**AGILE AND SCRUM – Explanation Document**

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**Slide 1: What is Agile?**

Agile is a flexible and customer-focused approach to project management and software development. It allows teams to **adapt to change** rather than following a rigid, step-by-step plan.

**Example:**  
Think of **planning a road trip**. Instead of deciding every stop in advance, you remain flexible and adjust based on weather, traffic, and preferences. Agile works similarly—delivering results **step by step** while making adjustments based on feedback.

**Key Principles of Agile:**

* **Teamwork & Collaboration** – Teams work closely, ensuring open communication.
* **Small & Quick Steps** – Work is done in short cycles instead of one large project phase.
* **Customer First** – Regular feedback ensures the product meets user needs.
* **Embracing Change** – Plans adapt to evolving requirements.

**Slide 2: Why Agile?**

Traditional project management takes **months or years** before a final product is released, often leading to outdated results. **Agile solves this by delivering smaller, usable features regularly.**

* Agile allows teams to **respond quickly** to market demands.
* Ensures continuous improvement and adaptability.
* Delivers **incremental value** instead of waiting for one final delivery.

**Slide 3: Agile Principles**

Agile is based on **12 principles** (from the Agile Manifesto). Some key ones include:

1. **Customer Satisfaction** – Deliver working software frequently.
2. **Welcoming Changes** – Even late in development, changes should be embraced.
3. **Frequent Delivery** – Working software is delivered in short timeframes.
4. **Collaboration** – Business and development teams must work together.
5. **Motivated Teams** – Projects should be built around **trusted** individuals.
6. **Face-to-Face Communication** – The most efficient way to share information.
7. **Working Software as a Measure of Progress** – Focus on delivery, not documentation.
8. **Sustainable Development** – Teams should work at a consistent pace.
9. **Technical Excellence** – Continuous attention to good design and quality.
10. **Simplicity** – Maximize the amount of work **not done** (avoid unnecessary effort).
11. **Self-Organizing Teams** – Teams should take ownership of solutions.
12. **Regular Reflection** – Teams should reflect and improve their processes.

**Slide 4: Advantages of Agile**

Agile offers several benefits that make it a preferred approach in software development and other industries:

* **Faster Delivery** – Working software is released quickly and frequently.
* **Flexibility & Adaptability** – Agile teams **adjust** based on feedback.
* **Better Collaboration** – Promotes **strong teamwork and open communication.**
* **Higher Customer Satisfaction** – Regular feedback ensures customer needs are met.
* **Reduced Risks** – Problems are identified early and resolved quickly.
* **Higher Quality** – Frequent testing ensures better software quality.

**Slide 5: Disadvantages of Agile**

Despite its strengths, Agile has some challenges:

* **Lack of Predictability** – Since Agile is flexible, estimating time and budget can be difficult.
* **Scope Creep** – Continuous changes can lead to an **ever-expanding** project scope.
* **Requires Active Collaboration** – Agile depends on regular communication, which may be difficult for some teams.
* **Not Ideal for Large Projects** – Scaling Agile for large teams **can be complex**.
* **Documentation Challenges** – Focus is on working software rather than detailed documentation.
* **Dependence on Skilled Teams** – Agile requires **experienced** team members who can adapt quickly.

**Slide 6: What is Scrum?**

Scrum is a **framework within Agile** that helps teams work in short, structured cycles known as **Sprints**.

**Key Elements of Scrum:**

* **Sprints** – Fixed-length work cycles (typically **1-4 weeks**).
* **Scrum Team** – Consists of:
  + **Product Owner** – Defines what needs to be built.
  + **Scrum Master** – Facilitates the Scrum process.
  + **Development Team** – Builds the product.
* **Daily Stand-ups** – Short meetings to track progress.
* **Backlog** – A prioritized list of tasks.
* **Sprint Review & Retrospective** – Meetings to reflect on the sprint and improve for the next one.

**Slide 7: Advantages of Scrum**

Scrum provides multiple benefits:

* **Faster Delivery** – Small releases ensure quick results.
* **Increased Flexibility** – Teams **adjust** quickly based on feedback.
* **Improved Collaboration** – Everyone works together effectively.
* **Better Product Quality** – Frequent testing improves software.
* **Higher Customer Satisfaction** – Regular updates keep users engaged.
* **Continuous Improvement** – Reflection and feedback help teams improve.
* **Better Risk Management** – Issues are **spotted early** and resolved.

**Slide 8: Disadvantages of Scrum**

Scrum, like any methodology, has some challenges:

* **Requires Experienced Team Members** – New or inexperienced teams may struggle.
* **Difficult to Scale for Large Teams** – Scrum works best in small teams.
* **Frequent Changes Can Cause Scope Creep** – Constant changes may disrupt progress.
* **High Commitment Needed from Team** – Requires **active participation** from everyone.
* **Time-Consuming Daily Meetings** – Stand-ups and planning meetings take time.
* **Lack of Detailed Documentation** – Focus is on software, not extensive paperwork.
* **Not Suitable for All Projects** – Large, complex projects with **fixed scope** may not benefit.

**Slide 9: Agile vs. Scrum**

**Agile:**

* Agile is a **broader methodology** that promotes flexibility and adaptability.
* Focuses on continuous improvement and customer feedback.
* Can be implemented in **various ways** (Scrum, Kanban, Lean, XP, etc.).

**Scrum:**

* Scrum is a **specific framework within Agile**.
* It has **fixed roles, time-boxed sprints, and structured meetings**.
* Works well for **smaller teams** delivering iterative improvements.

**Analogy:**

* Agile is like a **healthy lifestyle** (flexible, long-term approach).
* Scrum is like **a structured workout plan** (specific exercises, fixed schedules).
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**Slide 10: Thank You!**

This concludes the presentation on **Agile and Scrum**. Thank you for your time!