

MANAGING THE TALENT PIPELINE:

A New Approach to Closing the Skills Gap



U.S. CHAMBER OF COMMERCE FOUNDATION
Center for Education and Workforce



U.S. CHAMBER OF COMMERCE FOUNDATION

The U.S. Chamber of Commerce Foundation (USCCF) is a 501(c)(3) nonprofit affiliate of the U.S. Chamber of Commerce dedicated to strengthening America's long-term competitiveness by addressing developments that affect our nation, our economy, and the global business environment.

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Preface

Education and workforce systems in the United States are failing to keep pace with the changing needs of the economy, and employers are struggling to find skilled workers who can contribute to their companies' growth and success. What we need is a workforce strategy for our time that can meet the needs of today's changing business environment.

To that end, the U.S. Chamber of Commerce Foundation (USCCF) is engaging employers and their partners across the country in developing a new demand-driven approach—talent pipeline management—to close the skills gap. Through extending lessons learned from innovations in supply chain management, this paper calls for employers to play a new and expanded leadership role as “end-customers” of education and workforce partnerships. From there, employers can proactively organize and manage talent supply chain partnerships with measures and incentives tied to performance.

Benefits from using talent pipeline management practices are numerous: a reduced skills gap and a better-prepared workforce for employers, improved partnerships and job placement outcomes for education and workforce partners, increased transparency and opportunity for students and workers, and higher returns on education and workforce investments for policymakers. Case studies show that this approach is already yielding positive results for all parties, so the time to scale up is now.

Building off of a series of regional roundtable discussions with employers and other stakeholders held earlier this year, USCCF is convening a national conference on November 19, 2014, in Washington, D.C. The national conference is a call to action where USCCF announces its plans to build a national movement by partnering with employers in regions and communities across the country to advance talent supply chain solutions.

We call upon employers and all stakeholders to join the conversation and partner with us on this important work.

Introduction

A production manager at a mid-sized manufacturing company is reviewing the company's capacity to execute and deliver orders over the next three years. Given a growing shortage of precision welders and a high number of retirements expected among engineers, he is increasingly concerned about the company's capacity to staff projects. While the firm has posted position openings at local education and training providers and on the Internet, the process to fill those positions has dragged on for months. The company has incurred high on-boarding costs and increased turnover rates for those they do hire, because they lacked the necessary skills and qualifications. New automation systems, increased overtime and temporary staffing have allowed the company to maintain its current level of productivity, but the production manager knows all too well that absent a real solution—and one arrived at quickly—the bigger problem will soon undermine his team's ability to deliver orders on time and take on new business.

This example illustrates a common problem experienced by companies of all sizes across a range of industries: the skills gap is growing and directly impacting the ability of companies to compete.

Our nation's education and workforce development systems are failing to keep pace with the development of our economy. Employers throughout the United States struggle to find skilled workers who can contribute to their companies' growth and success. As a result—despite stubbornly high unemployment rates—many jobs are left unfilled. If employers nationwide are to maintain their competitiveness, it will require closing an ever-worsening skills gap.

The business community must be involved in more effective ways if the skills gap is to be closed. To that end, the U.S. Chamber of Commerce Foundation (USCCF) is championing a new vision for employer engagement with education and workforce systems, one that yields more effective transitions into employment for students and improved career advancement for workers.

In undertaking this task, we must accept a hard but undeniable truth—the nation's current approach to skills development is no longer capable of meeting the needs of a rapidly changing business environment. Employers can no longer afford to wait for others to find a solution; rather, they must play a leadership role in exploring new public-private approaches to closing the skills gap.

This new approach—*talent pipeline management*—argues that employers can close the skills gap by applying lessons learned from supply chain management. These lessons point to the need for major changes for both employers and their partners. They provide guidance in how employers can close the skills gap by scaling leading employer practices and forging new types of partnerships with education and workforce providers. Although we are not the first to suggest the application of supply chain thinking to skills development, we believe talent pipeline management represents a bold departure from prior practice and a novel approach for addressing the inadequacies of the current system.

Talent pipeline management envisions a demand-driven system in which employers are positioned as the “end-use customer”—hereafter referred to as “end-customer”—in order to create and share value among all partners in the talent supply chain.¹ This new approach will add value to employers by reducing the skills gap and providing a better prepared workforce. Education and workforce providers

will benefit from improved partnerships with employers and better outcomes for their students. Students and workers will benefit from more transparent and successful career pathways, including new opportunities for economic mobility for low-income and disadvantaged youth and adults who have been increasingly left behind in the new economy. Also, it will help policymakers better align and achieve higher returns from their education, workforce, and economic development investments.

We begin by examining the challenge and need for a “demand-driven” system. From there, we introduce supply chain management and explore key lessons that inform how employers can improve their partnerships with education and workforce providers. Next, the paper identifies three foundational principles for a new talent pipeline management system and concludes by highlighting implications for key stakeholders, including employers, education and workforce providers, students and workers, and policymakers.

Why Now? The Challenge and Need for a Demand-Driven System

The Skills Gap: Increasing Costs to Employers, Students, and Workers

The skills gap is a threat to American growth and competitiveness. U.S. employers are increasingly reporting problems finding qualified workers, despite stubbornly high unemployment rates. A recent survey found that 92% of executives believe there is a serious gap in workforce skills, and nearly 50% are struggling to fill jobs.² In manufacturing alone, more than 75% of manufacturers report a moderate-to-severe shortage of skilled workers, and the problem is expected to grow.³ If left unaddressed, the skills gap could cause more than 5 million positions to go unfilled by 2020.⁴ This problem will be further compounded by an increase in retirements and a shrinking workforce.

Employers are paying a premium for today's skills gap, including lost revenue and productivity. A study by CareerBuilder found that forgone revenue and profits can be as high as \$23,000 per unfilled position.⁵ Accenture and the Manufacturing Institute estimated that mid-sized manufacturers alone report more than 11% loss in annual earnings or \$4.6 million annually because of the skills gap.⁶ Another survey by Chartered Global Management Accountant (CGMA) found that because of ineffective human capital management, 43% of employers failed to achieve key financial targets, 40% had a reduced ability to innovate, and 37% were unable to start a major project or strategic initiative.⁷

The skills gap is also reflected in the experience of students and other job seekers. The rising costs of education programs, extended periods of time to secure degrees with forgone earnings, and wide variation in return on investment combine to reduce the value of postsecondary training and credentials.⁸ Only 36% of full-time students enrolled at four-year research universities, 19% at all other universities, and a shocking 4% of students at two-year institutions graduate on time.⁹ For those who do graduate, nearly 54% of bachelor's degree holders age 25 and under are either unemployed or underemployed.¹⁰

These uneven returns from postsecondary education are symptomatic of a serious disconnect between employers and education and training providers. A recent study by Gallup found that only 11% of business leaders say they are confident that college graduates are well prepared for the workplace, while a full 96% of chief academic officers of colleges and universities report being somewhat or very confident that they are preparing students for success in the workplace.¹¹

A New Demand-Driven Solution for Our Time

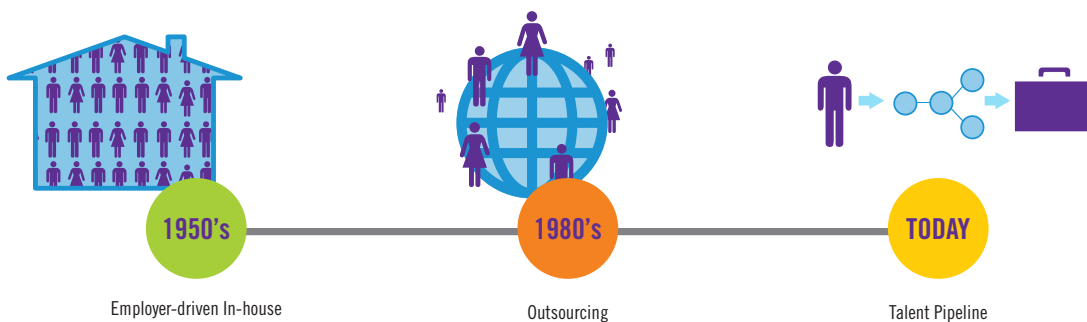
This problem will not be easy to fix, given a rapidly changing business environment and growing lead times—time required to attain skills and credentials—within education and the workforce. In today's economy, employers must constantly restructure work roles, skills requirements, and career pathways in order to adapt to the modern competitive business environment. As a result, the workplace is now evolving from one characterized by reasonably stable employment and gradually shifting skills requirements to one with shorter periods of employment and skills requirements in constant flux.

