Why Your Agile Isn't

presented by: Travis Alexander | travisa@empyra.com

Your theory game is weaksauce

Your team operates like a RedBox

Your backlog got no sex appeal

Your walls are covered in spaghetti

Honestly.. your sprints are kind of slutty

You're confusing this with AA

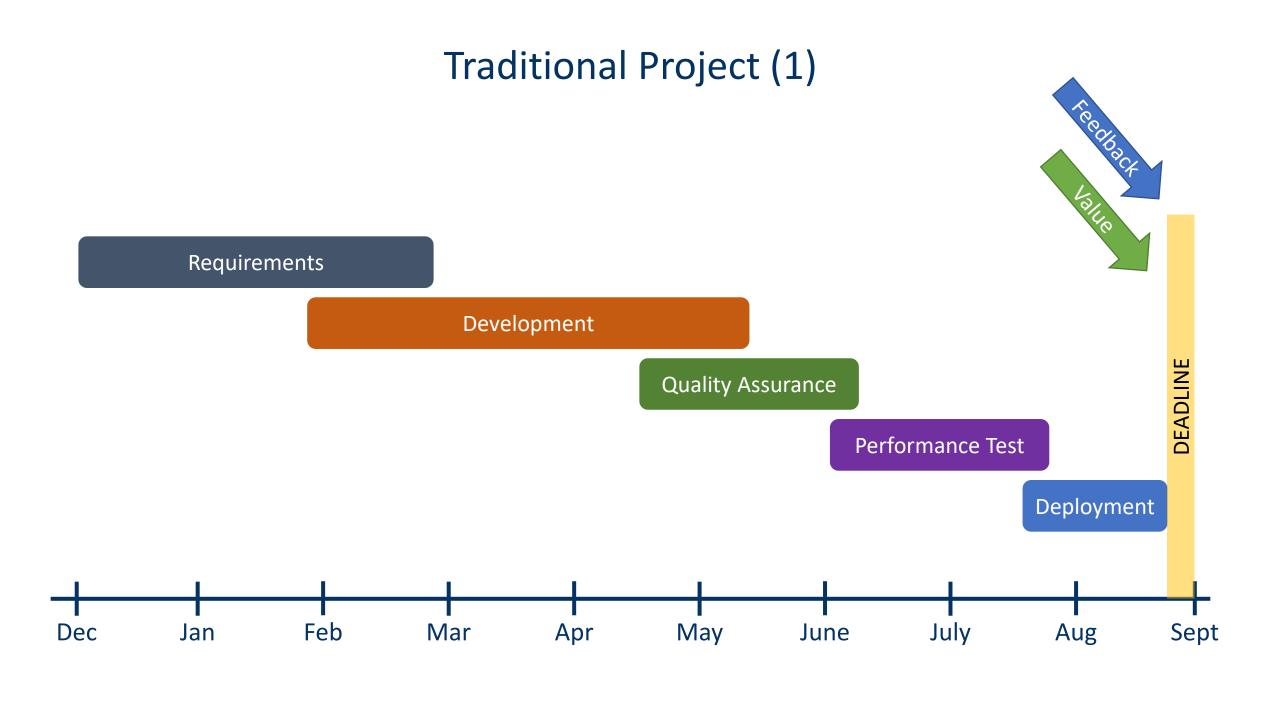
You didn't fire Nick

Why Your Agile Isn't

Your theory game is weaksauce

Perhaps you've taken it for granted that the whole team understands the real goals and benefits of agile theory.

