Dealing with deviations in Scrum

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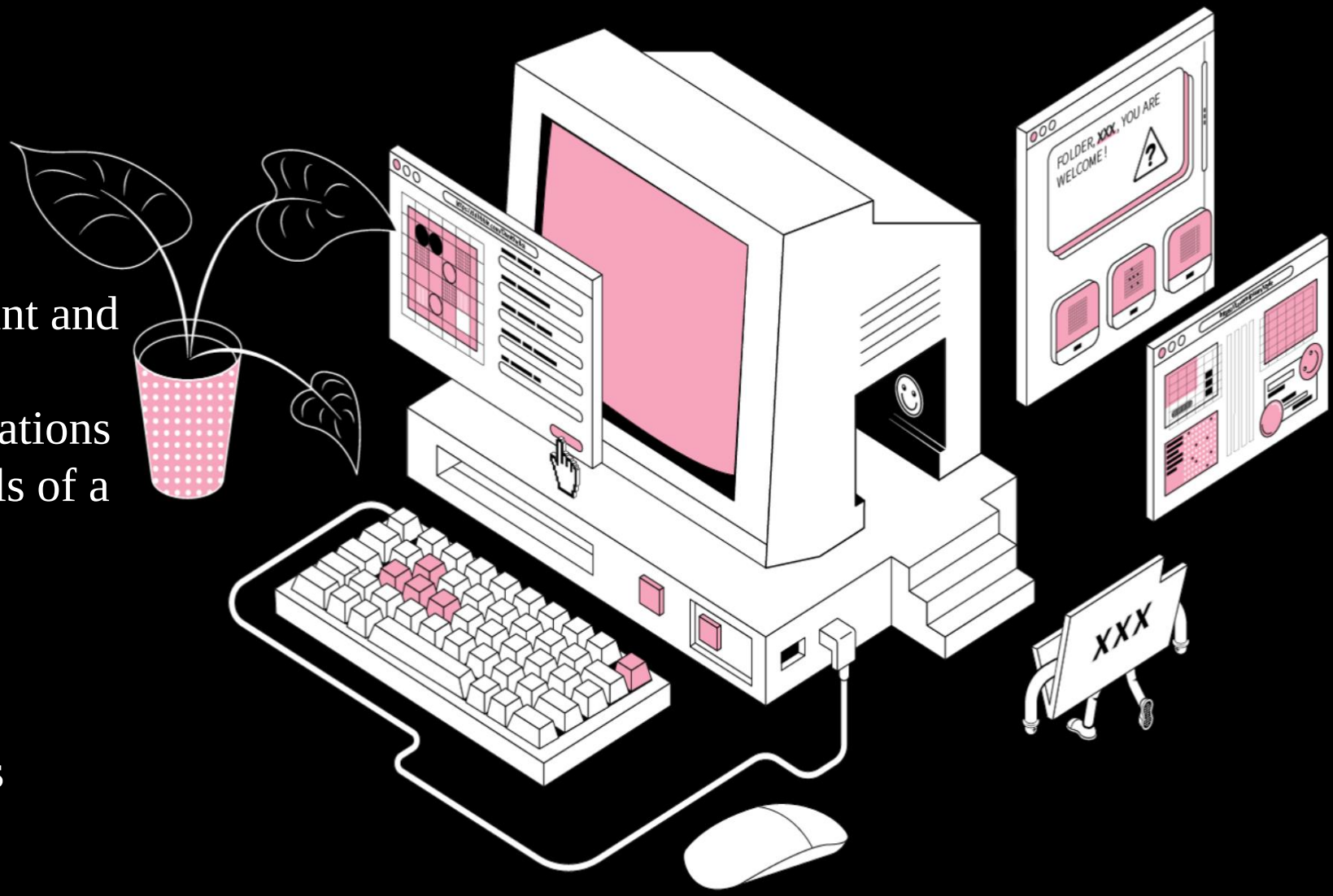


Introduction

Scrum is an agile framework for managing complex projects. It emphasizes iterative development, collaboration, and continuous improvement. Scrum teams work in short, time-boxed iterations called sprints, delivering incremental value. With its focus on adaptability and responsiveness, Scrum is widely used in software development and beyond for delivering high-quality products efficiently.

