

Product development team performance mapping

Maximizing the performance of product development teams has never been more important. But since performance varies across teams, you need to tailor your improvement approach carefully to make the best use of your limited resources. This four-step process can help.

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Product development teams are facing increased pressure to reduce costs and boost productivity—all under conditions of constrained resources. Yet maximizing product development teams' performance has never been more important, no matter which industry a company operates in. Most efforts aimed at boosting performance paint the entire product development organization with the same broad brush, expecting everyone to contribute equally to productivity improvement programs. However, in nearly every client organization we have worked with, we have seen a wide spread in performance across the organization. Therefore, implementing a traditional one-size-fits-all approach rather than setting more granular, tailored aspirations limits the return on investment such programs can deliver.

Further, most improvement programs simply are not backed by enough resources. Transformation programs consume valuable resources, and there is constant pressure to limit the number of employees tied up in such efforts. Consequently, an approach that concentrates limited resources on the areas of the organization with the most improvement potential will exert the greatest impact.

In our work with clients, we have developed such an approach: Product Development Team Performance Mapping (TPM). TPM is built on two assumptions: every company has pockets of superior product development performance, and scarce resources available for improvement programs should be directed toward teams that will deliver the most impact if their performance were enhanced.

Advantages of TPM

TPM has multiple advantages. For one thing, it makes wise use of the limited R&D budgets characterizing many companies today. As noted earlier, traditional performance improvement programs try to elevate all teams' performance—wasting

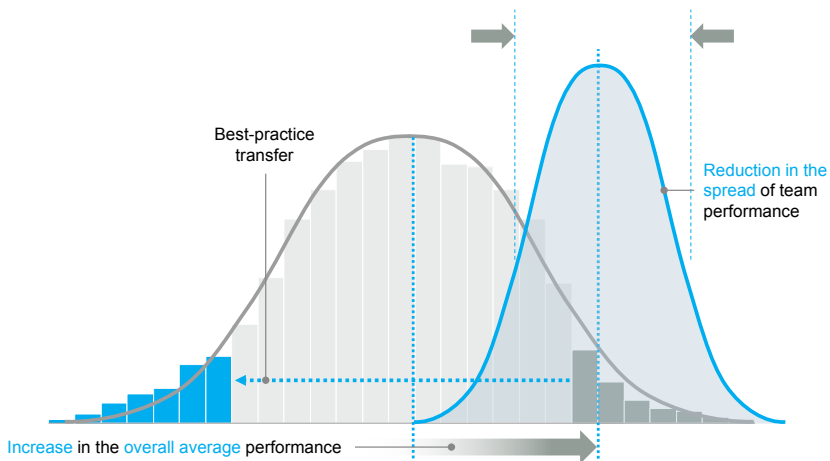
constrained resources on teams that are already excelling. TPM takes a different focus: concentrating resources on significantly lifting the lowest-performing teams. Indeed, McKinsey analysis shows that the bottom 20 percent of teams are the culprits behind as much as 50 percent of development issues (such as engineering-cost overruns, delays, and poor release quality). The upshot: boosting performance of the bottom 20 percent will deliver an outsize impact on overall product development performance (such as reducing the R&D ratio or increasing the number of products launched without increasing head count).

Such gains can translate directly into a healthier bottom line for the company overall. In fact, we have seen companies using this approach achieve a 7 to 10 percent increase in R&D efficiency through targeted TPM interventions. The approach not only improves overall average team performance; it also reduces the team performance spread through transfer of best practices from the best teams to the target teams. Simply put, it pushes the whole performance bell curve up while also tightening the curve (Exhibit 1).

TPM also helps companies combat the “not invented here” attitude often seen in product development teams. In our experience, engineering organizations always view themselves as unique. Consequently, they are often skeptical of improvement programs, countering proposed improvement ideas with comments such as, “We

Best-practice identification and transfer enables two dimensions of improvement.

Exhibit 1



have special constraints,” “Our teams operate differently,” or “That idea won’t work here.” Such teams may put up especially stiff resistance to standardized, “off the shelf” performance improvement frameworks (such as those adapted from lean).

Our approach combats such resistance by identifying teams that demonstrate superior performance, despite facing the same context and constraints as the low performers. Poorly performing teams who are skeptical about a specific improvement practice can see the top-performing teams putting that very practice into action—and reaping impressive results. One product development organization we worked with achieved a 23 percent total performance increase within 12 months of adopting TPM.

Furthermore, TPM reveals the unsung heroes in a company’s product development organization. The truth is, all too many companies celebrate and promote “firefighters”—people who rush in and solve urgent problems. Our method helps companies identify the stable, consistent performers—those who prevent fires from breaking out in the first place. All too many of these team members are never recognized for their contributions, and their morale can suffer as a result. TPM raises their profile, which in turn can enhance their engagement, morale, and job satisfaction—critical ingredients for achieving and sustaining elevated on-the-job performance.

How TPM works

To develop a team performance map, we recommend the following steps:

Select metrics to indicate superior team performance

Define a set of KPIs that indicate superior performance in your company’s product development teams. Industry guidelines abound for designing a KPI system, but we have found these simple principles especially helpful:

- **Transparency.** Ensure that the ways in which your teams’ performance is being measured and their results calculated are visible to and easily understood by team members. And define KPIs in terms that people find relevant. For example, in many organizations, the engineering change process is a critical process to manage. Therefore, shorter lead times on engineering changes—if the process is controlled—can be an indicator of a well-managed engineering team. This is a KPI that is clearly connected to an engineer’s daily work and is transparent in how it is calculated.