Given the pace of change and the relative ease with which employees can move to another company—taking their knowledge and skills with them—employers are unlikely to return to the past and take on the risks and additional costs associated with large-scale in-house training. Similarly, employers are less likely to find just-in-time talent, given that education and training providers are unable to respond quickly enough to changing workforce needs.¹² Therefore, rather than sourcing new graduates, many employers have opted to poach employees from other companies, because experience is judged as a more trustworthy proxy for talent than are newly acquired credentials—even though poaching drives up the cost of wages within an industry.

As the skills gap has become more intractable, employers and policymakers have tried to make labor markets respond better. Employers have attempted to promote career opportunities in their industries and to improve their job posting, recruiting, and screening practices. Policymakers, too, are trying to make education and training systems more responsive by better leveraging labor market data, encouraging employer advisory boards for programs, and providing incentive grants to make education and training providers more responsive to employer needs. However, such efforts are yielding only incremental improvements.

What we need is a workforce strategy for *our time*, not one designed to address the skills gaps and talent needs of the past. More than ever we need a new demand-driven strategy that can address both the need for talent on demand in a constantly changing business environment and the lack of flexibility and responsiveness in producing this talent in today's education and workforce systems.

A STRATEGY FOR OUR TIME

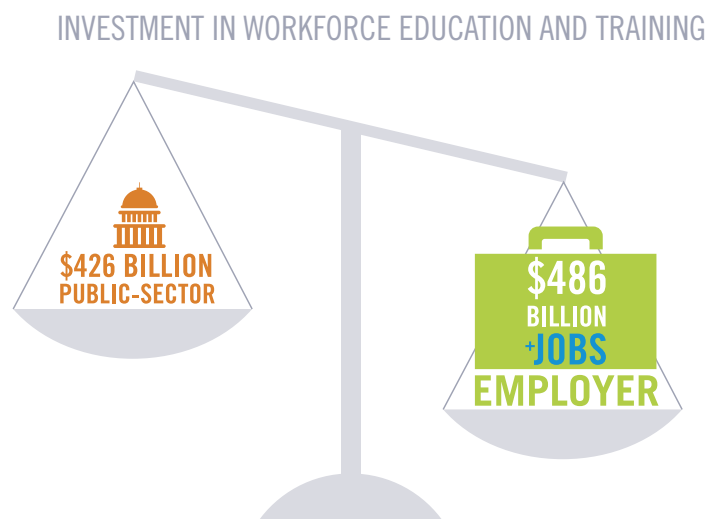


We need a workforce strategy for our time, not one designed to address the talent needs of the past.

Employers must lead such a transformation, and they have the leverage to make a demand-driven system a reality. In today's economy, employers control the greatest currency in the marketplace: *jobs*. Moreover, employers invest more than \$486 billion annually on training, overwhelmingly focused on upgrading the skills of their existing employees.¹³ That figure dwarfs the approximately \$16 billion spent on federal job training programs. Even when taking into account the total public expenditure on postsecondary education, private sector investment is still roughly equal if not larger.¹⁴ By leveraging their substantial resources and job openings more effectively, employers today can begin to revolutionize how America develops talent critical to the nation's future.

But where do we begin? Enter supply chain management.

EMPLOYER INVESTMENT



Employers must lead the way and they have the leverage to do so. In today's economy, employers control the greatest currency in the marketplace: jobs.

Supply Chain Management

Leading employers are beginning to recognize that in order to remain competitive in today's economy, they must approach talent recruitment and development like any other critical business investment. The conditions driving that perspective—such as growing business uncertainty and longer lead times to fill positions—are similar to the challenges that led to innovations in supply chain management. Those firms that implemented state-of-the-art supply chain management practices gained a competitive advantage through reduced costs and improved quality and responsiveness. We believe that many of the lessons learned from the supply chain management revolution are relevant to addressing the skills gap.

What is a supply chain? At its most basic level, a supply chain is a set of business activities performed by multiple entities involved in designing, producing, delivering, and using a product or service. Supply chains are a series of customer-supplier relationships starting with the end-customer, defined as the customer closest to the end-use of the product or service. Effective supply chains work backward from an end-customer, with first-tier suppliers functioning as the customers of second-tier suppliers and so forth, with each partner adding incremental value to the chain.

Establishing a recognized end-customer provides direction and purpose and is a precondition for generating shared value across all partners in the supply chain. Supply chain management coordinates those activities needed to best serve requirements of the end-customer and, in so doing, achieves the best mix of responsiveness and efficiency for the market being served.¹⁵

Over time, employers have become increasingly sophisticated in managing high-performing and adaptive supply chains in all aspects of their business. However, when it comes to sourcing and developing talent, few companies have brought supply chain management logic to bear. We believe that if employers define their role as that of the end-customer managing a talent supply chain, then they will develop compelling insights as to potential solutions to the skills gap. Those solutions will hinge on the formation of new types of partnerships that have the power to transform our education and workforce systems and create shared value for all participants, including students and workers.

We begin by reviewing lessons learned from supply chain management to understand how crucial innovations transformed employer practices and built enduring partnerships to meet the needs of a changing business environment. In each lesson, we will relate supply chain management thinking to changes in human resource practices and point to implications for talent management.

Lesson 1: Drive Competitive Advantage

The story of supply chain management begins with a strategic reorientation around how companies perceived the role of logistics in a rapidly changing world. Traditionally, the management of supply chains fell to the logistics function—such as transportation and inventory management. It was seen as

a cost of doing business that should be contained as much as possible. However in the 1980s, market leaders began to connect supply chain management to their overall business strategy to make it a driver of competitive advantage.¹⁶ To do this, supply chain management leaders developed:

- **Customized Solutions**—Supply chains were customized to execute a company’s business strategy and address the different needs and priorities of key customers.¹⁷
- **Shared Ownership and Accountability**—Supply chain management was now the responsibility of the entire organization, including production, engineering, and sales with support from finance and accounting.

Leading employers are taking similar steps in making talent management a driver of competitive advantage. Human resource management is no longer a cost center that must be contained, but is instead a key resource for executing business strategy.¹⁸ Practices include:

- **Customized Talent Solutions for Core Capabilities and Jobs**—Talent management solutions are now being customized for core capabilities and jobs that are critical to executing business strategy. They are focused on getting the right talent with the right skills at the right time and place.¹⁹
- **Shared Ownership and Accountability**—Firms are asking line managers with major profit and loss responsibilities to play larger roles and share in the ownership and accountability for developing and executing talent management solutions, in cooperation with human resources, finance, and accounting.²⁰

