

LEADING PRACTICES

IN MODERNIZING
CANDIDATE
RECRUITMENT, HIRING,
AND TRAINING

June 26th, 2020

VISION STATEMENT FOR LEADING PRACTICES IN MODERNIZING CANDIDATE RECRUITMENT, HIRING, AND TRAINING

The American Workforce Policy Advisory Board's vision is that employers promote skills-based recruitment and hiring to better match potential employees with indemand jobs.

The Advisory Board encourages all employers to examine the skills and competencies needed in their workforce, broadly seek talent that possess these skills, and promote workers' lifelong skills development.

This approach will make it possible for all employees and job candidates to gain the skills needed to be successful in the workplace.

Purpose: Determine the use, format, and collection of leading practices in candidate recruitment, hiring, and training. The target audience will be employers, but will also affect workforce stakeholders and policymakers.

Given that the Advisory Board has access to leading organizations in the private, public, and non-profit sectors, this report also provides a series of case studies of how different organizations are utilizing these modern practices to attract, hire, and train their workforce.

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I. Introduction

The unprecedented nature of the COVID-19 pandemic will continue to impact the U.S. economy, businesses, and employees fundamentally changing every aspect of the U.S. labor market. Significant displacement of workers who have filed (or will soon file) for unemployment may devastate the economic health of many communities. Amid this seismic shift, businesses and employees have shown innovation and flexibility in adapting their recruitment and selection, management, and training investments. The pandemic has underscored the urgent need to optimize America's talent pool by engaging all potential workers, particularly underutilized and/or untapped talent.

Employers, both large and small, have been forced to make drastic changes, including long-lasting changes to their operations, budgets and work environments. In the investigation of this work by the American Workforce Policy Advisory Board (Advisory Board), this report was generated to highlight successful practices and actions partners who seek to efficiently make ready employees for their ultimate return to work in the new normal, while also helping expedite America's economic recovery.

Over the last year, the Advisory Board has affirmed the growing skills gap with perspectives from industry, non-profit and government lenses. Employers have tried to tackle this challenge by modernizing how they recruit, select, and train talent to fill critical skill gaps within their own workforce.

Employers are adopting innovative ways to identify the talents, capabilities, and potential of American workers to match the skills of in-demand jobs. Industry leaders are leveraging their workforce data as well as new and cutting-edge technology to identify skills that may have been previously overlooked or not well defined. Employers are developing and implementing training and skilling initiatives to help candidates and employees adapt to the constantly changing work environment and promote opportunities for lifelong learning and development.

This report aims to highlight the leading modern practices in recruitment, hiring, and training by companies within the United States and aims to serve as a resource for the private sector to learn from as they prepare Americans for the future of work. It is more important than ever for businesses to share best practices in order to develop a talent pool that is broader and deeper. Education and training providers benefit from a better understanding of the skills that employers, employees, and job candidates need. Employers benefit from improved productivity and, most importantly, employees and job candidates benefit from expanded economic opportunities.

Trends of Leading Practices from Case Studies

- Companies are developing and providing customized training opportunities for employees so they can maximize the time and effort spent learning and training to gain skills that are most applicable to them. Personalized training formats (e.g., in-house training, credentials, degree programs, job rotation) offers employees the flexibility to learn when and how it is most suitable for them.
- Companies are measuring important metrics in order to evaluate the effectiveness of any organizational intervention for recruitment, hiring, and/or training. By leveraging data and analytics, companies can produce concrete evidence of return on investment as well as identify areas for improvement.
- Companies and education providers are partnering together to communicate and share information on the desired competencies and qualifications needed for students, candidates, and employees to stay current, and inform people in relevant and applied methods that best prepare Americans for future job opportunities.

Other Advisory Board Resources

- 1. The American Workforce Policy Advisory Board has made recommendations to bolster these practices. In the September 2019 board meeting, the Advisory Board presented a white paper and recommendations to develop interoperable learning records which would facilitate candidates' and employees' ability to communicate the skills acquired through customized and personalized training programs.
- 2. During the June 2020 Advisory Board meeting, the board will present a white paper entitled, America's Workforce-Based Training Data Infrastructure: Assessment and Recommendations that provides concrete recommendations on how to collect these metrics through the federal statistical system.
- 3. The Advisory Board unveiled a Call to Action in May 2020 for government, private sector, education, and labor leaders to provide immediate and unprecedented investments in American workers and the pathways necessary for them to get back to work to help expedite the U.S. economic recovery.

II. Use of Artificial Intelligence in Recruitment, Hiring, Training

DESCRIPTION

Artificial intelligence (AI) in the human resources context is using various types of technology to automate processes and functions in recruitment, hiring, and/or training. There are different types of AI that power these HR functions.

Data for Job Matching: The goal of talent acquisition is to find and hire the right talent for the job. The traditional way in which most organizations go about achieving that goal can turn matching and selection into a long and drawn-out process. Organizations need the flexibility of scalability as they grow. The use of artificial intelligence in this case uses regression or neural networks to classify big datasets into simpler categories. This powers software to find the best candidates and match them to the right job based on their job application information. This Al technology can quickly scan thousands of variables to match candidates thus reducing time and need for manual efforts to identify qualified candidates. Additionally, this can help prioritize the best candidates for the job such that organizations do not lose out on good talent.

Natural Language Processing: This type of AI powers technologies such as chatbots (e.g., chat, email, voice) which can be used for initial applicant screening, scheduling interviews, fielding questions, etc. This technology can expedite organizations' hiring processes and enhance the quality and diversity of the candidates they consider.

Responsible use of AI can potentially help organizations attract, find, and retain high-quality job candidates with more efficiency and potentially less bias. It can help organizations search through and analyze voluminous data. One of the potential benefits of AI is enabling a better and fairer candidate experience because factors unrelated to the job such as gender, socioeconomic status, race, and age, are less likely to matter.

Trends and Examples from Organizational Case Studies:

IBM: While AI holds the promise of increasing efficiency and fairness, broad adoption will rely heavily on AI's transparency and the public's trust. IBM is committed to building AI systems for recruitment and hiring that promote trust and understanding of how they work among users, avoid bias from data sources or operation, and ensure inclusion and equity in their assessments, recommendations, and outcomes. IBM has used bias reduction capabilities to flag potential bias in recruitment efforts and has seen internal improvements of candidate, employee, and manager satisfaction. Externally, IBM is partnering with clients globally to complete HR transformation projects that include AI capabilities adopting these practices and values.

Siemens: Siemens has made significant talent acquisition (TA) technology investments to support the recruiting process, from writing gender-neutral job postings, to predicting candidate interest, to sourcing and matching talent, to assessing skills. Siemens understands that while there are many benefits to using AI throughout the process, this technology does not eliminate the need for human decision making and human touch. The Siemens TA technology strategy is focused on leveraging the best of machine learning, big data, predictive analytics and AI to automate some transactional aspects of the recruiting process, thereby enabling recruiters to function as strategic consultants to the business. This mix of "hands-on" human insight and AI-enabled tech allows Siemens to access the full spectrum of available talent, not only those candidates who match an algorithm. This balance is both critical and necessary to reduce unintended bias.

U.S. Chamber of Commerce Foundation: Through the T3 Innovation Network®, the Chamber Foundation is exploring how emerging technologies and modernized data standards can better align education, workforce, and credentialing data with the needs of the new economy. The T3 Network is comprised of more than 400 organizations – more than 700 individuals, 28% of whom are international – working together to change the way we provide, access, and use educational and workforce data by using advanced technologies like AI, blockchain, and others to create an open and decentralized public-private data ecosystem. The goal of the network is to define and design a competency-based lifelong learner record (interoperable learning record), modernize technology and advance data standards to achieve seamless sharing of data throughout a person's education and career pathway and across the talent marketplace, and empower individuals with a validated record of their skills and competencies in a way that all employers can understand.

III. Modernizing Job Postings and Advancement Opportunities

DESCRIPTION

Job postings have typically included qualifications such as mandatory educational requirements, years of work experience, training certification, etc. However, with technology changing work demands faster than ever before, new jobs are constantly emerging, and the traditional language of job descriptions and resumes means the employment system is unable to keep pace. Additionally, job descriptions within job postings often are not viewed as living documents and may become quickly outdated as jobs change rapidly, often leaving behind talented candidates. In today's economy, organizations are now looking to modernize job postings based on skills and tasks and are searching for ways to continuously update them as jobs change.

In order to maximize the power of AI technologies for matching talent to job opportunities, job descriptions need to be standardized to industry-specific and skill-based such that organizations and candidates are speaking the "same language". By standardizing and validating skills for a specific organization or industry, it will be easier to evaluate the contingent workforce, identify skill and talent gaps, and develop training programs geared towards specific demands.

Trends and Examples from Organizational Case Studies:

American Association of Community Colleges (AACC): With support from Lumina Foundation, AACC investigated the various methods of mapping competencies wanted by employers against the messages presented to students in community college academic documents (such as course catalogues and marketing materials). Termed "The Right Signals," this work required a massive undertaking by the college personnel and their partners, but once piloted at multiple colleges across the country, allowed all parties to synchronize their "signals". Job descriptions were rewritten by the employers resulting in candidates submitting resumes with the desired and relevant skills. Clearer course descriptions rewritten by the community college assured students of the exact education and training they would achieve from class. Workforce and economic development partners using similar terms were also able to reduce the misinformation and mis-messaging so that more courses transferred, allowing students to rapidly be provided recognition for prior learning. As a new credentialing model, competency-based language can help clarify the learning behind an array of items (degrees, badges, certificates), making these easier to compare, stack, and appropriately apply to the labor force in a manner that empowers individuals to optimize their career and salary opportunities.

Boys & Girls Clubs of America: Boys and Girls Clubs of America is using data to improve job matching by identifying CEO candidate profiles for the clubs. The profiles are used to evaluate organizational performance for the 18 months following CEO onboarding process. With this practice of recruiting and hiring, key performance indicators have improved. By using data to match CEO jobs to candidate profiles, key performance indicators have improved and future hiring processes will continue to identify core competencies most needed by the organization.

IBM: What matters most in job roles in technology's fastest-growing areas (e.g., cloud, AI, cybersecurity) is having the right mix of skills and a commitment to lifelong learning. IBM is utilizing a skills first approach to hiring and is evaluating and revising their job postings to eliminate degree requirements where possible in order to focus on core skill requirements. Since the half-life of technology skills is only three to five years, many degree holders need additional short-term education and certificates to gain the skills needed for today's jobs. By placing a priority on skills first and learning agility, IBM is expanding pathways to careers outside of traditional tech hubs, and expanding education partnerships (e.g., high school and associate degree partnerships, apprenticeship program with on-the-job training, and returnships for women and veterans reentering the workforce).

State of Iowa: lowa's labor exchange system, Virtual OneStop, offers employers the ability to post job orders, send automated correspondence, analyze current industry data, and utilize an array of search, screening, and ranking tools to help identify suitable candidates. The system utilizes the Sapphire Technology analysis tool, which uses proprietary pattern matching algorithms to determine how well a job seeker's education and experience matches an employer' requirements. Additionally, automatic alerts notify employers when a potential candidate meets the qualifications of a posted job listing.

National Association of Manufacturers: The Creators Wanted campaign was started to change the perception of modern manufacturing and to address the 2.4 million jobs expected to go unfilled over the next decade in the manufacturing sector. The mobile and on the road experience will let students, parents, and potential workers experience modern manufacturing technologies first hand through innovative hands-on activities. The campaign aims to increase the positive perception of modern manufacturing among students and parents, increase the number of students enrolling in manufacturing apprenticeships and reskilling programs, and increase the number of students enrolling in technical and vocational schools. These efforts aim to decrease the number of unfilled jobs in the manufacturing industry.

