

# Strategy 3

## Table of Contents

---

Introduction and Strategy 3 Learning Objectives	2
Key TPM Terms and Definitions	3
<hr/>	
<b>Unit 3.1</b>	4
<b>The Role of Communicating Competency and Credential Requirements in TPM</b>	
Exercise 1	
Analyzing Job Descriptions Exercise	
<hr/>	
<b>Unit 3.2</b>	8
<b>Identifying Hiring Requirements</b>	
Exercise 2	
Identifying Hiring Requirements Exercise	
<hr/>	
<b>Unit 3.3</b>	17
<b>Reporting Hiring Requirements Results</b>	
Exercise 3	
Reporting Results Exercise	
<hr/>	
Ready for Next Steps?	22

---

# Introduction

Strategy 2 addressed the quantity, location, and timing of talent needs. But mitigating critical skill shortages also requires a focus on quality, which means addressing the **competency**, **credential**, and other **hiring requirements** for these critical jobs. This is the purpose of Strategy 3.

How employers accurately communicate their hiring requirements has important implications for how successful they are in managing their talent pipelines. Setting hiring requirements that are too low will increase costs to employers by requiring more on-the-job training and increasing turnover costs. Setting requirements that are too high will have the unintended consequence of excluding otherwise qualified candidates and potentially reducing the available talent pool, and imposing higher education and training costs on prospective workers. Both can result in positions going unfilled for long periods of time with potentially high onboarding and turnover costs.

Talent Pipeline Management™ (TPM) treats communicating competency and credential requirements as a separate strategy for the purposes of the curriculum given its importance and complexity, but *it is best to think of the outcomes of this strategy as part of the combined process by which employer collaboratives communicate their combined need for talent and the hiring requirements for filling that need.*

As mentioned in Strategy 2, a key decision for employer collaboratives is whether they conduct (1) two separate surveys, with one focused on demand planning for job opening projections, followed by another focused on hiring requirements; or (2) a combined demand planning and hiring requirements survey, which we call the needs assessment. We will discuss the pros and cons of each choice after we review the essentials of communicating competency and credential requirements.



## Strategy 3 Learning Objectives

- 1 Explain the role of communicating competency and credential requirements in TPM™.
- 2 Recognize different ways employers can communicate hiring requirements.
- 3 Develop a shared language for communicating competency and credential requirements with an employer collaborative.
- 4 Combine and share the results of demand planning and communicating competency and credential requirements, as outlined in Strategies 2 and 3.

# Key TPM Terms and Definitions

Here are the concepts that are most critical for understanding and executing Strategy 3. These terms appear in the order in which they are listed below and are highlighted in purple throughout the chapter.

## **Competency**

What someone should know or be able to do in a particular job as demonstrated through tasks performed; tools and technologies used; and knowledge, skills, and abilities applied.

## **Credentials**

Documents attesting to qualifications and the attainment of competencies, usually in the form of education degrees and certificates, industry and professional certifications, badges, and licenses.

## **Hiring Requirements**

The competencies, credentials, work experience, and other characteristics (e.g., ability to pass a drug test) used for making hiring decisions for one or more jobs related to a business function. Hiring requirements can be preferred or required.

## **Work Tasks**

Work performed in carrying out job roles, functions, and responsibilities.

## **Knowledge**

What a person should understand in terms of facts, theories, principles, concepts, and procedures related to general or specific domains, including disciplines and professions.

## **Skills**

Capabilities to apply knowledge and perform work tasks.

## **Tools and Technologies**

Essential technologies used to perform work tasks and skills, including software and equipment.

## **Employability Skills**

Essential workplace skills needed to be successful in any job, including what are commonly referred to as “soft skills,” such as problem solving, critical thinking, communication, and teamwork.

## **Human Resource Information System**

An information technology system that captures all aspects of human resources data in a centralized place and supports employee recruitment, hiring, performance, and benefits management.

## **Applicant Tracking System**

A software application that manages employee recruitment data, including job postings, applicant tracking, screening and scoring, interview management, and hiring.

## Unit 3.1

# The Role of Communicating Competency and Credential Requirements in TPM

Clearly communicating hiring requirements for their most critical job openings is one of the most important challenges facing employer collaboratives. TPM focuses major attention on clearly specifying competency and credential requirements through a shared language so employers within the collaborative can understand how their needs are both similar and different. This ability to communicate differences in a clear and consistent manner will enable talent providers to better customize and meet the needs of all employers instead of aiming for an average fit.

Employers have choices in how they communicate their hiring requirements. Many employers have historically relied on education credentials as a proxy for skills, but in today's economy, employers are becoming increasingly sophisticated in how they communicate their hiring requirements in order to better source talent.

