AGILE AND SCRUM:

What is agile?

Agile is a project management philosophy that employs a set of principles and values to help software teams respond to change. Agile teams value individuals and interactions over processes and tools, working software over comprehensive documentation, customer collaboration over contract negotiation, and responding to change over following a plan.

A good way to understand agile is to contrast it with another project management philosophy, waterfall. In waterfall delivery, the scope of a product is set and time and resources are flexible. Waterfall organizations will add more programmers and pad schedules to deliver the product that they decided to ship.

In agile, the scope of the product is flexible while resources and time are fixed. Agile teams commit to deliver software on time with the team they have today. What they deliver is a flexible combination of what they've learned that the customer wants and what they can create in the allotted time.

Benefits of using agile

Agile teams have a strong "why" behind what they do and clarity about how they do it. The agile principles help teams break huge, ambitious goals into manageable chunks of work that they can consistently deliver. Agile software developers are empowered by countless stories of small, agile teams outperforming large competitors that use waterfall delivery. Agile teams also benefit from the "agile industrial complex." There is a wealth of resources and tools for those needing to learn agile and a whole army of consultants eager to help with implementation.

Disadvantages of using agile

Following agile principles can lead you to places you never thought you'd go. Agile helps teams change direction based on market and customer feedback. Chasing these ideals, you might find that your team has built something completely different than what you set out to do. This can be an unnerving feeling and you might even feel a lack of direction as you pursue new avenues and follow customer feedback in new directions. Because of these divergent outcomes, not all teams and companies can work in an agile way. But the teams that choose to overcome these hurdles often find they can ship a better product to their customers in the end.

What is scrum?

Scrum is an agile framework that helps teams structure their work into short development cycles called sprints. Scrum teams commit to shipping work at the end of each sprint and adopt practices and a team structure that helps them achieve this cadence. Scrum takes the agile principles one step further, creating structure that helps teams live the agile principles in their day-to-day work. Scrum is a well-documented agile framework that many teams can adopt without much disruption.

Benefits of using the scrum methodology

Scrum teams ship software on time. Rather than updating the business on your progress, you can show them! When you ship software, customers start using it. More customer usage data helps inform your direction and drives growth. Scrum teams also tend to be healthier, with less burnout and churn than others. This is because scrum practices, like sprint planning and sprint retrospectives, are focused on setting up teammates for success.

Disadvantages of using the scrum methodology

Scrum is an "all-in" approach. Success stems from the addition of new roles, like a scrum master, and the refactoring of everybody's schedules around a set meeting cadence. Many teams don't have the resources to hire new teammates and the time for new meetings. When teams fail to go "all-in" they often fail to unlock the benefits of scrum. Additionally, not all teams can deliver work at such a high cadence. When quality suffers as a result, many teams make their sprints longer and longer. Eventually, you're back to doing waterfall!

Questions:
1. **What is the primary goal of Agile?**
   a) To create detailed project plans before development
   b) To ensure strict adherence to documentation
   c) To help teams respond to change effectively
   d) To eliminate project management roles
2. **Which of the following is NOT a core value of Agile?**
   a) Individuals and interactions over processes and tools
   b) Customer collaboration over contract negotiation
   c) Following a plan over responding to change
   d) Working software over comprehensive documentation
3. **In Agile, what remains fixed while the scope of the product is flexible?**
   a) The number of features to be developed
   b) Time and resources
   c) Project documentation
   d) The customer's requirements
4. **How do Agile teams decide what to deliver?**
   a) Based strictly on the initial project requirements
   b) By delivering everything planned, regardless of time constraints
   c) By balancing customer needs with what can be created within the given time
   d) By following a rigid contract
5. **What is one advantage of Agile teams?**
   a) They deliver large projects all at once
   b) They break down ambitious goals into manageable chunks
   c) They focus only on technical implementation
   d) They avoid market feedback
6. **What is a possible downside of Agile?**
   a) It never allows for customer feedback
   b) Teams may build something different from their original plan
   c) It strictly follows pre-defined specifications
   d) Agile teams struggle with flexibility
7. **What is Scrum?**
   a) A set of project management tools
   b) A framework within Agile for structuring work into short cycles
   c) A document-heavy approach to software development
   d) A method that discourages teamwork
8. **What are short development cycles in Scrum called?**
   a) Phases
   b) Steps
   c) Sprints
   d) Levels
9. **What is a key benefit of Scrum teams?**
   a) They ship software on time and gain customer feedback early
   b) They minimize communication among team members
   c) They avoid deadlines and structured planning
   d) They prioritize lengthy documentation over software development
10. **What is a major challenge of implementing Scrum?**
    a) It requires new roles and structured meetings
    b) It discourages teamwork
    c) It lacks clear guidelines
    d) It does not allow for continuous improvement

KEYS:

1 c) To help teams respond to change effectively

2 c) Following a plan over responding to change

3 b) Time and resources

4 c) By balancing customer needs with what can be created within the given time

5 b) They break down ambitious goals into manageable chunks

6 b) Teams may build something different from their original plan

7 b) A framework within Agile for structuring work into short cycles

8 c) Sprints

9 a) They ship software on time and gain customer feedback early

10: a) It requires new roles and structured meetings