Siemens: To better compete in our rapidly changing marketplace, Siemens is shifting from traditional experience-focused job postings toward job postings that emphasize required skills and competencies. This move away from traditional profiles opens the talent aperture, allowing more candidates to envision themselves at Siemens. To further support and enable this shift, Siemens is using an augmented writing platform with built-in bias interruption. This platform allows recruiters to craft well-written, gender-neutral and bias-free postings. Siemens also recently has begun using video job postings to enhance talent engagement and drive higher applicant-to-candidate conversion.

Society for Human Resource Management (SHRM): SHRM has long promoted a creative approach to building talent internally and allowing employees to try new job positions within the company (outside of the core area of experience). This offers employees opportunities to diversify their experiences and acquire new skills in their roles. This not only has helped close the skills gap for the organization but has also impacted employees' abilities to take on new challenges and become more marketable in the economy. Similarly, during COVID-19 SHRM encouraged innovative talent management solutions and promoted to its membership resources and thought leadership aimed at recruiting and maintaining employment levels.

COVID-19 has posed a unique situation for HR departments nationwide. Although many organizations have had to resort to lay-offs or furloughs to keep their businesses afloat, some HR departments are using this unpredictable time as an opportunity to adapt their recruiting, hiring, training, and other practices in various ways. When it comes to recruiting and hiring, HR departments are adapting to meet their workforce and immediate staffing needs. For example, at one design firm, HR is actively reviewing and updating their job descriptions and postings to determine whether the onboarding process or even specific positions can be done remotely. Further, at one social services organization, HR is currently engaging in more virtual interviews and adopting virtual onboarding modules to expedite their hiring process. Finally, at one global outsourcing firm, HR has shifted to an all-virtual recruiting and hiring process, using a variety of online communication and collaboration tools. They have created videos of recruiters providing step-by-step instructions on how candidates move through the application process and adjusted the paperwork process to include electronic signatures. Recruiters have been texting more with prospective candidates and using chat bots to service job seekers and candidates.

U.S. Chamber of Commerce Foundation: The Job Data Exchange™ (JDX) is an open data project to improve signaling of in-demand competencies and skills across the talent marketplace through a modernized global data standard for job descriptions and postings. The JDX, and the data standard it employs, will help employers and their HR partners break down a job description into specific skill and hiring requirements. Open-source, non-proprietary, and free to use, the JDX collects that hiring data in a structured, machine-readable way and then makes that data available to the education and workforce partners that are helping students and job seekers prepare for the workforce. As a result, education and training providers will receive better signals of skill requirements from the business community, job seekers will have an improved experience when searching for jobs with more equitable hiring opportunities based on skills and competencies, and employers benefit from better alignment with their education and workforce partners. In addition, we all get better, more accurate labor market information.

WSU Tech: WSU Tech has a focus on Industry & Workforce Collaboration, building and maintaining partnerships to develop curriculum that enables students to transition skills and concepts learned in the classroom directly to the job site. WSU tech has several customized options to recruit, empower and employ students and graduates. These efforts aim to provide the business community direct avenues to a talent pipeline through recruitment, applied learning initiatives, online job boards, virtual industry chats/tours, and industry advocate teams. These mutually beneficial initiatives provide information to students about varied career options, while enabling employers to attract talent for high-demand careers early on. Strengthening education-industry partnerships improves candidate recruitment and prepares students to enter high-demand careers. Working closely with K-12 education expands pathways to STEM careers and

allows for the perception of these careers to be reflective of the current environment, increasing the enrollment pipeline in these technical programs which ultimately fill high-wage, high-skill jobs. WSU Tech's end goal is ensuring real economic outcomes for the people they educate and train and the communities those individuals serve.

IV. Recruitment of Underutilized Populations (e.g., veterans, individuals with disabilities, older individuals)

DESCRIPTION

Finding pools of untapped talent to fill in-demand job roles is a critical way for organizations to attract and hire the best talent and ensure a competitive advantage. Organizations can tap into underutilized talent pools such as veterans, individuals with disabilities, older workers and individuals who were formerly incarcerated.

Trends and Examples from Organizational Case Studies:

American Association of Community Colleges: The Right Signals Initiative is aimed to demonstrate a new credentialing model that recognizes multiple quality credentials to send "the right signals" to employers, students, and colleges about the meaning of these credentials. Further, the initiative is charged to connect with at least one nontraditional credential with traditional degrees and certificates to increase diversity.

State of Iowa: Iowa has four, in-state, re-entry career planners called Offender Connections. The purpose is to connect ex-offenders to Registered Apprenticeship programs, provide opportunities to earn National Career Readiness certificates, and offer interview skills training. The IowaWORKS centers provide job fairs and trainings on-site at these community-based correction centers and in many local jails. Further, the Juvenile Justice Task Force is implementing comprehensive system-wide reforms to juvenile reentry policies and processes. Additionally, Iowa also provides connection programs for refugees, youth, minorities, and individuals with disabilities.

JPMorgan Chase: JPMorgan Chase has expanded its commitment to giving people with criminal backgrounds a second change by supporting their reentry into the workforce, community, and local economies. The company recently put forth enhancements to its hiring strategy by "banning the box", which increases access of people with criminal backgrounds to fill job positions as well as new collaborations with community organizations to help JPMorgan Chase further build its pipeline for hiring candidates with criminal backgrounds. The company is also committed to promoting best practices and insights to increase second chance hiring across the industry.

The Manufacturing Institute (MI): Heroes MAKE America is The Manufacturing Institute's initiative to build connections between the military community and the manufacturing industry. The signature program provides transitioning service members, veterans, National Guard, reservists and military spouses with the skills and certifications to find and excel in manufacturing careers. The program also provides employers with best practices and tools to help them attract and retain this talent.

North America's Building Trades Unions (NABTU): NABTU sponsors comprehensive apprenticeship readiness programs that provide a gateway for local residents, focusing on women, people of color, and transitioning veterans, to gain access to registered apprenticeship programs in the construction industry. The Multi-Craft Core Curriculum (MC3) aims to increase the number of candidates for apprenticeships, increase the diversity of apprenticeship candidates, and increase the retention rate among apprentices. The ability to provide in-person and online instruction will allow diverse candidates to access critical training.

Siemens: As part of an overall strategy to recruit and retain top talent, Siemens launched its Military Talent Program in 2010. This nationwide initiative was designed to support veterans with engineering and manufacturing backgrounds as they transition to the civilian workforce. The program includes key five areas that standardize and sustain all of Siemens' military hiring efforts: 1) More targeted, proactive engagement of potential military candidate; 2) Standardized onboarding; 3) Upskilling via apprenticeships, classroom and online training programs; 4) Engagement from day one; 5) Recognition within the military community. Siemens' military hiring mission is a brand marketing campaign that positions the company as an employer of choice for veterans and transitioning military. Since launching its military hiring program, Siemens has recruited more than 4,000 service members from all four branches of the U.S. Military: Air Force, Navy, Army, and Marine Corps. With over 60 percent working in STEM (science, technology, engineering, mathematics) disciplines, these veterans are providing technical field service support, running automation systems, and helping Siemens' customers deploy next-generation power systems.

Society for Human Resource Management (SHRM): HR is also adopting special policies, actions, or practices to ensure that vulnerable populations, such as people with disabilities and/or older workers, are recruited, hired, and trained during the COVID-19 pandemic. For example, at one healthcare organization, HR has made a concerted effort to accommodate their older workers' special requests for modified job duties and/or schedules to limit their potential exposure to the virus. Further, another HR department indicated that they have allowed their healthcare staff, a vulnerable population during COVID-19, to accrue and use additional paid time off through the end of the year.

Visa: Visa's Ready to Return is an annual workshop for men and women who have left the workforce for a minimum of one year for a variety of reasons (e.g., family care, childcare, career change). The workshop is focused around empowering attendees and equipping them with tools for success as they reenter the workforce. Recognizing the challenges of a pause in career journeys, this program has recently helped over 2,000 Bay area job seekers to reenter the workforce.

Western Governors University (WGU): Service Employees International Union-United Healthcare Workers West (SEIU-UHW) partnered with Western Governors to deliver educational experience as part of a workforce training initiative. This initiative aims to recruit people with the potential to grow in the healthcare industry and then be placed in jobs through union-created healthcare workers cooperative. The collaborative model among employers, employees, and WGU works to offer pathways to individuals who may not have access to healthcare careers through other channels, and to do it at scale.

V. Modern Training Practices for Upskilling and Reskilling

DESCRIPTION

Training employees for in-demand, hard-to-fill jobs can help them move up the career ladder and reduce the shortage of candidates in the workforce with critical skills for the future of work. Organizations that offer their workforce up-skilling and re-skilling opportunities will be able to maintain a competitive advantage, and attract and hire high-quality talent to fill in-demand tasks.

Trends and Examples from Organizational Case Studies:

Accenture: Accenture recognizes the important role professional apprenticeships can play in closing the skills gap in the U.S., in addition to reskilling workers whose jobs have been, or will be, disrupted by technology. The company has developed its own model of apprenticeship programs used for indemand roles in areas including cybersecurity, data analysts and software engineers among others. However, the skills gap is a national problem and Accenture has developed an apprenticeship playbook, in partnership with Aon and the Chicago Apprenticeship Network, to encourage more companies to develop their own apprenticeship programs to reskill the American workforce.

Amazon: Amazon is focused on creating career pathways in areas that will continue to grow in years to come, including healthcare, machine learning, manufacturing, robotics, computer science, cloud computing, and more. As part of Amazon's Upskilling 2025 initiative, new training opportunities such as machine learning university, Career Choice pre-paid tuition program, and technical apprenticeships, employees across the company will be able to obtain skills training they need for today's and tomorrow's most in-demand jobs, whether those career paths are within Amazon or elsewhere.

AT&T: AT&T has recognized the need for a workforce with digital and software skills that could keep pace with evolving technology; this led to an initiative to reskill nearly half of its workforce with internal training programs and tuition assistance. It implemented programs to enable employees to manage their own reskilling and evolve along with technology. In addition to internal training programs, AT&T has also partnered with third-party credentialing courses and universities to create online STEM-related programs that are available inside and outside the company.

Kentucky Community and Technical College System & The Manufacturing Institute (MI): The

Federation for Advanced Manufacturing Education (FAME), originally founded by Toyota and stewarded by the MI today, is a network of manufacturers working collaboratively to train students of all ages and backgrounds in an apprenticeship-type program to gain careers in advanced manufacturing. Employers are intentional about going to classes that have diverse populations and inviting students into their facilities to see the realities of a manufacturing career. By directly communicating and recruiting students, recruitment of students into manufacturing careers has drastically improved. One of the first implementers was KY FAME – where more than a dozen community colleges across the Commonwealth of Kentucky prepared students in Advanced Manufacturing developing the technical skills (e.g., maintaining industrial equipment, robotics, hydraulics, welding) and workforce effectiveness skills (e.g., communication, teamwork, safety) necessary by industry.