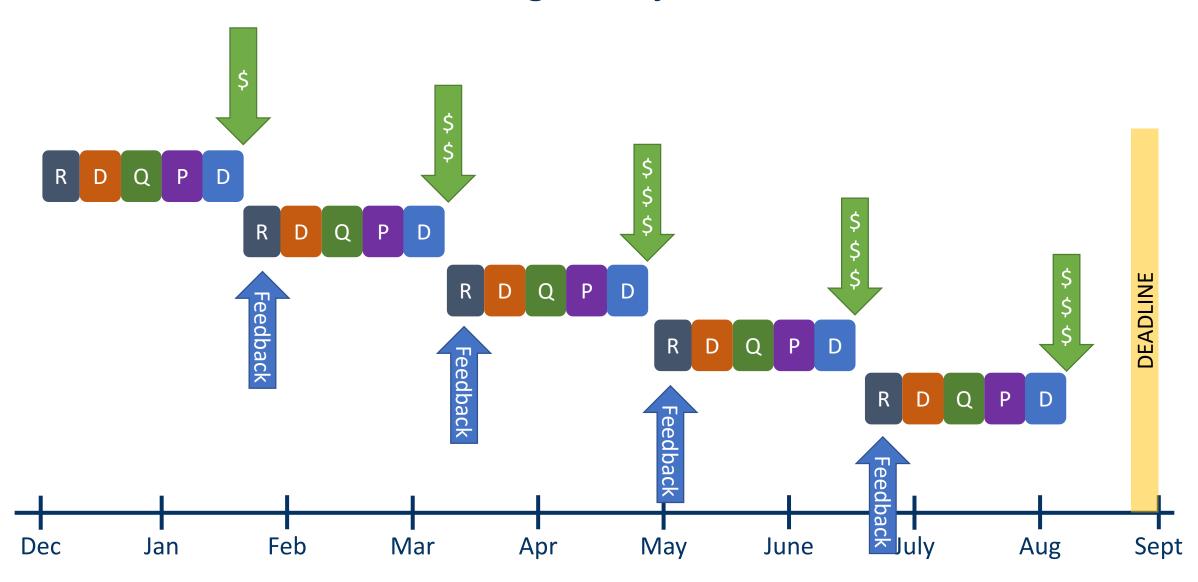
Understanding the goals and benefits of agile naturally drives a proper, better execution of the individual components of the framework.



What is Agile?

In it's simplest form, it is taking a project and splitting it into smaller projects that collectively accomplish the goal of the original project.

Agile Project



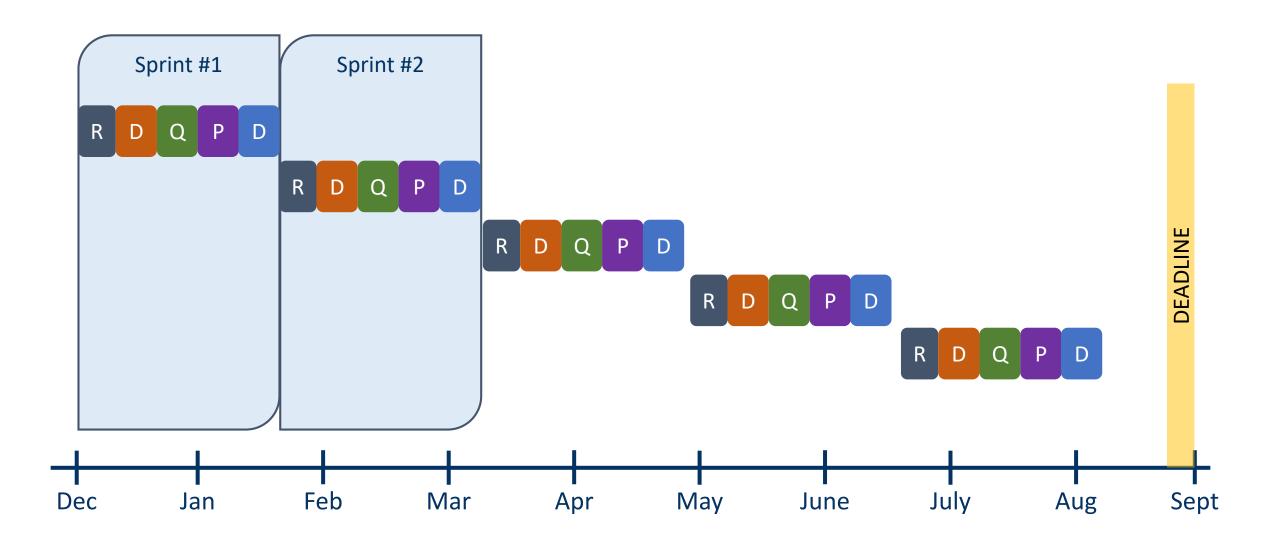
What is Scrum?

