

Strategy 6

Table of Contents

Introduction and Strategy 6 Learning Objectives

Key TPM Terms and Definitions

3

Unit 6.1

Why Continuous Improvement Is Critical for TPM

4

Unit 6.2

Step 1: Identify Improvement Opportunities

6

Unit 6.3

Step 2: Analyze Root Causes

9

Unit 6.4

Step 3: Develop Solutions

11

Unit 6.5

Step 4: Test Solutions

13

Unit 6.6

Step 5: Implement Proven Solutions

15

Ready for Next Steps?

16

Introduction

Strategy 5 showed how to build and manage talent pipelines using performance measures and incentives and how to evaluate employer return on investment (ROI). But that is not the end of the Talent Pipeline Management™ (TPM) process.

At this stage of TPM™, employer collaboratives should have the information they need to improve performance in ways that will continually increase ROI and create additional shared value for all partners.

Strategy 6 shows how employer collaboratives can manage their talent pipelines using a process of **continuous improvement** in cooperation with their talent providers. This helps keep employers engaged and dedicated to the collaborative and committed to working with their talent providers, especially those designated as preferred providers. These improvement efforts may—and likely will—involve changes in the practices of both employers and providers. That is why a cooperative continuous improvement process is necessary.

Strategy 6 first provides an overview of the role of continuous improvement in TPM and its five-step process. We then describe how to use performance scorecards (first presented in Strategy 5) and related information to identify where large gaps exist between expected and actual performance and where performance levels are moving in the wrong direction.

From there, you will learn how to evaluate improvement opportunities and assign **continuous improvement teams** to projects. We conclude by providing an overview of the remaining continuous improvement process steps to manage a project of your choosing.



Strategy 6 Learning Objectives

- 1 Define the role of continuous improvement in TPM.
- 2 Apply the five-step approach to continuous improvement.
- 3 Determine improvement priorities and organize improvement teams.
- 4 Identify the key issues to be addressed in each step of the improvement process.

Key TPM Terms and Definitions

The following concepts are most critical for understanding and executing Strategy 6. These terms appear in the order in which they are listed below and are highlighted in yellow throughout the chapter.

Continuous Improvement

A structured process to improve performance over time. Continuous improvement approaches in the business world include Lean Six Sigma and others using the five-step DMAIC (define, measure, analyze, improve, and control) process.

Continuous Improvement Team

A team established by the employer collaborative or an individual employer to carry out an improvement project and report results for a specific period of time based on the agreed scope and goals.

DMAIC

A widely accepted data-driven continuous improvement process that includes five major steps: (1) define, (2) measure, (3) analyze, (4) improve, and (5) control.

Lean Six Sigma

An improvement methodology used to identify and eliminate waste and optimize performance.

Root Cause

Those conditions or factors that directly cause a performance problem.

Root Cause Analysis

A process to identify factors that directly cause a performance problem and can be addressed in a continuous improvement process.

Unit 6.1

Why Continuous Improvement Is Critical for TPM

Let's summarize the TPM process thus far. In Strategy 1, we addressed how employers are more likely to join employer collaboratives when (1) they have a major “pain point” that needs to be addressed in sourcing talent for critical jobs and (2) they see value in working with other employers in addressing that pain point. Strategies 2 and 3 help clarify the specific talent needs of collaborative members. Strategy 4 shows how to establish baseline information on actual and potential sources of talent. Strategy 5 establishes how to build and manage talent pipelines using value stream maps, performance measures, and incentives, and how to evaluate your employer collaborative's ROI.

And now, Strategy 6 demonstrates how employers and their talent sourcing providers can work together to improve performance on these measures, especially those bottom-line pain point measures that led to the employer collaborative forming in the first place.

To guide the continuous improvement process, TPM encourages the use of a systematic and data-driven approach that has proved effective across all aspects of the business enterprise as well as in the nonprofit and public sectors. The TPM continuous improvement process is based on the widely used **DMAIC** (pronounced “duh-may-ik”) approach consisting of five improvement steps: (1) define, (2) measure, (3) analyze, (4) improve, and (5) control.