In TPM, employers should communicate their hiring requirements for critical jobs by minimally addressing competencies, credentials, work experience, and other hiring requirements (e.g., security clearance, citizenship). TPM also focuses major attention on how employers can more clearly communicate which qualifications are required, and which are preferred for critical jobs.

Communicating competency and credential requirements as well as other hiring requirements is critical in TPM because it helps employers and potential employees do the following:

- **Get the Right Applicants:** Communicating competency and credential requirements clearly signals requirements to get the most qualified candidates to apply in a way that does not drive up screening costs or deter qualified candidates from applying.
- **Hire the Right People:** Communicating competency and credential requirements improves the capacity of employers to screen and hire the right people who can be quickly and reliably onboarded, trained, and retained.

In setting hiring requirements, employers should consider their implications for achieving return on investment in managing their pipelines. Setting requirements that are lower than what is necessary for successful onboarding and work performance may result in increased hiring costs, lower productivity, and lower retention.

In contrast, setting requirements that are higher than necessary may result in a reduced pool of qualified talent and higher costs in developing talent in the pipeline. This also may result in lower retention rates due to higher expectations among workers meeting these higher requirements.

Given these implications, the best approach is for hiring managers to conduct a detailed analysis of job requirements and the characteristics of top performers in these jobs who have been successfully retained and use this analysis to establish validated hiring requirements.

TPM encourages employers to use the Strategy 3 survey process for sharing and compiling validated hiring requirements in a common language based on shared competency and credential frameworks, taxonomies, and other resources.<sup>1</sup> This common language is necessary to identify both similarities and differences in hiring requirements and opportunities for aligning and harmonizing these requirements over time—its importance cannot be understated, and the Strategy 3 process provides the vehicle for rich dialogue for employers to have with one another on how to improve their signaling.

It is worth reiterating that by identifying the commonalities and differences of employer requirements, this process does not require that employers come to complete agreement on which competencies are tied to their critical jobs.

Instead, it is more important that employers clearly communicate employer similarities and differences to education and training providers. This survey process using the common language then can be used by employers to constantly update job descriptions and online job postings.

<sup>1</sup> Andrew Reamer, Robert Sheets, and Jason Tyszko, *Clearer Signals: Building an Employer-Led Job Registry for Talent Pipeline Management* (Washington, D.C.: U.S. Chamber of Commerce Foundation, 2017).

# Exercise 1



## Analyzing Job Descriptions Exercise

The exercise below illustrates how differently employers signal hiring requirements for critical jobs and calls into question how employers can unintentionally narrow their candidate pool.

On the following page are two examples of job requirements for software developers—one generic and the other by level. The requirements are typical of what you might find when looking at a job description or online job posting and are consistent with what you might find in a labor market report highlighting job requirements.

Review the requirements for each job and compare and contrast them. After reviewing the example job descriptions on the following page, discuss the following with your group:

- 1** Highlight some of the competency and credential requirements for each of the positions and describe ways in which they can be improved or communicated more clearly.
- 2** Based on the way the job hiring requirements are written, explain how an unqualified candidate may apply or be referred by providers.
- 3** Identify how the hiring requirements may inadvertently reduce applications from otherwise qualified candidates.

