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Rewards and Challenges in Adopting Agility in an Academic Department

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Rewards and challenges in adopting agility in an academic department

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Project Goals

Through the use of Scrum in departmental operations, this project seeks to:

- Graduate agile engineers capable of success within agile and non-agile environment
- Develop agile faculty culture that is responsive to student and industry needs

Scrum Process

Rewards | Challenges

Productivity
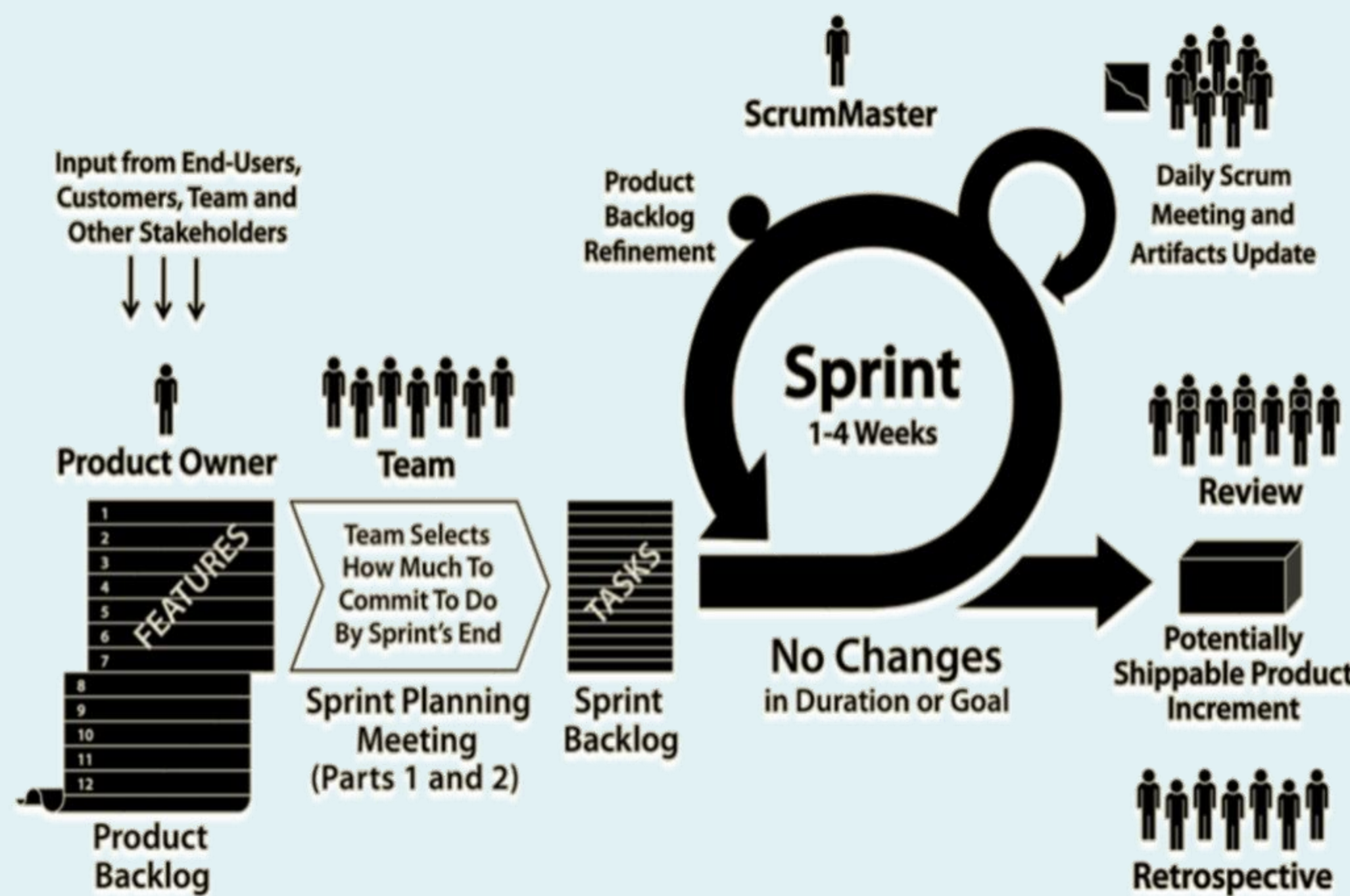
Rewards:
- Frequent interactions (2-3, 15-minute meetings/ week) leads to more communication and transparency.
- Multiple teams encourages larger % of faculty participation.
- Progress report at each meeting eliminates mad dash before due date

Challenges:
- Agile process conflict with slower non-agile academic environment.
- More meetings and tasks can conflict with traditional teaching, research, and service responsibilities.

Faculty Community

Rewards:
- Multiple faculty, staff, and students are working together towards a common goal.
- Team members experience sense of ownership and buy-in for final product.
- Accomplishments emphasize the team rather the individual.

Challenges:
- Finding common times for teams > 4 is challenging within academic structure.

Faculty Workload

Rewards:
- Workload is distributed across multiple team members and meetings.
- Faculty experience a sense of accomplishment for work getting done

Challenges:
- More meetings and potentially more tasks.
- University P&T processes need to accept team accomplishments.

Projects Y3	Backlog guidance	Deliverable/Product
Rewards & Incentives	• Feasible, Paradigm shifting, & Revolutionary	• Policies and procedures this semester, get faculty feedback
Foster Community	• Improve the faculty/student and student/student relationship in/out of class • Incorporate substantial involvement from the student body	• Develop a list of initiatives involving all constituents • Select 2+ Initiatives to be implemented this semester
Asset-Based Culture	• Best practices (in and outside of the classroom) • Instruction assessment and student interaction	• Policies and procedures this semester • Identify a pilot project to be implemented in the Spring Semester (2023)

Departmental Approach

- Every member of the department gets trained on Agile framework
- Faculty and staffs participate in department level projects using scrum framework
  - First year, initial pilot projects involving faculty with previous experience with scrum process
  - Second year, every member participate in at least one project using scrum

Implications

Introducing agility into department processes may be challenging especially when interfacing with a non-agile environment. While frequent meetings can add more time constraints, the team environment emphasizes more communication, transparency, and accountability in completing the products leading to a higher sense of ownership of the completed work.

Acknowledgement

Scrum Framework

The Agile Scrum Framework at a glance