



What Can Scrum Do for Me?



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Scrum Training

- **Not everyone can implement Scrum because of various corporate constraints.**
- **In studying Scrum, a few things struck me as useful to focus on no matter what Project Management methodologies you use:**
 - * 7 Wastes of Software Development
 - * Process Efficiency

7 Wastes of Software Development

Toyota Production System 7 wastes in manufacturing:

- In-process Inventory
- Over-Production
- Extra Processing
- Transportation
- Motion
- Waiting
- Defects

7 wastes in Software Development:

- Partially Done Work
- Extra Features
- Relearning
- Handoffs
- Task Switching
- Delays
- Bugs

7 Wastes of Software Development

- **Partially Done Work**

- Until “Done Done” you don’t know if it meets customer needs, has bugs, can integrate and run. Needs to be reviewed and documented.

- **Extra Features**

- 2/3 of features are rarely or never used

- **Relearning**

- Failure to document code, long delays between writing and addressing bugs, poor documentation.

7 Wastes of Software Dev

•Handoffs

- From one developer/group to another
- From development to QA, as opposed to working together from the start
- To deployment teams or customers

•Task Switching

- Multitasking is lousy for developers
- One study found that when someone was interrupted, it took an average of 25 minutes to cycle back to the original task.

•Delays

- Project approvals, change management, waiting on other resources. All increase WIP and decrease Process Efficiency

•Bugs

- Avoid through small stories, clear acceptance test criteria, Product Manager involvement

Story Process Efficiency

- **Process Efficiency=**

$$\frac{\text{Value Added Time}}{\text{Calendar time}}$$

- If a project with 3 months of work is spread out over 25 calendar months, Process Efficiency= $3/25= 12\%$

- **“Systematic Software Engineering, a CMMI Maturity Level 5 company, has extensive data showing that teams that drive story process efficiency to over 50% will double their velocity systematically for every team.”**

- **Lower process efficiency means:**

- More multi-tasking
- Longer time between coding and QA