Engineering Team Roles

(original google doc)

TEvo Product & Engineering Team

This document attempts to clarify the expectations of each member of the Product & Engineering organization at TEvo. The main objective is so that each team member has a clear understanding of what is expected of them and what they can expect from their peers. Please note that nothing is set in stone and we can iterate and adjust as we move forward. The important thing is to focus on what we need right now so that we can create areas of ownership and accountability. Our team will comprise of primarily four roles, with more details later in the document:

- Engineer (Eng) - Feature Focused
- Technical Project Lead (TPL) - Project(s) Focused
- Engineering Lead (EL) - Standards/Solutions Focused
- Product Lead (PL) - Product/Services Focused

One area of clarity is that at TEvo we distinguish between your role and your title. The role is what defines the expectations of what you will be doing on a day to day basis. Your title is a reflection of your experience and is a more outward facing designation. Regardless of title, each person will serve as an engineer with the potential of 1 or more roles on projects.

Core principles:

Before getting into the details of the roles, it is best to understand the rationale for how these roles are being defined.

The concept of **servant leadership** is at the core of how we envision leadership at TEvo. That is why our teams are structured with servant leadership in mind.

It is not a coincidence that the role names have Lead in them and not Manager. “Lead” puts the focus on the actual leadership skill. Leadership means being able to guide and influence others, not bossing people around.

First, our product/engineering teams have a **flat structure** in which no member is hierarchically above another member. Second, our teams are by nature **cross-functional**, and as a result, leadership is **shared** between multiple individuals, namely the Project Lead, the Engineering Lead, and the Product Lead. Each of these leaders has an area of focus and a set of responsibilities. Therefore collaboration is required between all members to deliver a project.

In addition to servant leadership, group ownership and individual ownership mentality are also core principles that we value at TEvo in all areas.

Every engineer is encouraged to participate and contribute to every part of the product development lifecycle. Whether it is a suggestion for a UX/UI improvement or the discovery of a security issue, the engineer's inputs are valued on the same level as the Project Lead's, Engineering Lead's, and the Product Lead's..

At the same time, this does not mean that every decision must be decided unanimously by the whole team. Doing so would lead to paralysis and friction between team members, especially between the Engineering Lead and Project Lead. A decision-maker is needed on the engineering side to ensure development progresses. In our project teams, the Project Lead has the final say and is the decision-maker assuming that decision is inline with predefined company standards & guidelines. The Engineering Leads will have the final say in company level standards and architectural decisions. Engineers must respect and abide by the decisions taken whether it is the selection of a specific technology for a whole project or a specific implementation decision for a feature or bug fix.

Having a decision-maker does not mean having a dictator. Being a good leader requires trust, honesty and context. Therefore, getting the team's buy-in is essential. This ensures that if/when things go wrong, the whole team will be mobilized to turn things around.

Everyone on the engineering team is expected to focus on execution the majority of their time regardless of role or title. As an individual takes on more roles, expectations around how much time they spend on execution tasks will decrease, but not expected to go below 50%.

- Engineer - 95% of their time focused on execution "in the weeds" tasks
- Project Lead - 80% of their time focused on execution tasks
- Engineering Lead - 70% of their time focused on execution tasks

Engineer (Eng) expectations

Accountabilities

- Regressions that are created are on the Engineer
- Lack of adherence to company standards are on the Engineer

Responsibilities

- Write clean and maintainable code
- Write proper documentation for their code
- Write clean and maintainable tests for their code
- Being analytical about the task at hand. Tasks that do not make sense or need more clarifications must be flagged and brought up to the Technical Project Lead and / or Product Lead.
- Understand the whole design of the application being developed
- Participate meaningfully in technical decisions
- Perform research to solve issues
- Participate meaningfully in code reviews

Tech Project Lead (TPL) expectations

The TPL is expected to perform the same development duties as all engineers on the team. Therefore, it is not a purely team-management-focused job. In essence, TPLs have to combine the same responsibilities as engineers with an additional set of responsibilities (detailed below).

In practice, since a TPL cannot focus entirely on development tasks, a velocity lower than the other engineers on the team is expected and accepted as normal. Being a TPL always results in less time available for executing on development. However, it should be noted though that this is not a rule. A TPL can also be the engineer having the largest output. It varies depending on the skill sets of the engineer on the team and the type of projects.

Accountabilities

- If the quality of the code the team is putting out isn't good (lots of defects, low test coverage) or UX performance is slow, it's on the Technical Project Lead
- If the team isn't identifying and/or addressing tech debt & it's impacting their ability to deliver it's on the Technical Project Lead
- If the project exceeds agreed upon effort/timeframes and or does not meet Sprint Goals it's on the Technical Project Lead
- Accountable for the execution of the overall project

Responsibilities

- Focus on 1 or more projects
- Works with Product Lead & Engineering Lead(s) to create project level roadmaps/execution plans
- Ensures teams adherence to company standards
- Facilitate and ensure that more junior engineers follow the company's engineering best practices
- Nurture and assess more junior engineers
- Contribute to the prioritization and planning of Epics & user stories in accordance with the project goals and deliverables defined by the Product Team
- Participate in the recruitment process
- Remove roadblocks for the team including task clarifications and code reviews

Engineering Lead (EL) expectations

TEvo will have more than one individual in this role to ensure that multiple points of view are involved in decision making. In addition, we will have an odd number of to ensure that there can't be any stalemates.

