





AGILE FOR EVERYONE

A Fundamental Course on Agile

By: Gourab Nanda



1

RE-INVENTING MYSELF











Coaching Agile teams and practicing human transformation techniques. An Agile enthusiast.



Conducted over 400 Agile and Scrum training sessions in North America, providing private Agile and Scrum Programs to organizations such as: Bank of America, Philips, GlaxoSmith, American Express, MITRE, US Senate, PWC, Department of Justice, NCTC (CIA), USPS, SAIC, NATO, Guardian Life, Kaiser Permanente, DnB, Customer Bank, AARP, Booz Allen, Katz Business School and many more



Founded MyBusinessAssistant, in 2007. Founded VendorFit.com (B2B Software Recommendation Platform).



Successful work experience as an Engineer, Software Programmer, IT Consultant, and IT Manager spanning multiple decades.

1.2

ว

COURSE OBJECTIVES



At the end of the course, learners will understand:

- What Agile is and why it matters
- The most important components of an Agile work environment
- The skills necessary to become a true Agile professional
- The career opportunities associated with Agile

Remember: Fundamentals are not just for Agile beginners. It's for everyone who wants to experience growth in a specific field.

1.3

J

COURSE AGENDA



- 1. What and Why of Agile
- 2. Agile Mindset
- 3. Value-Based Delivery
- 4. Systems Thinking
- 5. Self-Managed Teams
- 6. Learning and Growth
- 7. Servant Leadership
- 8. What's Next? (Career Options)

1.4



What is Your Understanding of Agile?

1.5

5

AGILE: DICTIONARY DEFINITION



Ag·ile

Adjective

· able to move quickly and easily.

"Ruth was as agile as a monkey"

synonyms: nimble, lithe, supple, limber, acrobatic, fleet-footed, light-footed, light on one's

antonyms: clumsy, stiff, slow, dull

• able to think and understand quickly.

"His vague manner concealed an agile mind"

1.6

BEING AGILE = BEING RESPONSIVE



In a complex, uncertain situation:

Do you React?



Do you Respond?

What difference does it make?

1.7

7

AGILITY IN BUSINESS





"Agility is the ability to both create and respond to change in order to profit in a turbulent business environment. Agility is the ability to balance flexibility and stability."

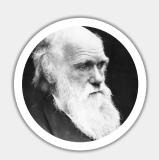
- Jim Highsmith, 2002

1.8

Q

MY FAVORITE AGILE QUOTE





"It's neither the strongest of the species that survive, nor the most intelligent, but the ones most responsive to change."

- Charles Darwin

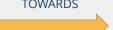
1.9

WORKING IN THE MODERN ERA









To Knowledge Work

- · Work is invisible
- · Work is constantly changing
- · Emphasis on fast value delivery
- · Less structure with decentralized decisions
- · Understand your customer
- · Give autonomy
- · Continuous innovation
- · Focus on value
- Inspect and Adapt
- Treat workers as appreciating assets, not costs

1.10

From Industrial Work

- · Work is visible
- Work is stable (not much variation in output)
- · Emphasis on process efficiency
- · More structure with centralized decision
- · Define the task
- · Command and Control
- Strict standards
- Focus on quantity
- Measure performance to defined standards
- · Minimize cost of workers for a task

ARE YOU READY TO CHANGE?



Knowledge Work Environment Requires A Complete Change In Mindset.



1.11

11

AN AGILE MIND





Moving away from **Plan and Control**Moving towards **Sense and Respond**

1.12



Agile was not developed in a single day. Future Agile practitioners across the globe felt the need for adaptive project management because they saw that traditional, predictive Waterfall methods failed to account for the uncertainty involved in software development and innovation was needed.

1.13

13

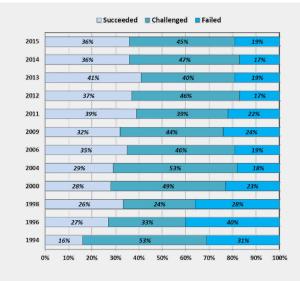
SOFTWARE PROJECTS WERE FAILING

AGILETRAINING.CO

© AgileTraining.Co

Until recently, around 60 - 75% of software projects either failed or were severely challenged across all industries.

Source: Standish Group Chaos Report



1.14



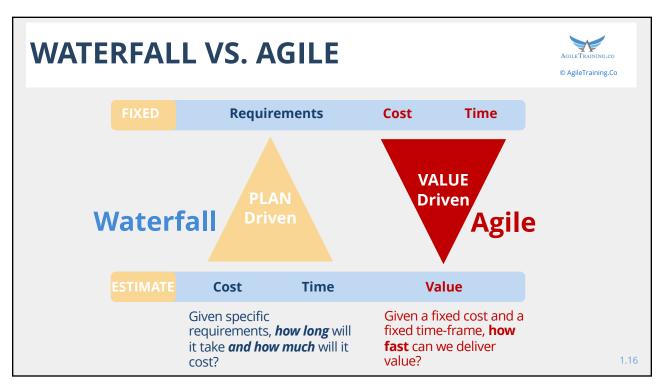
Agile started as a software product management methodology but slowly became a necessary mindset for overall organizational operation in the current, fast-paced world.

65% of Enterprises use Agile outside Software development.

-Gartner Report 2019

1.15

15



AGILE PROJECT MANAGEMENT





Achieve the highest **Economic Value** in the shortest time possible.