- SAP: SAP uses data driven methodology through Persona-based Learning maps to categorize training content and recommend customized offerings to their employees based on their needs. Specifically, the data driven approach systematically tracks specific learning interventions and compares progress against learning targets. It also provides the ability to use data to evaluate courses to determine the effectiveness and value of the learning intervention (business impact). SAP recognizes that the challenge of continuous learning, development, and training is time. The development of this approach is to provide learning recommendations that are applicable to each employee. This program has enabled employees to maximize their time and effort to gain skills that will help them in the future of work.
- Society for Human Resource Management (SHRM): When it comes to training, some HR departments are adapting their regular trainings so that they can take place virtually and are even adopting entirely new types of training for employees. At one healthcare organization, the HR department has transitioned all of their classroom and in-person training to virtual synchronous or asynchronous training. For example, they stream a weekly all-employee live webinar to provide current training topics related to COVID-19 disease, prevention, and company policies, and general training on a variety of cross-disciplinary topics.
- Udacity: Udacity is a leading provider of online learning that works with many fortune 500 companies as well as individuals to upskill workers in technology and equip them for a changing workforce. Udacity has trained more than 10 million individuals in technology-based learning. When General Electric (GE) was looking to harness the capability of big data and analytics and upgrade software to enable their employees to be more productive they turned to Udacity. GE saw that Udacity could train their employees in a way that was not only creative and cutting edge, but that they have a keen understanding of how employees can become practitioners through project-based learning. Udacity provided individual specific training that allowed GE employees to leverage the latest platforms to launch new products and upskill them in a way that immediately benefited the company.
- U.S. Chamber of Commerce Foundation: Talent Pipeline Management® is a demand-driven, employer-led workforce development strategy that more than 2,000 employers -- in 33 U.S. states, D.C., and now in Canada are using to close the skills gap. This practice works equally for employers recruiting new hires from external talent sources as well as for employers searching for an upskilling or reskilling strategy for an existing workforce. The strategy teaches employers how to build talent supply chains so that what is taught in classrooms and training programs is aligned to

the dynamic needs of business. This is a proven solution to a number of employer workforce challenges, such as diversifying a workforce, increasing employee retention, closing a skills gap, reducing time-to-hire, and reducing time to full productivity. The in-person training, the TPM Academy, includes a custom curriculum that walks workforce and economic development leaders step-by-step through how to successfully implement this approach for their industry.

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VII. Case Studies

TITLE: Recruitment of Under Tapped Talent

CASE STUDY: Visa Inc.

AREA: Recruitment

BRIEF BACKGROUND:

We believe in the power of moments in life - it's that one conversation, that one person who believes in you or that one opportunity that presents itself that can change your journey. Ready to Return program is a workshop focused on upskilling candidates that have been away from the workforce for one or more years due to personal circumstances. The earnings gap is one of the harsh realities women face of returning to work. According to a recent US Census commissioned report, women's earnings fall drastically at the time a child is born, and their earnings do not recover until the child is 9 or 10 years old.¹

MODERN PRACTICE CATEGORY: Recruitment of underutilized populations (e.g., veterans, individuals with disabilities, older individuals).

INITIATIVE:

- Ready to Return is an annual workshop hosted by Visa for men and women who have left the workforce for a
 minimum of one year for a variety of reasons whether to care for family or a child, to initiate a career
 change or pursue a personal passion.
- The goal of the program is to provide the foundational tools candidates who have been out of the workforce need to build their resume, perfect their interview skills, get tips and inspiration from executive leaders and to network.
- The Ready to Return conference is focused around empowering attendees and equipping them with tools for success as they decide to reenter the workforce.²
- The conference allows candidates to participate in motivational speaker sessions, spend time with Visa recruiters and receive advice from executives. It's also an opportunity to explore open roles at Visa.

OUTCOMES:

 Recognizing this gap and the challenges of a pause in career journeys, Visa has recently helped over 2,000 Bay Area job seekers who have left work due to life circumstances or family care prepare for future career opportunities.³

¹ Source: "The Parental Gender Earnings Gap in the United States", U.S. Census Bureau, November 2017

² https://usa.visa.com/visa-everywhere/global-impact/ready-to-return.html

³ https://usa.visa.com/visa-everywhere/blog/bdp/2019/08/05/visa-provides-thousands-1565040898410.html

TITLE: Data Driven Approach to Tracking Training

CASESTUDY: SAPAmerica-Training

AREA: Training

BRIEF BACKGROUND:

SAP categorizes training content and recommends offerings to employees based on their needs, through the Time to Learn Persona-based Learning Maps, by using data driven methodology to focus recommendations to our employees.

Data Driven approach to tracking Training:

- Systematic tracking of specific learning interventions across both global and business unit
- categories are captured on SAP's "Success Factors" Learning Management System or LMS.
 Reports and learning dashboards consolidate data on completions and progress against learning targets.
- Automated Impact Analytics provides the ability to evaluate courses and determine effectiveness and/or value including the business impact of the learning intervention.
- In the future, automated Impact Analytics will create a validated standardized data source that can be used for recommenders and chatbots to make recommendations about activities, experiences, and courses based on which things are known to cause the desired outcome, rather than just keyword relevance.

At SAP, we think about learning holistically and categorize our learning according to the following framework:

- Compliance: what do employees need to do ensure we are compliant with legal requirements?
- Company: what do our employees need across the organization to keep us aligned on foundational topics such as our vision and strategic initiatives?
- Current skills: what do employees need to help them perform in their current role?
- Future skills: what do employees need to be thinking about to reskill or upskill in their current and future role?

Below is a graphic that represents how these four 'layers' make up the whole of our employees. A specific example of what this looks like within our organization is attached as a PDF. Our Learning Compass technology hosts this same information online and dynamically updates as our employee's progress through the program.



MODERN PRACTICE CATEGORY: SAP uses data driven tools in Learning and Development to make better recommendations to its employees for current and future offerings. This helps to better match training offerings available within the SAP Learning environment to each employee and their role. By understanding what critical skills are needed, Persona-based Learning maps define the critical skills for both an employee's current and desired future role.

INITIATIVE: SAP Learning — Time to Learn & Persona-based Learning Map The Learning Persona is focused on both internal and external-facing employees that are part of the Global Business Development and Ecosystem team. The employees work in the areas of Corporate Development and Systems and Technology Partners Ecosystems, including interns, individual contributors, and people managers. The recommended learning focuses on skills related to building and growing business acumen, project management skills, critical thinking skills, technical knowledge, and leadership capabilities.

OUTCOMES: The challenge of time to learn has many facets. Employees busy with work and their daily lives often result in minimal time being dedicated to ongoing learning and development of non-compliance related skills. With development of the Learning Persona, SAP is now able to give more concise recommendations to employees seeking guidance on where to focus their energy to solve their training needs for critical skills for both current roles and future roles within the organization. Impacts of this initiative have been:

- 1) Enabled employees to focus on future skills
- 2) Introduced segmented learning groups through the concept of "learning personas" for 6 teams
- 3) Provided clear recommendation on target amount of time to spend on learning in different areas Compliance, Company-recommended, Current Skills and Future Skills
- 4) Provided a single point of access, single tool/location/format, for all learning recommendations for every "learning persona"
- 5) Provided integrated learning recommendations that include both informal and formal learning experiences
- 6) Enabled our company's transition to an ongoing feedback model by providing managers with a set of learning recommendations for continuous employee development
- 7) Launched new structured persona-based learning maps to 5,000+ employees across several business units
- 8) Pioneered a new structured approach to learning for teams that had never had one previously resulting in a total of 6,000 learning hours
- 9) Requests for additional learning support have increased with several teams expressing interest in curating and designing more learning for their teams

See Appendix below for an example of a Time to Learn Persona-based Learning Map

Appendix



Corporate Development Learning Persona

This persona is for internal and external-facing employees that are part of the Global Business Development and Ecosystem team, that work in the areas of Corporate Development and Systems and Technology Partners Ecosystems, including interns, individual contributors and people managers. The recommended learning focuses on skills related to building and growing business acumen, project management skills, critical thinking skills, technical knowledge and leadership capabilities.

Recommended Learning & Development (formal & informal): 0.9-1.3 Hours/Week (45 - 69 total hours for 2019)



This Learning Map was developed in collaboration with your team. We identified "Learning Personas" based on groups of roles with similar learning needs. Each persona-based learning map defines the critical skills for your current and future roles. It is designed to be used as an input to your SAP Talk dialogues with your manager. For more information about how to use this Learning Map to support your career development consult these reference documents:

Getting Started with Learning Personas and User Handbook for Your Persona-Based Learning Map.



COMPLIANCE: 4 Hours

COMPLIANCE Title	Learning Type	Learning Level	Duration (hours)
Information Security Fundamentals 2018	eLearning	All	0.5
Compliance Baseline Training	eLearning	All	0.5
Information Governance and Records Management	eLearning	All	0.25
Competition and Anti-Trust	eLearning	All	0.75
Preventing Bribery and Corruption	eLearning	All	0.75
Five Pillars of Compliance – Module 1 – Bribery and Corruption	eLearning	All	0.5
Five Pillars of Compliance – Module 2 – Conflict of Interest	eLearning	All	0.5
New enhanced controls – SAP Global Third-Party Sales Commission Policy	eLearning	All	0.25

COMPANY: 2 - 26 Hours

COMPANY Title	Learning Type	Learning Level	Duration (hours)
SAP Talk Visit the SAP Talk Jam page to explore resources to learn more about SAP Talk dialogues.	Activity	All	0.5
Deliver the Intelligent Enterprise	eLearning	All	0.5
Why Brand Matters – All Employee Brand Training	eLearning	All	0.25
Focus on Insight: Diversity and Inclusion (Part 1)	eLearning	All	0.25

CO	MPANY e	Learning Type	Learning Level	Duration (hours)
	Expert Experience If you are new to the Expert/Chief Expert role, visit the Expert Experience Jam Page to explore opportunities to expand your knowledge, foster strong connections, and develop new ways to success.	Classroom	T4/T5	16 - 24
	Leadership Learning- If you are a people leader, take some time to visit the Leadership Experience Jam Page to access an interactive platform to stay up to date, exchange ideas and develop your career. There, you will find the Leadership Development Roadmaps and the Leadership Flagship programs for your level.	Classroom	Advance	16-24

CURRENT SKILLS: 30 Hours

CUI	RRENT SKILLS e	Learning Type	Learning Level	Duration (hours)
	GBDE "Partner Strategy, Portfolio & Governance" Skill: Understanding Global Business Development & Ecosystems (GBDE)	Activity	Intermediate	1
	GBDE "Team Overview GSSPs" Skill: Understanding Global Business Development & Ecosystems (GBDE)	Activity	All	1
	GBDE "Team Overview: Industry Ecosystems" Skill: Understanding Global Business Development & Ecosystems (GBDE)	Activity	All	1
	GBDE "Team Overview: Global Tech Partners" Skill: Understanding Global Business Development & Ecosystems (GBDE)	Activity	All	1
	GBDE "Corporate Development: M&A" Skill: Understanding Global Business Development & Ecosystems (GBDE)	Activity	All	1

CURRENT SKILLS Title	Learning Type	Learning Level	Duration (hours)
Retaining Top Talent and Leveraging Future Leaders Skill: Leadership: Managing Teams / Projects	Activity	Expert	1
Liz Wiseman: Multiplying Genius Skill: Leadership: Managing Teams / Projects	Activity	Intermediate	0.5
The Impact of Digitalization on Leadership and Skill: Leadership: Managing Teams / Project	nd Work eLearning	Intermediate / Expert	4
Conflict Management Guide Skill: Leadership: Managing Teams / Project	Activity	Intermediate	0.25
The High-Potential Leaders Skill: Leadership: Managing Teams / Project	Activity	Expert	1
Becoming a Thought Leader Skill: Leadership: Managing Teams / Project	eLearning	Basic	0.75
The Secrets to Leading with Assertiveness Skill: Leadership: Managing Teams / Project	eLearning	Intermediate	1
Coaching and Developing Employees Skill: Leadership: Managing Teams / Project	eLearning	Intermediate	1
Mentoring: The Mentoring Relationship Skill: Leadership: Managing Teams / Project	eLearning	Intermediate	1
Networking Foundations: Networking Basics Skill: Networking	eLearning	Basic	1.75
Quiet: The Power of Introverts in a World that Stop Talking, by Susan Cain Skill: Transformation: Define and Drive Innovation/ Ne Business Development / Influence Strategy	Activity	Intermediate / Expert	4
Innovation Guide Skill: Transformation: Define and Drive Innovation/ New Business Development / Influence Strategy	_W Activity	Intermediate	0.25

