Team Photo Album

Below is a visual inventory of the team's POC effort.

Starting from our team start-up, initial review of the draft RFI, evaluating the released RFI, initializing our POC backlog, completing three 1-week Sprint cycles and finally deploying the MVP working prototype.

Two of the main artifacts we used to guide team efforts was our Team Agreement and Definition of Ready/Definition of Done.

Team Agreement - drafted as a team, outlines how we all want to work together as a community.

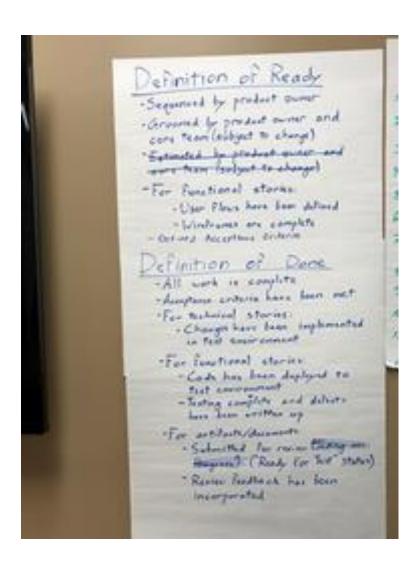
It emphasizes we all believe in open, honest peers working on a common goal.



Within the team Sprint workflow, it's key to understand when a story is 1) ready for development; 2) when code is done supporting a story.

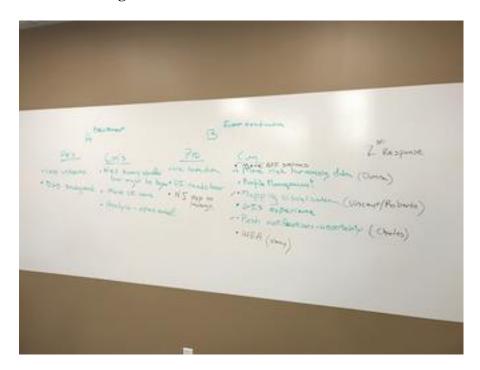
Below is the "Definition of Ready" defined by the team to outline what's expected in user stories coming from the product backlog and into a Sprint. Stories are reviewed and groomed to comply so developer don't waste idle cycles chasing business goals.

Also below is the team's "Definition of Done", defining what each developer must complete within a Sprint per story. So changes deployed are well formed, lower risk and ready for business user review.



When the RFI was released - the team mobilized to quickly evaluate the POC scenarios.

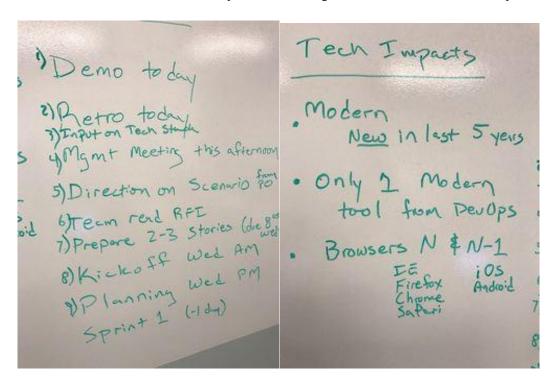
We leveraged a Pro vs Con review of both RFI scenarios to frame the options for our Product Manager.



Product Owner and Team in action - RFI review - discussing the Pro/Con breakdown.



The team also identified the key technical impacts from the RFI and Day 1 next steps



During each of the three Sprints - the team followed a common set of steps to build prototype value.

During Sprint Planning - the team discussed each User Story being considered from the backlog.

To size each User Story, the team used a web based poker voting tool to estimate the number of story points required.

Made the process fun and productive.

Points where based on Fibonacci numbers - starting with 1 and growing to 8; capturing the increasing estimation risk as the story scope increased.