1.17

17

DO YOU KNOW?





The most important thing to know about Agile methods and processes is that they simply do not exist. **There are only Agile people**.

The processes that we describe as "Agile" are designed to create environments for **people to develop Agile mindsets**.

1.18

LEAN AND AGILE FRAMEWORKS



Outdated Methodologies

Crystal, DSDM, FDD

Popular Methodologies

Scrum, Kanban, Xtreme Program

Scaled Methodologies

SAFe, LeSS, DaD, Nexus

1.19

19

ASSESS YOUR AGILE CULTURE

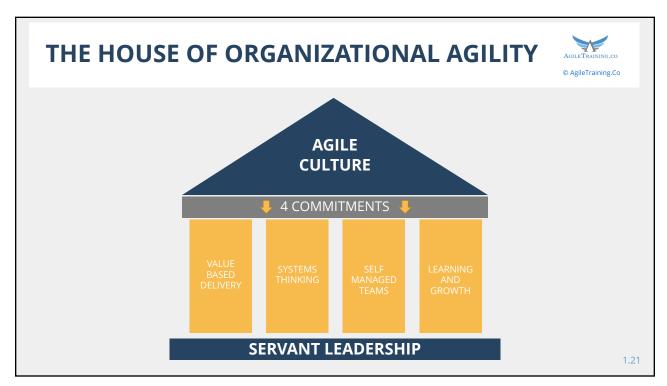




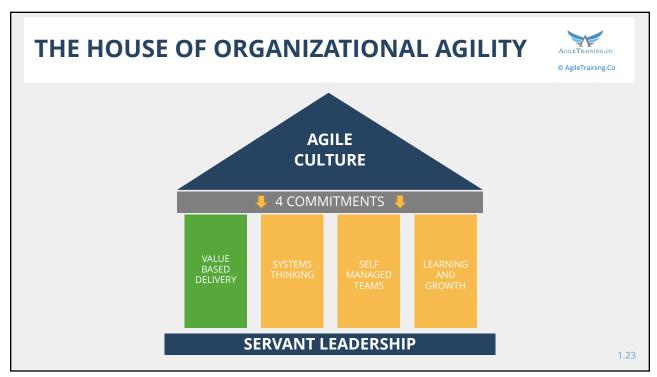
On a scale of 1 - 10, 1 being strongly disagree and 10 strongly agree, how do you rate your company on the following statement.

In our company, we do whatever it takes to support the dynamic needs of our business and customers and do not focus on completing pre-defined or outdated plans.

1.20







23

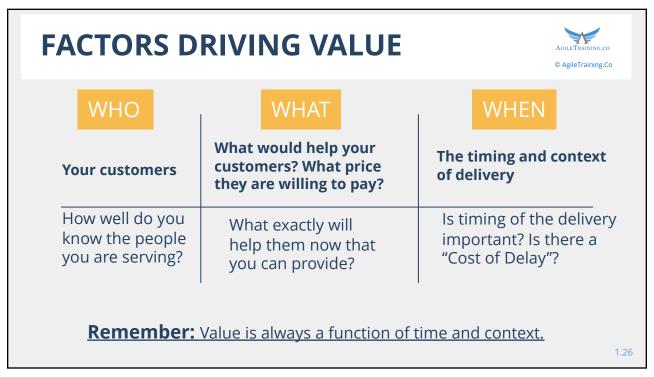
VALUE-BASED DELIVERY

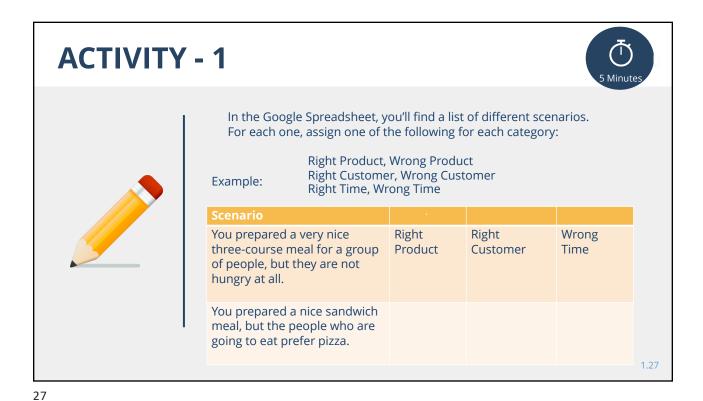


- Every organization exists to deliver value to their customers
- Customers are willing to pay for what is personally valuable and not what is given to them
- A product, feature, or service is only valuable in a specific time and context
- The value delivered should make economic sense to both the customers and producers

1.24

Standish Group Survey Standish Group Survey In software applications, when asked about the actual features used: Most value is contained within only 20% of the delivered solution.





AGILE PRODUCT DELIVERY



Delivering the **Right Solution** to the **Right Customer** at the **Right Time**.

1.28

UNDERSTANDING YOUR CUSTOMERS



- The more you understand your customers and their needs, the more effectively you can serve them
- Understand their work environment, buying habits, fears, likes, dislikes, etc.
- Customers could be internal or external to the organization

1.29

29

Tools To Help Define Customer Journey Map. Customer Persona Customer Journey Map. Sara We set is See a ring as I tage core every 3-monts, but process product or set of the first in the contract of the first in the

FROM PROJECT TO PRODUCT



What is a Product?