These improvement steps underlie many leading improvement processes, such as **Lean Six Sigma**. They also involve the applications of many useful improvement techniques and tools that are widely known and used across industries and professions.

Systematic improvement approaches like DMAIC are essential to prevent taking action based on “data-free observations” and “conventional wisdom” and to avoid pursuing “solutions in search of problems.” They also reduce the chances of taking action based on priorities set by outside parties, such as government-led initiatives that might not directly address a collaborative's shared pain point(s) and performance challenges. Such actions are clearly seen in states and regions pursuing grant opportunities that do not tackle their most critical challenges but require substantial time commitments and potentially carry significant costs.

Without a systematic approach to continuous improvement, employer collaboratives run the risk of wasting time and resources that will not produce the results and shared value needed to be self-sustaining and demonstrate the ROI that employers value.

The TPM approach to continuous improvement is based on the five-step DMAIC approach (see Figure 6.1: TPM Continuous Improvement Process). The TPM approach involves the following steps:

Step 1 – Identify Improvement Opportunities: Define the focus and goals of a continuous improvement project based on information gathered from the analysis of performance presented in the performance scorecard (Strategy 5).

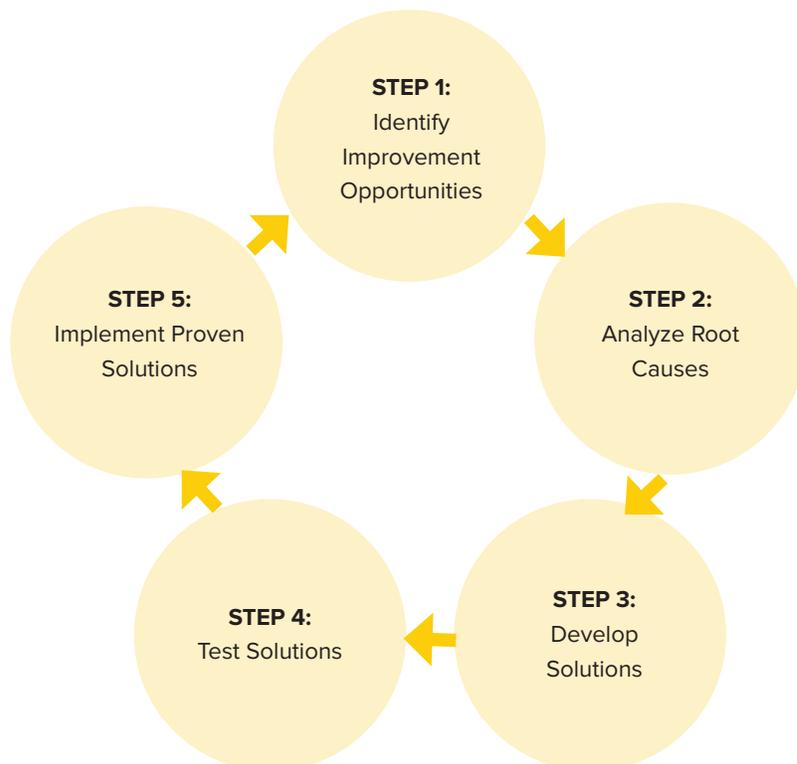
Step 2 – Analyze Root Causes: Explore and analyze additional data to determine major root causes of performance problems and what is needed to improve performance for the selected opportunity.

Step 3 – Develop Solutions: Develop possible solutions for the performance problem, including new approaches, methods, and processes, along with new types of incentives.

Step 4 – Test Solutions: Conduct a pilot test of one or more solutions and evaluate their effectiveness.

Step 5 – Implement Proven Solutions: Fully implement those solutions that deliver the most promising results and take steps to ensure they can be sustained, and then start again in exploring the next improvement opportunity.

Figure 6.1: TPM Continuous Improvement Process



Unit 6.2

STEP 1: Identify Improvement Opportunities

The first step in the TPM continuous improvement process is to identify the highest-priority improvement opportunities to address based on a review of the data made available through your collaborative's performance scorecard.