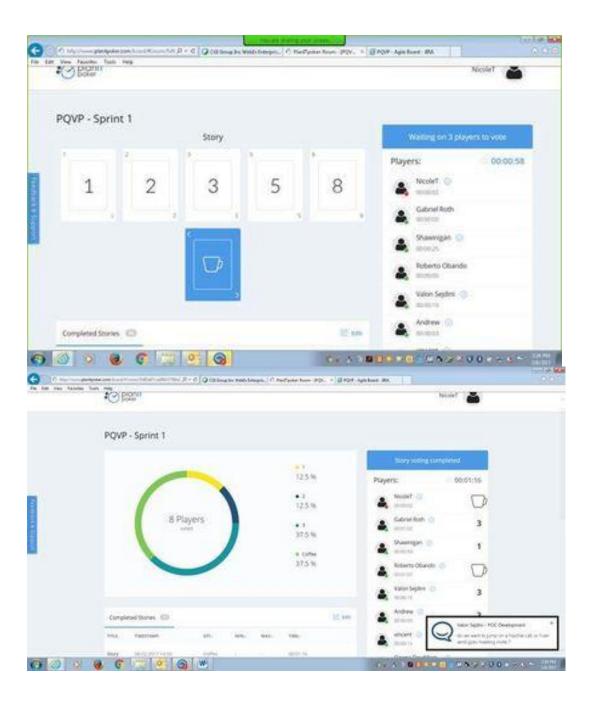
The team made an early decision not to estimate any single story above 8 because of the inherent risk.

Instead we worked with our Product Manager to decompose larger stories into business friendly blocks.

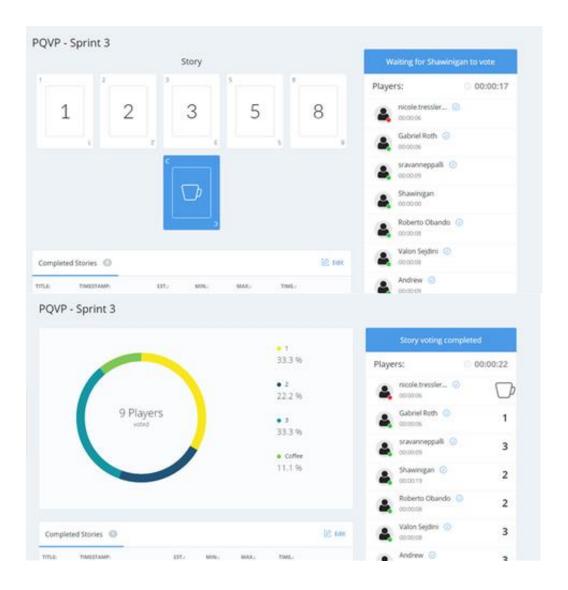
Poker sizing a User Story in Sprint 1

Left panel is what each voting developer uses to vote.

Right panel is the summary produced when all developers vote - sizing estimates are aggregated.



Another example - this poker sizing example from User Sprint 3 planning/sizing



We kept our Scrum Board both physically and virtually, mapping User Stories through our development flow.

Scrum Board at the start of Sprint 2



Scrum Board at the start of Sprint 3

Notice lots of User Stories moving into DOD status even at the end of the first day.

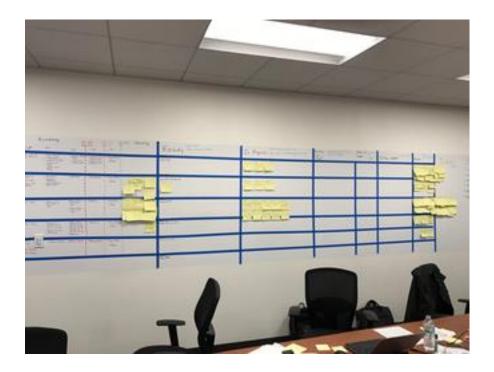


During Sprint 3 - it's easy to see the collection of completed Stories from the two completed Sprints

Notice we've also started the countdown to submission.



Sprint board at the start Sprint 4 - this short 3 day sprint focused on production hardening the MVP for release.

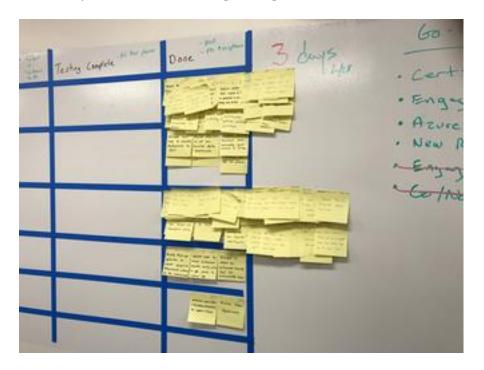


Small # of stories In Progress given the short duration of the sprint - priority set by Product Manager.

Even with a short duration, our Sprint process remained the same.



Three days till MVP release - growing collection of business value in the MVP.