"A Product is a vehicle to deliver value. It has a clear boundary, known stakeholders, well-defined users or customers. A product could be a service, a physical product, or something more abstract."

> The Scrum Guide (Scrumguides.org)

> > 1.31

31

TYPES OF PRODUCTS AND SERVICES





Simple

We know What and How. Say we need to prepare a meal for an event, or manufacture a dining table set, or a bed we know how it works. These products can be completely planned and delivered.



Complicated

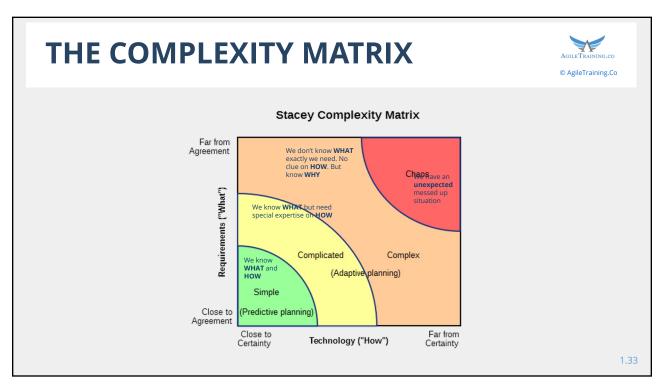
We know What we want but need expert skills on How. For instance, designing a complicated machine, servicing an iPhone's technical issue, or building a new laptop, etc. It's complicated, but if we can gather the right expertise, we should be able to deliver.

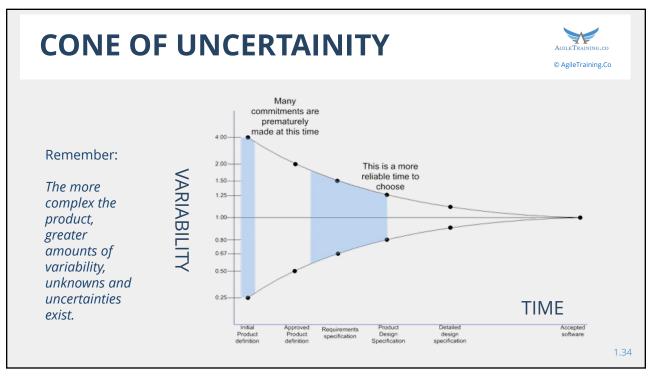


Complex

We don't know What or How. We know Why. The company wants to innovate and launch a completely new product line or service. For example, a new service like Uber, new Al-based teaching platform, or a mobile shared ride service

1.32





POWER OF INCREMENTAL DELIVERY



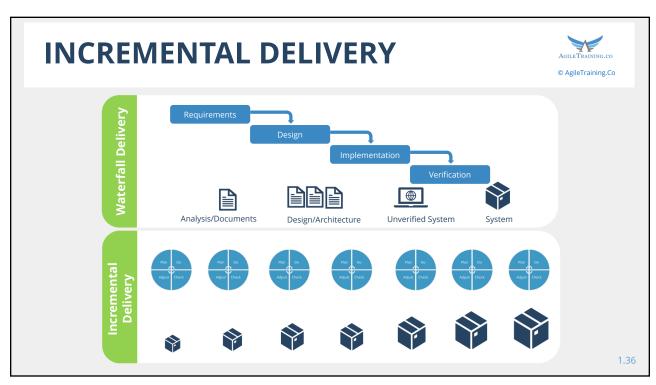


As we move from simple to more complex, we need to deliver incrementally.

Get continuous feedback to know if what you are delivering makes economic sense to the users.

1.35

35



ACTIVITY - 2





In your group, discuss different examples of simple products, complicated products, and complex products.

Discuss and assign which execution model you would utilize for the scenarios given in the Google spreadsheet.

1.37

37

DEFINE VALUE AT ALL LEVELS © AgileTraining.Co The future state of the solutions or services that we offer to our customers and \boldsymbol{WHY} that state is right for our customers. Many companies define projects and Epics at this In Agile organizations, value is clearly Strategy defined and What's our game plan to achieve the vision above? A product Roadmap with specific business objectives (goals) is a good way to define strategy. The **HOW** part of the delivery. communicated at all levels. **Execution** WHAT will be done to achieve the goal? Detail scope and technical steps discussed. User Story and Acceptance Criteria of features are defined. 1.38

VISION OF A PRODUCT



Vision: Show a clear direction as to why the Product is developed.

users and

Segment

customers?

Target group

Who are the target

Defining the Market

What problem does the Product solve?

Needs

What benefits does it provide to the users?

Product

What's the name and type of Product?

What makes it desirable and special?

Where are its key differentiators?

Business Value

How is the Product going to benefit the company?

What are the business outcomes / goals?

What is the business model?

What are the leading indicators?

1.39

39

PRODUCT VISION EXAMPLE





• Vision: Building an independent online app for easy grocery shopping.