Lesson 2: Build Collaborative Networks That Create Shared Value

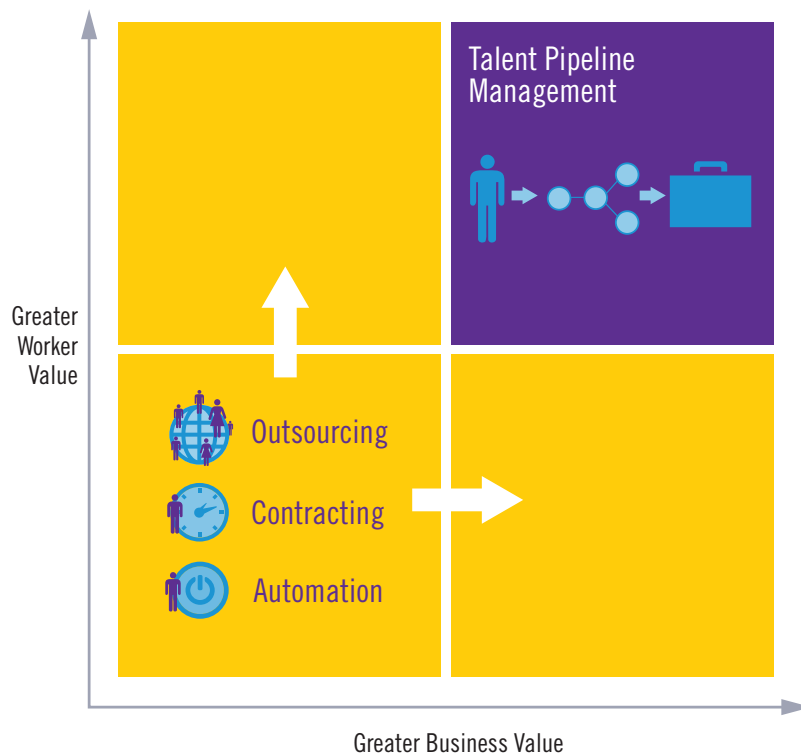
Supply chain management redefined customer-supplier relationships around the concept of extended value networks. Emphasis was placed on improving the combined competitiveness and value of the overall network, where costs and benefits are shared across partners. In doing this, leading firms produced major innovations across three core functions: demand planning, sourcing, and fulfillment.

- **Dynamic Short-Term Forecasting and Real-Time Data Sharing**—Rather than trying to refine long-term forecasts, demand planning under supply chain management increasingly relies on dynamic short-term forecasting and real-time data sharing with partners in the face of market uncertainty.
- **“Make and Buy” Decisions and Product and Performance Requirements**—Supply chain management calls for companies to make sophisticated “make and buy” decisions. This starts by removing any unnecessary product or service features that may increase costs and reduce responsiveness without adding value to the customer. This is followed by more systematic processes in determining what can be “made” in-house and what to “buy” from potential partners. Supply chain management then sets performance requirements and related qualifications to ensure quality, cost, and responsiveness from preferred providers. Leading firms also work with existing and potential suppliers to build their capacity to meet these requirements and create shared value within the supply chain.

Similar innovations are now being explored by leading firms in managing talent.

- **Dynamic Short-Term Forecasting and Real-Time Labor Market Information**—Employers and partners are starting to experiment with dynamic short-term labor market forecasting and real-time data sharing to get a more accurate sense of what skills are in demand.²¹
- **Defining Competency and Credentialing Requirements**—Some employers are beginning to remove unnecessary academic credentialing and experience requirements, replacing them with more transparent industry-recognized credentials and competencies.
- **Establishing Networks to Source Core Capabilities**—Employers also are making more sophisticated “make and buy” decisions for talent management, especially for those core capabilities and jobs critical to the execution of their business strategies. For those non-core functions and jobs that are not essential to executing business strategy, employers are exploring a wide range of workforce strategies, including automation, contracting, temporary staffing, and outsourcing. However, for their core capabilities, leading employers are focusing on talent pipeline management strategies that combine (1) career advancement from their existing workforce, (2) job-ready workers accessible through networked recruitment and staffing partners, and (3) new entrants to the workforce with recent customized education and training.

TALENT PIPELINE MANAGEMENT FOR HIGH-VALUE JOBS



Employers need talent management strategy for those positions that drive their competitiveness.

Lesson 3: Align End-to-End Performance and Incentives

In order to support companies, supply chain management required a fundamental change in approach to measuring and incenting performance. New measures and incentives were required to reward partners for working together to create shared value across the entire supply chain. Leaders did this by:

- **Balancing End-to-End Performance Measures and Incentives**—End-to-end performance measures and incentives allow employers to address the overall performance of the supply chain and partner contributions to it. Measuring network performance required balanced metrics that assess quality, cost, and responsiveness aligned to the needs of the end-customer.²²
- **Performance Dashboards, Predictive Analytics, and Data Integration**—This led to technology innovations that promoted greater standardization and interoperability among supply chain partners, including real-time data sharing, predictive analytics, and performance dashboards that provided transparency across the entire supply chain.²³

Similar to supply chain management, leading employers are changing their use of performance measures and data systems for talent management. They are using:

- **Balanced Scorecards and Aligned Measures and Incentives**—Companies experimented with a new generation of balanced scorecards that are designed to provide line-of-sight between workforce performance and advancing the core business strategy.²⁴ Instead of reinforcing silos, scorecards are now designed to measure end-to-end performance and to align and integrate metrics and incentives across the company, including accounting and finance.²⁵
- **Performance Dashboard and Predictive Analytics**—Moving a step further, some employers have harnessed the power of predictive analytics to optimize workforce solutions by defining predictive indicators of worker productivity and performance.²⁶

Foundational Principles of Talent Pipeline Management

Changes in supply chain practice were brought on by necessity in response to changing business requirements and conditions. The same dynamics that necessitated change in supply chain practices—rising costs, increasing competition, shorter lead times, and growing market uncertainty—are now manifesting themselves in the realm of human capital. However, equivalent thinking has yet to be applied to broader talent management systems.

Drawing on lessons learned from supply chain practice, talent pipeline management offers a promising new approach that is demand-driven and more effective in managing risks and shared value among all partners, including employers, education and workforce providers, students and workers, and policymakers.

We begin by identifying three key foundational principles that form the basis of a demand-driven system. These principles provide the framework for a new education and workforce paradigm that we call talent pipeline management.

1. **Employers Drive Value Creation**—Employers play a new leadership role as the end-customer in closing the skills gap for those jobs most critical to their competitiveness.
2. **Employers Organize and Manage Scalable Network Partnerships**—Employers organize and manage flexible and responsive talent pipelines in partnership with their preferred education and workforce providers.
3. **Employer Measures and Incentives Drive Performance**—Employers work collaboratively with their partners to develop measures and incentives designed to reinforce and improve performance across all partners.

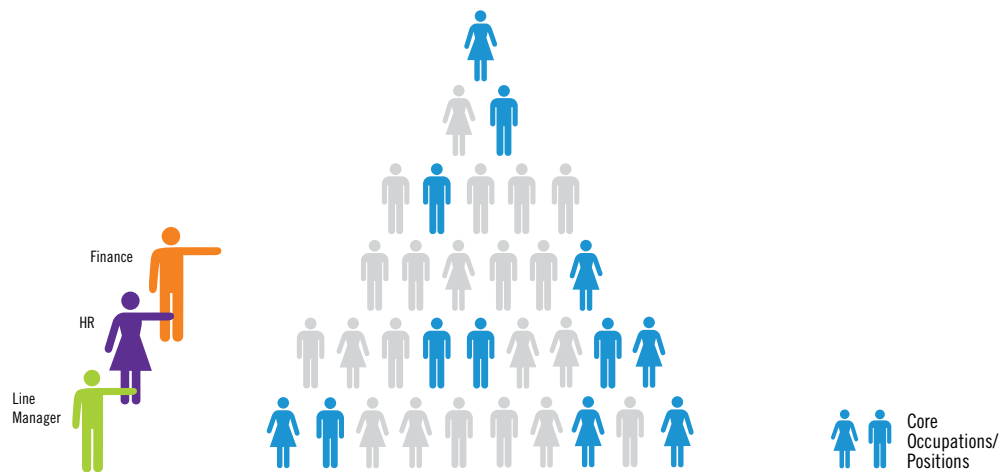
Implications for Stakeholders

To understand more fully how talent pipeline management represents a new direction for demand-driven partnerships, we now turn to implications for key stakeholders. Separately, they represent best practices, many of which are highlighted in this paper. Taken together, they represent a systemic and scalable solution to closing the skills gap.

Employers

In order to be successful in securing and growing the talent they need to compete, employers must begin by linking their talent strategy to their business strategy. This means identifying core capabilities (e.g., critical functions) and related jobs that are the most fundamental in executing competitive strategy. This requires collaboration and shared responsibility among the various operations and functions within a business, including human resources, finance, and line managers. Together, those management teams can then develop workforce sourcing strategies for each core capability. Each capability may require a different sourcing strategy—none of which includes returning to the “spot market” through job posting and screening practices of the past, which are costly, time consuming, and inefficient.