Scrum is a framework within which people can address problems, while productively and delivering high-value products.

Scrum is **not** a process or a technique for building products rather, it's a **framework** within which you can employ various processes and techniques.

Therefore, in essence, virtually every team who practices scrum will follow a different process within the framework of scrum.

Scrum Project



Scrum Essentials

- Devoted, cross-functional teams
- Product/project backlogs
- Regular sprint/iteration schedule(s)
- Cross-resource estimates
- Sprint Planning and Sprint Kickoff Meetings
- Standup/Daily Scrum Meetings
- Retrospective Meetings
- A tool to facilitate the process

#AgileGoals

- 1. Less code, do things once
- 2. Less dependencies, more agility
- 3. Less risk
- 4. Less bugs, better quality
- 4. Less wait times, more value

Your team operates like a RedBox

It appears likely that the team is not currently organizationally conducive to an agile/scrum framework.

Agile doesn't run itself; teams are literally the foundation that the whole framework operates upon.

Team Structure

- Optimal development team size is small enough to remain nimble and large enough to complete significant work within a sprint
- Fewer than three development team members decrease interaction and results in smaller productivity gains
- Smaller development teams may encounter skill constraints during the Sprint
- Teams should be as cross-functional as possible with regards to development; large specializations within the team are bottle-neck risks



Team Structure (2)

- Ideally, each scrum team consists of
 - Scrum Master
 - Product Manager / Business Analyst
 - Developer(s)
 - QA Resource(s)
- Organizations should do there best to ensure teams have devoted team members and do not share team member's time across other groups



Think of teams like this...

Finished Product(s) Without all it's parts, it doesn't work **Project**

It's not 'How many developers do you have?'
It's 'How many teams do we have?'

It's not "Who has free time?"

It's "What's on the team's backlog?"



- If teams are too big, break them into smaller teams, even if it's the same project
- If teams are shared across projects, change it. If you can't change it, share the same sprints
- Lower individual available work capacity to account for other work
- Pair-program to breed cross-functional development; value moldable, well-rounded people over niche experts when hiring
- Hire the additional resources you need; full time scrum masters are not a waste of money and downtime is not a bad thing – you'll pay for it in bottlenecks if you don't
- If you only have one scrum master, use Team Leads that are in sync with Scrum Master
- If management isn't having it, see about getting an outside person to come in

Your backlog got no sex appeal

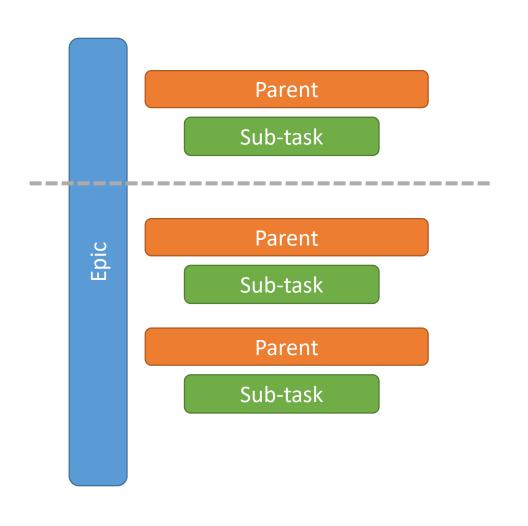
The processes and procedures surrounding how the team breaks down, organizes, and prioritizes their work.. could look better.

And unorganized backlog isn't really an agile, product, or team backlog. It's just a list of things someone should do.