Using Performance Scorecards to Identify Improvement Opportunities

As discussed in Strategy 5, performance scorecards present current performance in useful ways to highlight problems that may present continuous improvement opportunities. In particular, they present (1) performance relative to expectations and (2) performance trends and whether performance is moving upward or downward.

Using the sample scorecard introduced in Strategy 5, Table 6.1: Example Aggregate Performance Scorecard shows an aggregate scorecard for an employer collaborative that has decided to focus on three major pain points: (1) the quality of new hires, (2) unfilled job openings, and (3) retention of new hires over the first year. The collaborative also decided to address whether sufficient numbers of learners were entering and completing education and training programs to meet projected demand so that all employers would be able to meet their hiring needs in the future.

Table 6.1: Example Aggregate Performance Scorecard

Shared Pain Point Measures	Performance	Relative to Expectation	Trend
Percentage of applicants from talent providers that meet requirements	55%	●	↓
Average number of days to fill open positions	128 days	●	↓
Percentage of hires retained in first year of employment	75%	●	↑
Driver/Transition Measures	Performance	Relative to Expectation	Trend
Number of learners that complete education and training programs	75	●	—
Number of learners enrolled in education and training programs	95	●	—

In reviewing performance dashboards, employer collaboratives should consider identifying improvement opportunities based on the following considerations:

- **Level of Impact:** The degree of direct or indirect impact on employer ROI, with priority given to direct pain point measures
- **Immediacy of Impact:** How fast the impact will be realized to generate employer ROI, with priority given to performance measures for which improvement initiatives have the potential to achieve quick wins for the collaborative
- **Performance Gaps:** The size of the gap between actual and expected performance, with priority given to measures with the largest gaps
- **Performance Trends:** The trend in performance, with priority given to measures that are trending downward

For example, an employer collaborative using the performance dashboard in Table 6.1 could identify two potential improvement opportunities and decide which one to prioritize. As shown in Table 6.2: Scoring the Opportunities, the collaborative could evaluate and score these two opportunities as follows:

- **Opportunity 1: Improve the Percentage of Applicants Meeting Requirements.** This opportunity would immediately affect the major pain points identified by employers and address major performance gaps that are trending in the wrong direction. It might also have an additional impact of reducing the number of days required to fill open positions and could reduce the number of unqualified candidates who need to be screened, resulting in additional cost savings.
- **Opportunity 2: Increase the Number of Learners Enrolled in Education and Training Programs.** This opportunity would provide a moderate level of impact by providing more applicants, but it would not address the problem of too few applicants meeting employer requirements. It might also have the unintended consequence of driving up hiring costs, with more learners needing to be screened. In addition, with a larger cohort, more learners might not meet employer requirements. Also, employers might not see a reasonable ROI in the near term since they would need to wait considerably longer for learners to complete an education or training program.

Table 6.2: Scoring the Opportunities

Selection Criteria	Opportunity 1	Opportunity 2
1. Level of Impact	H	M
2. Immediacy of Impact	H	L
3. Performance Gaps	H	M
4. Performance Trend	H	L

H = High; M = Medium; L = Low

After identifying and ranking improvement opportunities, the employer collaborative should then identify the opportunity that would be most effective and most feasible. In this case, it may want to prioritize Opportunity 1 and then move to Opportunity 2 once it has satisfactorily resolved the problem of many learners not meeting employer requirements.

Establishing the Improvement Team and Project

After selecting an improvement opportunity, the employer collaborative should then establish a **continuous improvement team** to carry out a project that develops and tests solutions for addressing this performance problem over a specified time period. In exploring this further, the team may want to determine the scope of the effort and whether this problem can be addressed by working with one or more talent providers or whether this problem is shared across all or most partners. This could be done by reviewing education and training provider-level scorecards, as shown in Strategy 5.