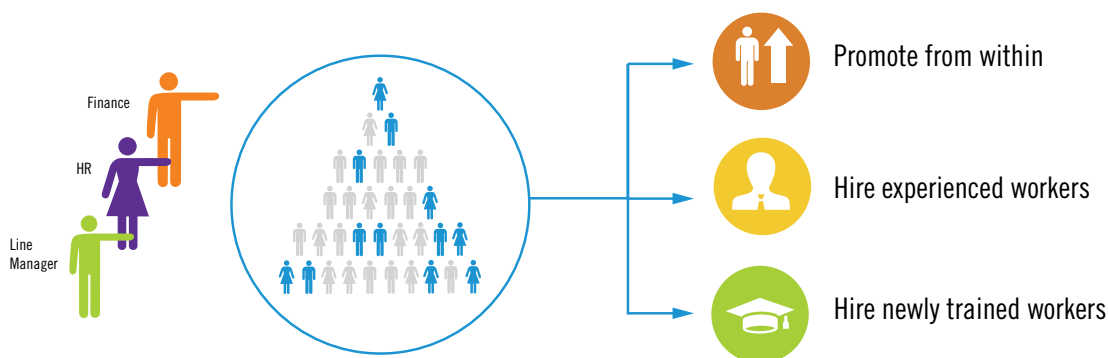
IDENTIFYING CORE CAPABILITIES AND JOBS



Employers must link their talent strategy to their business strategy, which requires shared responsibility across business functions to identify core capabilities critical to their ability to compete.

Instead, what is needed is a strategic approach that involves either upgrading the skills of existing workers, leveraging professional networks to recruit and hire experienced workers, or building partnerships for newly trained workers from education and workforce providers. Identifying the right strategy begins with employers back-mapping from where they currently source their best talent. Once these sources are identified, employers can choose to improve upon their existing sources of talent or identify alternative strategies.

TALENT PIPELINE STRATEGIES



Working together, management teams can segment their workforce and develop sourcing strategies around those positions most critical to their competitiveness.

Caterpillar—Strengthening Business Strategy by Planning for Tomorrow’s Workforce

Caterpillar Inc. developed succession plans to ensure that robust talent pipelines are in place to support the company’s long-term competitiveness and profitability. Since 2010, Caterpillar has been developing and implementing these plans across its six key enterprise roles in facilities around the world.

The Talent Management and Development team created competency maps for all positions in the succession line to these six core positions. These competency maps define the required skills, leadership abilities, and experience

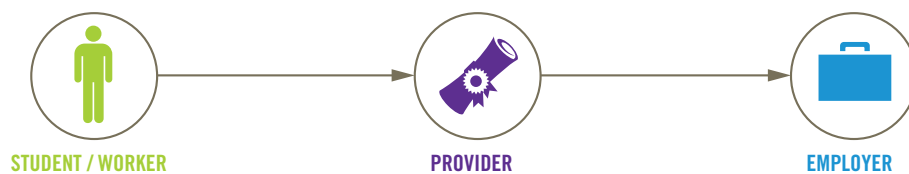
levels needed to perform effectively in the specified positions. Using the competency maps, the team can assess the volume of candidates eligible for leadership roles in a 10-year horizon. Internal development plans are then created for qualified candidates to support and accelerate their career progression.

This process helps Caterpillar ascertain the volume of “ready-now” candidates. A low volume prompts Caterpillar either to design fast-paced development plans for internal resources or to seek preferred external sources of talent.

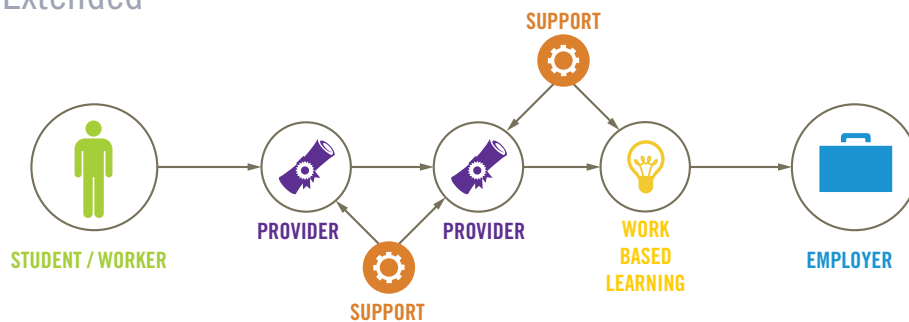
Next, employers need to decide what can be done in-house and what should be done through external partners. For the latter, employers need to proactively organize and manage flexible and responsive talent pipeline partnerships. This includes selecting from a diverse pool of traditional and nontraditional public and private education and workforce-preferred providers or partners that can best support a talent pipeline with the employer as the end-customer. This function can occasionally be executed by a single provider but more likely requires integrated services and transitions across a network of specialized providers. In supply chain management, the provider closest to delivering value to the end-customer is identified as a “tier-one” provider, with each step removed identified as a “tier-two” and so forth. There are also other network partners that provide services to suppliers themselves.

SIMPLE VS. EXTENDED VALUE CHAINS

Simple



Extended



Employers, working independently or through collaboratives, must function as an end-customer and build flexible and responsive talent pipelines for new hires.

Once a sourcing strategy has been identified and implemented, employers can begin to manage demand through more effective communication with their chosen pipeline partners. To ensure the appropriate number of people are in the pipeline at any given point in time, employers can make better use of dynamic short-term demand forecasting and real-time labor market information. Employers can also communicate hiring requirements for each core capability and related jobs through the use of common industry frameworks for academic, technical, and employability competencies and related credentials. These hiring requirements can be customized for each employer while still showing common or shared competency and credentialing requirements.²⁷

Once a talent pipeline network and demand planning system is in place, performance must be measured based on meeting the needs of the end-customer and creating value across the full network of partners. Employers will need to develop a balanced scorecard that addresses time, cost, and quality across all internal units as well as education and workforce partners. Balanced scorecards should include measures such as the rate at which a new hire reaches “time-to-full productivity.”

Employers can also support their leading providers through continuous improvement strategies and incentives. By providing data and constant feedback on new hire performance, employers can ensure that there is complete transparency among partners on the quality of the workforce provided. In addition, employers can provide incentives—such as work-based learning opportunities, performance-based funding, and equipment—to their high-performing education and workforce partners.

When networks prove themselves over time, employers—whether as individual firms or consortia—can identify and promote their preferred provider networks and communicate what the career pathways are to reach them.

CHE Trinity Health—Aligning and Streamlining the Hiring Process

In 2010, the West Michigan Region of CHE Trinity Health recognized that its successful growth in the booming health care industry relied heavily on its ability to hire highly competent and compassionate staff throughout the network. Trinity engaged Metrics Reporting, a workforce development and talent management consulting firm, to support the development of evidence-based hiring practices that would promote “talent excellence” across the organization.

Metrics Reporting designed key competency maps for 21 job families in the health care industry, which identified the specific knowledge, skills, abilities, and work styles required for core capabilities. By supplementing the competency maps with a data-driven hiring process and utilizing

such tools as cognitive and personality assessments, rigorous reference checks, and structured interviews, Trinity Health was able to monitor and optimize end-to-end performance of its talent recruitment and hiring processes. First-year turnover was dramatically reduced, and for every 14 candidates referred to hiring managers by the human resources team, 10 people were hired, demonstrating the initiative’s success.

In 2013, Trinity Health and Catholic Health East merged to become the fourth-largest health care provider in the United States. CHE Trinity Health is actively sharing competency information on local and national levels to engage educational institutions and workforce agencies in this talent system improvement.

Some firms, depending on their size and need, may be able to pursue a talent pipeline solution independently. Large employers have the ability to lead the way in implementing solutions by virtue of the resources they can mobilize and the partners they can assemble. However, most firms—including small-to-mid-sized employers—will need to join existing or new collaboratives that allow them to aggregate their activities and purchasing power across a region or industry. Even large employers may discover advantages in working with mid-sized and small employers that together employ the largest share of new hires in most industries.