Properties of Ideal Sprint

- **Fixed Duration**: Sprints have a predetermined length, usually 1-4 weeks, ensuring consistency and predictability.

- **Stable Backlog**: The sprint backlog remains unchanged during the sprint, maintaining focus and commitment to selected work.

- **Team Commitment**: Team members agree to deliver the committed scope by the end of the sprint, fostering accountability.

- **Minimal Changes**: Requirements remain stable throughout the sprint, avoiding disruptions and ensuring efficient completion of committed work.

What should be fixed during a sprint and why?

- 1. **Duration:**
- provides a predictable timeframe for planning and ensures regular delivery of increments.

- 2. **Team Composition:**
- Changes to the team's composition can disrupt workflow and impede progress, so maintaining a stable team structure promotes continuity and collaboration.

- 3. **Definition of Done (DoD)**:
- to ensure clarity and help maintain the quality of deliverables.

- 4. **Sprint Goal:**
- guiding the team's efforts and ensuring alignment towards a common purpose.

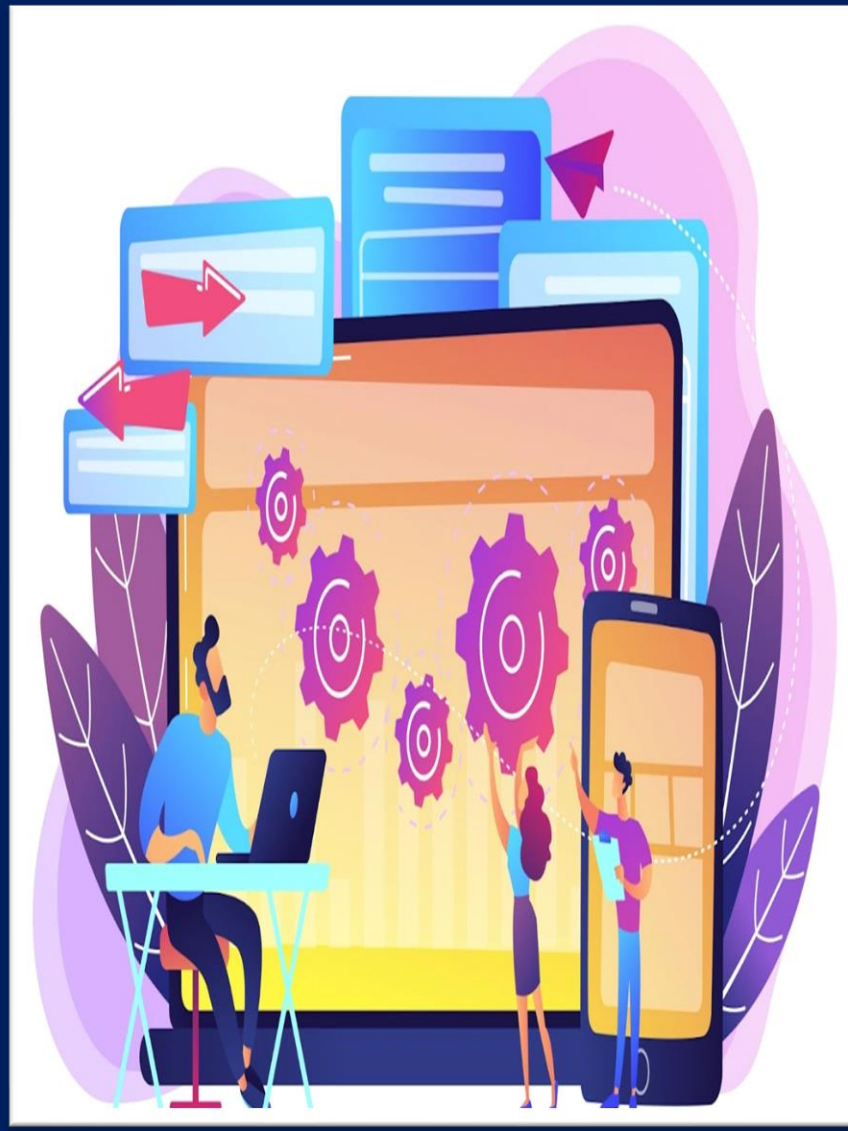
Various Situations that lead to Deviations