COMPLIANCE: 4 Hours

COMPLIANCE Title	Learning Type	Learning Level	Duration (hours)
Information Security Fundamentals 2018	eLearning	All	0.5
Compliance Baseline Training	eLearning	All	0.5
Information Governance and Records Management	eLearning	All	0.25
Competition and Anti-Trust	eLearning	All	0.75
Preventing Bribery and Corruption	eLearning	All	0.75
Five Pillars of Compliance – Module 1 – Bribery and Corruption	eLearning	All	0.5
Five Pillars of Compliance – Module 2 – Conflict of Interest	eLearning	All	0.5
New enhanced controls – SAP Global Third-Party Sales Commission Policy	eLearning	All	0.25

COMPANY: 2 - 26 Hours

COMPANY Title	Learning Type	Learning Level	Duration (hours)
SAP Talk Visit the SAP Talk Jam page to explore resources to learn more about SAP Talk dialogues.	Activity	All	0.5
Deliver the Intelligent Enterprise	eLearning	All	0.5
Why Brand Matters – All Employee Brand Training	eLearning	All	0.25
Focus on Insight: Diversity and Inclusion (Part 1)	eLearning	All	0.25

COI	MPANY :	Learning Type	Learning Level	Duration (hours)
	Expert Experience If you are new to the Expert/Chief Expert role, visit the Expert Experience Jam Page to explore opportunities to expand your knowledge, foster strong connections, and develop new ways to success.	Classroom	T4/T5	16 - 24
	Leadership Learning- If you are a people leader, take some time to visit the <u>Leadership Experience Jam Page</u> to access an interactive platform to stay up to date, exchange ideas and develop your career. There, you will find the Leadership Development Roadmaps and the Leadership Flagship programs for your level.	Classroom	Advance	16-24

CURRENT SKILLS: 30 Hours

CURRENT SKILLS Title	Learning Type	Learning Level	Duration (hours)
GBDE "Partner Strategy, Portfolio & Governance" Skill: Understanding Global Business Development & Ecosystems (GBDE)	Activity	Intermediate	1
GBDE "Team Overview GSSPs" Skill: Understanding Global Business Development & Ecosystems (GBDE)	Activity	All	1
GBDE "Team Overview: Industry Ecosystems" Skill: Understanding Global Business Development & Ecosystems (GBDE)	Activity	All	1
GBDE "Team Overview: Global Tech Partners" Skill: Understanding Global Business Development & Ecosystems (GBDE)	Activity	All	1
GBDE "Corporate Development: M&A" Skill: Understanding Global Business Development & Ecosystems (GBDE)	Activity	All	1

CURRENT SKILLS Title	Learning	Learning	Duration
Retaining Top Talent and Leveraging Future Leaders Skill: Leadership: Managing Teams / Projects	Activity	Expert	1
Liz Wiseman: Multiplying Genius Skill: Leadership: Managing Teams / Projects	Activity	Intermediate	0.5
The Impact of Digitalization on Leadership and Work Skill: Leadership: Managing Teams / Project	eLearning	Intermediate / Expert	4
Conflict Management Guide Skill: Leadership: Managing Teams / Project	Activity	Intermediate	0.25
The High-Potential Leaders Skill: Leadership: Managing Teams / Project	Activity	Expert	1
Becoming a Thought Leader Skill: Leadership: Managing Teams / Project	eLearning	Basic	0.75
The Secrets to Leading with Assertiveness Skill: Leadership: Managing Teams / Project	eLearning	Intermediate	1
Coaching and Developing Employees Skill: Leadership: Managing Teams / Project	eLearning	Intermediate	1
Mentoring: The Mentoring Relationship Skill: Leadership: Managing Teams / Project	eLearning	Intermediate	1
Networking Foundations: Networking Basics Skill: Networking	eLearning	Basic	1.75
Quiet: The Power of Introverts in a World that Can't Stop Talking, by Susan Cain Skill: Transformation: Define and Drive Innovation/ New Business Development / Influence Strategy	Activity	Intermediate / Expert	4
Innovation Guide Skill: Transformation: Define and Drive Innovation/ New Business Development / Influence Strategy	Activity	Intermediate	0.25

CURRENT SKILLS Title	Learning Type	Learning Level	Duration (hours)
Delivering Employee Feedback Skill: Communication	eLearning	Basic	1
Leading with Stories Skill: Communication	eLearning	All	0.5
Introduction to Program Management Skill: Program Management	eLearning	Basic	0.5

FUTURE SKILLS: 9 Hours

FUTURE SKILLS Title	Learning Type	Learning Level	Duration (hours)
Strategic Learning - How to Be Smarter Than Your Competition and Turn Key Insights into Competitive Advantage Skill: Critical Thinking	Activity	Intermediate	0.25
Cultivating a Growth Mindset Skill: Critical Thinking	Instructor- led Course	All	1.5
What Having a Growth Mindset Actually Means Skill: Critical Thinking	Activity	All	0.5
Big Data is Better Data Skill: Technology Innovation	Activity	Intermediate / Expert	0.25
The Business of Blockchain Skill: Technology Innovation	Activity	Intermediate / Expert	0.25
The Future of Work in a Digital World Skill: Digital Transformation	Activity	Expert	1
Transforming People and Organizations for a Digital World Skill: Digital transformation	Activity	Expert	1

CURRENT SKILLS Title		Learning Type	Learning Level	Duration (hours)
	Driving Digital Transformation: Culture, Structure, and Leadership Matter Skill: Transformation: Define and Drive Innovation/ New Business Development / Influence Strategy	Activity	Expert	1
	Customer CEO Skill: Transformation: Define and Drive Innovation/ New Business Development / Influence Strategy	Activity	Expert	0.5
	Information Technology Project Management Skill: Transformation: Define and Drive Innovation/ New Business Development / Influence Strategy	Activity	Intermediate /Expert	0.25
	The Idea-driven Organization Skill: The improvements and best practices / Influence Business Outcomes	Activity	Intermediate	0.25
	Business Strategy - A Guide to Effective Decision- Making Skill: Business Strategy	Activity	Intermediate /Expert	0.25
	10 Golden Rules for Win/Win Negotiation Skill: Negotiation	eLearning	Basic	0.25
	Build Your Influencing Capabilities Skill: Negotiation	eLearning	Basic / Intermediate	1
	Strategic Negotiation Skill: Negotiation	eLearning	All	0.75
	Ken Blanchard on Servant Leadership Skill: Emotional Intelligence	eLearning	Intermediate (0.5
	Improve Your Emotional Intelligence Skill: Emotional Intelligence	Activity	Basic	0.5
	7 Things Resilient People Do Differently Skill: Emotional Intelligence	Activity	All	0.25
	Effective Listening Skill: Communication	eLearning	Basic	1.25

CURRENT SKILLS Title	Learning Type	Learning Level	Duration (hours)
Delivering Employee Feedback Skill: Communication	eLearning	Basic	1
Leading with Stories Skill: Communication	eLearning	All	0.5
Introduction to Program Management Skill: Program Management	eLearning	Basic	0.5

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What Having a Growth Mindset Actually Means Skill: Critical Thinking	Activity	All	0.5
Big Data is Better Data Skill: Technology Innovation	Activity	Intermediate / Expert	0.25
The Business of Blockchain Skill: Technology Innovation	Activity	Intermediate / Expert	0.25
The Future of Work in a Digital World Skill: Digital Transformation	Activity	Expert	1
Transforming People and Organizations for a Digital World Skill: Digital transformation	Activity	Expert	1

FUTURE SKILLS Title		Learning Type	Learning Level	Duration (hours)
	Management Strategies for the Cloud Revolution Skill: Cloud Strategies for the Future	Activity	Intermediate / Expert	1
	CMI Perspectives on Intelligent Enterprise Landscape Skill: Intelligent Enterprise	Activity	All	0.5
	Learn to Use Qualtrics Research Core Skill: Experience Management / Qualtrics Tool	Activity	All	2.5

TITLE: Improving Recruiting Results via Balanced use of Al and Human Insight

CASE STUDY: Siemens Corporation

AREA: Recruitment

BRIEFBACKGROUND:

Siemens has made significant talent acquisition (TA) technology investments to support the recruiting process, from writing gender-neutral job postings, to predicting candidate interest, to sourcing and matching talent, to assessing skills. Siemens understands that while there are many benefits to using Al throughout the process, this technology does not eliminate the need for human decision making and human touch. The Siemens TA technology strategy is focused on leveraging the best of machine learning, big data, predictive analytics and Al to automate some transactional aspects of the recruiting process, thereby enabling recruiters to function as strategic consultants to the business. This mix of "hands-on" human insight and Al-enabled tech allows Siemens to access the full spectrum of available talent, not only those candidates who match an algorithm. This balance is both critical and necessary to reduce unintended bias.

MODERN PRACTICE CATEGORY: Use of Artificial Intelligence in Recruitment

INITIATIVE: Siemens has established and maintains a talent acquisition technology stack that leverages the best of AI and human insight to maximize process efficiency, improve candidate and hiring manager experience, and to attract/source/engage diverse talent. Investments in the stack include:

- Talent sourcing automation platform that enables recruiters to source across multiple social media platforms and talent communities at once
- Crowdsourcing platform combining the expertise of a vast external recruiter network with the power of Alto deliver qualified, diverse candidate profiles to Siemens recruiters
- Augmented writing platform with built-in bias interruption. This platform allows recruiters to craft well-written, gender-neutral and bias-free postings. Siemens also recently has begun using video job postings to enhance talent engagement and drive higher applicant-tocandidate conversion
- University recruiting platform that combines AI search technology and oncampus ambassadors to match campus talent to jobs, engage campus talent and deliver qualified, diverse leads to Siemens recruiters
- Talent sourcing bots that find hidden and passive talent, predict who will be most interested in Siemens jobs, engage this talent and deliver prequalified candidates

OUTCOMES: While many of these tools are new and outcomes vary based on the target skill, position location, talent supply and other variables, AI-enabled TA tools are driving noticeable improvements, to include:

- Reduced time to fill: Al tools reduce sourcing time and effort, allowing recruiters to create candidate slates faster:
- Ability to reach passive or "hidden" talent: some of the tools in the Siemens stack;
- Leverage predictive analytics to identify candidates who are "hidden" or passive and flag them as great talent for Siemens;
- Increased candidate attraction and engagement: Altools automate talent engagement, allowing Siemens to reach candidates earlier and reinforce the brand interaction throughout the recruiting process;
- Improved recruiter productivity and service delivery: automation of sourcing activity allows
 recruiters to spend more time on higher-value tasks, such as consultation to hiring managers,
 direct sourcing of passive talent and diversity outreach.

TITLE: Siemens Military Talent Program

CASE STUDY: Siemens Corporation

AREA: Recruitment

BRIEFBACKGROUND: As part of an overall strategy to recruit and retain top talent, Siemens launched its Military Talent Program in 2010. This nationwide initiative is designed to support veterans with engineering and manufacturing backgrounds as they transition to the civilian workforce.

