. **The best architectures, requirements, and designs emerge from self-organizing teams.** This is a critical principle of the agile world to ensure that emerging and effective architectures, requirements, and designs are built into the product development life cycle to maximize technical excellence.

12. At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

Finding concrete opportunities for improvement is a continual effort.

1 Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.



2 Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.



3 Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.



4 Business people and developers must work together daily throughout the project.



5 Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.



6 The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.



7 Working software is the primary measure of progress.



8 Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.



9 Continuous attention to technical excellence and good design enhances agility.



10 Simplicity--the art of maximizing the amount of work not done--is essential.



11 The best architectures, requirements, and designs emerge from self-organizing teams.



12 At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.



New Terms

- **Agile Manifesto:** The four paired Core Values and associated 12 Principles that set the foundation for all Agile Frameworks
- **Agile Principles:** Practical guidance for teams to adopt Agile
- **Four Paired Core Values:** The part of the Agile Manifesto that defines the values that establishes what Agile is for teams and organizations

Additional Resources

The Agile Manifesto is worth exploring in depth. These resources should help:

- [**The Agile Manifesto**](#): The original Agile Manifesto crafted by 17 industry leaders in 2001.
- [**The Agile Manifesto, Explained**](#): Kris Hughes walks through The Agile Manifesto in detail.

Quizzes: The Agile Manifesto

Thinking About the Agile Manifesto

Quiz Question

Identify the INCORRECT Agile principle and its implications.

- Continuous attention to technical excellence and good design enhances agility: it keeps the software maintainable
- The best architectures, requirements, and designs emerge from self-organizing teams: self-organizing teams have a higher level of ownership in the designs they create
- Business representatives and developers must work together daily throughout the project: it is mandatory for the stakeholders and the team to meet and converse daily
- Deliver working software frequently: this ensures timely feedback that can be incorporated early in the product development process

Submit

X



Thanks for completing that!

That is right! It is not mandatory for the stakeholders and the team to meet and converse daily.

Instead, the recommendation is for the team members only to have a quick Daily Stand Up Ceremony.

Continue

Quiz Question

Match the appropriate Paired Core Values:

These are the correct matches.

Value	Paired Value
Individuals and Interactions	Processes and Tools
Working Software	Comprehensive Documentation
Customer Collaboration	Contract Negotiation
Responding to Change	Following a Plan

Exercise: The Agile Manifesto

Applying the Agile Manifesto

Are the Four Paired Core Values from the Agile Manifesto being followed at SocialKare.gov? Review the [SocialKare.gov Case Study](#) and identify the Core Values and Agile Principles that are missing at SocialKare.gov.



Agile Paired Core Values

Review the SocialKare.gov case study and review the Agile Manifesto Paired Core Values. Of the four Paired Core Values, which two particularly stand out as being absent at SocialKare.gov? Explain why.

- Review the [SocialKare.gov Case Study](#)
- Find the **Agile Manifesto worksheet** in the [Agile Foundations Course Workbook](#)
- In the worksheet, identify two Paired Core Values that are not present at SocialKare.gov
- List the evidence that the value is missing and how that impacted the team
- Identify two Agile Manifesto Principles that are not present at SocialKare.gov
- List the evidence that the principle is missing and how that impacted the team

Solution: The Agile Manifesto

My Solution

Agile Manifesto Exercise

- Which two values are absent at SocialKare.gov?
- Which Agile Principles should SocialKare.gov adopt?



Agile Manifesto: Missing Paired Core Value 1

Individuals and interactions over processes and tools



Evidence:

- Lack of team cohesion
- Siloed approach
- Autocratic management style

Results:

- Quality of the results was disappointing
- Demotivated and fatigued team

Agile Manifesto: Missing Paired Core Value 2

Working software over comprehensive documentation



Evidence:

- Lots of ineffective planning documents and paper trails
- No demos for a working prototype
- No opportunity for early feedback

Results:

- Tangible results at the end inadequate
- Feedback on the final deliverables was dismaying

Agile Manifesto: Missing Principle 1

Simplicity--the art of maximizing the amount of work not done -- is essential



Evidence:

- Heavy requirements upfront
- Unprioritized requirements

Result:

- Non-value added (NVA) requirements that were not so useful

Agile Manifesto: Missing Principle 2

Our highest priority is to satisfy the customer through early and continuous delivery of valuable software



Evidence:

- No delivery of functionality incrementally
- No periodic product demos

Result:

- Feedback loop delayed

Agile Manifesto: Missing Principle 3

Welcome changing requirements, even late in development.
Agile processes harness change for the competitive advantage



Evidence:

- Changing requirements at the tail end
- Stringent change control review

Result:

- Delays in responding to key functional change requests

Agile Manifesto: Missing Principle 4

Business people and developers must work together daily throughout the project



Evidence:

- Development team did not actively engage business users

Result:

- Delayed feedback loop
- Lack of confidence

The Missing Paired Core Values and Principles

At least two of the missing Paired Core Values from The Agile Manifesto at SocialKare.gov are:

- Individuals and Interactions over Processes and Tools
- Working Software over Comprehensive Documentation

At least four of the missing Agile Principles at SocialKare.gov are:

- Simplicity--the art of maximizing the amount of work not done--is essential.
- Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.
- Welcome changing requirements, even late in development. Agile processes harness change for the competitive advantage.
- Business people and developers must work together daily throughout the project.

Thinking Like an Agilist



Think about a team that you have worked on. Did the team align with the Agile Four Paired Core Value and Principles? Why or why not?

Your reflection

Currently I'm working with a team, developing a e-commerce platform for a retail company. I think they try to apply the Agile principles, but they fail in put them into practice some of them. 1) They value a lot, individuals over processes and tools, but the interactions are very poor. We are a team of four developers, but each one of us work in side projects and we barely communicate with each other, and on top of it all, the team leader doesn't do anything for trying to create a better communication between the members of the team. 2) Working software over comprehensive documentation: Well, they don't have documentation at all, and the half of the software was created by developers who already quit the job and didn't leave any documentation at all about the software they wrote. They try to apply this, but there is no balance in between the application of this concept. 3) Customer collaboration over contract negotiations. There is an excellent communication between the business people and the technical people in this project. This is being well applied I think. 4) Responding to change over following a plan. This is well done, due to the constant communication with the business people.



Things to think about

As an Agilist you will want to keep yourself and your team focused on the Agile Manifesto. Pay attention to the Four Paired Core Values and the Agile Principles to ensure that the team stays aligned to the Manifesto.

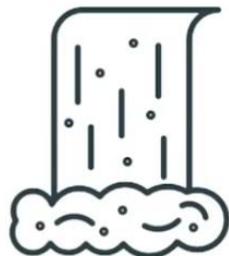
Agile vs. Waterfall

Comparing Agile to the Waterfall Methodology

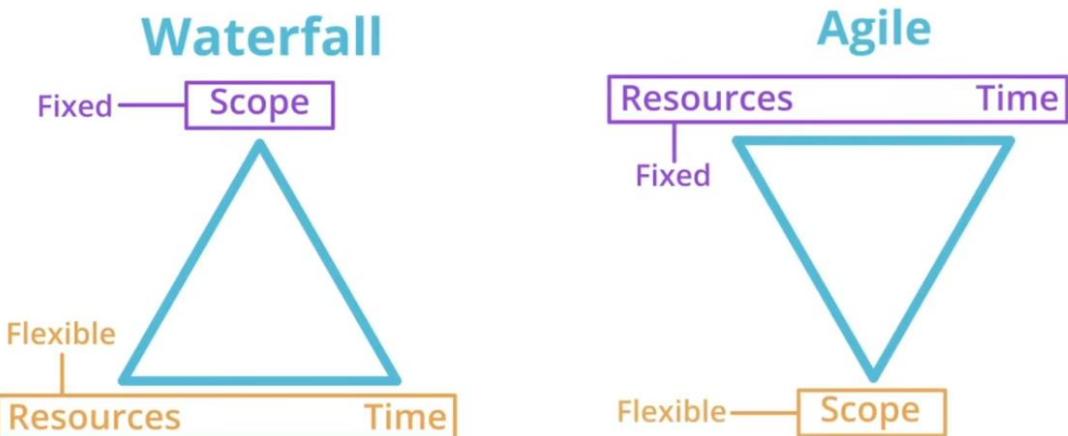
Agile vs. Waterfall

The Waterfall Model

- Process-driven
- Each phase depends on deliverables from the previous phase
- Focus on work to be done