The improvement team should include people who are best positioned to analyze the problem and develop and test the most promising solutions. In most cases, this will involve front-line professionals from employers and talent-sourcing providers. The improvement team also should include continuous improvement experts from employers and talent provider partners, including Lean Six Sigma experts if available.

For example, in addressing the first improvement opportunity described on page 7, the employer collaborative might determine that this problem exists across all partners. As a result, the collaborative may want to establish an improvement team made up of hiring managers and human resource professionals who have been involved with improving the communication of hiring requirements (Strategy 3), in addition to front-line program administrators and instructors from all major education and training providers that are responsible for preparing their learners to meet these requirements. This improvement team should be supported by the employer collaborative staff members, who can provide the necessary data and help coordinate the meetings, as well as continuous improvement experts.

Unit 6.3

STEP 2: Analyze Root Causes

Step 2 is for the improvement team to identify the most critical direct causes of the performance problem—what are often referred to as **root causes**. Root causes are those factors that directly cause a performance gap to occur.

Root cause analysis is a critical step because it forces collaboratives to agree on what is causing the problem first and not rush to a solution too quickly or develop a solution in search of a problem.

Just as in business and everyday life, we often want a quick fix to a problem and don't want to take the time to examine what is really going on. We then run the risk of quickly accepting conventional wisdom about a problem instead of seriously asking why. As a result, *teams should never stop asking "Why?" when searching for root causes, and they should challenge conventional wisdom whenever possible* throughout the process and always ask "What is the evidence that leads us to this conclusion?"

In addition, improvement teams should focus on those root causes that are within their control and for which they can take action within a reasonable time frame. Sometimes, root causes can be directly addressed by employers and their partners because they are the result of existing policies, practices, and processes that can be changed within the scope and time frames of the improvement initiative. But root causes also can reflect larger environmental factors that cannot be directly addressed, such as economic and population factors.

A systematic process for conducting a root cause analysis should use well-established methods, tools, and practices of proven improvement approaches, such as Lean Six Sigma, whenever possible. At a minimum, the process should include the following steps:

- **Brainstorm Potential Root Causes:** Team members should first brainstorm about potential causes they can explore. This is particularly important for those employers and partners that are most directly involved in producing results for the chosen performance measure. These causes may be reflected in more than one performance measure. Teams should avoid assigning blame or responsibility to others, and should instead focus on making lists of potential causes that are balanced and comprehensive and emphasize that most causes are complex and involve changes from all partners.
- **Review Available Evidence:** Improvement team members should then review available evidence about each of these causes from their performance data and from follow-up discussions with employers and their partners. Teams should also consult experts and explore any research on related performance problems that have developed compelling evidence of root causes.
- **Analyze and Evaluate Potential Root Causes:** Next, improvement teams should conduct a systematic evaluation of these potential causes and rate them based on several important factors, such as the following:
 - **Root Cause:** The degree to which a cause is a direct cause
 - **Level of Impact:** The cause's degree of direct or indirect impact on performance
 - **Evidence:** The degree of evidence that the cause has an impact on performance
 - **Control:** The level of control the employer collaborative and its designated preferred providers have in affecting the cause within the scope and timing of the initiative

Improvement teams should identify the root causes that are rated the highest based on these four criteria and agree on which ones to address.

For example, the team addressing Opportunity 1 (see Table 6.2) could have conducted further research into the major gaps between hiring requirements and the applicants who did not meet those requirements, and identified two major root causes:

- **Employer Communication of Hiring Requirements:** Employer members did not sufficiently communicate to all education and training providers on some critical technical and employability skills.
- **Education and Training Provider Curriculum and Assessments:** Some education and training providers did not correctly address these skills or did not provide the necessary evidence that these technical and employability skills were attained.

The improvement team then agreed that both causes must be addressed in developing comprehensive solutions to address the performance problem.

In conducting this root cause analysis, employer collaborative teams should try to avoid three common mistakes: (1) relying on conventional wisdom and easy answers without looking at available data, (2) focusing on symptoms rather than their underlying causes, and (3) focusing on causes that are outside their control or that require coordination with partners that might not share the same senses of purpose and urgency.