MODERN PRACTICE CATEGORY: Recruitment of Underutilized Populations (e.g. veterans, individuals with disabilities, older individuals)

INITIATIVE: The program includes five key areas that standardize and sustain all of Siemens' military hiring efforts:

- More targeted, proactive engagement of potential military candidate: Knowing that many of
 its roles can be done quite successfully by veterans with relevant experience, Siemens identifies
 ideal candidate profiles for key job categories and then focuses sourcing efforts on talent pools
 that can fulfill those requirements.
- 2. Standardized onboarding: Creating common processes and standardized information for new employees can be challenging for companies with diverse operating units. To avoid missing opportunities to truly engage new veteran hires, Siemens utilizes an employee engagement program that is standardized across its eight divisions. This common framework includes a comprehensive approach to communication and an employee orientation website with onboarding information for HR, hiring managers, and new employees.
- 3. **Upskilling:** Apprenticeships and classroom and online training programs are available in areas such as digital lifecycle management, computer-aided design (CAD), computer-aided manufacturing (CAM), and computer-aided engineering (CAE) software technology.
- 4. **Engagement from day one**: Siemens focuses on engagement: individualized access to training, transparency into global job opportunities, ongoing performance management, and competitive compensation and benefits programs.
- 5. Recognition within the military community: Central to Siemens' military hiring mission is a brand marketing campaign that positions the company as an employer of choice for veterans and transitioning military. Components of the campaign include a military careers microsite featuring profiles of veterans successfully employed at Siemens; job descriptions tailored toward veterans; content on benefits and resources relevant to veterans; a referral program that allows new veterans to easily refer their fellow service members; and the Siemens Veteran Network, an employee resource group with active chapters in Siemens locations across the U.S.

OUTCOMES: Since launching its military hiring program, Siemens has recruited more than 4000 service members from all four branches of the U.S. Military: Air Force, Navy, Army, and Marine Corps. With over 60 percent working in STEM (science, technology, engineering, mathematics) disciplines, these veterans are providing technical field service support, running automation systems, and helping Siemens' customers deploy next-generation power systems.

TITLE: Opening the Talent Aperture via Modern Job Postings and Skills/Competency Based Position Profiles

CASE STUDY: Siemens Corporation

AREA: Recruitment

BRIEFBACKGROUND: To better compete in our rapidly changing marketplace, Siemens is shifting from traditional experience-focused job postings toward job postings that emphasize required skills and competencies. This shift opens the talent aperture, allowing more candidates to envision themselves at Siemens and allowing Siemens to attract and engage a broader range of diverse talent. The Siemens Talent Acquisition technology stack includes tools strategically chosen to support and enable this shift.

MODERN PRACTICE CATEGORY: Modernizing Job Postings

INITIATIVE: The job posting modernization initiative is designed to open the talent aperture by shifting toward skills/competencies-based profiles and supporting that shift via technology, to include:

- Augmented writing platform with built-in bias interruption. This platform allows recruiters to craft well-written, gender-neutral and bias-free postings.
- Video recruitment application that allows Siemens recruiters to develop branded videos and add them to job postings enhance talent engagement and drive higher applicant-to-candidate conversion.
- Employer branding tool integrated into the Siemens career portal that transforms Siemens job postings into engaging, branded visual candidate experiences
- Recruitment marketing platform that allows Siemens recruiters to create targeted marketing campaigns strategically designed to attract, engage or source talent. For example, some campaigns are designed to drive brand awareness within new candidate populations, while others are designed to directly drive application flow for open positions.

OUTCOMES: Additional data will be available as we continue to refine candidate quality metrics. Initial outcomes include:

- 65% of Siemens job posts globally score above 90% on overall posting quality.
- The average Siemens job posting scores 55 on a scale of 100 (male to female) for gender neutrality.
- Job postings that include video outperform regular job postings by up to 45% (click to apply rate).
- Recruitment marketing campaigns are driving more brand awareness and attraction among digital candidate populations.

TITLE: Future Ready

CASE STUDY: AT&T

AREA: Promotion or Employee Advancement and Training

BRIEF BACKGROUND: AT&T's leaders recognized the need for a workforce with digital and software skills that could keep pace with evolving technology.

MODERNPRACTICE CATEGORY: Use of Artificial Intelligence in recruitment, hiring and/or training

INITIATIVE: AT&T seeks to instill a culture of continuous learning. In 2019 alone, AT&T invested about \$176 million on internal training programs and over \$24 million on tuition assistance.

AT&T provides employees with numerous ways to manage their own reskilling. In addition to customized inhouse training, the AT&T skilling program also includes:

- Nanodegrees: Introduced in partnership with Udacity, these self-paced credentialing courses allow
 participants inside and outside AT&T to gain skills in areas such as machine learning and data analytics. In
 2020, AT&T added 7 new nanodegree and now offers 33 nanodegrees in areas as data science, artificial
 intelligence, programming, machine learning and business.
- Online master's degree programs: In 2014, AT&T collaborated with Georgia Tech and Udacity. to create the
 first-ever Online Master of Science in Computer Science degree program. Today, AT&T has partnerships
 with seven universities across 12 online degree programs that allow employees to pursue STEM degrees,
 at a fraction of the cost. Recently, AT&T partnered with the University of Texas at El Paso a Hispanic serving
 institution for a master's program in systems engineering, and Hampton University a historically black
 university for a master's program in cybersecurity.

OUTCOMES: AT&T's ongoing reskilling efforts contributed to career growth opportunities for employees across the company.

- In the last year, 90% of managers engaged in a form of skills transformation training, completing about 2 million hours of training.
- In 2019, managers who had a mid-to-high level participation in reskilling efforts were nearly twice as likely to be promoted—and over twice as likely to be chosen for a new role.
- The percent of internally filled technical jobs increased by 16% in the last 3 years, with over 2,000 technical positions filled by existing employees in 2019.
- Since 2015, AT&T employees have earned more than 5,600 nanodegrees, and more than 700 AT&T employees are currently enrolled in these nanodegree courses.

TITLE: North America Apprenticeship Program

CASE STUDY: Accenture

AREA: Hiring

BRIEF BACKGROUND:

 "Werecognize the important role professional apprenticeships can play in closing the skills gap in the U.S., providing underserved groups greater access to innovation economy jobs and helping reskill workers whose jobs have been, or will be, disrupted by technology."

- (https://www.accenture.com/us-en/about/company/apprenticeships) To us, the "future of work" is now, and it looks bright because of apprenticeships. The programs can help diversify entire industries, build a more inclusive workforce and create pathways to employment for underserved communities. But the skills gap is a national problem, and closing it will require nothing less than a national movement—one that can only be led by the private sector. Our aim is to enlist more companies to join us in closing the skills and training gaps, which is why we last year unveiled an apprenticeship-playbook to help companies jump-start their own programs, whether these programs follow the traditional Department of Labor registered apprenticeship model, or represent companies seeking to forge their own path.
- By rallying employers to invest in apprenticeships, we can unleash the untapped potential of millions. We can better equip our businesses to compete in an age of dynamic change. And we can prepare the United States' workforce for well-paying jobs that power today's economy and tomorrow's.
 (https://www.washingtonpost.com/opinions/2019/01/24/we-have-once-in-a-generation-opportunity-fix-our-labor-market/?noredirect=on)
- Accenture's basic model for apprenticeship programs, which was initiated by Julie Sweet in 2016 while she was North America CEO, "can be adapted not only for IT jobs but for a range of other roles that all big companies need to fill," she says. Besides cybersecurity, data analytics, and software engineering, Accenture is now training apprentices in other areas like HR, finance, and marketing. Sweet sees apprenticeships as having the potential to solve two problems at once. First, and most obvious, the training helps narrow the skills gaps that make it tough for employers to fill jobs. Beyond that, though, is a much broader and thornier social issue (not to mention a political hot button) often referred to as the Digital Divide: technology has split the economy in two, with most "knowledge workers" thriving —and getting more affluent—while the less educated fall further and further behind. "There are whole segments of the population being left out of the digital economy," notes Sweet. "So there is a pressing need for more inclusiveness." To address that, Accenture's apprenticeship recruiters focus on finding bright people from diverse

backgrounds who want to cross the Digital Divide but can't necessarily afford a four-year degree.

• (https://fortune.com/2019/09/03/can-apprenticeships-help-close-u-s-skills-gaps/)

MODERNPRACTICE CATEGORY: Recruitment of underutilized populations (e.g., veterans, individuals with disabilities, older individuals

INITIATIVE:

- North America Apprenticeship Program: This is an earn-and-learn employment model in which we focus on hiring individuals from alternative sources, such as community colleges or technology bootcamps. This provides us access to more diverse populations often coming from underserved communities or individuals who are looking to re-skill without having to attain a four-year degree. We utilize a mix of formal classroom curriculums, shadow time and the on the job training with the intention to develop a skillset that helps us fulfill our real business demand.
- <u>Shaping the Future of Work</u>: Intelligent technologies—including Analytics, Big Data, Cognitive Artificial Intelligence (AI) and Robotics—are reshaping the future of work, fueling demand for digitally resilient skills and skills development activities that involve social/emotional or high-order cognitive skills. In 2018, Accenture released the <u>Inclusive</u>
- <u>FutureofWork:ACalltoActionreport</u>outlining a framework for addressing this issue, and inviting interested parties to partner in developing solutions. In addition to continuing our US commitments around impact hiring, apprenticeships, skills-to-succeed internsandentry-level hiring, our response includes facilitating place-based "call to
- action" design workshops that invites local community leaders and businesses to solve for the unique challenges and job requirements in a particular city. To date we have conducted IFOW workshops in St. Louis, Atlanta, Tampa, Charlotte, and Washington DC.
- CareerWise/Here 2 Here: is a New York-based apprentice program which provides high school students a pathway to develop skills essential for a professional career while they work towards their high school diploma. The apprenticeships starts with students in their junior year working 2-3 days a week and participating in high school classes and activities the rest of the week. The program lasts 3 years, with the work schedule increasing in each subsequent year and portions of the work activity counting towards a high school diploma. Accenture is initially targeting students from the Bronx area focused on roles in areas such as HR, recruiting, marketing and research. Our high school apprentices are provided hands on experience, practical training, coaching and professional development to prepare them for the workplace. Accenture is one of several companies in New York that participate in the program.

OUTCOMES:

- We have hired over 450 apprentices within North America and continue to expand our program.
- Our program is currently operating in 20 cities across North America and we are looking to add more cities to the list this year.
- We are leveraging our success to get other companies to buy into the Apprenticeship program by convening likeminded leaders. The notable example is the Chicago Apprentice Network, a program Accenture launched with Aon in 2017, and today consists of more than 40 companies, including Zurich Insurance, Walgreens, and McDonalds. The Network has more than 630 committed apprenticeship roles to date, with the goal of producing 1,000 apprenticeship opportunities by the end of 2020.

TITLE: Growing and Promoting Talent Within

CASE STUDY: Society for Human Resource Management

AREA: Promotion or Employee Advancement

BRIEF BACKGROUND: The country is facing a growing skills gap that has become a major concern for many organizations. The workforce simply does not have enough skilled candidates to fill an ever-increasing number of high skilled jobs. Business and HR leaders view the skills shortage as a top concern that needs to be addressed. In fact, according to the SHRM Skills Gap 2019

publication, "Among HR professionals, 75% of those having recruiting difficulty say there is a shortage of skills in candidates for job openings."

SHRM has invested in promoting and growing talent within the organization to tackle this workforce issue of closing the skills gap. In fact, in 2019 SHRM filled 29% of its job openings internally by promoting employees or giving them an opportunity to try something different. SHRM is taking a strategic approach to building talent and encouraging employees to be innovative by acquiring new skills and training.