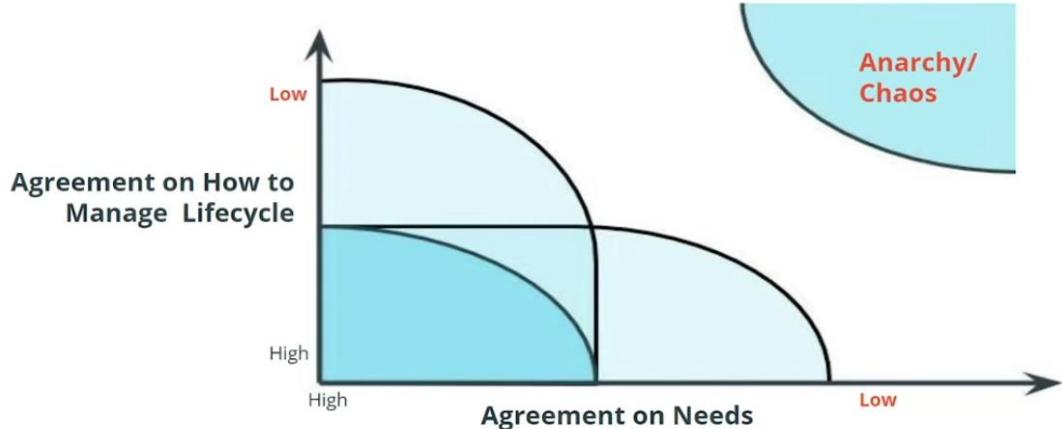
Waterfall vs. Agile



Agile vs. Waterfall

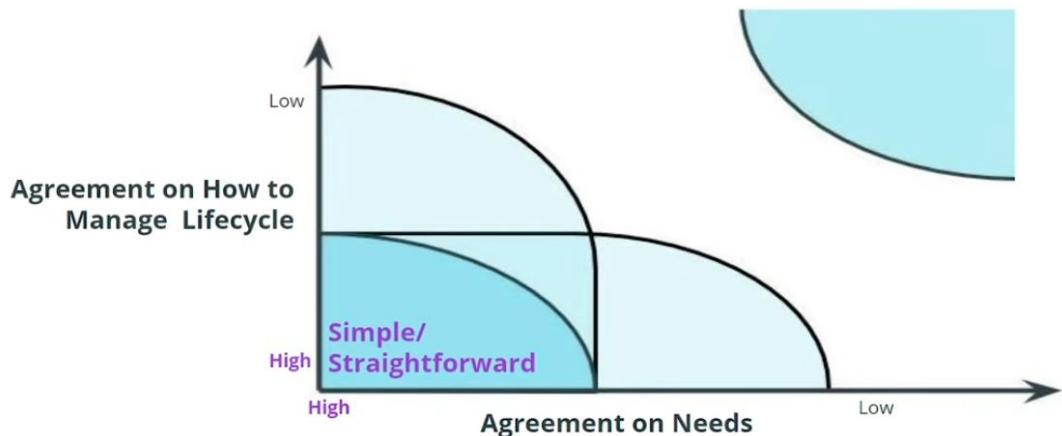
	Agile	Waterfall
Product Lifecycle	Iterative	Distinct phases
Design Process	Incremental	Sequential
Change	Change is embraced	Change is a challenge
Mindset/Focus	Customer needs	Completing the project
Collaboration	Significant collaboration	Limited Synchronization
Requirements	Prepared incrementally	Prepared at start of project
Organization	Self-directed team	Led by Product Manager