Requirements	Description 1: Software Developer	Description 2: Software Developer, Senior Level
<b>Key Job Functions and Responsibilities</b>	<ul style="list-style-type: none"> <li>- Develop new systems and maintain operational programs and procedures.</li> <li>- Lead transformational initiatives, such as use of agile practices and migration to future software architectures, and establish project standards and processes.</li> <li>- Work with stakeholders and product owners to define software requirements.</li> <li>- Design, develop, and maintain code that meets requirements, is high quality, and performs efficiently and effectively to provide a great customer experience.</li> <li>- Incorporate standards and best practices, including performance, security, usability, and maintainability.</li> <li>- Troubleshoot development, deployment, and production problems across multiple environments and operating platforms.</li> </ul>	<ul style="list-style-type: none"> <li>- Analyze user needs and software requirements to determine feasibility of design within time and cost constraints.</li> <li>- Confer with systems analysts, engineers, programmers, and others to design systems and to obtain information on project limitations, capabilities, performance requirements, and interfaces.</li> <li>- Design, develop, and modify software systems, using scientific analysis and mathematical models to predict and measure outcomes and consequences of design.</li> <li>- Develop and direct software system testing and validation procedures, programming, and documentation.</li> <li>- Modify existing software to correct errors, allow it to adapt to new hardware, or improve its performance.</li> <li>- Perform or oversee revision, repair, or expansion of existing programs to increase operating efficiency or adapt to new requirements.</li> <li>- Participate in an agile team to deliver the full life cycle, including requirements, architecture, design, development, testing, and deployment.</li> <li>- Write, analyze, review, and rewrite programs using a workflow chart and diagram and applying knowledge of computer capabilities, subject matter, and symbolic logic.</li> <li>- Write, update, and maintain computer programs or software packages to handle specific jobs, such as tracking inventory, storing or retrieving data, or controlling other equipment.</li> </ul>
<b>Skills</b>	<ul style="list-style-type: none"> <li>- Ability to quickly learn new concepts and software</li> <li>- Self-motivated and a team player</li> <li>- Strong communication skills, both written and oral</li> <li>- Strong problem-solving skills</li> </ul>	<ul style="list-style-type: none"> <li>- Critical thinking and complex problem solving</li> <li>- Teamwork and interpersonal skills</li> <li>- Effective communication skills</li> <li>- Project management</li> </ul>
<b>Technologies</b>		<ul style="list-style-type: none"> <li>- Operating Systems: Linux and OS X</li> <li>- Software: C, C#, C++, and SQL</li> </ul>
<b>Credentials</b>	<ul style="list-style-type: none"> <li>- Preferred: Bachelor's degree, preferably in computer science, computer engineering, software engineering, or a related discipline</li> </ul>	<ul style="list-style-type: none"> <li>- Required: Bachelor's degree, preferably in computer science, computer engineering, software engineering, or related discipline</li> </ul>
<b>Work Experience</b>	<ul style="list-style-type: none"> <li>- Preferred: At least two years</li> </ul>	<ul style="list-style-type: none"> <li>- Preferred: At least five years</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>- Required: U.S. citizenship</li> </ul>	<ul style="list-style-type: none"> <li>- Required: U.S. citizenship</li> <li>- Required: Ability to obtain and maintain a government security clearance</li> </ul>

## Unit 3.2

# Identifying Hiring Requirements

Identifying and, especially, communicating hiring requirements is a complex task, but one that is critical to the TPM process and worthwhile for the collaborative members. Collaboratives can experience greater leverage than individual employers as they communicate their talent needs to their provider partners. Collaborative members also benefit from the shared expertise of their peers to be able to articulate why these requirements are essential to their business.

The first major decision in identifying hiring requirements is whether it will be done at the business function level or for one or more jobs or jobs families (i.e., occupations). In most cases, it is best to identify hiring requirements at the business function level (e.g., machining, welding, software development), which will involve one or more common job titles used by employers in the collaborative.

In forming a collaborative—and as part of a demand planning survey—employers may focus on one or more job titles, possibly organized by occupation (e.g., by Standard Occupational Classification, or SOC, codes) within a business function. This could be because the employer collaborative’s focus is separate occupations. However, the collaborative’s focus might be different job titles but essentially the same job with many of the same hiring requirements.

For example, a collaborative may find its members call software developers by different titles, but the role the developers play is essentially the same. Organizing hiring requirements at the business function level has the added benefit of simplifying the process since one survey will cover multiple job titles, as opposed to identifying hiring requirements for two or more jobs.

## Competency, Credential, and Other Hiring Requirements

One of the most difficult decisions to make is how best to communicate competency requirements. Employers have many different approaches for communicating this information, which usually involves a combination of (1) **work tasks** reflecting the major job functions and responsibilities, (2) **knowledge** and **skills**, and (3) adeptness with **tools and technologies**.

Minimally, a job description should communicate the most important work tasks—what a person should be able to do on the job—and the essential **employability skills**. Collaboratives can then decide to add more requirements over time and decide how to manage the delicate balance between capturing all essential information and making the hiring requirements survey too complex to capture and communicate this information.

In compiling competency requirements, employers must establish a common language in describing work tasks, knowledge, skills, and tools and technologies. They should work from previously established lists of requirements prepared by other employers, business and industry associations, or other trusted sources. Some of these sources might have been identified when establishing a focus area in Strategy 1. The TPM website, [TheTalentSupplyChain.org](http://TheTalentSupplyChain.org), provides access to some of the most widely used resources.

However, it is not just the competencies that matter, but also the preferred demonstration of the competency. In addition to articulating in-demand skills and competencies, TPM provides employers a process in which they can more effectively signal preferred demonstrations or assessments of that skill or competency to preferred and trusted talent sourcing providers.

It is important to keep in mind that even though employers may describe a skill the same way, they do not always mean the same thing. Context matters and differentiates the skills in one setting versus another. This is a common challenge with soft skills, for which “ability to manage time effectively” can mean entirely different things in the context of an information technology-related job versus a manufacturing and healthcare job. These distinctions are important so that TPM can help employers better signal to learners how to optimize their career readiness. Indicating preferred demonstrations and assessments allows for clarity in interpretation of stated skill sets.