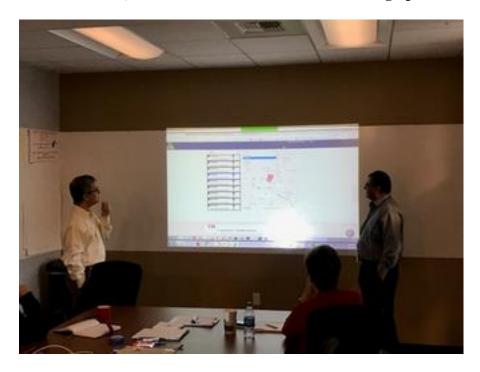
At the end of each Sprint, our Product Manager, Tech team members and Stakeholders reviewed prototype functionality delivered in the Sprint.

We shared feedback on the work completed and stakeholders offered suggestions for additional backlog items.

Sprint 1 Demo



Product Owner, Tech Lead and Stakeholder reviewing Sprint 2 demo results



Our Product Manager engaging the team at the end of Sprint 4.



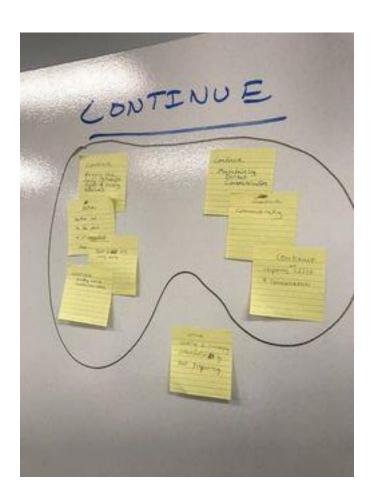
Also at the end of each Sprint - the development team accomplished a group Retrospective, considering team, workflow and/or tool options to improve our Sprint process.

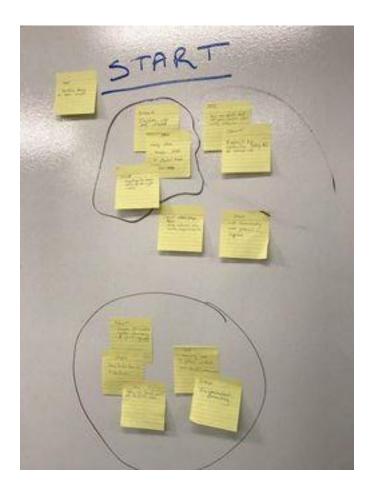
In the Retrospective, we considered opportunities to START new improvements; STOP negative tasks and CONTINUE processes that worked well.

Team findings from all (3) Retrospectives were posted on-line in the team's website and reinforced in Stand-Ups by the Scrum Coach.

Images from our 1st Retrospect.

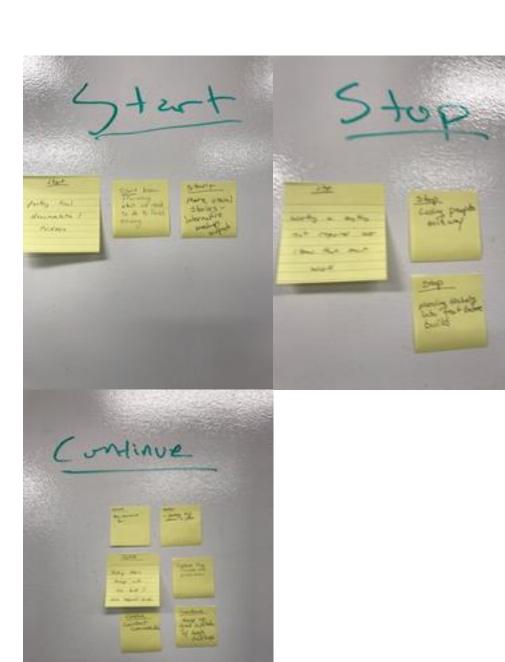
From the end of Sprint 1





From Sprint 3 Retrospective - by the end of this sprint the scope of improvements have become more specific.

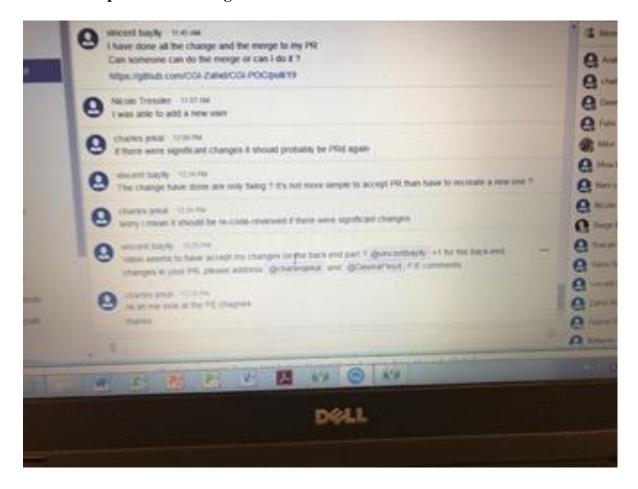
Team chemistry has gelled well based on the group feedback.