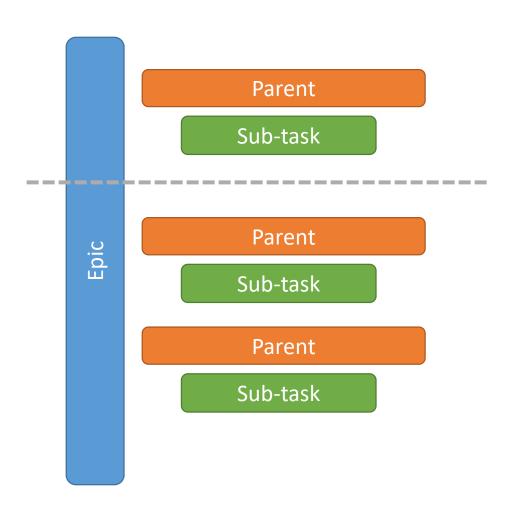
- Get a shared understanding of the terminology
- Standardize your processes and setup within the tool you're using
- Standardize a way to build the backlog and ensure a shared understanding

Understanding Epics



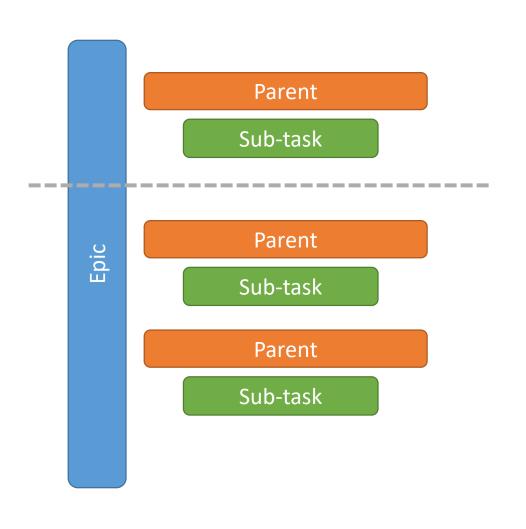
- Epics represent buckets of related work that can be completed; not simply an eternallyexisting container of issues.
- Generally, Epics become necessary when a group of related stories are not accomplishable within a single sprint.
- Epics themselves are not added to a sprint, rather, the stories/issues within the epic are what get added to the sprint.
- Epics themselves are not estimated; they receive their total estimate from the sum of the issues within them

Understanding Parent Tasks



- Parent tasks can be configured to be whatever is preferred. Ex. Story, Task, Etc.
- Parent issues may have sub-tasks
- A Parent issue's estimate is always the sum of it's Sub-tasks, if they exist
- Parent issues are the only type (of the three) that receive story-point estimates

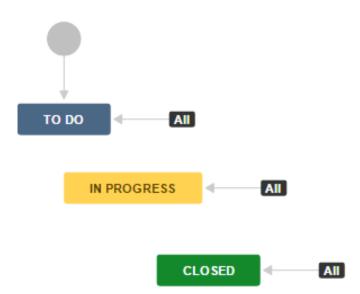
Understanding Sub-tasks



- Sub-tasks types can be configured to be whatever is preferred
- Generally, Sub-tasks represent a check-list of what is necessary to accomplish the parent
- Sub-tasks never not receive story point estimates (the Parent issues does).

Workflow Pro-tips

- Ensure workflows facilitate your end-to-end process
- Try to design workflows to be as cross-functional as possible
- Avoid adding complexity when you can do without it the simpler, the better
- When building workflows, often ask "Will we need to report on this?" if not, special workflow capabilities or fancy task types are generally not necessary
- Do your best as an organization to standardize (at least at a foundational level) the workflows across all teams



Step 1: Create Epics

- Involve the whole team in this process
- Ask, "What's a logical way to break down the project into large bodies of work?"
 For example, perhaps and epic titled "Home Page" or "Develop API" would be a good start for your first epic
- If the project/initiative is short-term, you may use a single epic
- You don't need to be perfect, additional epics may become necessary as you breakdown the individual issues

What it looks like... (Epics)

Build the Home page

Build the Contact Us page

Build the About Us page

Build the API

Step 2: Create Stories / Tasks

- Involve the whole team in this process
- Work to break down the new body of work in a logical way that is conducive to development and QA processes (this will take significant amounts of time, but it pays off)
- Typically, if story is going to take longer than (3) days, it needs broken down into smaller, additional issues
- Work overtime to settle on a standardized way of creating stories as a team master this, you'll master scrum (But, that's a topic for another day)
- At a minimum, have the Story's summaries complete; you can assign the BA's (or others add content, descriptions, specific requirements, and/or acceptance criteria later

What it looks like.. (Stories/Tasks)

Build the Home Page

As a user blah blah..