Accountabilities

- If the technical solution the team chooses doesn't solve the business problem, it's on the Engineering Lead
- If the team is doing big upfront architecture rather than working out how to break features into vertical slices that add value, it's on the Engineering Lead
- If the team doesn't have well defined engineering practices & standards (like CI & unit tests) or those standards are too restrictive on the team's ability to deliver, it's on the Engineering Lead

Responsibilities

- To assess technical bottlenecks and process problems
- Responsible for understanding the business problems & work with Technical Project Lead(s) & Product Lead(s) to define an execution plan
- Contribute to the prioritization and planning of Epics & user stories in accordance with the Roadmap of deliverables defined by the Product Team
- Define key metrics for success across product/project initiatives
- Assist the Technical Project Lead(s) with communication with external stakeholders which require technical knowledge
- Define standards for the engineering team to ensure consistency across all teams & projects

Accountability means that an EL is accountable for the technical solutions and delivery of all projects. The EL is thus the point of contact for management (CPO) regarding the assigned projects.

Accountability does not mean decision-making. When it comes to having the final say, the Technical Project Lead of the project remains the decision-maker for that project. Technical Project Leads are usually senior engineers so they have the technical abilities to make such decisions. But as a leader, an EL must use their technical expertise and leadership skills to get the team to go in the right direction i.e. the ELs must use their influence and persuasion skills instead of forced authority to impose a decision. While it might seem counterintuitive to have someone accountable but not calling the shots, the reality is that forcing technical decisions

will create conflicts in the engineering team. Our teams must continue to work collaboratively and have group ownership. Thus, an EL must work in collaboration with the Technical Project Lead and the team as a whole to achieve the best possible outcome.

In order to avoid some pitfalls, the following guidelines must be followed (i.e. a list of what NOT to do):

- Do NOT coerce the squads to follow a specific direction.
  As a servant leader, an EL must use influence and guide, not order and force. Respect the decision-making process occurring in the team.
- Do NOT make technical decisions in place of the Technical Project Lead.
  When software developers are placed in a Technical Project Lead role, it is because they have been assessed and deemed ready to take on the role and/or they need to grow their leadership skills as part of their individual growth. An EL must guide and coach Technical Project Leads so that they understand the bigger picture of a project, learn how to balance the business and technical perspectives, and know how to make a decision.
- Do NOT blame the Technical Project Lead and/or the whole team when issues arise.
  An EL is accountable therefore is ultimately responsible for the outcome. By doing code reviews and being involved in the development process, the EL must be on top of all the things happening in a project. Therefore, forecasting issues and being pro-active enough is the EL's responsibility.

Product Lead (PL) expectations

Responsibilities of PL boil down to product vision, planning and QC i.e. having a clear view of what the product should be, planning how it will be built and making sure that what has been built reflects the original vision and requirements.

Accountabilities

- If the engineering team does not have enough context into why they are creating specific solutions it's on the Product Lead
- If roadmap isn't clearly defined, it's on the Product Lead
- If Sprints don't have proper Sprint Goals, it's on the Product Lead

Responsibilities

- Define and coordinate milestones/epics/sprint goals with Technical Project Lead
- Plan sprints multiple sprints ahead
- Work with business/stakeholders to clarify requests & translate to technical requirements
- Define and ensure schedule of deliverables
- Define measurements of success & key metrics for the product
- Perform quality controls of the work delivered by the engineering team
- Responsible for maintaining the product backlog
- Manage communication with external stakeholders including not only the Client but also all other third parties

How does this work in practice

A new business problem/initiative is brought to the team. This is first vetted with the CPO and or designated team member. If deemed relevant to be worked on:

- If new initiative or large scale changes to an existing one, Engineering Leads will do the initial scoping of effort and assist with prioritization against other ongoing projects
  - Outputs should include skill sets needed, estimated scope of work, systems that need to be touched and high level breakdown of feature sets/changes to systems needed to accomplish business objectives.

- For smaller tasks/bugs/feature requests, this can be brought directly to the Product Lead and or Technical Project Lead to get scoped out and assigned.
- Once prioritized, the Technical Project Leads and Product Leads work together to create epics in Jira that describe what is going to be done in which order (project roadmap). It is not expected at this point to have defined specific tasks, but more milestones.
- Technical Project Leads and Product Leads then break the work down into sprints and prioritize the jira epics (project planning).
- Once Epics are defined for a specific sprint, the Technical Project Leads will work with the engineers assigned to the project to create the specific tasks in Jira (sprint grooming). This will be driven by the Technical Project Lead.
- The assignee of the tasks is responsible for making sure that their tasks have points on them prior to starting the sprint.

If any individual has multiple roles on the same project, they will assume the union of all accountabilities and responsibilities.

Resource constraints created due to conflicting priorities will be resolved by the CPO or designated team member based on business priorities/drivers.