MODERN PRACTICE CATEGORY: closing the skills gap and growing employees' skills

INITIATIVE: SHRM is taking a creative approach to building talent internally and allowing employees to try new positions within SHRM (that are outside of the core area of experience for the employee), offering them an opportunity to diversify their experience and acquire new skills in their roles. SHRM is encouraging hiring managers to think differently and consider ways of better aligning employees' competencies and interests to new roles within the organization. These movements have occurred both through employees taking the initiative to pursue new opportunities as well as ideas that are surfaced through executive discussions on talent management. A few examples of employees who have been impacted by this are:

- Field Services Director in Membership Marketing transitioned to a Sr Specialist,
- Learning & Development position within HR
- Manager of Visitor Exchange Programs, from Global Development, transitioned to Manager, Employee Experience in HR
- Field Services Director in Membership Marketing transitioned to Director of Customer Experience
- An Associate Specialist from IT transitioned to a Senior Administrator role in eLearning Systems with Global Development
- Manager, Knowledge Center transitioned to Manager, Certification Engagement

- So far, this initiative has been extremely successful. More than 90% of the employees who transferred, succeeded in their new roles and gained new experiences, skills and training.
- Additionally, this initiative will encourage people managers to incorporate the theme into their developmental conversations with their staff.
- This initiative has also had a positive impact on employee morale as employees are excited and motivated to try something different and challenging. This initiative not only helps close the skills gap for the organization, but also has a positive and long-term impact on the employees' ability to take on new challenges and become more marketable in the economy.

TITLE: Skills First: Making the Shift to Competency-Based Hiring

CASE STUDY: IBM

AREA: Recruitment, Hiring, Promotion or Employee Advancement, Training

BRIEF BACKGROUND: IBM believes that companies bringing advanced technologies to market have a responsibility to prepare students and workers for the way those technologies will shape jobs and the nature of our work. Innovation should unlock opportunities to make our workforce more inclusive, not less. New collar hiring is one way that IBM unlocks opportunities.

MODERN PRACTICE CATEGORY: Recruitment of underutilized populations

INITIATIVE: New collar jobs are careers in technology's fastest-growing areas, like cloud, Al and software. These aren't "blue collar" or "white collar" jobs, they're "new collar" roles that prioritize skills and capabilities over traditional Bachelor's degrees. What matters most in these roles is having the right mix of skills and a commitment to lifelong learning.

IBM is committed to a skills first approach to hiring, and we are consistently evaluating and revising our job postings to eliminate degree requirements where possible and instead focus on core requirements.

Our new collar recruitment has additional urgency due to the current skills shortage in the United States. Employers have jobs to fill and a problem filling those jobs. There are more than 7 million open jobs in the U.S. right now and around 6 million unemployed - yet, like other employers, IBM cannot find enough candidates with the right mix of skills to fill our jobs if we limit our recruitment to candidates with a Bachelor's degree.

Almost two-thirds of the adult workforce do not have a Bachelor's degree, and those with degrees are unequally distributed by location, race, and income. And since the half-life of a skill is less than five years, many of the degree holders need additional short-term education and certificates to gain the skills needed for today's marketplace.

By focusing on our new collar principles and a skills first approach to recruiting and hiring, we want to shift mindsets in our industry, close the skill gap, and make the tech industry more inclusive.

This is how we do it:

Widen the Aperture: Let's rethink how we design job requirements by asking ourselves, should a degree be a mandatory requirement for this position? In many cases, the answer is no. At some of IBM's U.S. facilities, as many as one-third of our employees have less than a four-year college degree. New collar candidates without a four-year degree account for more than 15% of all IBM new hires in the U.S.

Skills First is also about creating a more diverse workforce by expanding pathways to careers outside of the tech hubson the coasts. IBM is training and hiring new collar IBMers in places like West Virginia, Louisiana, Missouri, and Iowa.

Shift recruitment to learning agility as a core requirement: We want to attract and retain employees who will update their technical and professional skills throughout their career. By focusing on learning agility, we can attract and provide career pathways for people with from more starting points—including those without degrees, reentering the workforce, or those from geographies and populations that have been underserved in the past.

Skills First helps create a culture of lifelong learning. At IBM, for example, we provide ongoing education like digital badging and online courses, and IBMers in the U.S. complete an average of 59 hours a year in skills training.

Create New Collar pathways: Creating additional pathways to careers means expanding public/private partnerships that scale – involving federal and state governments, public school systems, community colleges and private business, across multiple industries.

IBM has already invested hundreds of millions of dollars in programs to help train and prepare the global workforce for a new era of technology, including:

- The P-TECH school model—a six-year program that offers a high school diploma and an Associate's degree, along with real-world work experience and mentorship—all at no cost to students. P-TECH will be in 220 schools across 24 countries this year.
- Our 21st century apprenticeship program, which provides on-the-job training in areas from blockchain to
 cybersecurity and mainframes. These apprenticeships are expanding opportunities for people with nontraditional backgrounds to build the skills they need to work intoday's tech industry, all while being paid
 and avoid incurring student debt
- Returnships for women re-entering the workforce, veterans training programs and volunteer skills-building sessions for more than 3.2 million students worldwide.

OUTCOMES: IBM wants to attract the world's best and brightest. New collar and skills first is about diversifying the industry. We're not devaluing degrees or education — IBM employs more mathematicians than any other private entity on the planet — but with new collar, we're simply expanding access to great career opportunities, among underserved communities and those who don't have access to traditional education pathways. 15% of our workforce are New Collar workers including 500 apprentices in the USA. If you have the right skills, there's a job for you at IBM.

TITLE: Trust and Transparency in the Use of Alfor Recruitment and Hiring

CASESTUDY: IBM

AREA: Recruitment, Hiring, Promotion or Employee Advancement, Training

BRIEF BACKGROUND: Artificial intelligence systems are increasingly being used to support human decision-making in recruitment and hiring. While AI holds the promise of increasing efficiency and fairness, broad adoption will rely heavily on trust and transparency.

We must build AI systems for recruitment and hiring that promote trust and understanding of how they work among users, avoid bias from data sources or operation, and ensure inclusion and equity in their assessments, recommendations and outcomes.

MODERN PRACTICE CATEGORY:

- 1. Use of Artificial Intelligence in recruitment, hiring and/or training
- 2. Recruitment of underutilized populations
- 3. Use of data to improve job matching

INITIATIVE:

Human trust in AI will be based on our understanding of how the technology works and our assessment of its fairness and reliability.

The purpose of Al is to augment the capabilities of existing recruitment and hiring professionals to find the right talent from diverse sources.

Recruitment and hiring systems with AI can:

- augment efforts to identify and attract diverse talent,
- reduce bias and improve consistency in all steps of the recruitment process,
- make faster, more predictive data-informed decisions to move forward and engage the best candidates in the hiring process

Moving forward, "build for performance" will not suffice as an Al design paradigm. We must learn how to build, evaluate, and monitor for trust throughout the entire life cycle of an Al application. We need to understand the rationale behind the algorithmic assessment, recommendation, or outcome, and be able to interact with it, probe it – even ask questions. Companies advancing the use of Al in HR systems have an obligation to address potential bias proactively, continually testing systems and finding new data sets to better align their output with human values and expectations.

Companies must be clear about how they train their Al systems, what data was used in that training, and what went into their algorithm's recommendations. If we are to use Al to help make important employment decisions, it must be explainable and trustworthy.

OUTCOMES: IBM's new services, Al tools and related training initiatives take learnings from methods and technologies that IBM has applied to drive its own workforce transformation. These services harness the power of Al personalization to guide employees in developing skills and pursuing opportunities to grow within the company. They also allow HR teams to measure flight risk for proactive retention and use bias reduction capabilities to flag bias in recruitment efforts, such as language in job descriptions. When applied to IBM's own HR function, these services drove more than \$300 million in benefits to the company, \$107 million in benefits in 2017 alone, and resulted in significantly better candidate, employee and manager satisfaction.

IBM has already partnered with clients to successfully complete more than 1,000 HR transformation projects globally. Through consulting engagements or by outsourcing talent acquisition, talent development or HR operations to IBM, organizations like Shire plc are reinventing their human capital strategies to drive business growth.

TITLE: KCTCS Workforce Solutions and Talent Pipeline Management

CASE STUDY: Kentucky Community and Technical College System

AREA: Recruitment and Training

BRIEF BACKGROUND: In partnership with state government, The Kentucky Chamber's Workforce Centerhas deployed Talent Pipeline Management (TPM), ademand-driven approach created by the U.S. Chamber of Commerce Foundation, to close the workforce gaps for Kentucky business and industry. Using supply chain management principles, businesses workthrough the Kentucky Chamber-Workforce Center to utilize the TPM tool to better project their talent needs and align those needs with the education and workforce development systems. Kentucky's experience to date shows the tool can play a powerful role in business growth and education and workforce system effectiveness. https://www.uschamberfoundation.org/talent-pipeline-management.

Once employers reach a specific point within the TPM process, workforce training providers have an opportunity to build, adjust or scale existing programs to meet those demands. Currently, TPM has established TPM collaboratives around the state, meeting with employers, collecting data on the talent needs, and then involving educators in ensuring talent into the pipeline. The Workforce Solutions departments of the 16 Colleges of The Kentucky Community and Technical College System (KCTCS) participate in the TPM Process as education providers and partners, helpingensure business and industry meet employee needs and students/graduates attain gainful employment.

MODERN PRACTICE CATEGORY: Leveraging education, training, and relationships of local comprehensive community college, workforce development partners, and employers.

INITIATIVE:

- As Collaboratives of employers establish specific employment needs and required competencies (for example, registered nurse numbers in a region and soft skills/nursing competencies), preferred education providers are then determined. The local KCTCS College is a preferred provider.
- The College participates in Collaborative meetings with employers and KY Chamber facilitators to identify barriers to student (potential employee) recruitment, retention and success barriers.
- Often, adequate individuals are entering the pipeline, but are not retained to employment. This is where employer engagement is most important, as their participation increases student success.

Working together, the employers and educators develop strategies to meet the talent pipeline need.

- Employers identify and meet workforce needs by participating in the development and selection of employees for incumbent worker training or building new programs for recruiting and retaining new employee.
- Education providers receive real-time information on desired competencies, qualifications, and credentials of desired graduates/credential-earners.
- The process increases communication and data-sharing between employers and educators, and, led by a credible third-party, increases collaborations, partnerships, and support for the educational institutions.
- Between January 2019 to January of 2020, 25 employer collaboratives have been created—engaging hundreds of employers focused on building talent pipelines for over 10,000 critical positions.

TITLE: Job/Candidate Profile Matching of BGC CEO Hiring

CASE STUDY: Boys & Girls Clubs of America

AREA: Recruitment to Hiring to Training

BRIEF BACKGROUND:

The need for strong, vibrant Boys & Girls Clubs is greater than ever before, and we recognize that the most critical barometer of how we will achieve our goals is talent. The current, increasingly complex landscape, has magnified the skillsets needed in our future CEOs and recruiting, hiring and developing transformational leaders, who will fulfill our mission of enabling all young people, especially those who need us most, to reach their full potential is critical to our collective success.

CEO turnover is constraining the ability of the collective movement to drive impact and sustained growth. At present, the average turnover for Local Club CEOs is approximately 10%, and over the next five years, BCCA expects 20% of current CEOs to retire; these leaders generally stay in the CEO role for 7 years. The natural candidate profile a volunteer Board considers for a CEO role is likely from another local youth-serving nonprofit. However, this small pool of non-profit candidates does not always contain the transformational leader that we are seeking.

Analysis from McKinsey & Company in 2014 showed during a CEO transition, an organization experienced on average aloss of 12% in key mission metrics over the first 3 years after a new hire, 9% of that loss occurring in Year 1. Therefore hiring the very best leader is critical to minimizing these losses. Once hired, new CEOs participate in an intensive 18-month Onboarding and New Executive Orientation to ensure they maintain organization performance during transitions and build immediate and sustainable platforms for growth.

Local Boards have repeatedly and consistently asked the National Office to look at data regarding new CEO hires, especially their professional background, correlated with subsequent organizational performance after the 18-month Program. The underlying assumption was that our Onboarding Program would support the idea that a transformational hire, from any industry, could be successful leading a Boys & Girls Club. For the purpose of matching the job with candidate backgrounds and examining the effectiveness of a private sector transformational leader, we used three main categories of primary work experience: Boys & Girls Clubs; another nonprofit; private or corporate sector.