This and that needs done

As a user blah blah...

This and that need done

As a user blah blah..

Your walls are covered in spaghetti

Your estimations don't take into account variable change and at the end of the day are just an individuals throwing things at the wall and hoping they stick.

Like Kevin Spacy says in "21", "Always account for variable change."



- Use Story Points for project estimates
- Use Hours Estimates when sprint planning

Story Points

- A Story Point is a relative measurement of complexity given to a Story (in the backlog) and has no relation to time
- Story Points are team estimates, rather than individual estimates which allows for a **team** velocity to be established (think wood chipper)
- Only when the a Story is entirely complete are the Story Points "counted" towards Sprint Velocity

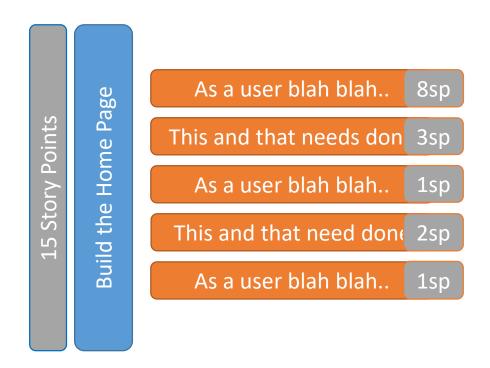
Step 3: Story Point Your Backlog

- Involve the whole team
- Have a sequence defined for all teams (typically Fibonacci) 1, 2, 3, 5, 8, 12, 20...
- Review each story in the backlog together, discussing (in detail) the requirements of each
- When first starting determine a relatively simple task that everyone has done or is familiar with – call this the "2". Now, compare all other numbers to the complexity of this task. For example, if adding content to a modal is a 2, then a 5 is a little more than twice as complex as adding content to a modal
- Play rounds of planning poker to determine a story point value, only settling on a story point value when all team members are within two story-cards from each other

Planning Poker Cards



What it looks like.. (Story Points)



If the team has a (2) week sprint cycle and average number of Story Points completed is (5), about how long will it take to build the home page?

3 Sprints / 6 Weeks

More things about Story Points

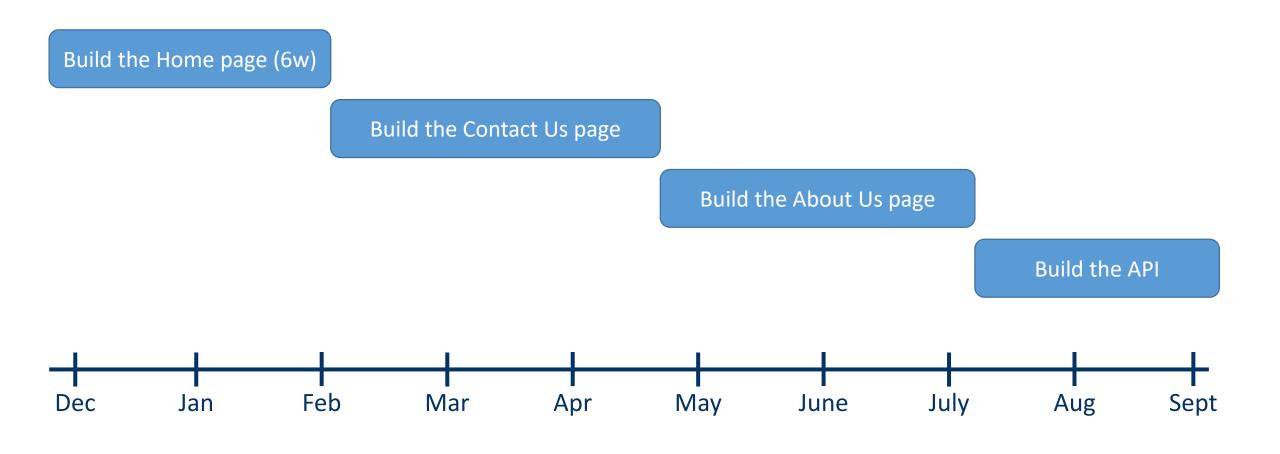
- Story Point velocity represents the amount of new development you can complete in a sprint therefore, only Stories (value add development items) are assigned story points
- Production Bugs, Technical Debt, and other overhead project tasks should NOT receive story points