Employer collaboratives represent a significant shift from the roles and business models of many existing, publicly funded intermediaries. These collaboratives would be established by employers and operate under a new business model that depends on the shared value they generate for employers and their provider networks. Collaboratives could be established by a consortia of employers in cooperation with regional chambers of commerce and industry associations.

WorkAmerica—Helping Employers Manage Their Talent Pipeline

WorkAmerica, a fee-for-service recruiting firm, operates using a Job Commitment model that identifies students in the initial phase of a training program and brokers commitments from employers to hire those students upon program completion. Acting as the intermediary that aggregates talent supply from numerous sourcing partners to build pipelines of job candidates for employers, WorkAmerica alleviates the uncertainty many businesses face in filling their future workforce needs. The services are especially relevant to small and medium-sized businesses, which often do not have the resources for a geographically disbursed recruiting strategy.

To facilitate the right talent match, WorkAmerica helps its employer customers define the skills required to meet core business needs and subsequently identify the appropriate programs and institutions that teach those skills.

WorkAmerica sees several benefits to brokering early hiring and job acceptance commitments between employers and students. Students gain assurance of future employment prior to committing time and resources to a given training or certification program. Likewise, employers can reduce hiring costs and shift recruitment risk to an intermediary that takes on the responsibility of creating a prequalified, prescreened talent pipeline for critical jobs.

EMPLOYER CHECKLIST

1. Connect your talent strategy to your business strategy.

- ✓ Focus on core capabilities and critical jobs—workforce segments—that connect to core business strategy.
- ✓ Promote shared leadership—including more responsibility to line managers—and align internal management functions in developing and executing talent strategy.

2. Establish flexible and responsive partnership networks.

- ✓ Back-map and identify from where you currently source your best talent.
- ✓ Develop “make and buy” workforce strategies for critical jobs and determine what education and training services will be provided by external partners.
- ✓ Establish employer collaboratives, where needed, to manage workforce solutions provided by education and workforce partners.
- ✓ Select from a diverse pool of public and private education and workforce partners that can address requirements for critical jobs.
- ✓ Investigate and access third-party financing options to offset the cost of employee education and training.

3. Plan and communicate your workforce needs.

- ✓ Conduct dynamic short-term workforce forecasting for core capabilities and jobs.
- ✓ Continuously define, validate, and update competency and credentialing requirements for critical jobs based on common industry frameworks and remove any unnecessary requirements.

4. Develop balanced end-to-end pipeline performance measures.

- ✓ Develop end-to-end talent pipeline performance measures that balance time, cost, and quality, including such measures as time-to-full productivity.
- ✓ Develop balanced scorecards and dashboard tools that manage and communicate partner performance.
- ✓ Promote continuous improvement by developing lagging and leading pipeline measures that promote contestability talent pipeline networks and leverage the power of predictive analytics.

5. Align incentives to improve talent pipeline performance and recruitment.

- ✓ Provide incentives for line managers, human resources, finance, accounting, and other internal partners to improve performance in cooperation with external partners.
- ✓ Provide incentives (e.g., internships and equipment purchases) for education and workforce partners to continuously improve performance.
- ✓ Communicate preferred providers to students, workers, public funders, and aspiring suppliers to improve recruitment and signal where to invest.

Education and Workforce Providers

As employers must adapt to changing conditions in the business environment, so too must education and workforce providers. This begins with those providers recognizing employers as the end-customer and the key to value creation for the students and workers pursuing career objectives and upward economic mobility.

With employers seen as the end-customer, education and workforce providers can be proactive in developing highly effective employer partnerships. This starts by developing talent solutions for employer partners that address their competency and credentialing requirements for critical jobs and that meet performance requirements for cost, quality, and time.

This will require maximizing their flexibility and responsiveness by unbundling the education and training experience and adopting accelerated and work-based approaches—or “earn and learn” career pathways. This includes removing unnecessary administrative and program barriers (e.g., degree requirements) and focusing more attention on core competency and credentialing requirements as well as work-based learning experiences that reduce on-boarding costs and time-to-full productivity.

BALANCED MEASURES



Employers need to develop balanced scorecards that address time, cost, and quality across partners and support measures such as time-to-full productivity.

Lone Star College System—Improving Responsiveness to Meet the Needs of Employers

In 2013, the Lone Star College System, the largest institution of higher education in the Houston area, recognized the growing need for skilled workers among the concentration of drilling and exploration companies in the region. To respond to this need, Lone Star College partnered with the International Association of Drilling Contractors to quickly develop the Floorhand/Roustabout Certificate Program. The eight-week program is delivered in small classes and teaches the entry-level knowledge and skills needed for workers in the drilling and exploration sector of the oil and gas industry.

Lone Star College identified the need for this training through its data-driven Ten Step Process for identifying, evaluating, implementing, and reviewing programs. Since 2008, the Lone Star College System Workforce Council has used this process to launch and realign dozens of credit and noncredit programs across its six campuses to rapidly provide training programs to meet the changing needs of employers in the region. By running these rapid-response programs through the Lone Star Corporate College, Lone Star College is able to make new noncredit certificate offerings available to its students in less than two months, and associate degree offerings in less than a year.

Employers may require a level of service beyond what any one provider can deliver, particularly when serving nontraditional students, adult dislocated workers, and incumbent workers seeking career advancement. As a result, providers must integrate their service delivery and supports with other providers as part of a talent network that services an employer or employer collaborative. This requires providers to proactively establish their own supplier partnerships with organizations and institutions that are supplying or receiving students.

Education and workforce providers should also support continuing education and coaching services for students and workers beyond the initial transition into the workplace. Done in cooperation with their employer partners, providers can continue to improve time-to-full productivity for their graduates. This includes on-boarding services and more expansive alumni services for ongoing professional development that addresses changing competency and skill requirements.

As a supply chain partner, education and training providers must align their own performance measures and incentives—and those of their suppliers—to employer measures. In addition, providers must share their performance data with their employer partners and with their own supplier network.

Those entrepreneurial providers that are successful in building trusted and proven relationships with employers will be able to communicate to students that they are a preferred talent provider to a portfolio of companies. This level of transparency, backed by results, can revolutionize student recruitment strategies, and it rewards those providers that continue to create value for both students and employers.

College for America—Providing Customized Career Advancement Solutions

In 2013, Southern New Hampshire University (SNHU), a private, accredited, nonprofit university and the largest nonprofit provider of online education in New England, recognized an untapped talent pool already existing in the workforce—employees with strong leadership potential but nontraditional education backgrounds. Employers openly recognized the contributions these individuals made to their businesses but identified barriers to their career advancement owing to limited credentials and proficiency in critical skills.

In response, SNHU launched College for America (CfA), a nonprofit college offering associate and bachelor degrees

earned by mastering key competencies through project-based experience, as opposed to traditional lectures and credit hours. CfA begins by recruiting employers and then designs programs targeted to incumbent workers who require flexible scheduling and clear career advancement opportunities to prompt their participation.

Costing just \$2,500 per year, the program strikes a balance between cost, quality, and flexibility for employers and students/workers. In addition, the program is priced at or below the tuition reimbursement level of most employers and is the first of its kind to be eligible for federal student financial aid.

Once a talent pipeline is operational, providers can communicate their performance to all partners within the network as well as to current and prospective students. This includes adopting and building support for new pipeline measures, such as reduced time-to-fill positions and first-year turnover rates as well as time-to-full productivity of recent hires. Sharing data with partners allows them to see how they are performing individually and as a whole in relation to meeting the needs of the end-customer.

EDUCATION AND WORKFORCE PROVIDER CHECKLIST

1. Recognize employers as end-customers.

- ✓ Develop renewed commitment among top leadership and frontline staff to recognize employers as the end-customers.
- ✓ Engage local and regional economic development stakeholders as well as employers and employer collaboratives (e.g., chambers of commerce) to improve alignment with employer demand.

2. Manage your employer partnerships.

- ✓ Identify employers that the organization has the commitment and capacity to serve as a preferred education and workforce partner.
- ✓ Assign responsibility for cultivating, establishing, and managing employer partnerships at the organizational and program levels.