MODERN PRACTICE CATEGORY: Use of Data to Improve Job Matching

INITIATIVE:

- 100 CEOs hired on average in 2011-2015 we identified their category of experience with the objective to validate our belief that recruiting, hiring and onboarding private sector leaders, from any industry, could lead to success in transforming a Local Boys & Girls Club.
- After identifying the candidate profiles, we evaluated their organizational performance for the 18 months following the onboarding process.
- We then mapped the correlation/data and utilized to build a candidate profile to be used as part of the recruiting process.

- Our data is consistent: the amount of people hired annually from our three main classifications over the last eight years stayed the same – approximately 20% of all new Boys & Girls Club CEOs come from private sector
- Organizational performance, after two years in role, proves that recruiting and hiring a transformational CEO will lead to a higher likelihood of success, further supported by the Onboarding Training Program. Looking at CEO hires over 5 years showed that 23% of traditional nonprofit hires and 37% of private sector hires, respectively, led their organization toward transformational growth within two years of hire; with Transformational Growth being defined as increases of 20% or more in key performance indicators like revenue and youth served. Comparing these two groups, we have found that the private sector leaders hired were 60% more likely to bring transformational growth to a Local Boys & Girls Club. Experiences in leading transformations, in complex organizations, is a key "experience" we seek in all CEO candidates.
- Using data to match our CEO jobs to candidate profiles has proven to be very valuable to our Local Boards and Search Committees as they go through the visioning process, identifying the core competencies most needed in their next CEO hire.

TITLE: General Electric Upskilling

CASE STUDY: Udacity

AREA: Training

BRIEF BACKGROUND:

GE works to harness the capability of big data and analytics, and has software embedded in its products. The company wanted to leverage creating software to enable them to be more productive and allow their customers to be more predictive. GE looked for a partner to train their employees that was not only creative and cutting edge, but thoughtful and knowledgeable about how employees learn. GE decided to partner with Udacity to upskill their workforce with Udacity Training Programs.

MODERN PRACTICE CATEGORY: Upskilling

INITIATIVE:

- GE is training hundreds of employees across departments and throughout regions with Udacity's Nanodegrees.¹
- GE saw that Udacity offers a wide scale offers courses with contemporary and relevant topics taught by thought leaders. These courses are structured to be conducive for employee learning. Udacity allows GE employees to pursue a series of courses, progress their learning, and build a portfolio they can share with managers.

- GE's management is seeing terrific results as employees leverage the latest platforms to launch new products in industrial data and applications with faster time to market. ²
- The training programs allow employees to leverage everything offered to gain variety of skills without going to a lot of sources.
- Employees are able to reskill where they want to and upskill where they need to.

¹http://businessblog.udacity.com/wp-content/uploads/2016/12/Udacity_Case_study_GE-.pdf

²http://businessblog.udacity.com/wp-content/uploads/2016/12/Udacity_Case_study_GE-.pdf

TITLE: Job Data Exchange™ (JDX)

CASE STUDY: U.S. Chamber of Commerce Foundation

AREA: Hiring

BRIEFBACKGROUND:

The <u>Job Data Exchange (JDX)</u> developed a data standard for job descriptions and postings, supported by open data tools, to improve how quickly and clearly employers communicate in- demand jobs, skills, credentials, and other hiring requirements to education partners, learners, and job seekers.

MODERN PRACTICE CATEGORY: Modernizing job postings

INITIATIVE: The JDX phase one pilot started in October 2018 and ended in December 2019. At the end of the JDX pilot, seven pilot partner teams were created across eight states that involved 13 employers and 12 talent sourcing providers (e.g. educational institutions, training providers, and staffing organizations). The complete list of JDX pilot partners can be found here.

The goal of phase one was developed and achieved through five strategies.

- 1) Engage stakeholders about the JDX phase one goal and onboard employers interested in participating in the JDX phase one initiative.
- 2) Develop a job data standard (JDX JobSchema+) to support more structured job descriptions and postings for improved search and discovery on the web.
- 3) Co-design open data tools and resources that improve utilization of the job data standard for the purposes of generating skill-based job descriptions and postings.
- 4) Pilot-test the JDX prototype for the viability of incorporating a job data standard into employer hiring practices using open data tools and resources.
- 5) Employers and talents souring providers evaluate the JDX phase one initiative on its ability to improve the way employers communicate hiring requirements by comparing an original job description to a JDX-generated job description.

OUTCOMES: The top-level findings from the JDX evaluation are below.

- 70% of employers and 75% of talent sourcing providers—that participated in the JDX pilot—were optimistic about the ability for employers to better signal needs and preferences via job descriptions and postings.
- On average, employers rated the JDX-generated job descriptions 3.4 out of 5 stars on meeting their expectations whereas talent sourcing providers rated the JDX-generated job descriptions 4.2 out of 5 stars regarding how well the description signals in-demand skills and hiring requirements.

- 62% of employers believe they will use the JDX-generated job description in the future, but only 15% of employers said they understood the job data standard (JDX JobSchema+) well enough to use it in their hiring practices.
- Below are three recommendations—based on the JDX pilot and evaluation—to improve talent marketplace signaling.
 - Highlight the importance of using and implementing a job data standard (JDX JobSchema+) in employer hiring practices.
 - o Expand the information and resources that employers, hiring managers, and talent recruiters use in developing job descriptions and postings.
 - o Continue to improve education and workforce partnerships

An executive summary of the JDX pilot and evaluation can be found at this link.

TITLE: T3 Innovation Network

CASE STUDY: U.S. Chamber of Commerce Foundation

AREA: Training

BRIEF BACKGROUND: Through the T3 Innovation Network™, more than 400 organizations across the talent marketplace are working together to build an open, public-private data and technology infrastructure for a more equitable future. Through eight signature projects, this network is exploring emerging technologies and data standards to better align education, workforce, and credentialing data with the needs of the new economy.

MODERNPRACTICE CATEGORY: Use of Artificial Intelligence in recruitment, hiring and/or training

INITIATIVE: The T3 Innovation Network is working with more than 400 public and private <u>stakeholders</u> representing business, government, education, and technology to implement eight public-private data and technology infrastructure projects. Phase two of the T3 Innovation Network is ongoing with the development and implementation of the eight projects, which began in January 2019 and will end in December 2020. Below is a short summary of the eight projects split into three categories.

Open Data Standards—building the foundation to seamlessly share data across stakeholder systems.

- Map and Harmonize Data Standards Develop methods and tools for mapping and harmonizing existing data standards for improving interoperability and search and discovery on the web.
- Employment and Earnings Record Standards Develop public-private standards for employment and earnings records to improve data quality and utilization and reduce reporting costs.
- Comprehensive Learner/Worker/Military Record Standards Align and pilot test the use of data standards to enable individuals to better manage and use competencies documented in their records to pursue career and educational opportunities.
- Public-Private Adoption of Open Data Standards Improve public and private collaboration in the development and use of data standards.

Competency-Based Learning and Hiring—using all available competency data to make all learning count.

- Competency Data Collaborative Develop an open-source infrastructure that can be used to better connect and link machine-actionable data from competency frameworks and repositories.
- Competency Translation & Analysis Analyze, compare, and translate competencies within and across industries using artificial intelligence and machine learning.

Empowering Learners and Workers—ensuring data access and privacy for all individuals.

- Data Collaboratives for Individual-Level Data Promote best practices for managing public and private data, allowing for increased access while ensuring privacy and security.
- Management and Use of Individual-Level Data Records Develop open, self-sovereign protocols and data management guidance for learner, worker, and military records.

OUTCOMES: The T3 Innovation Network is in the second and final year of developing and implementing the eight projects listed above. The T3 Network does not have final outcomes of this work to share with the Modernizing Candidate Recruitment and Training Practices Working Group, but we expect to have information to share with the working group by the end of 2020 and wanted to make you aware of this work in the meantime. Additionally, the T3 Innovation Network announced—in November 2019—plans to support a diverse ecosystem of Interoperable Learning Record (ILR) pilots by the end of 2020 which builds on the existing data infrastructure work already underway by our T3 Network partners and provides a unique opportunity to coordinate and apply the eight projects in a concrete way to support ILRs. The T3 Network's announcement was in coordination with the American Workforce Policy Advisory Board's (AWPAB) Data Transparency Working Group's call to action and white paper on ILRs. Thus, we plan to share outcomes and findings from the ILR pilots with both AWPAB work groups at the end of 2020—along with the eight T3 Network projects.

TITLE: Talent Pipeline Management

CASE STUDY: U.S. Chamber of Commerce Foundation

AREA: Hiring

BRIEFBACKGROUND: <u>Talent Pipeline Management</u>® (TPM) is a demand-driven, employer-led approach to close the skills gap that builds talent supply chains aligned to dynamic business needs. The demands of today's economy require a strategic alignment between classroom and career. Through this six-strategy approach, employers play an expanded leadership role as "end-customers" of our education and training systems. The inperson <u>TPM Academy</u>® uses a custom curriculum to train workforce and economic development leaders on this approach and how to successfully implement it at the local level. TPM® is a workforce strategy for our time that can meet the needs of an ever-changing business environment.

MODERN PRACTICE CATEGORY: Increasing employer engagement for better career pathways

INITIATIVE:

- TPM demystifies what is needed for employers' most critical jobs. By leveraging employer data, TPM changes employer behavior and talent sourcing practices such that education and workforce partners get the information they need to better align their services resulting in more effective pathways for learners.
- TPM provides the framework and sequence to address internal and external talent challenges, encompassing all employees from entry-level workers to senior-level positions.
- The TPM methodology is taught through an in-person training program, the TPM Academy®. The Academy serves as a train-the-trainer model so participants can bring their learnings back to their community so that it as a whole benefit from TPM implementation.
- Starting with seven pilot partners in 2015, the TPM movement is now entering its 13th Academy cohort and includes thousands of employers across 33 states, D.C., and Canada with increasing statewide adoption and a growing network of over 300 TPM practitioners.

- <u>Vermont</u>: Having identified an addition of 5,500 jobs not previously forecasted, employers across the state are engaged in solutions-building like creating career ladder visuals for key industry sectors, marketing careers in skilled trades, and identifying realistic upskilling opportunities that can work for full-time workers.
- <u>UpSkill Houston (Texas)</u>: Employers created collaboratives to unify their voice and identify the most critical jobs. There is a 32% increase in enrollment in related courses and 42% increase in completion rates for related degrees and technical programs. Solutions include a Women in Construction program to become pipefitter helpers. With a graduation rate of 80%, all of these women are still in the industry today.
- Northern Kentucky: Gateway Community and Technical College's enhanced operator (EO) program is
 the story of a traditional manufacturing program that was transformed and modernized to meet people
 where they are and started as part of the original TPM pilotin 2015. They transformed a program from 1 year
 to 14 weeks, decreasing the price from \$5000 to \$2588, and expanded their talent pipeline for learners now
 able to take the classes needed to gain access to good jobs or upskill in their industry.
- Consumer's Energy (Michigan): Working in collaboration with the Michigan Energy Workforce Development Consortium, Consumer's identified electric line workers as a critical job and revitalized two community college partnerships and developed a new partnership to better align curriculum and work-based learning experiences. As a result of leveraging the TPM framework, they have filled more than 300 jobs and eliminated Level 0 on-the-job training, resulting in a savings of \$30,000 per hire.