Stacey Diagram



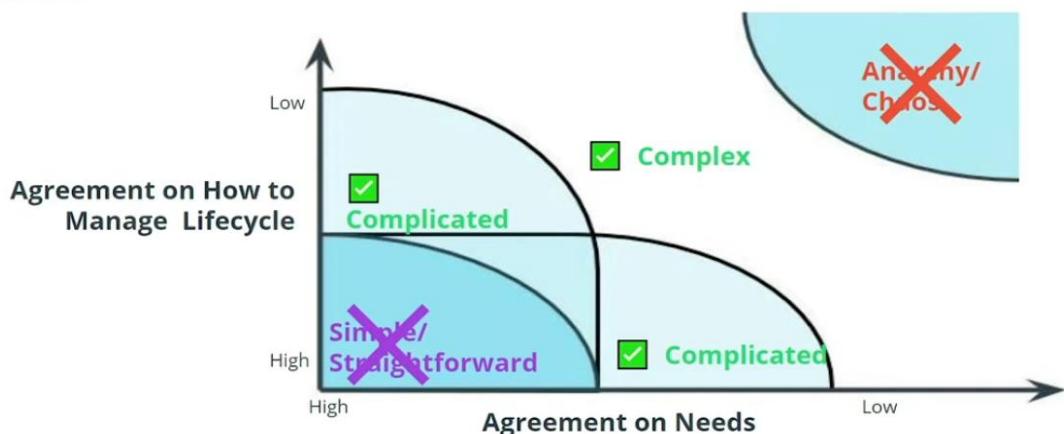
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Stacey Diagram



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Stacey Diagram

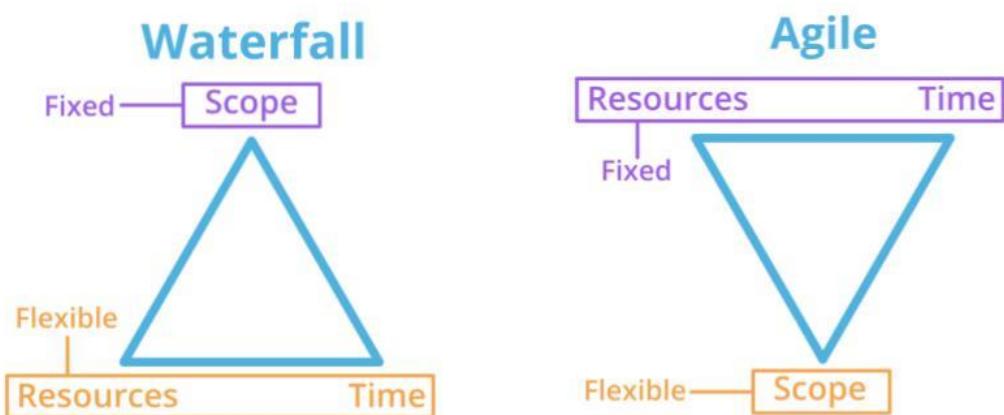


Adapted from: Stacey RD. *Strategic management and organisational dynamics: the challenge of complexity*. 3rd ed. Harlow: Prentice Hall, 2002

Waterfall vs. Agile

The waterfall model is a more stringent and process-driven style where the project is broken down into project activities through structured phases, with toll gates established to formally review progress. The focus is on the work to be done and not on delivering functional vertical slices.

Waterfall “fixes” the scope and estimates time & cost. Agile breaks this paradigm because Agile “fixes” time & cost and allows the scope to be flexible.