Target group

Major grocery chains and online grocery buyers

Needs

Shoppers' pain of going to stores and spending time on grocery shopping

Ease and convenience of grocery shopping from one or multiple stores with home delivery

Product

Fastgrocery App

Is a website and mobile арр

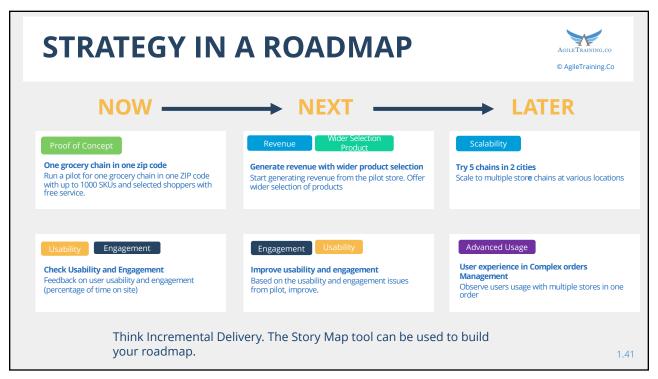
\$ Value

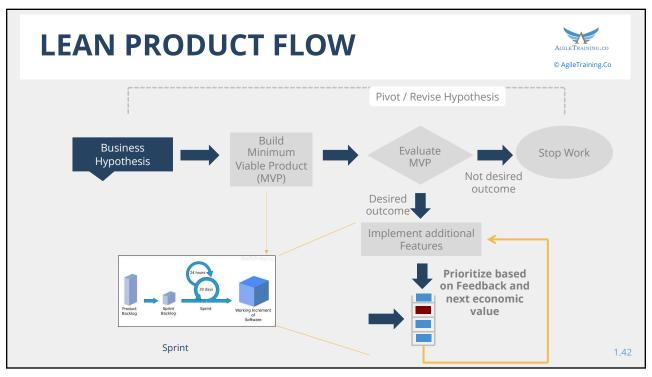
Multiple revenue streams. A percentage of the shopping costs will be charged to both grocery company and users.

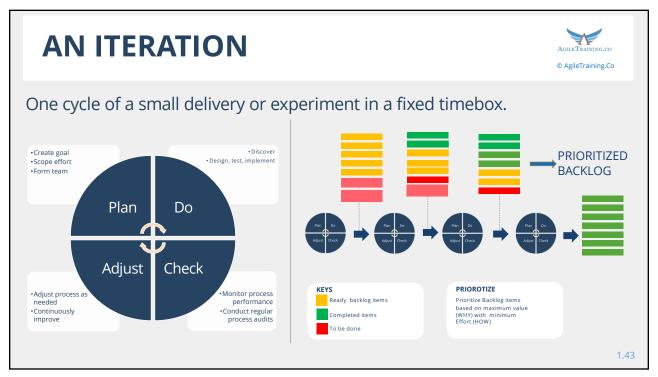
Partner with UberEATS for delivery

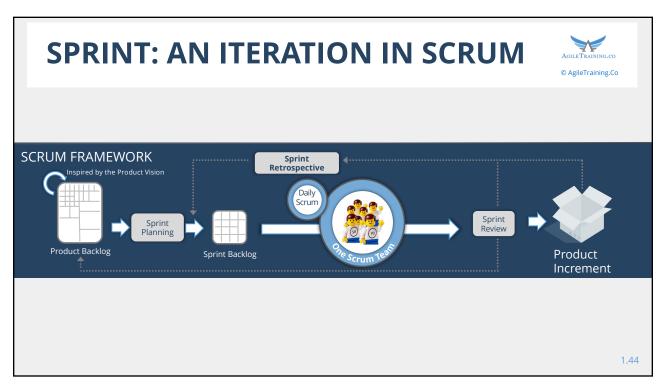
1000 orders within first 6 months with a 20% monthly increase

1.40









REQUIREMENTS AT EXECUTION



User Story

User Story is a great template to communicate the intent of the user

As a <who> I need <what> so that <why>.
As an online shopper, I need to save my items in a holding cart for future purchases.

Conversation

The details are in a conversation with the user

How long do you want to hold? How many items?

May be for 3 - 4 weeks. Not sure how many.

Acceptance Criteria

Acceptance criteria tells us what scope is needed to deliver value (for a specific goal)

- Provide "Save" option for all items
- Notify customers every month on their saved items
- Allow moving from holding cart into shopping cart

1.45

45

RIGHT ENVIRONMENT FOR VALUE



- An organization should always work on building the right environment for delivering value.
- Because we keep changing what we deliver as value, the environment should be conducive for creating and delivering the right value.
- In technology product development the two most important factors for the environment are the engineering infrastructure and the skillset of the people.

1.46

ACTIVITY - 3





In the E-3 section of the Google Spreadsheet, you'll find a list of different task items. Discuss with your group as to how you would prioritize those tasks.

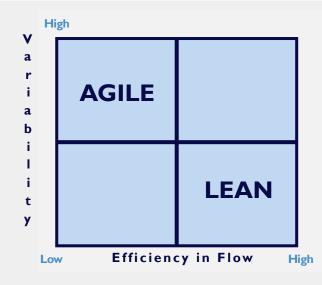
Remember: Tasks that generate higher value with lower effort should be prioritized first.