Another important decision is how to list credential requirements and how to make sure you are capturing whether these credentials are required or preferred. “Required” means that a job candidate would be disqualified if he or she did not possess the credential at the point of hire. “Preferred” refers to a credential that enhances the competitiveness of the job candidate but is not used to qualify or disqualify an applicant.

Next, work experience can be defined in multiple ways, starting with number of years of professional experience in the workforce. However, employers can also request information related to time spent on projects, in a work-based learning experience, or in an apprenticeship program.

Employers also communicate other hiring requirements that can vary depending on the industry and job. Many of these requirements can be used to qualify or disqualify a potential candidate. Some of the most common requirements set by employers include citizenship status, drug-free status, security clearances, language skills, and references.

## Hiring Requirements by Level, Importance, and Frequency

Employer collaboratives also face a major decision in how they communicate the level and importance of hiring requirements. Similar to what was covered in Strategy 2 on demand planning, employer collaboratives can set different requirements based on the level of the position they are planning to fill. This can be broken down by (1) entry level, (2) mid-level, and (3) senior level. For example, a collaborative can set different competency and credential requirements for different levels, even though they are addressing the same business function. Of course, collaboratives can defer on requesting information by level if this is deemed to be unnecessary or too advanced for getting started.

In addition, employer collaboratives can decide how to communicate the relative importance of different requirements. This can help further delineate how much weight different employers place on a particular requirement, which can be useful in determining how essential the requirement is for the purpose of building a talent pipeline. This is a very important decision, because employer collaboratives should clearly communicate priorities in their hiring

requirements. The most common format is using a five-point scale ranging from “not important” to “very important,” though this can be simplified even further.

To aid companies in determining the importance of a skill, they can also assess the frequency in which the skills or competencies are applied on the job. This is an important piece of information that can be ascertained through a job analysis and can help employers sort which skills are more or less important based on how often they are used in relation to how critical they are for the performance of the job.

Figure 3.1: Sample Survey Template includes a survey template of competency, credential, and other hiring requirements. This survey template was developed by TPM partners in Northern Virginia that formed an information technology collaborative with a focus on software development as a critical business function.<sup>2</sup>

## Coming Soon: The Job Data Exchange

The Job Data Exchange (JDX) is an innovation in development by the Chamber Foundation and select TPM networks. It seeks to automate much of the data collection process explained in Strategy 3 by providing tools directly to the **human resource information systems (HRIS)** and **applicant tracking systems (ATS)** employers use for hiring. The JDX will allow employers to organize their hiring requirements as structured, linked data that can be easily posted to the open web and distributed to talent sourcing partners including collaboratives and their education and training providers. By doing so, the JDX will enable them to send better, faster, clearer signals for changing competency and credential requirements tied to jobs.

The JDX will be an open application resource that is plug and play with any human resource technology vendor. It will also save employer collaboratives time by organizing and automating the data they have on jobs and rendering these data more transparent to the collaborative members, education and training providers, and learners themselves.

The JDX will enable dynamic signaling of jobs and job requirements, thereby creating a new generation of labor market information directly from the hiring systems employers use. It will provide backbone infrastructure that will enable competency- and skills-based hiring at scale.

## Where to Start: Reviewing Job Descriptions and TPM Resources

Employer collaborative staff should begin building the Strategy 3 component of the needs assessment survey by compiling the existing job descriptions and online job postings from employer members to identify similarities and differences in the definition of positions within the chosen business function. The TPM web tool enables users to upload job descriptions for this purpose.

Then, the collaborative staff should explore TPM resources that could be used to establish a common language for describing hiring requirements.

<sup>2</sup> Elevate Virginia Project Team. NoVA Talent Pipeline Management™ Initiative Survey (excerpt). Oct 2015.

Figure 3.1 Sample Survey Template



Figure 12: Example Competency and Credential Needs Assessment

Please rate the following tasks for **Computer Programmers | Software Developers | Software** in terms of importance, with 1 being very important and 5 being not important at all.

Analyze user needs and software requirements to determine feasibility of design within time and cost constraints.	Entry-Level	Mid-Level	Senior-Level
Confer with systems analysts, engineers, programmers and others to design system and to obtain information on project limitations and capabilities, performance requirements and interfaces.	Entry-Level	Mid-Level	Senior-Level
Design, develop and modify software systems, using scientific analysis and mathematical models to predict and measure outcome and consequences of design.	Entry-Level	Mid-Level	Senior-Level
Develop and direct software system testing and validation procedures, programming and documentation.	Entry-Level	Mid-Level	Senior-Level
Modify existing software to correct errors, allow it to adapt to new hardware, or to improve its performance.	Entry-Level	Mid-Level	Senior-Level
Conduct trial runs of programs and software applications to be sure they will produce the desired information and that the instructions are correct.	Entry-Level	Mid-Level	Senior-Level
Correct errors by making appropriate changes and rechecking the program to ensure that the desired results are produced.	Entry-Level	Mid-Level	Senior-Level
Perform or direct revision, repair, or expansion of existing programs to increase operating efficiency or adapt to new requirements.	Entry-Level	Mid-Level	Senior-Level
Write, analyze, review, and rewrite programs, using workflow chart and diagram, and applying knowledge of computer capabilities, subject matter, and symbolic logic.	Entry-Level	Mid-Level	Senior-Level
Write, update, and maintain computer programs or software packages to handle specific jobs such as tracking inventory, storing or retrieving data, or controlling other equipment.	Entry-Level	Mid-Level	Senior-Level

