**How to build an Engineering Team**

**Presented to:**

**Target Corporation India Pvt Ltd.**

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# **Introduction:**

All of us always want to build and be a member of an effective engineering team, but most of the times we are not sure where to start with the process. There are plenty of reasons for companies to build an effective engineering team such as:

* It can allow you to enhance your product/services better and take the company’s growth multiple folds.
* It helps manage the immense transformations in organization quickly and effectively with making sure people are collaborating.

# **Problem Statement:**

In early days, building engineering team was a challenge too but now it has become more challenging due to rapidly changing technologies which have the major effect on the way companies develop new products and processes. Over the years, there were many different challenges for us to solve and mistakes to learn from as the team got more and more mature. This paper is about how we can enhance the process of building up a team, from both my own experience in the past years and conversations with other teams in a similar situation.

# **Proposed Solution:**

As a leader, building an effective engineering is very critical. There are several factors we need to take into account while building a team.

## **Set the right Expectation:**

The very first and important thing is having a direction. The team must understand, what is the mission of Project/Company? where do they fit in the broader company? In order to make team understand, the leader has to articulate the company vision and pass it to the team, Then, we need to think about customers and how to involve them in a shared purpose. The collaboration between both teams can achieve more than just the team alone. Lastly, identify the strategy to achieve that vision.

## **Manage Resources:**

To achieve our vision and mission we need resources. As a leader we should be able to manage all types of resources and make sure we have the right balance of them to perform the task and achieve the goals.

* Hard resources:  Example: Project Budget, information, data, dependencies. These are very important things and required by team to perform the tasks assigned to them.
* People:   Next we need people with specific skillsets and in right quantity. it's critical for a leader to make sure the team has the right set of people and enough of them to do the work that's been assigned.
* Leadership time: You need to take care of the business needs as a leader, so having the time allocated focus on execution of project. Also, a leader should spend time for meeting your team’s needs like morale, culture, people development like skills training and feedback.

## **Creating Right mix of Skills:**

 As the leader of an engineering team, we need to make sure the team has the required skill set to succeed and execute all the initiatives that are on prioritization list. We need to evaluate the mission and look at the key initiatives. And then, we can map out the skills and capabilities required to achieve the mission.

* Technical skills: Involves coding, and/or doing analysis, and/or creating documents. Mainly technical skills required to build/test the products and services.
* Functional skills: Involves problem-solving, strategic planning, decision-making, communicating, presenting.

By understanding the skills mentioned above, the leader should create the right mix of people with the right mix of skills that will help that team succeed.

Always hire some horizontally talented people in team, especially in the early stages of a projects, when we cannot predict exactly about the use case and skill sets. Your company will probably benefit from the one who knows a little bit about a broad range of multiple technologies.

We need a right blend of high and less experienced people in team to make sure we can cover the project within allocated budget.

## **Diversity and Cultural Values:**

The last but not the least, Diversity is a critical component for any effective team. There are many researches that says diverse teams perform better which is backed by reason that each team member brings a different perspective to the table. But the work doesn’t end there. Once people are at the table, the leader should build an environment where everyone can share their thoughts and perspectives. This requires effort on the part of the leader as well as the team to maintain open and respectful communication with focus on change and growth. Although it may take a while to develop effective communication between the team but at last any company is going to be benefited by it.

# **Conclusion**:

In nutshell, these factors discussed above provide a good solution to main problems we face while building the team, but reality could be different in many scenarios. It is easy to have a plan on paper to build up an engineering team while taking into consideration multiple factors, but practicing it effectively is an entirely different experience. I am still learning new things about this process from people around and I am still far away from where I would like to be.