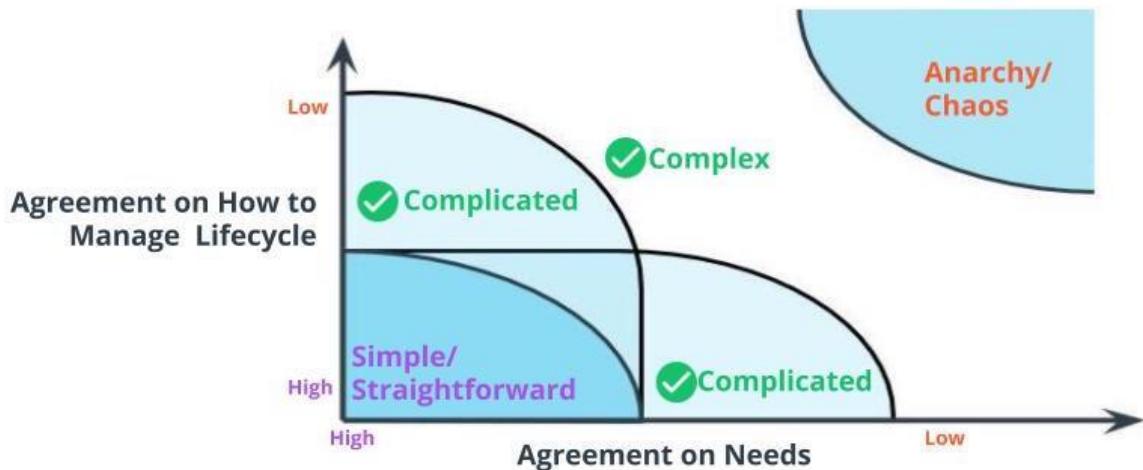


Agile vs. Waterfall Triangle

	Agile	Waterfall
Product Lifecycle	Iterative	Distinct phases
Design Process	Incremental	Sequential
Change	Change is embraced	Change is a challenge
Mindset/Focus	Customer needs	Completing the project
Collaboration	Significant collaboration	Limited Synchronization
Requirements	Prepared incrementally	Prepared at start of project
Organization	Self-directed team	Led by Product Manager

The Stacey Diagram

The Stacey Diagram is a popular method to select the appropriate project or product management style.



Adapted from: Stacey RD. *Strategic management and organisational dynamics: the challenge of complexity*. 3rd ed. Harlow: Prentice Hall, 2002

Stacey Diagram

Conditions Where Agile May Not Be Helpful:

- Lack of agreement in terms of requirements and process
- No vision and no clear roadmap
- Near certainty on requirements and process upfront

Conditions Where Agile Works Best:

- An environment of complexity and some uncertainty where an adaptive approach is needed
- With complicated requirements that need iterative cycles to understand the needs of end-users

New Terms

- **Incremental Product Delivery:** An approach that utilizes a given number of steps, which go from start to finish following a linear path of progression
- **Iterative Product Delivery:** An approach where product development is broken into sequences of time-boxed, repeated cycles called iterations
- **Sequential Product Delivery:** A process where a defined sequence of steps must be followed as in the Waterfall approach
- **Stacey Diagram:** A diagram developed by Ralph Stacey to categorize the complexity of a project
- **Waterfall Methodology:** A methodology of product development that starts by breaking down project tasks into linear sequential phases or stages where each subsequent stage depends on the successful delivery of the previous ones

Additional Resources

The topic of Agile versus Waterfall continues to be a topic of keen interest with practitioners.

- [**Agile vs Waterfall: What's the Difference?**](#): In this blog post, Peter Landau walks through the details of the differences between Agile and Waterfall.
- Ralph D. Stacey. **Complexity and Management**. Routledge, 2002. In this book, Ralph Stacey introduces the Stacey Diagram and explains where Agile makes more sense.

Quizzes: Agile vs. Waterfall

Thinking About Agile vs. Waterfall

Quiz Question

TRUE or FALSE: It no longer makes sense for an organization to use the Waterfall Methodology to run projects.

TRUE

FALSE



Submit



Thanks for completing that!

Yes! According to the Stacey Diagram, Agile makes sense with Complex projects with some Uncertainty. Projects that have a predictable and straightforward outcome are better managed with Waterfall.

Continue

Quiz Question

Which of the following statements are true?

Waterfall commits to a fixed time.

Agile management encourages the teams to be self-directed and self-organized, whereas Waterfall management is autocratic.

The Agile decision making is decentralized.

Agile commits to a fixed Scope.

Submit



X

Thanks for completing that!

Correct! Agile decision making is decentralized wherever possible; the longer-term strategic decisions, such as funding decisions, should still remain centralized.

Agile management also takes on a self-directed and self-organized approach.