How many years of experience are typically required for this position, **Computer Programmers | Software Developer?**

Entry-Level	0-3	3-5	5-7	7-10	10+
Mid-Level	<input type="radio"/>				
Senior-Level	<input type="radio"/>				

Please indicate your preferred industry sector experience, if any, for **Computer Programmers | Software Developers**.

Entry-Level	Commercial	Government Defense	Government Civilian
Mid-Level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please select the typical compliance screening or security clearance required for the position of **Computer Programmer | Software Developer**.

Entry-Level	Confidential Clearance	Mid-Level	Senior-Level
Mid-Level	Secret Clearance	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	Top Secret Clearance	<input type="checkbox"/>	<input type="checkbox"/>
Entry-Level	Sensitive Compartmented Information Clearance (SCI)	Mid-Level	Senior-Level
Mid-Level	Criminal Background	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	Work Status Verification	<input type="checkbox"/>	<input type="checkbox"/>
Entry-Level	Credit History	Mid-Level	Senior-Level
Mid-Level	Polygraph	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	Q Clearance	<input type="checkbox"/>	<input type="checkbox"/>
Entry-Level	Other	Mid-Level	Senior-Level
Mid-Level	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please rate the following Professional Business Skills for **Computer Programmers | Software Developers** at each level, with 1 being very important and 5 being not important at all.

Entry-Level	Mid-Level	Senior-Level	
Mid-Level	Critical Thinking	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	Complex Problem Solving	<input type="checkbox"/>	<input type="checkbox"/>
Entry-Level	Teamwork and Interpersonal Skills	Mid-Level	Senior-Level
Mid-Level	Effective Communication in the Workplace	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	Project Management	<input type="checkbox"/>	<input type="checkbox"/>

Please indicate the typical minimum level of education required for the position of **Computer Programmer | Software Developer**.

Entry-Level	Mid-Level	Senior-Level	
Mid-Level	High School Diploma	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	Associate's Degree	<input type="checkbox"/>	<input type="checkbox"/>
Entry-Level	Bachelor's Degree	Mid-Level	Senior-Level
Mid-Level	Master's Degree	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	Advanced Degree	<input type="checkbox"/>	<input type="checkbox"/>

Please describe any **REQUIRED** industry certifications or industry-recognized credentials not previously mentioned for **Computer Programmers | Software Developers** and indicate the experience-level (entry-, mid-, senior) for which they are most relevant.

Please share any **PREFERRED** industry certifications or industry-recognized credentials not previously mentioned for **Computer Programmers | Software Developers** and indicate the experience-level (entry-, mid-, senior) for which they are most relevant.

**Computer Programmer | Software Developer: Technical**  
Competency-Programming Languages

Entry-Level	Mid-Level	Senior-Level	
Mid-Level	C	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	C#	<input type="checkbox"/>	<input type="checkbox"/>
Entry-Level	C++	Mid-Level	Senior-Level
Mid-Level	SQL	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	HTML5	<input type="checkbox"/>	<input type="checkbox"/>
Entry-Level	HTML	Mid-Level	Senior-Level
Mid-Level	Java	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	Matlab	<input type="checkbox"/>	<input type="checkbox"/>
Entry-Level	JavaScript	Mid-Level	Senior-Level
Mid-Level	Python	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	XML	<input type="checkbox"/>	<input type="checkbox"/>
Entry-Level	Ruby	Mid-Level	Senior-Level
Mid-Level	Swift	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	JQuery	<input type="checkbox"/>	<input type="checkbox"/>
Entry-Level	R	Mid-Level	Senior-Level
Mid-Level	Other	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Computer Programmer | Software Developer: Technical**  
Competency-Database Management Systems

Entry-Level	Mid-Level	Senior-Level	
Mid-Level	MongoDB	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	MySQL	<input type="checkbox"/>	<input type="checkbox"/>
Entry-Level	Oracle	Mid-Level	Senior-Level
Mid-Level	PostgreSQL	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	MSSQL	<input type="checkbox"/>	<input type="checkbox"/>
Entry-Level	MySQL	Mid-Level	Senior-Level
Mid-Level	Other	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Computer Programmer | Software Developer: Technical**  
Competency-Other

