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RED Innovation: Using Scrum to Develop an Agile Department

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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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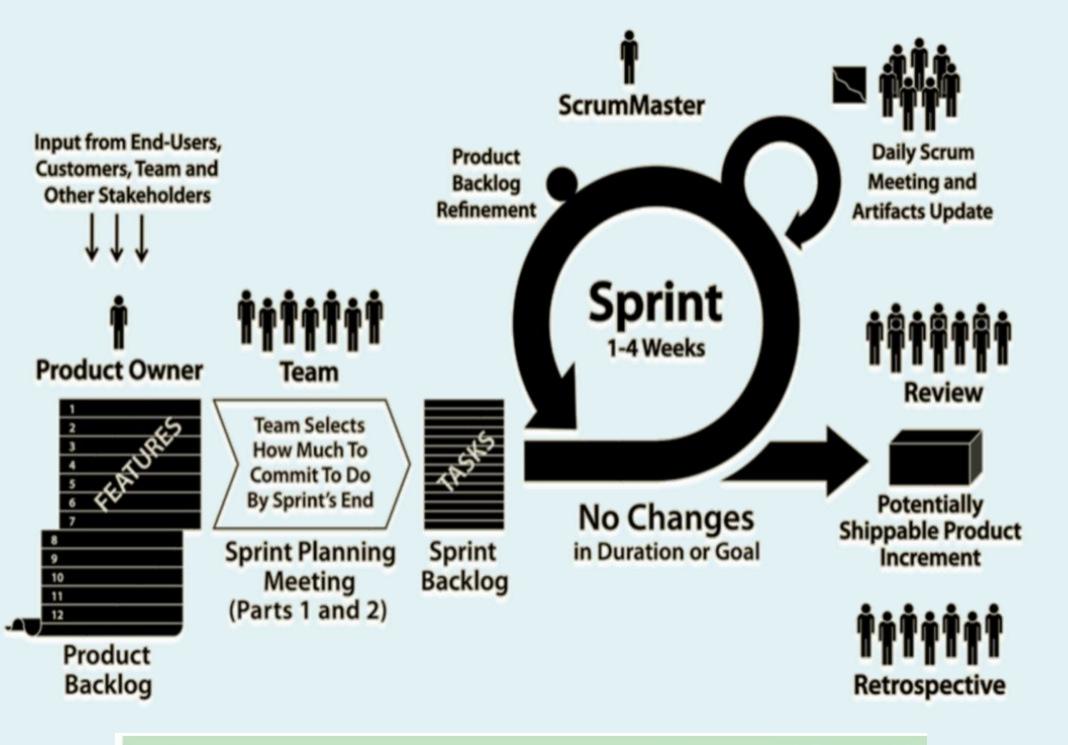
Productivity

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



Sprint 2	Resume this sprin	t Completed	
Team 1		28 points complete	d
develop a survey for graduate students (why they chose	ERAU, and which s	thool are they from, e	tc)
Identify a sample of UG student to see what they look for when they are looking for	Grad 2 p	Sprint completed	
develop a survey for graduate students (why they chose	ERAU, and which s	thool are they from, e	tc)
generate final version	2 p	Sprint completed	
plan an internal erecruiting session	4 p	Sprint completed	
set up dropbox for the group	3 р	Sprint completed	
develop a survey for graduate students (why they chose	ERAU, and which so		
Review by team members	1 р	Sprint completed	
develop a survey for graduate students (why they chose	ERAU, and which s	thool are they from, e	tc)
Develop initial draft	5 p	Sprint completed	
sort the school lists based on no grad programs and grad programs	5 p	Sprint completed	
fix the GRP/Thesis proposal to deal with funding from department for equip	ment 2 p	Sprint completed	
Review program quad chart slide and finalize	4 p	Sprint completed	
Sprint 2			

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

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

Faculty Workload

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

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

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Scrum Framework