Employer collaborative improvement teams should also avoid the common mistake of assuming that causes of performance problems can be found only on the talent provider side without giving equal attention to the employer side. This is usually the case when analyzing problems in retaining newly hired employees.

For example, a healthcare employer collaborative identified its highest-priority improvement opportunity to be increasing the retention rate of newly onboarded nurses in hospitals. The team assumed the causes of retention problems were in preparing the nurses. But some assumptions could also include more realistic expectations on working in acute healthcare settings and the technical preparation and clinical experiences provided. In this example, the employer collaborative might not give equal attention to employer practices, including the impact of nursing supervisors, onboarding systems, and nursing scheduling and compensation.

Unit 6.4

STEP 3: Develop Solutions

Once teams have identified, evaluated, and prioritized the root causes of improvement opportunities, the next step is to do the same for solutions that address these causes.

Developing a range of potential solutions is very important in preventing teams from quickly adopting widely recommended practices, popular homegrown solutions promoted by partners, or solutions that are being pushed by government initiatives or other outside efforts. Most commonly, this occurs without a systematic review of whether these solutions directly address the root causes and whether there is any evidence they will work within the context and time frames of the team's improvement initiatives.

As with root cause analysis, improvement teams should not be too quick to adopt a ready-made, silver-bullet solution without getting the facts straight. And they should consider only solutions that are within their control to implement within the time frame available to test and implement them.

Finally, teams should take the time necessary to get broad consensus within the team and within the larger employer collaborative that they have properly and systemically identified and reviewed all possible solutions, so that they can get the necessary commitment and support for testing and evaluating one or more of these potential solutions.

To do this, the team should follow a systematic process in developing solutions:

- **Identify Potential Solutions:** First, the team should ask all employer members and their partners to brainstorm on potential solutions. This should include those employers and partners that are most directly involved in producing results for the chosen performance measure.
- **Review Available Evidence:** Team members should then review available evidence about each of these solutions. Also, teams should consult experts and consider any research that has explored related performance problems and developed compelling evidence of the solutions.
- **Analyze and Evaluate Potential Solutions:** Next, the team should conduct a systematic evaluation of potential solutions and rate them on factors that include the following:
 - **Root Cause Impact:** The degree to which the solution has a direct impact on one or more root causes
 - **Level of Impact:** The degree or amount of impact the solution is expected to have on the targeted root cause
 - **Evidence:** The degree of evidence that the solution will have an impact on the targeted root cause
 - **Control:** The level of control the employer collaborative has in addressing the cause within the scope and timing of the initiative

As with analyzing root causes, the improvement team should then identify potential solutions that are rated highest based on these four criteria and agree which ones to address. For example, the team addressing Opportunity 1 based on the two root causes could explore two potential solutions:

- **Improve the Competency Detail on Employer Surveys:** The team could explore how to improve the level of detail in the specification of competency requirements in the hiring requirements survey used in Strategy 3.
- **Curriculum Review and Alignment:** The team could also explore a curriculum review process that the employer collaborative could execute with all partners to improve the alignment between employer requirements and curriculum and assessment systems.

Solutions should always address root causes, be evidence based, and have the support of key partners. Common mistakes that occur while developing solutions include (1) designing solutions that do not address root causes, (2) “reinventing the wheel” by implementing solutions that have already been tested in similar contexts with limited success, and (3) adopting what are considered to be best practices without fully exploring whether there is any evidence that they work.

Unit 6.5

STEP 4: Test Solutions

Once improvement teams have identified a potential solution, the fourth step is to pilot test this solution to evaluate its effectiveness before implementing it for the entire talent pipeline.

One common mistake in continuous improvement initiatives is not putting the solution to the test in the context in which it is expected to work. The solution must be confirmed to work in at least one setting before committing to the expense and time of implementing it everywhere. This requires a pilot test and evaluation.

Pilot testing is essential to your improvement process because it can help you refine the solution and it saves considerable resources if the solution does not work. The pilot testing should also be conducted in the context of where the solution will be implemented so that it can be evaluated where it will be expected to get results without changing other conditions.