Story Point Velocity



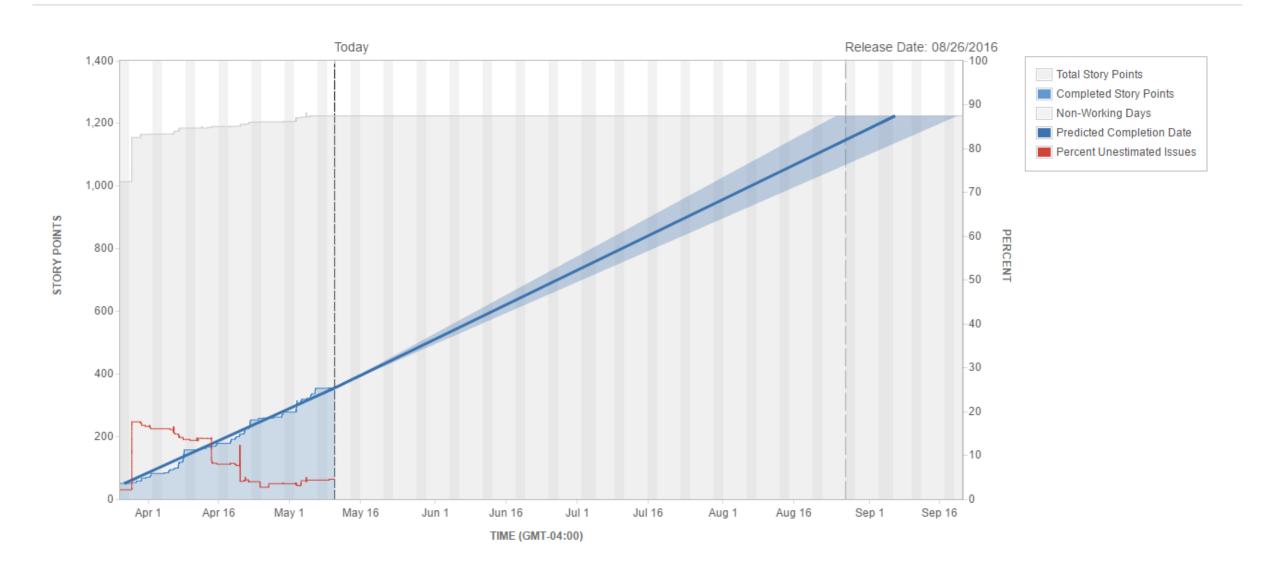
Wood-chipper RPM = Sprint/Team Velocity

Now look what we can do...



Version Report

Version Report -



Sprint Burndown

OL: FI 2.0 *****7% unestimated issues 1,026 of 1,590 completed (story points)



Work completed

Work forecast

Work remaining

Work added

Empiricism

Empiricism asserts that knowledge comes from experience and making decisions based on what is known. Scrum employs an iterative, incremental approach to optimize predictability and control risk.

Your Sprint Planning Meeting

- Take a whole, it helps keep people focused
- The teams available capacity (in Hours) is calculated
- The team determines what should be worked on
- Issues from the backlog are added to the sprint
- Issues are assigned to individuals and hour estimates are added to each story (or sub-tasks)
- Once each individual has reached his/her hourly capacity, he/she is considered "ready"
- Each team member completes this process one by one with the group until the whole team's capacity is filled
- Everything in the sprint should receive an hour estimate

What it looks like.. (hours)

As a user blah blah.. 8sp Page Develop This 8h **Build the Home** Develop That 4h Testing / QA 1h Code Review Documentation 1h This thing is broke 0 Develop This 8h Testing / QA 1h

Capacity Planning

- Don't rush to plan sprint capacity using Story Points
- To start, teams need to plan to an hourly capacity (since a SP velocity is not yet determined)
- An individual's capacity for a sprint is calculated simply by adding the total number of working days in the sprint, minus any days off, multiplied by hours in a workday, multiplied by a working capacity percentage.