Entry-Level	Mid-Level	Senior-Level	
Mid-Level	Apache Hadoop	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	Apache Webserver	<input type="checkbox"/>	<input type="checkbox"/>
Entry-Level	.Jboss (Wildfly)	Mid-Level	Senior-Level
Mid-Level	Shangpoint	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	WordPress	<input type="checkbox"/>	<input type="checkbox"/>
Entry-Level	Other	Mid-Level	Senior-Level
Mid-Level	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Computer Programmer | Software Developer: Technical**  
Competency-Development Method

Entry-Level	Mid-Level	Senior-Level	
Mid-Level	Scrum	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	Agile	<input type="checkbox"/>	<input type="checkbox"/>
Entry-Level	Waterfall	Mid-Level	Senior-Level
Mid-Level	Other	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Computer Programmer | Software Developer: Technical**  
Competency-Operating Systems

Entry-Level	Mid-Level	Senior-Level	
Mid-Level	Linux	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	UNIX	<input type="checkbox"/>	<input type="checkbox"/>
Entry-Level	OS X	Mid-Level	Senior-Level
Mid-Level	Microsoft	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	Other	<input type="checkbox"/>	<input type="checkbox"/>
Entry-Level	<input type="text"/>	Mid-Level	Senior-Level
Mid-Level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Senior-Level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Credit: Elevate Virginia Project Team, NOVA Talent Pipeline Management Initiative Survey (excerpts), Oct 2015

## Deciding Whether to Conduct Separate or Combined Surveys

The needs assessment survey encompasses the surveys described in Strategy 2 (demand planning) and Strategy 3 (hiring requirements). Employer collaboratives must decide whether to conduct separate or combined surveys and how to design and carry out the survey(s).

In general, employer collaboratives should conduct separate surveys in the following circumstances:

- **Multiple Focus Areas and Targeted Jobs:** The employer collaborative has more than one focus area or business function, or many different targeted jobs and levels of these jobs, and wants to use demand planning to help narrow its focus.
- **Employer Commitment and Experience:** The collaborative does not have sufficient commitment from some employers to complete a longer and more complex survey and needs the collaborative to do something quick and simple to build experience and trust among employers.

In contrast, employer collaboratives should conduct combined surveys when they are focused on one or two clearly defined business functions and have sufficient employer commitment to conduct a longer and more complex needs assessment survey. Moving forward, they should conduct combined surveys when they do additional rounds of surveys to update projections and hiring requirements.

# Building the Agenda for Your Survey Meeting

As described in Strategies 1 and 2, your first collaborative meeting should determine the focus of the collaborative. You will then introduce the needs assessment survey as a way to start the talent supply chain process. In conducting your meeting on the Strategy 3 component of the survey process, the collaborative should follow an agenda that addresses the following:

- 1 Select critical business functions, jobs, and levels.**
- 2 Select the survey template and schedule.**
- 3 Prepare your employer collaborative members for the survey.**

## 1. Select Critical Business Functions, Jobs, and Levels

- Confirm the critical business function(s) and determine which will be addressed in the first survey involving hiring requirements.
- Review the common competency, credential, and other hiring requirements that were provided in any job descriptions and online job postings that employers have shared with one another. Employer collaborative members can also review hiring requirements used by other TPM collaboratives along with competency and credential taxonomies and frameworks found on the TPM web tool.
- Share the proposed survey draft with collaborative members based on the analysis of job information and TPM resources.
- Ask employer members to determine if they want to use job levels based on the demand planning survey results.
- Encourage employer collaborative members to seek data on different job levels if there are large numbers of job openings at different levels and these levels have different competency, credential, and hiring requirements, including work experience.
- Review the consequences of establishing hiring requirements that are too high or too low for the actual requirements at different levels.
- After the review, propose how to develop a final draft list of competency, credential, and other hiring requirements to be used in the survey for one or more levels.

## 2. Select the Survey Template and Schedule

- Review examples of the survey template that will be used, based on decisions about the number of business functions and jobs included, as well as levels and the competency, credential, and other hiring requirements that you have chosen to include.
- Propose and get agreement on a schedule for distributing and completing the survey.

