

TL Note – Estimation, Tracking and Metrics

Our ultimate goal is a productive and predictable team. That means measuring output, tracking output, and forecasting output. Objective measurement is important, and having members keep individual journals can be a starting mechanism to build some structure around this as a team. Estimation, tracking and metrics are aspects of managing software development. Without them commitments will not have a sound basis, projects will proceed in an ad hoc manner, outcomes will be dependent on luck rather than good management, and opportunities for continuous learning and improvement will be lost. This TL Note discusses these 3 aspects below.

Estimation

TechLauncher teams should not make commitments to customers based on just what they want. part of our job is to add definition and options. It should be based on what can be achieved within the timeframe by the specific team undertaking the work. Without estimation, commitments have no sound basis.

There are many estimation methods (man hours, story points, etc), and these should be researched independent of this TL Note. The most important thing for TechLauncher is that you adopt some sort of light and effective method of estimating, so that you are able to provide a sound basis for your schedule, commitments and sprint planning. Sprint planning should also take into account team member availability and commitments. Estimates cannot be perfect predictions. The term estimation itself implies uncertainty. The more uncertain you are of the estimates, the more allowance for uncertainty should be built into your schedules. Presenting the worst case, then exceeding expectations is a better approach than overcommitting your team. However, you must also demonstrate that the team will generate value in line with effort.

Tracking

Even with the very best of estimation, things will never go exactly to plan. Estimation provides a basis against which you can track and report progress within and across sprints. This could be done using something like a burn-down chart, but just selecting something with clarity is the most important thing. To do this you obviously need to be collecting and collating information on the effort from the team in the same unit of measurement you used for estimation.

Tracking is also input to the management of the schedules and resources by the Project Manager. It may become evident that adjustments are needed. The estimation and tracking supports monitoring, impact analysis, resource reallocation, schedule adjustment and change management if needed. This cannot be achieved with last minute updates in a taskboard just before each audit.

Metrics

Collecting and using project metrics can greatly contribute to effective project management, and there are a myriad of metrics that could be collected. The important things to think about are:

- 1) Determining what metrics might be most useful as early as possible. For example, accounting for the hour of effort for each team member and for the overall project is a good metric and you need to do this right from the start of the project.
- 2) Ensuring you have baseline data for the metric if appropriate. For example, a baseline for team sprint velocity might be 18 story points per sprint, then the team can be monitored against the baseline.
- 3) Ensuring someone has ownership of the metric and the responsibility of recording data /monitoring against that metric. For example, to show the trend in actual team velocity across sprints, you need to ensure that the metric is obtained for each sprint.

Don't go overboard with metrics. Like everything else, keep it light and effective. Consuming time and effort without generating value is never encouraged in TechLauncher.