In most cases, improvement teams can use a pre-post design that compares performance before and after the pilot testing. In other cases, they could test the solution while maintaining a control group for comparison purposes (see Table 6.3: Common Questions When Testing Solutions Depending on the Design of the Pilot).

For example, the team addressing Opportunity 1 (i.e., improving percentage of applicants meeting requirements) with the two root causes and two potential solutions could decide to conduct a limited pilot test. The team could test a revised employer survey to determine whether companies can provide the additional detail and whether the team is satisfied that it would address the gaps between requirements and applicants. The team also could decide to pilot test the curriculum review and alignment solution with one volunteer education and training provider to see if it is effective in closing the gaps for the provider's learners.

A common mistake during this step is fully implementing a solution without properly testing and evaluating it first through a pilot that yields comparable data through either pre- and post-evaluations or comparison groups.

The evaluation should involve both direct data collected on changes in performance and data gathered from interviews and focus groups with participants to gain further insights on what worked and what did not work.

Table 6.3: Common Questions When Testing Solutions Depending on the Design of the Pilot

Pre-Post Pilot Test Design	Comparison Pilot Test Design
1. Was the solution implemented as intended?	1. Was the solution implemented as intended at the test site?
2. Did the solution have the desired impact?	2. Did the solution have the desired impact?
3. Were other contributing factors controlled?	3. Were other contributing factors controlled at the test site?
	4. Did the control site experience produce different results?
	5. Were most other factors controlled for at the control site?
4. Does the solution need to be tested again?	6. Does the solution need to be tested again?
5. Do you recommend this solution be scaled?	7. Do you recommend this solution be scaled?

Unit 6.6

STEP 5: Implement Proven Solutions

Successfully piloting a solution in one setting does not guarantee it will work everywhere.

After the improvement team has successfully piloted the solution and shown promising results, it must address how it would scale the solution within the larger talent pipeline. This means considering what would be needed to ensure that the solution is successfully implemented in a much broader context.

Replicating small successes on a larger scale can be complicated by the addition of new factors and challenges that can reduce effectiveness. However, the chances of success are greater when teams fully specify how the solution should be implemented in other settings and teams have a plan to continually evaluate and adjust the solution during the scaling process. Here are two essential elements in this final step:

- Provide an Implementation Guide and Resources:** Develop a detailed description of the solution and guidance on how to fully implement it to get the best results.
- Continue to Evaluate and Improve:** Collect data on an ongoing basis to evaluate the implementation of the solution and whether it is getting the desired results, in addition to making changes or adjustments to make it more effective as it is being scaled.

Common mistakes made during this step include (1) not communicating the results and securing the buy-in of all critical stakeholders in implementing the solution correctly at scale, (2) not fully specifying the solution in ways that can be easily implemented in the talent pipeline, and (3) not providing sufficient resources and support to fully train key personnel involved in implementing the solution. See Table 6.4: Common Questions When Implementing and Scaling Proven Solutions to help avoid these frequently made slip-ups.

Table 6.4: Common Questions When Implementing and Scaling Proven Solutions

1. Have all stakeholders been informed of the pilot results, and is there consensus on scaling the solution?
2. Have implementation guidance and other resources been provided to all necessary partners?
3. Has training been provided to key stakeholders involved in scaling the solution?
4. Are there any barriers to scaling the solution that need to be addressed?
5. Have steps been taken to collect data and validate that the desired impact has been achieved at scale?

Ready for Next Steps?

Have you achieved the learning objectives in Strategy 6 necessary to move forward? When you go back to your community, verify you will be able to execute the following activities:

- Explain the role of continuous improvement opportunities in TPM.
- Explain the five-step continuous improvement process.
- Explain major decisions, actions, and common mistakes in each step.
- For those using the TPM web tool, use the tool to create and manage your selected improvement opportunity.

If you can do all of the above, you have the skills and tools needed to be successful in implementing continuous improvement.

NOTES