Information sharing and collaboration are key to our POC team working together effectively.

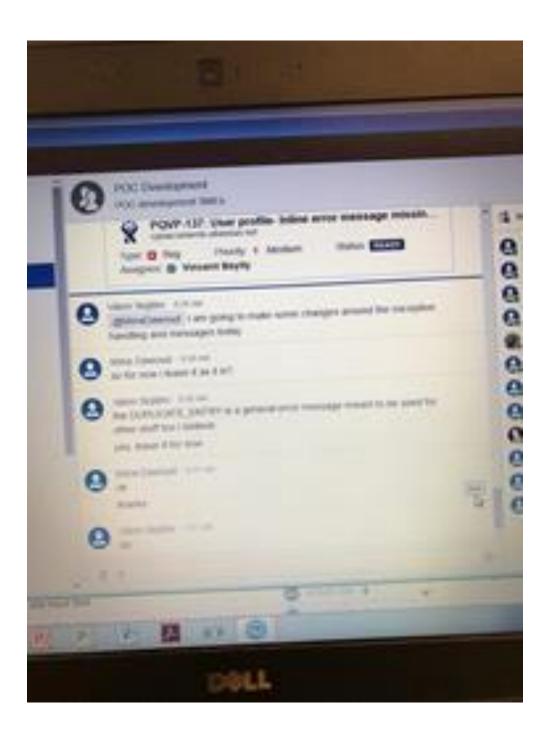
We used HipChat to share ideas and make decisions regardless of physical location.

In this example - collaborating real-time to resolve build issues.



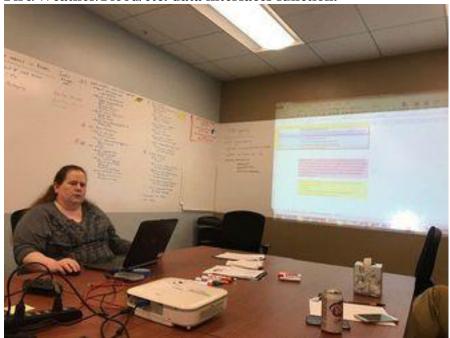
Another HipChat team collaboration with several developers on the team working together.

Notice we have JIRA integrated with HipChat so reported defects flow through.



Informally - the team would gather for educational info sharing sessions on new topics in the POC.

Here - a developer shares her research and educates the team on how the National Fire/Weather/Flood/etc. data interfaces function.

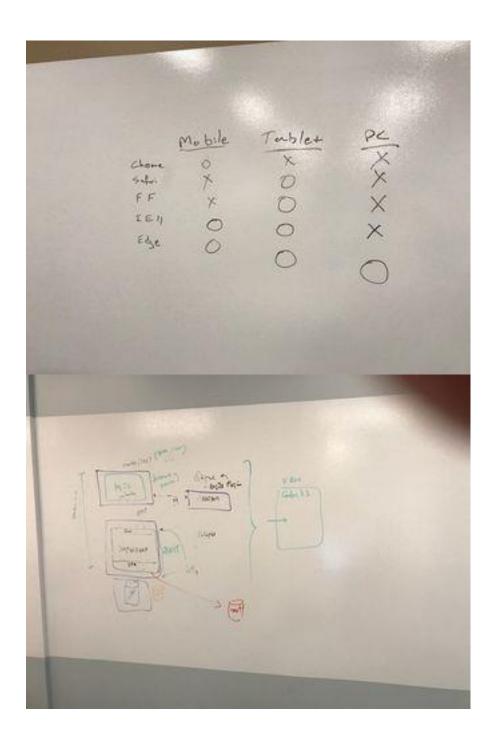


Two additional examples of our informal design process.

Small teams meet - discuss ideas - formulate ideas.

We whiteboard the material and then turn learning's into design artifacts.

Below 1) browser testing plan; 2) build/deployment roadmap



Knowing "two heads are better then one", the team leveraged concepts from peer programming when doing code reviews.

All new code branches developed are reviewed by a second developer and changes/comments added.

The initial developer then resolves the edits before merging their revision into the main development branch in GitHub.

The result is a higher quality revision.

Coordination of peer reviews handled via HipChat, enabling developers to work form multiple locations.



Another peer review example...