Continue

Exercise: Agile vs. Waterfall

Agile vs. Waterfall at SocialKare.gov

The SocialKare.gov team is taking a Waterfall approach to product development. Review the [SocialKare.gov Case Study](#). Where do you see weaknesses in using a Waterfall approach rather than an Agile approach?



Agile vs. Waterfall

Review the SocialKare.gov case study. Where do you see weaknesses in the Waterfall approach to the SocialKare.gov project being applicable? Identify at least two weaknesses and explain why you see them as weaknesses when compared to the Agile approach for SocialKare.gov.

- Review the [SocialKare.gov Case Study](#).
- Find the **Agile vs. Waterfall worksheet** in the [Agile Foundations Course Workbook](#).
- In the worksheet, identify at least two weaknesses in SocialKare.gov's waterfall approach.
- List the evidence that the Waterfall approach was weak and how that impacted the team.

Solution: Agile vs. Waterfall

My Solution

Weaknesses of Waterfall

- Identify at least two weaknesses
- Explain why this is a weaknesses when compared to the Agile approach

Waterfall Behavior 1

Thorough documentation and paper trails



Evidence:

- Significant amount of time spent on creating and maintaining documents

Result:

- Some focus was lost on working solutions
- Time taken away from valuable product development

Waterfall Behavior 2

The testing process started once development was over



Evidence:

- All testing was planned for and conducted after full development

Result:

- Bugs found later in development cycle
- Expensive fixes

Waterfall at SocialKare.gov

At least two weaknesses of Waterfall Planning at SocialKare.gov are:

- Thorough documentation and paper trails
 - The team lost focus on working solutions, and time was taken away from valuable product development.
- The testing process started once development was over
 - Bugs were found later in development, where they are expensive to fix.

Misconceptions of Agile

Five Common Misconceptions of Agile

Misconceptions of Agile

Misconceptions of Agile #1



- Holding ceremonies for the sake of holding ceremonies does not deliver benefits
- Ceremonies must adhere to core principles of Agile

*"Scheduling Agile Ceremonies
Makes a Team Agile"*

Misconceptions of Agile #2



The Facilitator Role is Filled by
a Traditional Project Manager

- Facilitator role is different from the Project Manager role
- Requires a shift to Agile Mindset
- Should be a Servant Leader who assists with whatever the team needs to forward

Misconceptions of Agile #3



Team Size is Larger than Agile Frameworks Recommend

- Agile recommends small cross-functional teams
- Allows the team to be nimble and powerful
- Challenging to track work when team is larger than 15

Misconceptions of Agile #4



The Product Backlog is Managed Like a Traditional Requirements Document

- Backlog should not be a process-driven document
- Should focus on customer value and strategic objectives
- Product Owner plays a critical role

Misconceptions of Agile #5



*"Documentation and Audit Trails
for Compliance are not
Important in Agile"*

- Agile does not mean no documentation
- Remove low value documents
- Document what is valuable to maintain and sustain the product

Common Misconceptions of Agile

Here are 5 of the more common Agile misconceptions that should be avoided keeping the Agile Mindset in focus:

- **Scheduling Agile ceremonies makes a team Agile** - Holding ceremonies for the sake of holding ceremonies does not deliver benefits. Ceremonies must adhere to the core principles of Agile.
- **The Facilitator role is just like a traditional Project Manager** - The Facilitator role is different from the Project Manager role. A Facilitator should be a Servant Leader who assists with whatever the team needs to forward.
- **Large teams are okay** - Agile recommends small cross-functional teams that allow the team to be nimble and powerful.
- **The product backlog can be managed like a traditional requirements document** - The backlog should not be a process-driven document. It should focus on customer value and strategic objectives.
- **Documentation and audit trails for compliance are not important in Agile** - Agile does not mean no documentation -- it just removes low-value documents and documents what is valuable to maintain and sustain the product.

Keeping a customer-centric and product-focused thought process is essential.

Quiz Question

Which of the following is true?