3. Develop talent solutions for employer partners.

- ✓ Identify and remove barriers to innovation that prevent flexibility and reduce responsiveness in meeting the needs of employers.
- ✓ Develop responsive and flexible competency-based delivery platforms that leverage standardized frameworks but enable customization based on employers served.
- ✓ Embed modular and stackable industry-recognized skill credentials.
- ✓ Implement accelerated and work-based solutions designed to improve time-to-full productivity.
- ✓ Develop shared and integrated service delivery strategies with other partners in the network.
- ✓ Extend alumni services to support program graduates in optimizing on-boarding with employer partners and updating their skills.

4. Align performance and incentives to employer measures.

- ✓ Develop balanced scorecards that prioritize employer measures that address time, quality, and cost, including time-to-full productivity.
- ✓ Provide incentives for leadership and program managers to improve performance in cooperation with employers and other network partners.
- ✓ Manage program improvement through the development and use of leading and lagging performance measures and predictive analytics.

5. Share performance data across network partners.

- ✓ Share data in cooperation with employers and all network partners for improving performance.
- ✓ Communicate partner performance through the use of performance dashboards.

6. Develop recruitment strategies based on employer partnerships.

- ✓ Recruit students and workers based on capacity and proven ability to meet the needs of identified employers.
- ✓ Communicate preferred provider status to students, workers, and funders backed by performance data.
- ✓ Coordinate with network partners to identify, recruit, and on-board a diverse pool of qualified applicants.

Students and Workers

Of all the stakeholders mentioned, students and workers are perhaps most in need of a new approach to navigating education and career pathways. Many are facing increasing debt, longer lead times to degree completion, and a complete lack of transparency in terms of whether they will achieve a return on their significant investment. Choices about the future are riskier than ever, and the consequences of failure are enormous. For the first time in generations, American families are weighing the costs and benefits of postsecondary education, which for many is the only pathway to economic mobility.

Talent pipeline management provides a new and promising approach for students and workers, including existing workers who seek career advancement opportunities. In addition, talent pipeline management can be leveraged to better meet the needs of low-income and historically underrepresented students as well as disadvantaged and dislocated adult workers who lack professional networks to navigate complex and ever-changing pathways to good jobs and robust careers.

To capitalize on these new opportunities, students and workers of all ages and backgrounds must take responsibility for planning and managing their own careers in a rapidly changing marketplace. They must become career entrepreneurs. This will require a new mindset and skills set to develop clear career goals and objectives based on interests, values, and talents.

Tata Consultancy Services—Building Stronger Connections to Future Talent

In 2012, Tata Consultancy Services (TCS) recognized that the newest generation of college graduates were using social, mobile, and online technology as the primary method to research and connect with potential employers. In response, TCS launched Campus Commune, an innovative digital platform targeting students in its primary Asian hiring geographies to promote networking through interactive gaming, learning modules, and career information. Now TCS actively engages potential candidates through the platform and can better recruit talent. More than 40% of TCS' roughly 25,000 new entry-level hires last year were identified through the platform, and it expects to increase this to more than 60% to 70% in the coming years.

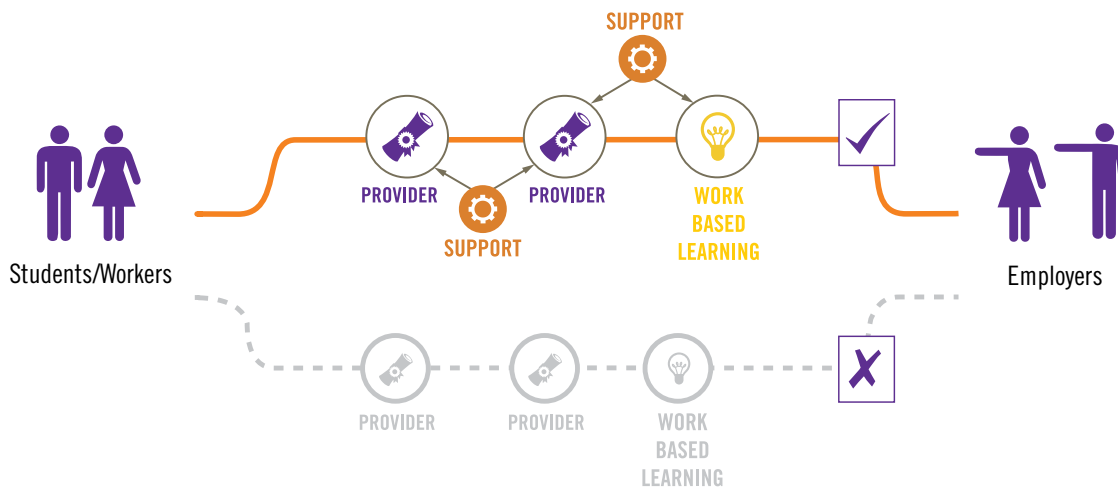
TCS populates the platform with business-relevant training modules for in-demand skills and competencies and runs coding and design challenges to evaluate and prepare the future workforce in advance of employment. As a result, TCS has seen preemployment assessment scores substantially increase and has reduced the time it takes to make new hires career ready.

Having more prepared candidates has enabled TCS to focus its on-boarding process on building client-specific competencies and capabilities with its new hires. Since the launch of the Campus Commune digital platform, TCS has staffed 100% of its open positions for new hires and is enjoying unparalleled levels of brand recognition and popularity among emerging talent pools.

Students and workers also must be able to identify the types of employers that can help them achieve their goals and enable their successes. They will need to research preferred employers and industries that match with the types of workplaces where they can add the most value and thrive. Career entrepreneurs must have better insight into the core capabilities and critical jobs that employers have, which align with their personal interests and talents.

Students and workers who manage their careers can then be more effective customers of the education and training systems where they enroll. Through talent pipeline management, students and workers are provided with full transparency into the diverse and flexible network of providers that service an employer as well as up-to-date performance data on those providers. This model is in sharp contrast to our current system, where providers in large part do not collect employment outcome data, nor do they see it as part of their responsibility to their students.

PROMOTING LEADING PROVIDERS



Students and workers can better connect to employers by accessing preferred provider networks based on performance.

Through demand-driven partnerships, students and workers will be able to identify the best pathways to reach their desired employment outcomes. This includes accessing accelerated, work-based “earn and learn” opportunities that reduce time and cost to career advancement—and resultant higher earnings.

Students and workers should also choose education and training providers that support them throughout their transition to the workplace and that offer ongoing alumni support and professional development, which allows them to remain competitive throughout their careers.

i.c. stars—Tapping into and Accelerating the Development of Hidden Talent

i.c. stars, a technology-focused workforce development and social enterprise in Chicago, believes that applicants who have overcome significant adversity have characteristics that make them ideal candidates for fast-paced, challenging careers in technology. Through an accelerated work-based learning program, students gain proficiency in cutting-edge IT skills, develop industry acumen through close interaction with a Chief Information Officer network, and ultimately overcome socioeconomic barriers to reach their maximum career potential.

The rigorous application process, which includes aptitude and personality tests as well as a resiliency interview led by a panel of staff and alumni, is designed to identify candidates

who can tackle challenges head-on. The program commences with a four-month internship, where students work in teams to create a mobile solution to a sponsored business challenge, frequently from the Fortune 100.

Ninety-five percent of participants find jobs within the IT industry upon program completion, often with the program’s corporate partners that pay 430% better than their previous jobs after only one year employed in the IT field. By identifying adversity as an indicator of success rather than an inhibitor, i.c. stars harnesses the strengths and innovation of Chicago’s inner-city young adults to develop a talent pool for in-demand IT jobs that could otherwise go untapped.

STUDENT AND WORKER CHECKLIST

1. Plan and manage your career.

- ✓ Take responsibility for planning and managing your career over a lifetime in consultation with family and other important social networks.
- ✓ Learn to use resources, tools, and supports to plan and manage your career consistent with your personal interests, values, and talents.

2. Develop employer-focused career plans.

- ✓ Identify employers that provide the best opportunities and fit for achieving career goals in chosen fields.
- ✓ Research career pathway opportunities and requirements tied to employer needs and identify entry-level opportunities.