- **Changing Requirements**: Stakeholders or product owners may introduce changes to requirements mid-sprint.
- **External Dependencies**: The completion of certain backlog items may depend on factors outside the team's control.
- **Urgent Priority Shifts**: Emergent issues or high-priority tasks may arise during the sprint, diverting the team's attention away from the committed backlog items.
- **Underestimation of Effort**: can result in backlog items taking longer to complete than anticipated, leading to deviations from the sprint plan.
- **Unforeseen Technical Challenges**: Unexpected technical complexities may arise while working on backlog items. This can happen due to poorly understood requirements, integration issues, or changes in underlying systems.

How do deviations contradict the ideals of a sprint?

These deviations contradict the ideals a sprint should follow in several ways:

1. **Stability**
2. **Commitment**
3. **Consistency**
4. **Quality**



METHODS TO HANDLE DEVIATIONS

Reactive Methods

- **Swarming**: team members with relevant skills collaborate to address the issue swiftly
- **Scope Adjustment**:
- **Daily Standup Adjustments**

Preventive Methods

- **Buffering**: Allocating some buffer time within the sprint
- **Improved Estimation**: Continuous improvement in the team's estimation practices
- **Risk Management**: Proactively identifying and mitigating potential risks

Scenario:

During a sprint focused on developing a new feature for a mobile app, the team encounters a technical challenge that threatens the completion of a critical backlog item. Additionally, a change in the project's priority requires urgent integration of a third-party API, further complicating the sprint.

Lets us look at some reactive and preventive measures to solve the issues.

Reactive Response

- **Swarming**: Upon encountering the technical challenge, the team immediately engages in swarming.
- **Scope Adjustment**:-Simultaneously, the team faces a change in project priority, requiring the integration of a third-party API.

Preventive Measure

- **Improved Estimation:**
- Reflecting on the sprint retrospective, the team identifies that the technical challenge encountered was partially due to underestimation of complexity during sprint planning.

By leveraging both reactive and preventive strategies, the team ensures adaptability, resilience, and successful sprint outcomes despite unexpected challenges.

Reactive Measures

- ADVANTAGES
- Immediate Solutions
- Flexibility

- DISADVANTAGES
- Temporary Fixes
- Resource Intensive

Preventive Measures

- **ADVANTAGES**
- **Risk Mitigation:**
- **Long-term Efficiency:**

- **DISDVANTAGES**
- **Upfront Investment**
- **Overestimation:**

Which method or combination of methods are best suited for our scenarios.

For our scenario, I would recommend a combination of reactive and preventive methods discussed before.

By combining these methods, the team can effectively address immediate issues while also implementing measures to prevent similar challenges in the future. This approach promotes adaptability, resilience, and successful sprint outcomes despite unexpected deviations.

Conclusion

In conclusion, a balanced approach that combines both reactive and preventive methods is essential for effectively handling deviations during sprints in Scrum. While reactive methods provide immediate solutions to address emergent issues, preventive measures help anticipate and mitigate risks proactively. Thus, I suggest that Scrum teams prioritize continuous improvement in both their reactive response capabilities, such as swarming and scope adjustment, and their preventive measures, such as improved estimation and buffering. By fostering a culture of adaptability, collaboration, and risk management, teams can enhance their resilience and agility, ensuring successful sprint outcomes in the face of deviations.

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