Introduction
In February 2019 the Substratum development team began publicizing their weekly Show and Tell for consumption. Show and Tell happens every Friday at 2:00 PM EST and the summary prepared for the public no later than the following Monday.

The development team has been tweeting about features going to production daily to the open source repositories (SubstratumNode and TNT). The team also made the weekly show and tell meetings available to Substratum community moderators to help equip them on the status and to help them with a more ongoing open Q&A practice with them.

About the Show and Tell
The show and tell decks contain the following elements.

- The current roadmap
  - Strategic Milestones the team is currently focused on
  - Tactical Milestones the team is now working on
  - Tactical Horizon items the team will begin weaving in soon

- Burn-up of the progress of SubstratumNode V1 that will show an engineering forecasted completion date range that spans between known work and uncertainty. The uncertainty buffer multiplies the number of remaining work items by 2x. Data points are equivalent to the number of cards in the SubstratumNode backlog.
  - In the burn-up notes, below the chart, the team provides a range of weeks remaining based on the known scope (low-end estimation) and the estimated scope with uncertainty buffer (high-end estimation). The date range will continue to get tighter and tighter over time as scope settles and work is burned up for the initiative.

- Capacity Utilization (% of planned, tech debt, and unplanned)

The Show and Tell
At the most recent show and tell, the Substratum development team reinforced what strategic and tactical milestones are currently in play.
As one could imagine, the strategic milestones, as seen in figure 2, *make the internet free and fair* and *earn cryptocurrency and change the world* won't change much over time. These are strategic guiding principles for what the team is working on tactically.

Internally, the team has key performance indicators (KPI) associated with the strategic priorities written in the form of hypotheses. There are placeholders for outcomes as the KPI is measurable. The development team wants to be as scientific as possible when delivering the product, and experiential learning comes from the line between the hypothesis and the outcome.
The tactical focus is basically everything remaining to get the product to a version 1.0.0 release (v1). It’s exciting for the team to be at this stage of the game but the work remaining isn’t trivial. Tactical focus continues to evolve slightly over time.

**Tells and Shows**

The main spirit behind the show and tell is the following slide as seen in figure 3. This is where the team talks about the work completed and it’s only worth a discussion or they show off what the new features do with a small demonstration. The work has been identified by planned, tech debt and unplanned so that it maps into the capacity utilization more cleanly for greater transparency and connectivity between the show and tell and metrics portions of the meeting.
All these improvements are in GitHub for review and use. [https://github.com/SubstratumNetwork](https://github.com/SubstratumNetwork).

**SubstratumNode v1.0.0 RC1 Burn-up**

When the team talks about SubstratumNode v1.0.0 RC1 they are typically only referring to the SubstratumNode and the Network itself. SubstratumNode v1.0.0 is a monetized and secure Substratum Network. There will be plenty of work post the v1.0.0 release.
The initiative completed cards completed show us how many items and how steady the completion rate is over time.

The known or “certain scope,” reflects all initiative work items that the team has identified and documented in the system of record. We know that there are still more undocumented things to do. That is especially true since some of the work is in the form of research spikes that will become more items or bugs found in the process of delivery or testing. So, that’s why we have an uncertainty buffer.

Estimated scope is calculated by taking the remaining known scope, multiplying it by an uncertainty buffer of 2, and then adding it to the known scope. The expected scope decreases over time as long as there is not an excessive amount of new scope added to the initiative backlog.
If the team changes, velocity changes, or scope changes, these engineering targets will undoubtedly change. That’s why the team forecasts new targets weekly and makes hard decisions about what’s in or out of the v1.0.0 RC1 initiative. The notes in the image speak to the changes from this week.

**Substratum Dev Team Capacity Utilization**

Capacity utilization is measured by looking at how the team wants to plan work as seen in figure 5. The team uses simple abstractions like planned, tech debt and unplanned to gauge whether or not the iteration was healthy and if the next iteration needs to have some adjustments. To ensure a team is working on the right kind of things.

*Figure 5: Substratum Dev Team Capacity Utilization*

Capacity utilization starts with an ideal bar and a bar for the life of the initiative. It’s healthy to know what ideal looks like when trying to plan what to work on each week. The team feels that 80% planned work (stories and spikes), 20% tech debt, and 0% Bugs or support issues or 0% Unrelated items is ideal. We use these percentages when we plan work for an iteration or even daily for tactical adjustments. In practical terms, the team plays one tech debt every five story or research cards and hopes never to see production defects. If production defects happen, they will need to be prioritized against everything else and will most likely impact some of the planned or tech debt capacity.
Summary
As you can see, the team has continued to make substantial progress over time and will continue. We hope this kind of information is helpful and isn’t too overwhelming. We would love your feedback useful. Thanks so much for your interest in the Substratum Network!

Well, that’s all for this week!