1.47

47

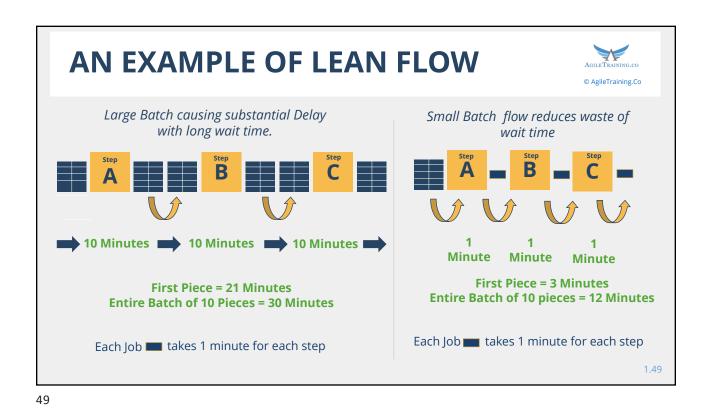
LEAN VS. AGILE





Agile focuses on managing variability. Lean-Thinking focuses on minimizing waste and increasing speed by tracking every step of the flow of Value delivery.

1.48



KANBAN – A WAY TO CONTROL WIP

Kanban is primarily about controlling Work-in-Process (WIP) to optimize the flow of a system by reducing any wait time

Backlog Analysis Development Test Deploy

Bottleneck

STOP STARTING. START FINISHING.

AGUST TRAINING.CO

C AgileTraining.CO

MIP 100

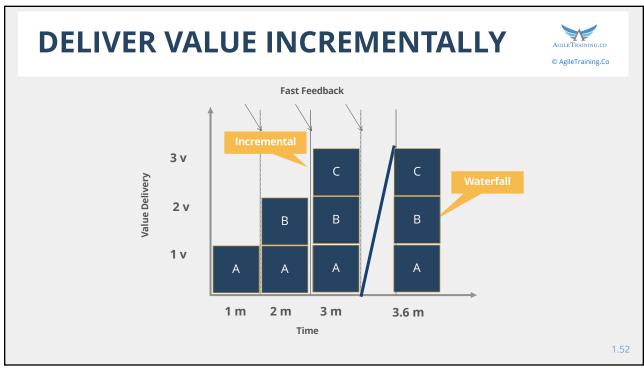
BOTTLENECK

BOTTLENECK

1.50

ACTIVITY - 4 SERIAL DELIVERY vs. PARALLEL DELIVERY • Your project has three jobs and ONE team. Job A, B, and C. Each job will take the entire team 1 month to complete and delivers one unit of value. • If your goal is to deliver the maximum value in the shortest time period, which of these two delivery methods would you recommend? Scenario 2 -Scenario 1 - Serial delivery Parallel delivery JOB B JOB C JOB A (Assume 20% task switching overhead for JOB B each team member in Scenario 2) JOB C — Time → 1.51

51



ASSESS YOUR AGILE CULTURE





On a scale of 1 - 10, 1 being strongly disagree and 10 strongly agree, how do you rate your company on the following statement.

In our company, we always strive to understand and deliver the highest possible **value** to our users / customers and not just produce products and services that are technologically, politically, or contractually nice to have.

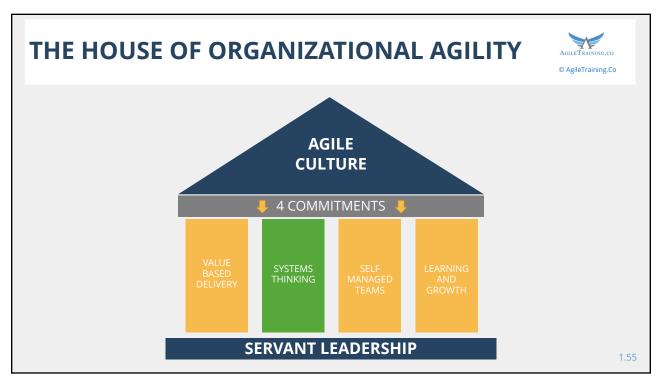
1.53

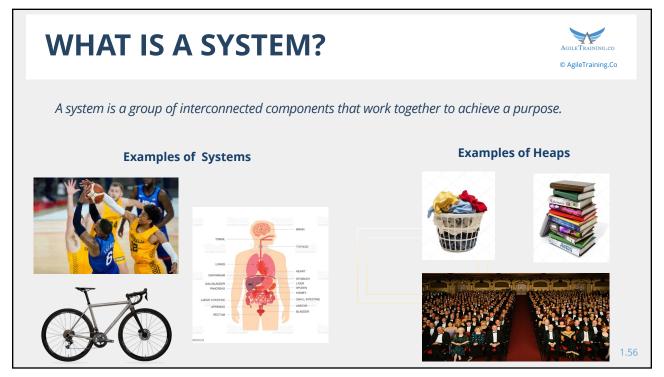
53



COMMITMENT 2:SYSTEMS THINKING

1.54





THE POWER OF EMERGENCE



The emergent properties of the whole (the system) is more than the sum of its parts and is understood better by understanding the INTERACTIONS between the parts

and **NOT**

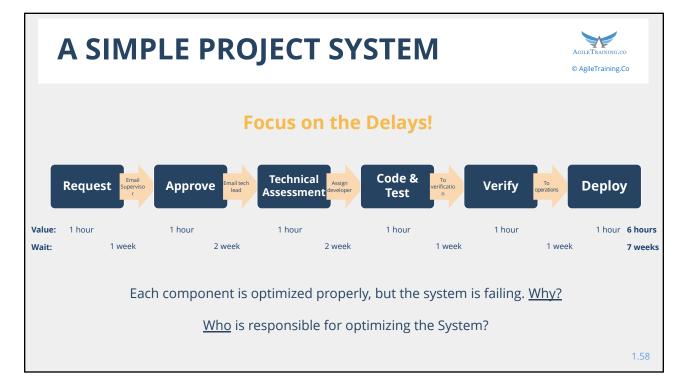
by separately understanding the behaviors or ACTIONS of individual parts.