- Holding Agile ceremonies, such as daily stand-ups and retrospectives, equates to a team becoming Agile.
- Agile team size is justified to be larger than what Agile frameworks recommend.
- Documentation and audit trails for compliance are important in Agile as well.

Submit



X

Thanks for completing that!

Exactly! There are many misconceptions about Agile. You have accurately identified that while Agile focuses more on the working product, documentation and audit trails remain important.

Continue

Quiz Question

Traditional Project Managers make excellent Facilitators.

- True
- False

Submit

X



Thanks for completing that!

Correct! Traditional project managers can step in successfully as Facilitators only if they adopt an Agile Mindset. This Facilitator role genuinely does not have an equivalent in the traditional project management team structure.

[Continue](#)

Additional Resources

We discussed a few misconceptions about Agile in the video, but there are many others.

- [Top Misconceptions about Agile Software Development](#): This article shares a few more misconceptions about Agile.

Exercise: Setting An Agile Mindset

Setting An Agile Mindset at SocialKare.gov

With what you have learned about Agile, how can we help the SocialKare.gov team develop an Agile Mindset? Review the [SocialKare.gov Case Study](#) and outline three recommended changes to the overall strategy for SocialKare.gov to set in place a more Agile Mindset. Take into account The Agile Manifesto in your recommendations and avoid the negative pitfalls of Waterfall.



Setting An Agile Mindset

Review the SocialKare.gov case study. Outline three recommendations to set an Agile Mindset at SocialKare.gov. Consider the Agile Manifesto in your recommendation and avoid the negative pitfalls of Waterfall. Explain why your recommendation will help.

- Review the [SocialKare.gov Case Study](#).
- Find the **Setting An Agile Mindset worksheet** in the [Agile Foundations Course Workbook](#)
- In the worksheet, list at least three recommendations to set an Agile Mindset on the SocialKare.gov team
- Explain why your recommendations will help

Solution: Setting An Agile Mindset

My Solution

Final Exercise

- Evaluate the situation at SocialKare.gov
- Outline three recommendations to set an Agile Mindset
- Consider the Agile Manifesto in your recommendations

Success Strategy #1



*Ensure SocialKare.gov's
Management Commitment*



- Ensures strategic input and support
- Continuing clear direction as product development evolves
- Resource support
- Removing significant roadblocks

Success Strategy #2



Provide autonomy to the team by empowering them



- Ensures timely decisions to move the product development forward
- Team becomes more self-managed

Success Strategy #3



Incorporate Adaptive Planning with relevant buy-in



- Inspiring product vision
- Roadmap that progressively evolves over time
- Release Plan and Iteration Plan sets expectations
- Daily updates to ensure proactive stance

Strategies to Bring an Agile Mindset to SocialKare.gov

The three strategies I recommend are:

- Ensuring management commitment. Any successful Agile transformation initiative requires a serious management commitment.
- Provide the team autonomy by empowering them. A de-centralized decision-making model is needed in Agile environments.
- Incorporate Adaptive Planning with relevant buy-in. Adaptive Planning includes a Product Vision, a Product Roadmap, a Release Plan, an Iteration Plan, as well as daily updates at the Daily Stand Up.

Thinking Like an Agilist



Think of a team you have worked on that didn't fully embrace the Agile Mindset. What strategies could you use to bring the team closer to "being Agile"?

Your reflection

To improve the communication between the team members would be a very important strategy to improve the performance of the team. Our team is multicultural and multiethnic but the communication is very poor between the team members and for that reason sometimes the outcomes of the sprints are not totally successful. The team doesn't have good team leaders who embrace the Agile Mindset or the principles established in the Agile Manifesto. Instead, the team leaders act as traditional project managers and for that reason, their job is not efficient.



Things to think about

Most teams need help now and then to keep them focused on being Agile. As an Agilist, you'll want to be an Agile champion for the team.

Lesson Recap

What We Have Learned

Lesson Recap



Why Agile?