## 3. Prepare Your Employer Collaborative Members for the Survey

- Remind employers about the need to engage hiring managers and other key decision makers in developing and validating survey responses for each selected business function and critical job.
- Emphasize the importance of clarifying actual hiring requirements for different levels to make sure the requirements reflect which are most important, frequently applied, and necessary to be qualified to do the work.
- Emphasize the need to communicate not just the most in-demand skills and competencies, but their preferred demonstration, including preferred assessment products or instruments.
- Review the hiring requirements survey design and show examples of how it can be completed and submitted.
- Show examples of how you will aggregate and report results to protect the confidentiality of employers. Re-emphasize that the survey should not be used to collect salary information to protect members from any legal risks of working together to address their common talent needs.
- Show examples of what could be shared with outside stakeholders, including education and training providers, and emphasize that whether these results will be shared is the collaborative's choice.
- The group can also combine the hiring requirements information with the job projections data gathered from the demand planning survey for a more complete profile of its employer members' talent needs.
- Summarize the decisions made about the design of the hiring requirements survey and confirm the date of the next meeting to review the results.

## Exercise 2



### Identifying Hiring Requirements Exercise

The example below illustrates how collaborative members use the hiring requirements process to articulate similarities and differences in their critical jobs, including how required and preferred hiring requirements play an important role.

Because there was no existing trade group for transportation, distribution, and logistics (TDL) companies, a local chamber of commerce organized a group of 10 member companies that recently expressed deep concern over TDL skills shortages. Having secured the buy-in to launch a TDL employer collaborative, the companies decided to focus on warehousing as a critical business function and identified a family of relevant front-line occupations under that function, including (by SOC codes) the following:

- 53-7011 Conveyor Operators and Tenders
- 53-7051 Industrial Truck and Tractor Operators
- 53-1021 First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand
- 53-7062 Laborers and Freight, Stock, and Material Movers, Hand
- 43-5071 Shipping, Receiving, and Traffic Clerks

These occupations were recently targeted in a demand planning survey, and a meeting was convened to review the results. The data showed existing and increasing demand for all five occupations, with the vast majority of demand for entry-level positions. Satisfied with the results—and with a greater sense of urgency and purpose—the collaborative agreed to take the next step and identify hiring requirements.

Because each of the companies treated this family of SOC jobs differently, with some treating equipment operators and clerks as separate jobs and others treating all five as essentially one job without any specific levels, they decided to address competency, credential, and other hiring requirements at the business function level.

During the meeting, the member companies shared a number of their hiring requirements for warehousing positions. Every employer referenced employability skills (i.e., soft skills) as a top requirement. Nearly all of the companies agreed to a core set of work tasks, though there was a debate over how important some were versus others, and a small number of members suggested work tasks that were dismissed as irrelevant by the majority of the members.

Everyone agreed that a high school education was required, but some companies required an associates degree or certificate, while others said they preferred a third-party industry certification. Experience was definitely preferred by most companies, but given the focus on entry-level jobs, many did not require it. Last, each company required job candidates to pass a drug test.



## Unit 3.3

# Reporting Hiring Requirements Results

In addition to administering the hiring requirements survey and aggregating the results, employer collaboratives will need to determine how the results will be used.

If there are multiple audiences for the results, the collaborative will need to determine how generalized or how specific the shared information should be. Reports must be designed and customized to serve these multiple objectives.

Collaboratives will need to be careful not to reveal information that is deemed proprietary or for the eyes of the collaborative membership only.

We cover three types of reports: (1) collaborative reports, (2) provider reports, and (3) community reports.

## Collaborative Reports

Collaborative reports are the aggregate results after each employer has had a chance to conduct its internal job analyses and complete the hiring requirements survey. While employers trust the host organization with their data, the information shared with the collaborative membership should be in aggregate form; this protects information that may be considered proprietary (see Appendix for legal language provided by U.S. Chamber of Commerce legal counsel).

These reports should include total numbers for demand—including by level, if applicable—and hiring requirements where there is consensus (see Table 3.1: Example Report of Employer Responses by Competency and Table 3.2: Example Report of Employer Responses by Credential). However, the reports should also specify where there are major differences in requirements.

Possible scenarios include (1) collaborative-wide agreement on the importance of a given hiring requirement; (2) broad agreement, but with a minority of collaborative members communicating something different that requires deeper understanding; and (3) no apparent consensus, with employers across the collaborative communicating something different, warranting a discussion. To show both similarities and differences in employer hiring requirements, it is important to show the full distribution of employer responses, not just averages (e.g., median or mean). Many times, averages hide important information on the level of differences between employers.

From there, collaborative members can discuss how to recalibrate their hiring requirements based on feedback from their peers, or they can move forward with better information about important differences among their needs. This is critical information that can help enable mass customization in talent development when using a shared language for communicating hiring requirements.