For example:

(10 Working Days) x (8 hours per day) = 80 Hours

 $(80 \text{ Hours}) \times (.65) = 52 \text{ Hours}$

Individual available capacity = 52 Hours

Capacity Percentage

- Nobody works on new development tasks 100% of their working time
- 65% for most roles is a good percentage to start with
- The remaining 35% is for
 - Meetings / Planning
 - Other tasks not related to the project
 - Misestimates
 - Bathroom Breaks
 - Trolling Reddit
- This percentage can be changed when necessary you'll learn to perfect this incrementally as the project continues
- Avoid having individual resources allotted their own percentage the team should all be using the same capacity when possible

Capacity Planner

	Resource / Assigne	Iteratio	n Capacity	Availability	Usable Capacity	Scheduled Effort		Unused Capaci	ty (Hours)		
Web Team	Phil [*]		10	days	65%	52.00 h	0.00 h	I	52.00 h		
	Adar		9	days	65%	46.80 h	54.00 h	I	-7.20 h		
	Briar		10	days	65%	52.00 h	56.00 h	\checkmark	-4.00 h		
	Mike		10	days	65%	52.00 h	52.00 h	\checkmark	0.00 h		
	Matt		10	days	65%	52.00 h	44.00 h	Į	8.00 h		
	Davi		10	days	65%	52.00 h	55.00 h	\checkmark	-3.00 h		
	Justi		10	days	65%	52.00 h	48.00 h	\checkmark	4.00 h		
	Devi		10	days	65%	52.00 h	28.00 h	Į	24.00 h		
	AHA		0	days	65%	0.00 h	54.00 h	Į	-54.00 h		
	Phili		10	days	65%	52.00 h	52.00 h	\checkmark	0.00 h		
	Xiu N		4	days	65%	20.80 h	16.00 h	I	4.80 h		
	Justi		8	days	65%	41.60 h	58.00 h	I	-16.40 h		
	Jorda		10	days	65%	52.00 h	33.00 h	I	19.00 h		
	Fred		10	days	65%	52.00 h	36.00 h	I	16.00 h		

Burndown (Hours)

Burndown Chart -

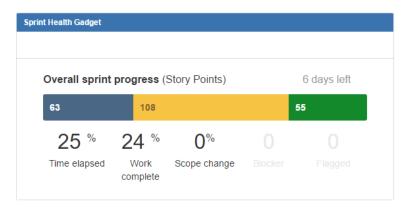


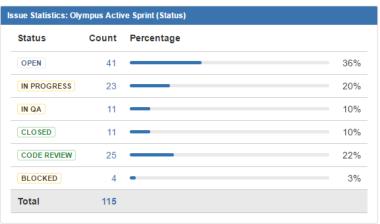
Burndown (Story Points)

