# DEALING WITH DEVIATIONS IN SCRUM

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### PRESENTATION OUTLINE

- I. Literature Review
- 2. Properties of Sprint
- 3. Situations that lead to Deviations and why they occur
- 4. How to handle deviations
- 5. Conclusion and Suggestion
- 6. References

### LITERATURE REVIEW

- Agile Development came about to be an improvement on the traditional development.
- The establishment of Agile software processes came about in 2001.
- The Agile process is responsive, incremental and an iterative approach that includes customer in every stage of the process.
- The purpose of the Agile approach is to produce working software with the customer involved at each stage.
- Common Agile approaches are:
  - I. Scrum
  - 2. Extreme Programming
  - 3. Crystal Methodologies and many more

### LITERATURE REVIEW CONT'D

- Scrum is an Agile approach where a team works together to advance development in short time spans.
- The development process in scrums is empirically controlled and supported by three pillars: Transparency, Inspection and Adaptation.
- Generally, scrums have values, events, artifacts and a team
- Scrum values commitment, courage, focus, openness and respect
- Scrum team consists of Product Owner, Scrum Master and Development Team

### LITERATURE REVIEW CONT'D

- Scrum artifacts product backlog, sprint backlog and increment.
- Scrum events sprint, sprint planning, daily scrum sprint review and sprint retrospective.
- Sprint is a time boxed event. Generally, sprints have an initiation time and completion time.
- Sprint is performed usually within one month

### PROPERTIES OF A SPRINT

- I. Sprint Planning
- 2. Sprint Review
- 3. Sprint Retrospective

### SPRINT PLANNING

- The major property of a Sprint is its planning phase. The initiation of a sprint takes place at this stage by laying out the work to be performed.
- The planning involves a meeting which usually must be done within a day. During the meeting, The scrum team and product owner consider the clients business priority and needs.
- The planning phase answers 3 questions. "Why?", "What?" and "How?"
- The planning phase also involves setting a goal for the team and creating a sprint backlog which corresponds to the product backlog.

### SPRINT REVIEW

- The purpose is to inspect the outcome of the sprint and determine future adaptations.
- The scrum team presents results of their work to key stakeholders and progress towards the sprint goal that was set during the planning phase.
- Suggestions take place in case of any changes and ideas.
- Usually takes maximum 4 hours during meeting.

### SPRINT RETROSPECTIVE

- This is done to plan ways to increase quality and effectiveness.
- This stage analyses "how" the software is built rather than "what" is being developed as compared to sprint review.
- This stage recognizes what went well for the scrum team, challenges it encountered and how the challenges were resolved.
- Most important improvements are addressed as soon as possible
- Takes usually a maximum of 3 hours.

### PROPERTIES OF A SPRINT CONT'D

### What should be fixed during a sprint?

Sprints durations are fixed. This is because changes or new requirements can arise and this could result in increased complexity, risks and even cost.

## SITUATIONS THAT LEAD TO DEVIATION OF A SPRINT

Situation	Why IT Occurs	Problems / Effects
I.When the scrum team does not answer all daily sprint key questions.	This deviation occur because some team members are focused on getting the things done than answering questions during meetings.	This leads to loss of trust among team members, bugs within a feature and lost time.
2. Daily scrum meetings exceeding 15 minutes	This occurs if some teams consider it necessary to have long meetings.	This is time consuming, loss of focus and results in fatigue.
3.A team does not use any method or tool to trace sprint status	This occurs because the team refuse to break task into simpler ones.	This leads to late discovery of issues.

### HANDLING OF SCRUM DEVIATION

- There are several ways in handling scrum deviations
- These a few listed below:
  - I. Reactive method
  - 2. Preventive method
  - 3. Pre-determined method
  - 4. Condition based method

### REACTIVE METHOD

- This is a method that allows issues to arise and affect processes before handling them.
- Advantage:
  - I. Maximum return on software since it's a method that can save money.
- Disadvantage:
  - I. Time loss due to dealing with unscheduled issues that arise from the sprint and can be costly too as well

### PREVENTIVE METHOD

- The team constantly inspect processes and development to identify issues and resolve them immediately whiles other processes are still going on. This is done to avoid issues from becoming bigger challenges.
- Advantage:
  - I. Avoid unscheduled down times and cheaper to repair certain issues immediately
- Disadvantage:
  - I. Increased risk since tackling issues right away can result in delay in project completion.

### PREDETERMINED AND CONDITION-BASED METHOD

- The predetermined method is when the team sets recommendations on when and what time should deviations be checked for.
- The condition-based method is to perform checks based on certain conditions as the name goes. Once these conditions are met the team must handle these situations.

### HANDLING OF SCRUM DEVIATION CONT'D

### What do you think works best to handle deviations?

- The preventive approach is what works best in my opinion.
- As problems arise, we need to deal with them right away to prevent further issues

### **CONCLUSION & SUGGESTION**

- I will recommend the preventive and condition-based method of handling deviations. The team must not allow issues to pile up and must be resolved straight away. This will help the team to grow and gain much experience.
- Also, the team need to set conditions and criteria that will trigger for resolving issues.

#### REFERENCES

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