3. Access preferred provider networks for entry-level opportunities.

- ✓ Identify employer preferred providers that can deliver the best opportunities for accessing entry-level opportunities.
- ✓ Choose providers that accelerate access to entry-level employment and reduce time-to-full productivity as well as offer alumni services that update skills based on changing employer needs.
- ✓ Change providers, when needed, to accelerate access to jobs and reduce time-to-full productivity, and continuously update skills.

4. Pursue career advancement opportunities.

- ✓ Access training and development resources provided internally through an employer or through their preferred providers.
- ✓ Access resources and career pathways supported by industry and professional associations and public funders that enable career transitions.

5. Join and use professional networks.

- ✓ Share your education and employment history with other students and workers.
- ✓ Use shared employment information to explore new career pathways.

Policymakers

Policymakers can accelerate the movement toward demand-driven strategies by enabling talent pipeline management-based solutions. Workforce development and career education have increased their support of programs that are in demand and aligned to the needs of the economy. However, many programs still see employers as beneficiaries rather than as end-customers.

One strategy is to expand the role of economic development and commerce organizations. It is the chief function of economic development organizations and commerce agencies to support the growth of business and the economy. These organizations—by virtue of their mission—are well positioned to coordinate with and support employers in the planning, development, and execution of talent pipelines linked to core business strategy.

Policymakers also can support employers in building more diverse and flexible provider networks. This starts with assisting employers in conducting back-mapping to identify the providers that now supply them with the best talent. In addition, policymakers can align funding, regulations, and incentives to support demand-driven partnerships. Policymakers should partner with employers and their providers to identify any regulatory and policy barriers (e.g., accreditation and program approval processes) to implementing talent pipeline management-based innovations and work systematically to remove them.

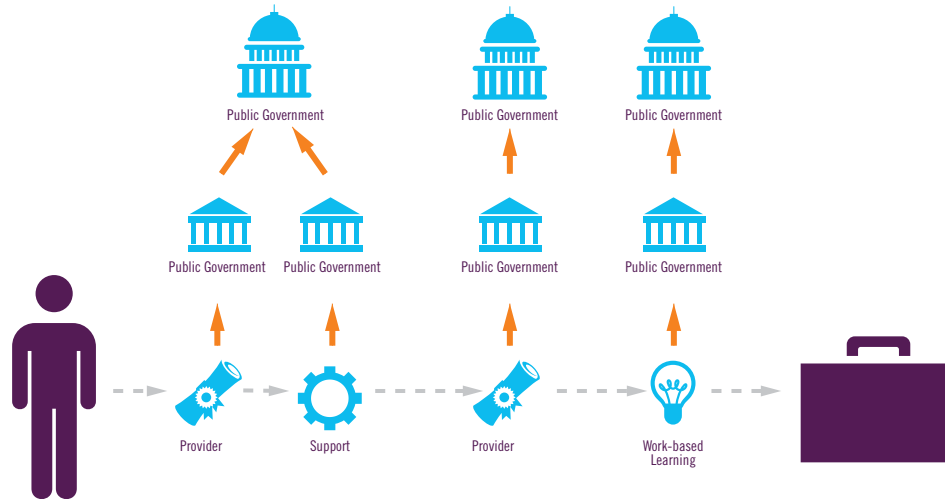
Formula and discretionary spending across a wide variety of federal and state programs can be repurposed to support employers and their collaboratives in organizing and managing diverse and flexible talent pipeline partnerships. Funding should flow to those education and workforce providers that employers identify as their preferred sources of talent. This includes expanding the use of resources to work with a broader training community made up of traditional and nontraditional providers—such as community-based agencies like i.c. stars—that have proven and trusted relationships with employers supported by performance.

Policymakers also can support employers in implementing new demand-planning strategies. They can help build employer capacity to do short-term and dynamic forecasting and communicate competency and credentialing requirements to provider partners. In addition, policymakers can work with businesses to develop and implement employer-focused measures. These include balanced metrics that track performance across partners and not in “silos.” These measures, such as time-to-full productivity, can then be applied across a wide variety of federal and state programs and incentives to achieve better outcomes for students and workers.

Policymakers should support the adoption and use of employer measures by expanding data-sharing initiatives. National and state data initiatives have promoted greater sharing of student and worker data to improve the management of public investments. These can be further enhanced by expanding existing data systems to better capture program outcomes, including employment, earnings, and such employer measures as time-to-full productivity.

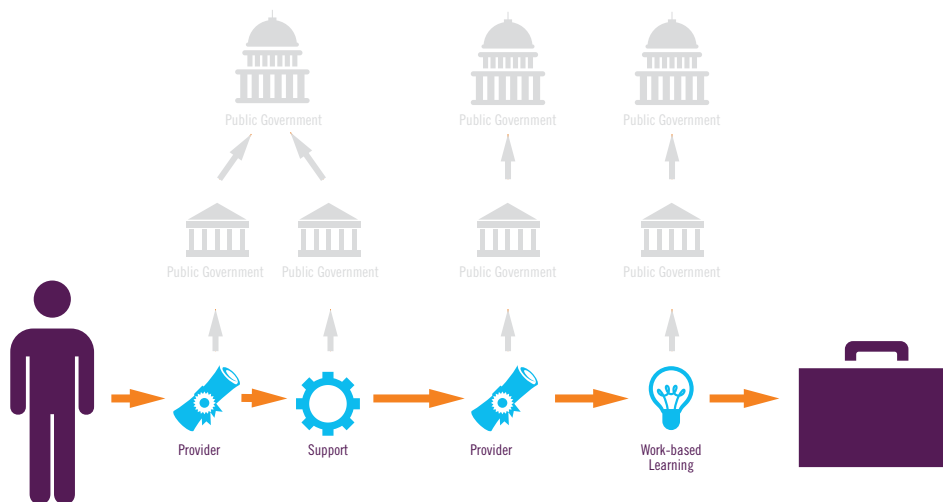
Moving beyond performance systems, support for technology standardization initiatives can add value to employers by catalyzing collaborative industry efforts. This includes new and emerging Web-based competency and credentialing frameworks that support employer-driven talent pipeline management.

SILO PROGRAM MEASURES



Today, programs and providers report up through silo measures.

END-TO-END PERFORMANCE MEASURES



With talent pipeline management, employer-focused measures track end-to-end performance across partners.

POLICYMAKER CHECKLIST

1. Align education, workforce, and economic development systems to be employer driven.

- ✓ Promote talent pipeline management as the best approach for creating value for students, workers, and communities.
- ✓ Integrate education, workforce, and economic development planning to support employers in developing talent solutions for critical capabilities and jobs.
- ✓ Build capacity for economic development organizations and prioritize workforce retention when employers source from outside of their regions.

2. Enable diverse and flexible provider networks that meet the needs of employers.

- ✓ Support employers in workforce segmentation practices and in developing sourcing strategies for critical capabilities and jobs.
- ✓ Assist employers in back-mapping talent flows and identify providers now supplying the best talent.
- ✓ Encourage employers to both designate and publicly identify preferred providers.
- ✓ Reduce regulatory barriers that prevent employers from designating preferred providers and reduce flexibility and responsiveness of provider networks.
- ✓ Expand student and worker access to employer-designated preferred provider networks by directing funding and targeting resources to follow market signals.

3. Promote employer-driven demand planning.

- ✓ Expand use of dynamic short-term labor market information.
- ✓ Support employers in communicating their competency and credentialing requirements to provider networks.

4. Develop employer-centered performance measures.

- ✓ Work with employers to develop end-to-end pipeline performance measures that focus on employer-driven value creation.
- ✓ Promote the use of balanced scorecards among employers and their education and workforce providers that address time, quality, and cost.
- ✓ Support continuous improvement at the provider level through the use of leading and lagging performance measures and predictive analytics.

5. Align incentives with employer-centered performance.

- ✓ Redesign government funding, regulations, and incentives to support demand-driven systems that address critical skills shortages.
- ✓ Provide performance-based funding for high-performing preferred providers.
- ✓ Empower and incentivize students and workers with consumer information, funding, and flexibility to access the highest-performing provider networks.