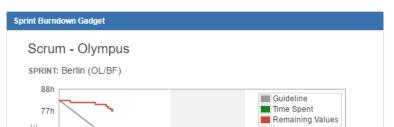
Burndown Chart -

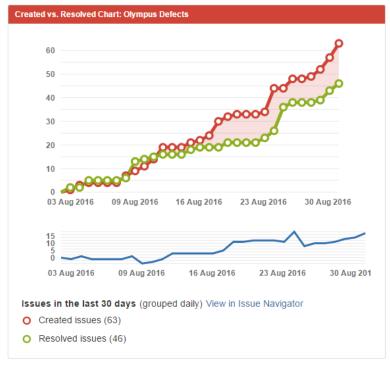


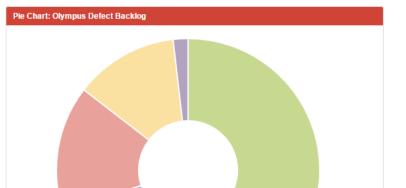
Dashboards

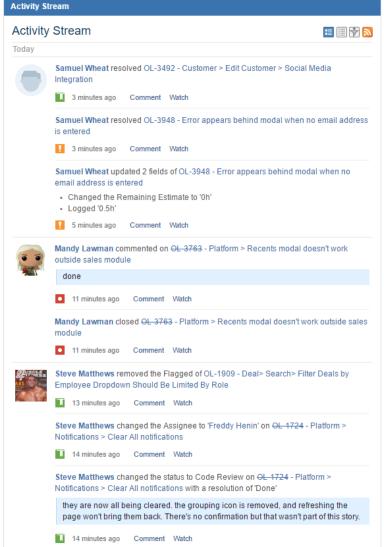












Honestly.. your sprints are kind of slutty

Your sprints are not really a closed commitment to the work that is originally planned.

Meeting the sprint goal should be the primary focus of the whole team because it's the only way you stay on track.



- Don't remove things from the sprint before it's over because you won't get them done.
 You need that data for your retrospective.
- If you've finished early, help others before working on things in the backlog
- The sprint goal is do or die (within reason) you work until it's done
- If your team is overworked in a given sprint, your sprint data should show this and you can adjust so it doesn't happen again
- If the whole team finishes early, consider sending people home early (unless you're behind, or prefer to get ahead, or whatever..)

Your confusing this with AA

The retrospectives are too often just awkward conversations about someone's mistake and it make me uncomfortable.

A team analysis of the sprint data is how you learn to improve and if you're not improving, your team's not agile.



- Use sprint reports and talk about what was complete, and what was not
- Look to really understand, as a team, the specifics about why certain things weren't finished and don't stop there, come up with fixes – create tasks for the backlog if necessary
- Analyze burndown charts: How did you hour estimates compare to the time you've logged? (More time logged = under estimate, etc.)
- Analyze how often things stories are closing. This provides insight into if your stories are too big – the shorter the better.

(See? You need the right process in place to get this kind of data..)

Stop Doing

Start Doing

Do Better

Keep It Up

KEEP DOING!

- · BL GEODMING / POKER
- . TEAM COLABORATION
- . QA'S WERE QUICK ? RESPONSIVE AT SPRINT END
- . ELIMINATED QUITE A BIT OF TECH DOST
- · PLANNING FOR NEXT SPRINT

STOP DOING!

· ADDING ESTIMATS POST SPRINT-START

DO BETTER!

- · ORGANIZE CROSS-USED COMPOLS
- · NEED TO CREATE "HOUSE BULES"
- . REQUIREMENTS WITHW THE ISSUE

START DOING!

- · CREATE "HOUSE RULES" DOCUMENT
- · USE TEAM-DEDICATED GA SERVERS
- · ESTIMATE : TRACK QA TIME
- · KE-LOOK AT B.F. CODE BEFORE START
- · More scrum OF SCRUM MEETINGS

Burndown (Story Points)

Burndown Chart -



Burndown (Hours)

Burndown Chart -



You didn't fire Nick

There may be a few strong personalities on the team that are not conducive to effective communication.

A high-performance team likes each other and communicates often.

A technical genius with a bad attitude is cultural cancer to the team.

You can easily teach/learn technical skills to/from someone who's a cultural fit.



- Culture / Everything
- Get things into a decent place regarding scrum and then assess if it's still the same
- Address people's negativity one-on-one; technically speaking this is a task for the
 Scrum Master, but use good judgement
- When people are being negative for seemingly good reason, don't participate
- Be a model of someone who gets things done and participate in ceremonies make it the cool thing to do
- Fire people with bad attitudes The team should be known for not putting up with an unreasonable amount of negativity. Do this regardless of the individual's "irreplaceable" knowledge. Trust me, you'll get by and it's often not as bad as you think.
- Have a work environment that breeds teamwork and positivity





travisa@empyra.com