- **Influenceability.** Engineers should be able to immediately recognize that they can affect their own performance on KPIs by changing their behavior. One KPI, accuracy of engineering releases, provides an example. Most engineers understand that to improve their performance on this metric they must avoid costly, unnecessary rework loops. And they will conclude that it is worth investing a bit more time up front to ensure release accuracy in order to make the desired performance improvement.
- **Limited number.** Avoid any temptation to come up with a plethora of KPIs on the assumption that you have to measure performance on every development activity for which data exists. This tactic can backfire in several ways. For instance, improving performance on a myriad of metrics simultaneously just is not humanly possible. What is more, significant improvement on any single KPI will barely move the needle of overall performance if it is buried under the weight of a long list of KPIs. Finally, defining a long list of KPIs simply is not necessary. The performance of most systems, especially an R&D team, can be abstracted through the clever selection of a small but meaningful set of KPIs.

Identify your high performers and codify their practices

Use the KPIs you have defined to identify your top-performing product development teams. Typically, plotting team performance in any organization results in something similar to a bell curve, with the best 5 to 10 percent of teams performing significantly above the average. To understand these “stars,” spend time with them; for example, by sitting in on their team meetings, watching how they interact, and asking them questions about how they get the work of engineering done. Watch for specific practices in use that lead to success. For instance, maybe you will see your top performers:

- Conducting disciplined kickoff meetings for projects, including full documentation of clear tasks with realistic due dates and personal responsibility
- Regularly sharing effective methods and processes for carrying out their work
- Cultivating strong relationships with customers to deepen their understanding of projects' requirements and scope, limiting disruptive late customer changes
- Proactively prioritizing and steering incoming requests from all stakeholders
- Holding weekly open-point reviews, shifting resources to deal with delays, and immediately assessing the impact on overall on-time delivery.

Right about now, you may be asking yourself if there are external factors beyond the control of any one engineering team, such as component complexity or unique customer requirements, and whether those factors also explain differences in team performance. These are reasonable questions—but our experience shows that top performers transcend such externalities. Specifically, within most organizations, different teams who are grappling with projects of similar scope, complexity, and customer type can be surprisingly far apart in terms of performance. Of course, each team will have unique practices that do not directly influence its performance, and that may be related in part to such externalities. However, careful observation and comparison of your teams' practices can help you tease out specific behaviors that do contribute to the high marks your top teams achieve.

Help your struggling teams

Once you have clearly defined the behaviors that enable superior performance in your product development teams, focus on working with your lowest performers. Your goal: help them apply what you have learned from your top teams. Consider implementing the following practices:

- **Target setting.** Together with these teams' managers, set challenging but realistic targets for improvement. Keep the SMART acronym in mind—which holds that performance goals should be specific, measurable, achievable, realistic, and timely. Defining SMART targets not only motivates teams to achieve their goals; it also involves managers directly in the performance improvement process.
- **Mentoring.** Pair struggling teams with top-team project managers who can serve as mentors. Though individuals available for mentoring are typically in high demand throughout an organization, we have found that a small amount of mentoring time can have a major impact on the project managers who are being mentored. And since we are talking about only a few hours a month, there are few other activities that will deliver such a high return on investment. Additionally, in our experience, most mentors thoroughly enjoy fulfilling this role and are eager to help build up capability. Thus, they tend to find the time.
- **Active coaching.** Use experts to coach the target teams and to guide them shoulder to shoulder through an intensive improvement process. If your company is like most, you will identify more best practices than any team would be able to implement simultaneously when you conduct your initial assessment of your high performers. Have coaches help the target teams focus on the most promising

and valuable practices for them—those that would most help them achieve their improvement goals.

Activate a continuous-improvement machine

For most companies, establishing the processes and systems required to adopt TPM is a herculean task. Yet it also sends a strong message that the organization really intends to improve product development performance. As such, it typically catalyzes a relatively quick surge in performance.

But TPM's true power lies in its ability to help companies continually improve product development performance. In fact, most companies already expect year-over-year improvement in their product development organization. TPM enables companies to break development improvements down into more granular levels. That is, rather than expecting, say, 3 to 5 percent improvement annually from all teams, companies can use TPM to adopt a graduated target-setting approach. Teams experiencing performance challenges can be given more aggressive targets, while high-performing teams, though still expected to improve, receive less aggressive targets.

In any product development organization, there will always be a bottom 20 percent of teams who have the best potential to improve overall product development performance if their own performance can be strengthened. And there will always be the top 10 percent, who have less room to improve, but who can be held up as role models for the others to aspire to. Therefore, you can get the most from TPM by managing it as a continuous-improvement machine. That means regularly revisiting and (if necessary) revising KPIs, identifying top and bottom performers, and focusing improvement efforts on the teams that need it.

Establishing organizational structures can help. For instance, consider setting up a central group to monitor teams' performance over time and to maintain a best-practice database that is regularly updated with new findings. This same group can also be responsible for selecting target teams that need help and maintaining a stable of coaches who can work with target teams.

Hard work? Yes—but the payoff makes it well worthwhile.

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