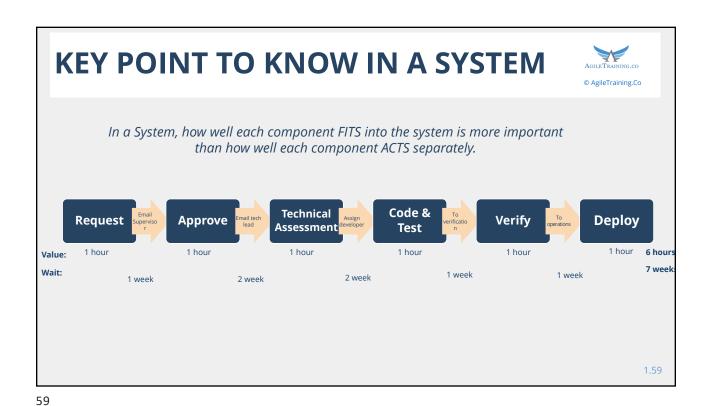




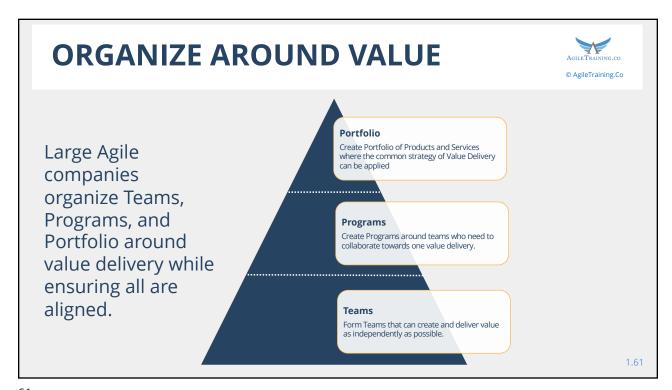
1.57

57









61

APPLY SYSTEMS THINKING:



Remember:

1. Changing the System will change what People do. But changing what people do WILL NOT change the System.

-Peter Scholtes

- 2. A System well designed self-organizes and auto-corrects itself through feedback loops.
- 3. In complex systems, the objectives of lower systems should align with the objectives of its higher system(s).

1.62

ACTIVITY - 5





You are the manager of a restaurant responsible for its effective operation.

Considering the restaurant as a system, discuss in your group what possible components and interactions contribute to the efficient operation of this system.

1.63

63

ASSESS YOUR AGILE CULTURE





On a scale of 1-10, 1 being strongly disagree and 10 strongly agree, how do you rate your company on the following statement:

In our company, we try to look and evaluate holistically the end-to-end business processes and consider the interdependencies between different entities to solve major business problems.

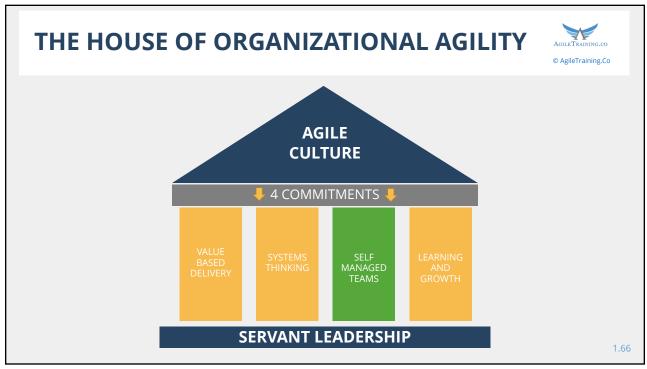
1.64



COMMITMENT 3:SELF-MANAGED TEAMS

1.65

65



SELF-MANAGED TEAM



Managed Vs. Self-Managed Team:

- **Managed Team:** A group of individuals working for a supervisor/manager. The manager is responsible for the output of the team's work. The manager is the control center, the primary decision maker, and takes responsibility for the quality of the output.
- **Self-Managed Team:** When team members are knowledge workers (know at least as much about the job than the manager) and collectively know the best choices to make in order to achieve a goal. The team should be left to decide the What, How, and Who aspects of the job they undertake.

1.67

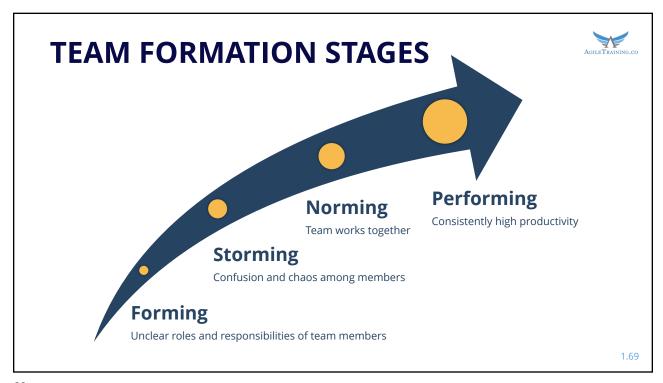
67

ADVANTAGES OF SELF-MANAGED TEAM



- A self-managed team makes fast decisions, learns quickly, and takes corrective actions rapidly
- A self-managed team is accountable for all decisions taken by them
- The collective intelligence that emerges from a self-managed team is much higher than the sum of their individual knowledge
- The work structure of a self–managed team mirrors their communication structure
- The team motivation level is generally high once team achieve a certain level of maturity