**Table 3.1: Example Report of Employer Responses by Competency**

Requirement	Aggregate Employer Responses (Total Employers = 15) 1 = Very Important; 5 = Not Important				
	1	2	3	4	5
Work Task A	8	0	1	3	3
Employability Skill B	12	3	0	0	0
Other Hiring Requirement C	0	2	4	8	1

**Table 3.2: Example Report of Employer Responses by Credential**

Credential	Aggregate Employer Responses (Total Employers = 15)		
	Required	Preferred	Neither
Degree A	9	6	0
Education Certificate B	5	10	0
Industry Certification C	0	2	12
License D	0	2	13

## Provider Reports

Next, collaboratives can create provider reports. These reports are designed to be shared with those providers that the collaborative intends to use to source talent. We will cover how to designate preferred providers in Strategy 5, but for now we are pointing out that this information can be organized to help education and training providers better understand (1) how many learners need to be in the talent pipeline; and (2) what specific competencies, skills, and credentials a provider’s curriculum needs to address in order to meet the employer’s needs and to set learners up for success.

## Community Reports

Finally, collaboratives can publish community reports. These are intended to be public documents and are used by the collaborative to communicate more broadly the demand for talent in the region or state, and what requirements are needed to fill this demand. These reports can be used to help bring attention to a particular skills gap or changing job requirements in a dynamic industry, or to inform public policy and research. Similar to demand planning data, employer-specified hiring requirements can also be used to improve the quality of state occupational projections and real-time labor market information.

---

## Sharing Reports and Templates with Peers in the TPM Network

The design of the needs assessment survey and the resulting aggregated findings can be shared with peers in the TPM network. Part of the mission of the TPM Academy™ is to develop a peer-to-peer exchange of ideas for how to communicate demand and hiring requirements that can help streamline the needs assessment process while promoting standardization among requirements and how we describe them where possible.

## Exercise 3



### Reporting Results Exercise

The example below presents the opportunity for a host organization to use data as an action-oriented plan for next steps.

The local chamber of commerce serving as a host organization, as discussed in Exercise 2, successfully disseminated its first hiring requirements survey for the warehousing function on behalf of its TDL employer collaborative. The chamber is now in the process of compiling the results and generating reports to be shared at the next collaborative meeting. Per the agreement among the collaborative members, the results will be compiled in tables and shared in aggregate form to protect the privacy of each individual employer.

Seeing the results for the first time, the chamber staff is preparing for the upcoming collaborative meeting. The plan is to present the results and facilitate a conversation among the collaborative members, but staff members must first understand the results, featured in Tables A–D.

**Table A: Results by Competency and Employability Skill**

Competency and Employability Skill (Abbreviated List)	Aggregate Employer Responses (Total Employers = 10) 1 = Very Important; 5 = Not Important				
	1	2	3	4	5
Processes Requests and Supplies Orders	8	1	1	0	0
Maintains Inventory Controls	6	3	0	1	0
Completes Inventory Reports	5	4	1	0	0
Maintains a Safe and Clean Work Environment	0	1	5	3	1
Communicates Clearly	1	1	5	3	0
Problem Solver	0	2	2	6	0
Time Management	10	0	0	0	0
Teamwork	1	5	1	2	1

**Table B: Results by Academic Level and Credentials**

Academic Level and Credential	Aggregate Employer Responses (Total Employers = 10)		
	Required	Preferred	Neither
High School Diploma	10	0	0
Associate Degree	1	2	7
Bachelor's Degree	0	0	10
Community College Warehousing and Distribution Certificate	2	2	6
International Warehouse Logistics Association Certified Logistics Professional	0	1	9

**Table C: Results by Experience**

Experience	Aggregate Employer Responses (Total Employers = 10)	
	Required	Preferred
Less than One Year of Experience	0	5
Two to Three Years of Experience	0	2

**Table D: Results by Other Requirements**

Other Requirements	Aggregate Employer Responses (Total Employers = 10)	
	Yes	No
Pass a Drug Test	10	0

After reviewing the exercise, discuss the following with your group:

- 1** Based on the report's findings, identify two or more hiring requirements for which there is consensus among the collaborative's members. Explain how you arrived at that conclusion.
- 2** Identify two or more areas for which there is a lack of consensus and explain how you arrived at that conclusion.
- 3** As a host organization, how would you manage the conversation to address variation in hiring requirements, and what are some possible outcomes?
- 4** Beyond the employer collaborative membership, how might the collaborative share these findings with other stakeholders, and what format do you recommend it uses?

## Ready for Next Steps?

Before you move to the next strategy, make sure you have achieved the learning objectives necessary to move forward. When you go back to your community, ensure you will be able to execute the following activities:

- Explain why communicating competency and credential requirements is important in TPM.
- Identify various ways of signaling employer hiring requirements.
- Explain how to develop and use a shared language for communicating hiring requirements across employers.
- Combine demand planning and hiring requirements into a common needs assessment survey to be completed by collaborative members.
- For those using the TPM web tool, develop a comprehensive needs assessment survey and report results to stakeholders, including collaborative members.

---

# NOTES