STRATEGIES FOR HANDLING
UNPLANNED WORK DURING SPRINT

AgileLAB
www.agilelab.org
www.baranoshnik.com

ON THE SPOT ACTIONS AND QUICK FIXES

CONTINUOUS IMPROVEMENT ACTIONS
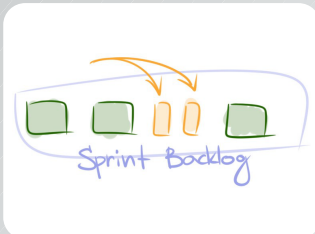
ABSORB
Non-action

Absorb the work

WHEN TO APPLY

• Changes occur infrequently
• Size of changes is small
• Doesn't interrupt the team's flow
• Doesn't jeopardize sprint goals
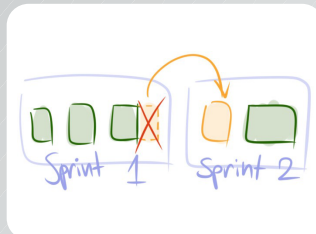• Adding process costs more

SCOPE OF APPLICATION

Current sprint

COSTS AND RISKS

• Some items are not delivered in this sprint
• Velocity drops slightly

BREAK UP AND CARRY OVER
On-the-spot action

• Complete the original item as planned
• Split off new requirements as a new item
• Carry over the new item to the next sprint or the backlog

WHEN TO APPLY

• Size of changes is significant
• Risk to break the team's flow
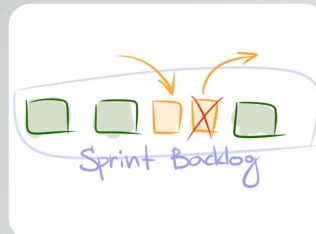• Risk of scope creep

SCOPE OF APPLICATION

Current and next sprints

COSTS AND RISKS

• Full functionality (old and new combined) is delayed for a sprint
• PO should set the expectations with the stakeholders

REPLACE
On-the-spot action

• Insert new item in the sprint
• Move an item of the same size to the top of the backlog or to the next sprint

WHEN TO APPLY

• Size of changes is significant
• Risk to break the team's flow
• **Rule of thumb:** whenever a new item needs to be added to a sprint, do Replace
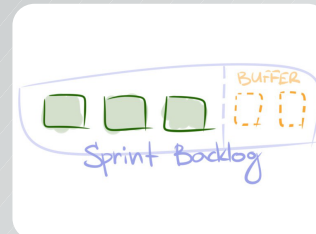
SCOPE OF APPLICATION

Current and next sprints

COSTS AND RISKS

• Replaced item is delayed at least till the next sprint
• PO should set the expectations with the stakeholders

PLAN A BUFFER
Quick fix, temporary solution

Option 1.
• In a planning create a buffer item
• Set the buffer size in story points
• During a sprint for each added item subtract its size from the buffer
• If the buffer reaches 0, reject new work
• Rejected work goes to the backlog

Option 2.
• Plan for reduced capacity
• During a sprint absorb new items

WHEN TO APPLY

• Size of changes is significant, while sprint goals are still achievable
• **Rule of thumb:** buffer size < 20-30% of the sprint capacity forecast
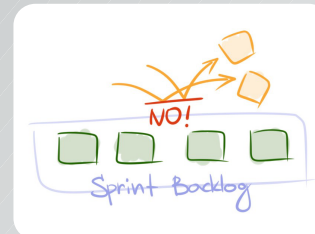
SCOPE OF APPLICATION

Product life cycle

COSTS AND RISKS

• Slows down delivery
• Forecasting becomes less reliable
• **Doesn't fix the root cause**
• **Masks real issues**

IMPROVE PRIORITIZATION
Fixing root cause

• Coach the PO
• Set prioritization rules explicitly
• Agree on the meaning of "urgent"
• Set stakeholders' expectations based on the prioritization rules

WHEN TO APPLY

• Unplanned items come from the PO or stakeholders
• The urgency of items often seems to be overestimated
• Items usually can wait till the next sprint
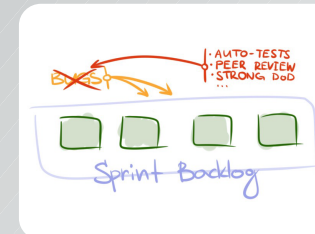
SCOPE OF APPLICATION

Product life cycle

COSTS AND RISKS

Change of human behavior takes time and is not a guaranteed success

---

IMPROVE QUALITY
Fixing root cause

• Find root causes for low quality
• Remove them one by one, try different approaches

WHEN TO APPLY

• Unplanned work is frequent and mostly consists of bugs
• Bugs affect sprint goals and the team's flow

SCOPE OF APPLICATION

Product life cycle

COSTS AND RISKS

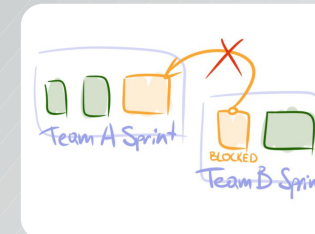In the short term, slows down delivery considerably

If improving quality is too expensive, Plan a Buffer can be more economical

CAUTION:
• This won't stop quality from going down
• Only pays off in the short term
• In the long term the costs of poor quality quickly outgrow the price of improving quality

---

REMOVE THE DEPENDENCY
Fixing root cause

• Increase the dependent team's level of ownership, e.g.
  - give access to the code base
  - delegate responsibilities
  - train lacking skills
  - set up the code review process
  - lend an expert to the dependent team
• Cut the technological dependency, e.g.
  - decouple components

WHEN TO APPLY

• Unplanned items come from downstream teams and are typically raised by them as blockers
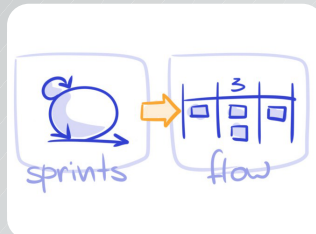
SCOPE OF APPLICATION

Product life cycle

COSTS AND RISKS

• In the short term, slows down delivery for both ends of the dependency
• Requires to spend time and effort on cross-training and technological improvement
• Lending an expert may trigger team reforming and conflicts

ADAPT THE PROCESS
Evading root cause

• Try smaller iterations
• Or get rid of iterations in favor of one-piece flow
• Apply Kanban Method
• Or try something totally different

WHEN TO APPLY

• Unplanned work is unavoidable and is caused by external factors (market, org limitations, etc.)

SCOPE OF APPLICATION

Product life cycle

COSTS AND RISKS

• In the short term, slows down delivery considerably
• May trigger team reforming and conflicts
• **If used as a quick fix, masks real issues**

As a quick fix, can be used to avoid org limitations

CAUTION:
• Only use as a last resort

For more details about dealing with unplanned work visit
https://agilelab.org/unplanned-work