6. Promote public-private data sharing and technology standardization initiatives.

- ✓ Remove policy and regulatory barriers that prevent sharing data between employers and public and private education and workforce providers.
- ✓ Participate in and incentivize technology standardization initiatives that support talent pipeline partnerships, such as competency and credential frameworks.

Call to Action

Absent a new approach, the skills gap will continue to undermine American competitiveness, and the American dream will remain beyond the reach of many in our society.

What is needed now is bold leadership and transformational change, not quick fixes that otherwise distract from what everyone knows and feels today—that our education and workforce systems are broken and fail to optimize value for employers as well as for students and workers.

This new approach responds to the needs of a changing business environment. Employers can no longer wait for a solution to be delivered to them. By applying lessons learned from innovations in supply chain management to employer-led education and workforce partnerships, we can begin today to improve employment transitions and economic mobility for students and workers while providing employers with the talent they need to compete and grow in our economy.

To that end, the U.S. Chamber of Commerce Foundation—through its affiliation with the U.S. Chamber of Commerce and its federation of more than 3 million employers nationwide—is calling upon the business community to lead the way. On November 19, 2014, the Foundation is hosting a national conference in Washington, D.C., to announce a call to action and create plans to build a movement of talent supply chain practices in partnership with employers and stakeholders across the country.

We call upon employers and all stakeholders to partner with us on this important work.

To learn more about how you can engage in this effort, contact Jason A. Tyszko, Senior Director, Policy, U.S. Chamber of Commerce Foundation at jtyszko@uschamber.com.

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27. This is in contrast to traditional career pathways systems that operate more as generic blueprints for an industry and treat each occupation as standard across all employers, as well as purely customized training that is not built on common industry competency and credentialing frameworks.

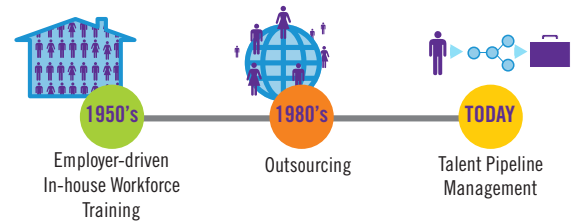
Appendix

Managing the Talent Pipeline: A New Approach

The challenge: Our education system is failing to keep pace with our economy and U.S. employers are struggling to find skilled workers who can contribute to their growth.

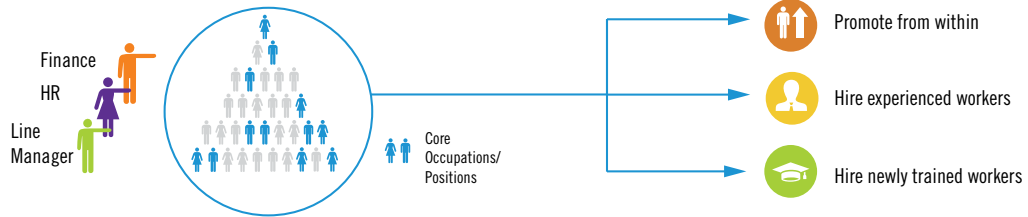
To address this challenge: The U.S. Chamber of Commerce Foundation is engaging employers and their partners in developing a new demand-driven approach—talent pipeline management—based on lessons learned from supply chain management.

We need a **workforce strategy for our time**, not one designed to address the talent needs of the past.



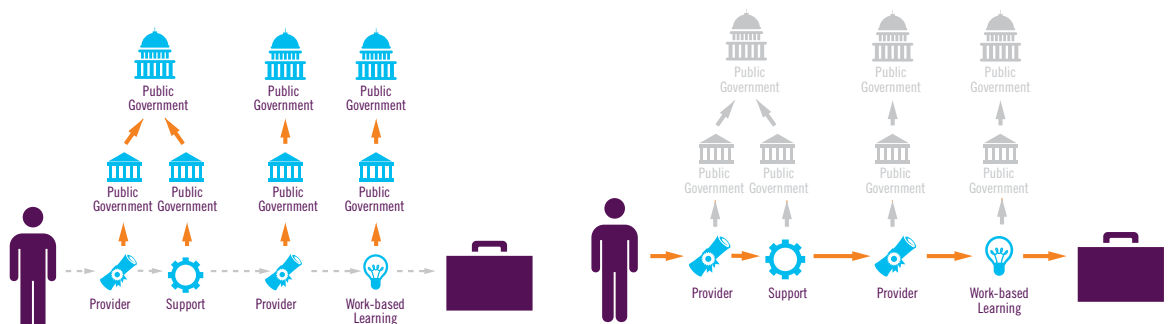
Employers must link their talent strategy to their business strategy, which requires **shared responsibility** across business functions to identify core capabilities critical to their ability to compete.

Working together, management teams can **segment their workforce** and develop sourcing strategies around those positions most critical to their competitiveness.



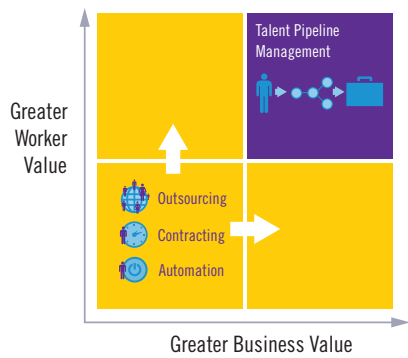
Today programs and providers report up through **silo measures**.

With talent pipeline management, employer-focused measures track **end-to-end performance across partners**.

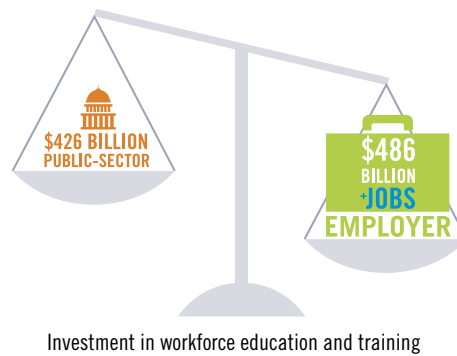


to Closing the Skills Gap

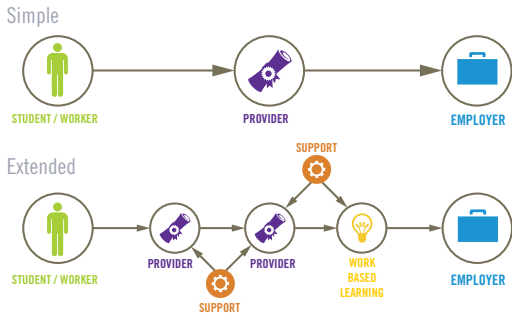
Employers need a talent management strategy for those positions that drive their competitiveness.



Employers must lead the way and they have the leverage to do so. In today's economy, employers control the greatest currency in the marketplace: jobs.



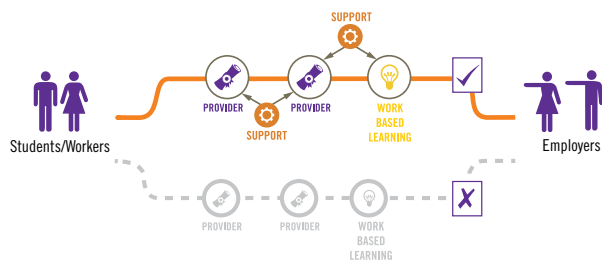
Employers, working independently or through collaboratives, must function as an end-customer and build flexible and responsive talent pipelines for new hires.



Employers need to develop balanced scorecards that address time, cost, and quality across partners and support measures such as time-to-full productivity.



Students and workers can better connect to employers by accessing preferred provider networks based on performance.



Through Talent Pipeline Management we can achieve a truly demand-driven education and workforce system that creates shared value for all stakeholders, including employers, education and workforce providers, students and workers, and policymakers.

The U.S. Chamber of Commerce Foundation calls upon employers and all stakeholders to join the conversation and partner with us on this important work.

Contact: Jason A. Tyszko, jtyszko@uschamber.com

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