1.68



69

STRUCTURE OF A SELF-MANAGED TEAM



A Self-Managed Team has:

- **Team Goal:** The team should have a shared goal that they are committed to achieve.
- Roles with a Purpose (Accountabilities): A self-managed team should have roles with a clearly-defined purpose. The role has all the authority to make all decisions to achieve the purpose as long as it does not break any of the governing rules mentioned.
- Governing Rules: If there are any governing rules that the roles must follow, they should be defined clearly. There should be as few rules as possible while remaining true to organizational desired outcomes.

1.70

EMOTIONAL INTELLIGENCE (EQ)



FINDING GOOD PLAYERS IS EASY.

GETTING THEM TO PLAY AS A **TEAM IS** ANOTHER STORY.

-Casey Stengel

AWARENESS ACTIONS

Self-Awareness What are you feeling? How did these feelings

SELF

What information do they

Self-Management How do you want to feel? What do you need to do in order to feel that way?

OTHER

Social Awareness What are they feeling?

How did those feelings

Relationship

Management How do you want them to What do you need to do for them to feel that way?

IQ MAY GET YOUR FOOT IN THE DOOR.

EQ WILL DECIDE HOW FAR YOU GO.

- KeyTalent

1.71

71

COACHING A SELF-MANAGED TEAM



- The right coach can make a disorganized team into a high-performing selfmanaged team.
- The coach pays close attention to the behavior of all the members. The coach appreciates and rewards behaviors that help the team perform and grow.
- The coach guides the team to a solution rather than providing a direct solution.
- The coach creates an environment that is conducive to team productivity and output.
- The coach can help a team develop the proper working agreements to avoid conflicts.

1.72

SCRUM TEAM: THREE CORE ROLES © AgileTraining.Co Scrum Master **Product Owner Developers** (3 – 8 people) (One per team) (One per team) Does the work Represents the Facilitates and Self-organizes business interests protects the Owns Sprint Sets priorities process Backlog • Owns the product Removes team All skill-sets impediments backlog included 1.73

73

ASSESS YOUR AGILE CULTURE





On a scale of 1-10, 1 being strongly disagree and 10 strongly agree, how do you rate your company on the following statement:

In our company, we always encourage cross-functional collaboration and information exchange with aims of coming up with the right solution rather than needing to be directed by a manager or an expert.

1.74

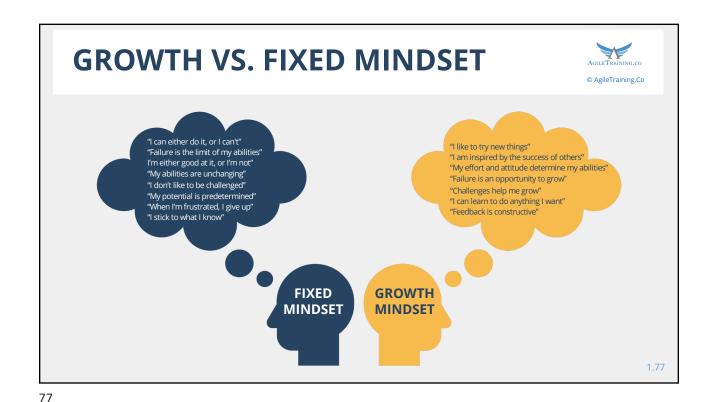


COMMITMENT 4: LEARNING AND GROWTH

1.75

75





INDIVIDUAL LEARNING



"We may know enough about a subject to know when we are right, but not enough to know when we are wrong."

- Every individual wants to learn and grow in their own way.
- In today's fast-paced world, our ability to learn quickly and reinvent ourselves all the time is critical for success.
- Learning at work by inspecting and adapting our job is a big part of learning.
- Learning by experimenting and collaborating with others in a complex working environment can be huge.
- Sufficient time and space are needed for learning.

1.78

LEARNING ORGANIZATIONS



- Learning organizations take advantage of the fastchanging environment to build a learning culture.
- They leverage collective knowledge of the workforce, the creativity of people, and collaboration with customers and suppliers to build a learning culture.
- They foster curiosity, exploration, invention, and safeto-fail risk undertakings, which replace commitment to the status quo and pre-defined plans.

1.79

79

ASSESS YOUR AGILE CULTURE





On a scale of 1 - 10, 1 being strongly disagree and 10 strongly agree, how do you rate your company on the following statement:

In our company, we strive to build a culture of learning where failure and mistakes create inquiry for the purpose of improvement and not for punishment.