- The Agile Mindset
- The Agile Manifesto
- Agile vs. Waterfall
- Misconceptions of Agile

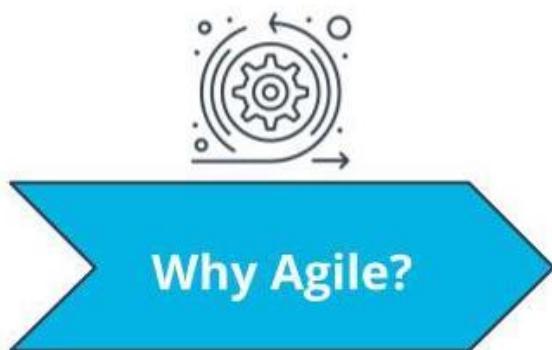
Up Next...



- High Performing Teams
- Size, Structure and Skills
- Agile Governance

In this lesson, we covered some fundamental groundwork for developing our understanding of Agile. We learned that:

- Agile is a Mindset
- It is essential to **be Agile** and not just **do Agile**
- The 4 Paired Core Values in the Agile Manifesto and their associated 12 Principles provide a solid foundation for successful Agile teams
- Agile is a very different approach than the traditional Waterfall methodology



- The Agile Mindset
- The Agile Manifesto
- Agile vs. Waterfall
- Misconceptions of Agile

What We Covered In This Lesson

The purpose of this lesson was to give you an understanding of the philosophical underpinnings of Agile. You were also introduced to the value-driven benefits of using Agile for product development. You should now understand why so many organizations across the globe are excited about using Agile.

This lesson has also set us up nicely for the next lesson, where we will dive into the topic of building and evolving successful Agile Teams

Glossary

New Terms In This Lesson

Term	Definition
Agile Manifesto	The four paired Core Values and associated 12 Principles that set the foundation for all Agile Frameworks
Agile Mindset	The set of attitudes supporting an agile working environment
Agile Principles	Practical guidance for teams to adopt Agile
Ambiguity	Ambiguity refers to a lack of clarity, such as not having a clear understanding of the genuine needs of the customer and end-users
Anti-patterns	Anti-patterns are practices that prevent the Agile mindset from being present and make things worse
Being Agile	When an Agile team lives & breathes Agile principles and values through Agile practices consistently every day
Business Agility	The ability of an organization to adapt quickly to market changes, respond rapidly and flexibly to customer demands that make business sense, as well as adapt and lead change in a productive and cost-effective manner with no compromise to quality
Complexity	Complexity exists when there are many interconnected parts and variables that influence each other
Doing Agile	When an Agile team adopting the practices without committing to or exhibiting Agile principles and values
Four Paired Core Values	The part of the Agile Manifesto that defines the values that establishes what Agile is for teams and organizations
Growth Mindset	The mindset that an individual's abilities can grow through dedication and hard work
Incremental Product Delivery	An approach that utilizes a given number of steps, which go from start to finish following a linear path of progression
Iterative Product Delivery	An approach where product development is broken into sequences of time-boxed, repeated cycles called iterations
Muda	Lean principles refer to the Japanese term Muda as waste; Agile teams focus on the removal of non-value adding tasks that are seen as Muda
Product Owner	A business proxy or representative of the business users who is the Voice of the Customer (VOC)
Return on Investment (ROI)	Return on investment (ROI) is calculated as the ratio between net profit and cost of investment over a defined period of time
Sequential Product Delivery	A process where a defined sequence of steps must be followed as in the Waterfall approach
Stacey Diagram	A diagram developed by Ralph Stacey to categorize the complexity of a project

Term	Definition
Systems Thinking	A holistic approach that looks at the way a system's components interrelate and influence each other and how these components come together within the context of larger systems to deliver a solution
Uncertainty	The extent to which an organization can confidently predict or forecast the future; more uncertainty makes it harder to predict
Voice of the Customer	A term used to articulate the steps to capture customer's needs
Volatility	Volatility is when there are unexpected or unstable possibilities that may influence the work being done
VUCA	Volatility, Uncertainty, Complexity, Ambiguity
Waterfall Methodology	A methodology of product development that starts by breaking down project tasks into linear sequential phases or stages where each subsequent stage depends on the successful delivery of the previous ones
WIP (Work in Progress)	The work that has been started but not yet completed