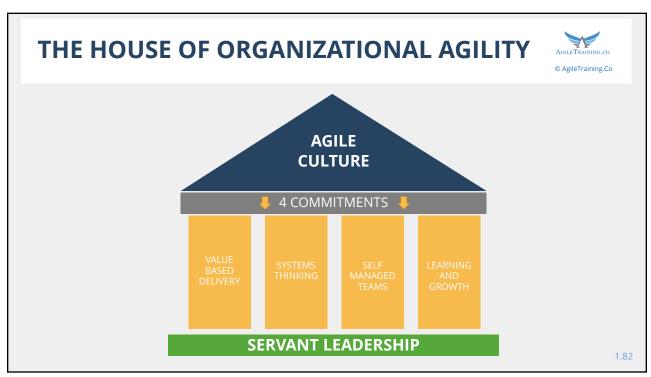
1.80

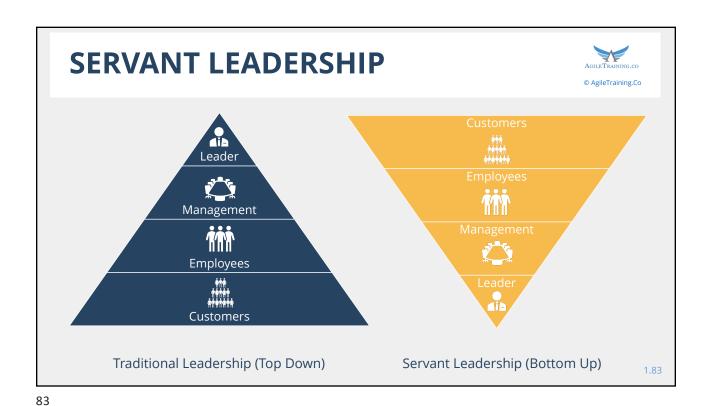


SUPPORTED BY SERVANT LEADERSHIP

1.81

81





SERVANT LEADERSHIP





TRADITIONAL LEADERS

- Sees leadership as a rank to obtain
- Uses power and control to drive performance
- Measures success through output
- Speaks more
- Believes it's about him/her



SERVANT LEADERS

- Sees leadership as an opportunity to serve others
- Shares power and control to drive engagement
- Measures success through growth and development
- Listens more
- Understands it's about the team

1.84

ASSESS YOUR AGILE CULTURE





On a scale of 1 -1 0, 1 being strongly disagree and 10 strongly agree, how do you rate your company on the following statement:

In our company, leaders spend more time removing bottlenecks for teams in order to maximize their potential and produce greater value rather than managing and directing teams for a certain amount of output.

1.85

85

THE AGILE MANIFESTO



We are uncovering better ways of developing software by doing it and helping others do it.

Through this work we have come to value:

Individuals and Interactions **OVER** Processes and Tools

Working Software **OVER** Comprehensive Documentation

Customer Collaboration **OVER** Contract Negotiation

Responding to Change **OVER** Following a Plan

While there is value in the items on the right, we value the items on the left more.

www.agilemanifesto.org

1.86

AGILE PRINCIPLES



- 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 customer's competitive advantage.
- Deliver working software frequently, from a couple of weeks to a couple of months, with a preference for the shorter timescale.

- Businesspeople and developers must work together daily throughout the project.
- Build projects around motivated individuals. **Give them** the environment and support they need and **trust them** to get the job done.
- The most **efficient and effective** method of conveying information to and within a development team is face-to-face conversation.

- Working software is the **primary** measure of progress.
- Agile processes promote sustainable development. The sponsors, developers and users should be able to maintain a constant pace indefinitely.
- Continuous attention to technical excellence and good design enhances agility.

- Simplicity the art of maximizing the amount of work **not done** is essential.
- The best architectures, requirements, and designs emerge from self-organizing teams.
- At regular intervals, the team reflects on how to **become more effective**, then tunes and adjusts its behavior accordingly.

1.87

87

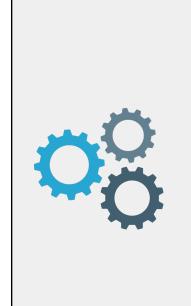
ACTIVITY - 6





Summarize each Agile Principle into a 3-word sentence.

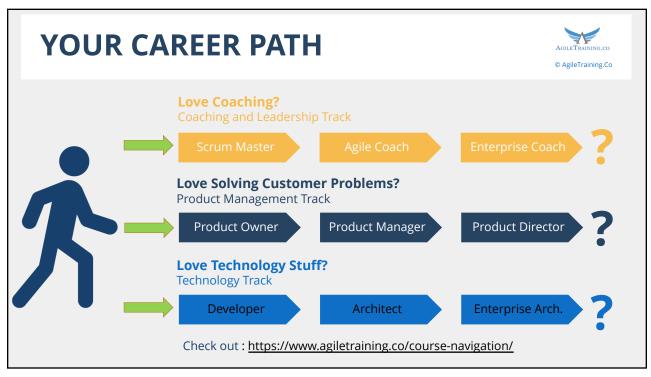
1.88



OK, NOW WHAT'S NEXT?

1.89

89



Book Recommendations

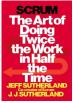


Scrum - A Smart Travel Companion Gunther Verheyen



Reinventing organizations Frederic Laloux

organizations



Scrum - The Art of Doing Twice the Work in Half the Time leff Sutherland



Scrum Mastery Geoff Watts



Agile Retrospectives Esther Derby and Diana Larsen



Coaching Agile Teams Lyssa Adkins



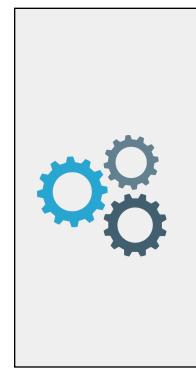
The Lean Startup Eric Ries

91



QUESTIONS? FEEDBACK?

1.92



THANK YOU!

1.93