TITLE: The Right Signals

CASE STUDY: American Association of Community Colleges

AREA: Hiring

BRIEF BACKGROUND: The purpose of The Right Signals Initiative was to demonstrate a new credentialing model that recognizes multiple quality credentials to send "the right signals" to employers, students, and colleges about the meaning of these credentials. Key credentials targeted were degrees, certificates, industry certifications, apprenticeships, and badges. This work was supported by a grant from Lumina Foundation as part of its commitment to creating a student-centered, learning-based credentialing system in the U.S. that is characterized by key attributes such as common language, transparency, portability, and trust in credentials. Twenty community colleges from across the country worked to identify and develop models for recognizable credentialing to serve students, colleges and employers nationally. To facilitate the work, participating colleges used a tool called the beta Credentials Framework. The Framework uses competencies – what the learner knows and is able to do – as common reference points to help understand and compare levels of knowledge, skills and abilities that underlie degrees, certificates, industry certifications, licenses, apprenticeships, badges and other credentials. The Framework is intended to connect the dots among diverse credentials by helping to clarify the learning behind credentials, making them easier to compare, and making it possible to translate the learning gained from one credential toward securing another.

MODERN PRACTICE CATEGORY: Modernizing job postings and Recruitment of underutilized populations (e.g., veterans, individuals with disabilities, older individuals)

INITIATIVE: The 20 colleges selected to be part of the Right Signals Initiative were given a basic charge – connect at least one nontraditional credential with traditional degrees and certificates – and wide latitude of how to proceed. Colleges made diverse choices about what credentials, subject matter, industry, and approach to connections would be meaningful in their context. This approach reflected an understanding that participating schools were already doing work with new credentials and had activity in progress to build upon. A key lesson from that diversity is that colleges are ending up finding ways the beta Credentials Framework is helpful in analyzing and solving many different challenges. The work of connecting credentials requires bringing stakeholders of the credentials – both academic and business – to be aligned into a dialogue. Those rich discussions are proving to create a "safety zone" in which the process of comparing the assumptions and linkages among the credentials prompts stakeholders to consider learning as it is occurring in many contexts and reflected as competency statements they can reference in the beta Credentials Framework. Thus, they can make comparisons about similar competencies or distinct competencies associated with each credential and align curriculum as needed.

On campuses, conversations about theory, strategy and technical application of the beta Credentials Framework fostered a discussion of - or caused - a number of systems changes on campuses. One facet of the tool, therefore, is the impact its eems to have for spawning larger, and often unexpected, discussions that impact the entire institution or system of institutions. On many of the campuses visited, discussions at a system level were related to the review and validation of existing programs and curriculum, as well as the process through which new programs and curriculum are built. This is not to say that conversation about curriculum and program review and development were not already occurring; rather, the beta Credentials Framework served as a tool with which to improve previous college efforts. Critical to using the tool is the competency statement itself. That statement or group of statements under-pins all the work that follows. As a result, colleges have undertaken the fundamental work of developing clarity in using the framework to signal what students know and can do but are also seeking conciseness and measurability in the underlying competency statements. Colleges are most successful in this enterprise when they cast a broad net in assembling the workgroups, including faculty, staff, curriculum developers, and administrators.

OUTCOMES: The beta Credentials Framework proved to be an effective and useful tool in a variety of settings and applications. The 20 colleges engaged in the work have demonstrated a willingness and appetite for making the kinds of changes within their processes that hold real promise in building the supports necessary to ensure that students, employers and industry, and colleges themselves are subject to signaling that is clear and coherent. This, in turn, provides clear economic and workforce development benefits across the community, supports equity and access, and helps more students earn the credentials necessary to obtain and hold family-sustaining wage jobs.

The Right Signals has further demonstrated that executive engagement is an important component of success, and that employer engagement beginning at the level of competency validation and upwards across the enterprise is critically important. Likewise, The Right Signals proved to be an easy and desirable "fit" in integration with other campus initiatives like Guided Pathways, Prior Learning Assessment, and work-based learning, and indeed helped to support and grow those initiatives.

TITLE: Apprenticeship Readiness Programs (ARPs)

CASE STUDY: North America's Building Trades Unions (NABTU)

AREA: Recruitment and Training

BRIEF BACKGROUND: North America's Building Trades Unions (NABTU) sponsors comprehensive apprenticeship readiness programs (ARPs) throughout the U.S. These programs provide a gateway for local residents – focusing on women, people of color, and transitioning veterans – to gain access to Building Trades' registered apprenticeship programs. ARPs are administered by

state and local Building Trades Councils and they teach NABTU's nationally recognized Multi- Craft Core Curriculum (MC3). The goals of our MC3 program are three-fold: Increase the number of candidates for registered apprenticeships across all trades; to increase the diversity of registered apprenticeship candidates by recruiting women, communities of color and veterans; and to increase the retention rate among apprentices by providing them with a deeper understanding of both the industry and the role of trade unions in construction.

MODERN PRACTICE CATEGORY: Apprenticeship programs

INITIATIVE: One of our strategies to achieve these goals is to bring construction trades classes back to the schools. Certified by a number of State Education Departments, NABTU's MC3 is bringing true construction education back into high schools. NABTU knows the importance of introducing, connecting and engaging young people early to harness a lifetime dedication to our trades. The MC3 introduces students to the different building trades and teaches them the skills necessary to successfully apply for a registered apprenticeship, debt-free education.

Most importantly, the MC3 connects two high-quality education systems: America's secondary schools and the Building Trades registered apprenticeship programs. When students take the MC3 they are engaged with industry and labor leaders through state-of-the-art curriculum.

The MC3 a standardized, comprehensive, 120-hour construction course designed to help young people and transitioning adults choose and succeed in apprenticeship programs that are appropriate for them. The MC3 curriculum is taught face-to-face, but it is delivered via NABTU's Online Learning Management System.

MC3 CURRICULUM CHAPTERS:

- Construction Industry and Trades Orientation
- Tools and Materials
- Construction Health and Safety (including OSHA 10 and CPR)
- Blueprint Reading
- Basic Math for Construction

- Heritage of the American Worker
- Diversity in the Construction Industry
- Green Construction
- Financial Literacy

Beyond the MC3, NABTU engages candidates interested in registered apprenticeship via our website. Two unique features allow potential candidates for registered apprenticeship to search for training centers in their area and sign up directly on our website. Through our <u>interactive map (scroll down)</u>, potential candidates can find all NABTU affiliate training centers in their area and connect with the affiliates whose trade they are most interested. If potential registered apprenticeship candidates are interested in several crafts, they can complete the Apprenticeship Sign Up form on our website.

Candidates outline their interests, qualifications and skills and we directly connect them with the trade contact. This tool allows for local affiliates to analyze potential candidates and reach out to those best qualified for registered apprenticeship.

OUTCOMES: Part of our outreach approach recognizes the different channels younger Millennials and Generation Z access information. We include multiple videos on our website to *show* potential candidates what working in the trades looks like. Our <u>most powerful video</u> released in 2019 was produced in conjunction with Alabama Power. Not only does this video encapsulate what the MC3 can do for participants, but what the MC3 is designed to do for communities. We share all of our content online via our Instagram, Facebook, and Twitter accounts, reaching Millennials and Generation Z via data driven personalization. For those still working on pencil and paper, we distribute thousands of <u>registered apprenticeship brochures</u> to recruiting events throughout the country. This year, we introduced our <u>brochure in Spanish</u>, to deepen our reach into the Hispanic community.

TITLE: FAME USA

CASE STUDY: The Manufacturing Institute and Kentucky Community and Technical College System

AREA: Recruitment

BRIEF BACKGROUND:

Originally founded by Toyota in partnership with the 16 Colleges of the Kentucky Community and Technical College System (KCTCS), KYFAME is an employer-led coalition to develop Advanced Manufacturing Technicians through a learn and earn program. The program targets recent high school graduates and individuals who wish to reenter the workplace or have recently transitioned out of the military.

The Federation for Advanced Manufacturing Education (FAME), is a network of manufacturers working collaboratively to train students of all ages and backgrounds in an apprenticeship-type program to gain careers in advanced manufacturing. Today FAME currently consists of over 400 companies, 31 chapters across 13 states and the national effort is now under the stewardship of The Manufacturing Institute.

MODERN PRACTICE CATEGORY: Modernizing job postings

INITIATIVE:

- The program began with Toyota Motor Manufacturing Kentucky in 2010 in partnership with Bluegrass Community and Technical College and has expanded to 11 chapters across the Commonwealth.
- Cohorts of students begin every August; some programs are large enough to also support a January start cohort.
- Employers hire new student employees or may use the program to upskill incumbent workers.
- While most often offered as an apprenticeship-like learn and earn program, some companies prefer to offer the program within a Registered Apprenticeship in partnership with their KCTCS College as apprenticeship sponsor
- From a national perspective, FAME manufacturers have realized that students must hear directly from the employers. Each company within a FAME chapter is responsible for recruiting students into the program. Each company sends a skilled team member, who can speak specifically to a manufacturing career, to talk directly to students about the FAME program and the career path that is available in manufacturing. FAME employers are intentional about going to classes that have diverse populations and inviting students into their facilities to see the realities of a manufacturing career. FAME employers have spent time intentionally finding classes or after school programs to target for recruiting that have larger populations of women and minorities in order to increase their involvement in the program. An employer speaking directly to the students, rather than only a school counselor or a community college representative, has been found to be instrumental in recruiting students in to manufacturing careers.

- The KY FAME Program involves over 160 employers and enrolls over 200 students each year. Students may earn over \$50,000 salary in their first year after graduation.
- Over 700 students are currently active in FAME USA across the country.
- There are more than 5 high school valedictorians who have entered a FAME program.
- Over 85% graduation rate for FAME apprentices.
- Over 85% placement rate for apprentices to their sponsoring company.
- Increased knowledge of best practices for recruiting women and minorities into manufacturing apprenticeship programs.

TITLE: Creators Wanted

CASE STUDY: National Association of Manufacturers

AREA: Recruitment

BRIEF BACKGROUND: Manufacturers in the United States need to fill 4.6 million jobs by 2028. More than half of those jobs could be left unfilled because of two issues: a skills gap and misperceptions about modern manufacturing. Creators Wanted was established in 2017 to begin addressing manufacturing's perception problem and workforce crisis. It worked. Over 15 million parents and future manufacturers have been reached so far and research reports high engagement among parents and students. The next phase of Creators Wanted is about rolling up our sleeves to build the workforce we need today and improve perceptions of manufacturing for tomorrow.

MODERN PRACTICE CATEGORY: Other: Campaign to change the perception of the manufacturing sector

INITIATIVE:

The Creators Wanted campaign was started to the change the perception of modern manufacturing and to address the 2.4 million jobs expected to go unfilled over the next decade in the manufacturing sector. The mobile and on the road experience will let students, parents, and potential workers experience modern manufacturing technologies first hand through innovative hands-on activities. The campaign aims to increase the positive perception of modern manufacturing among students and parents, increase the number of students enrolling in manufacturing apprenticeships and reskilling programs, increase the number of students enrolling in technical and vocational schools. These efforts will hopefully decrease the number of unfilled jobs in the manufacturing industry.

OUTCOMES:

Our impact by 2025:

- Increase the number of students enrolling in technical and vocational schools by 25%
- Increase the positive perception of modern manufacturing among students and parents
- Increase the number of students enrolling in manufacturing apprenticeships and reskilling programs by 25%
- Decrease the number of unfilled jobs in manufacturing by 600,000

TITLE: California Healthcare Workforce Training

CASE STUDY: Western Governors University (WGU) and Service Employees International Union- United Healthcare Workers West (SEIU-UHW)

AREA: Training

BRIEF BACKGROUND:

The state of California projects a shortfall of almost a half-million licensed or credentialed healthcare professionals over the next 10 years. The traditional higher education system in the state lacks the capacity to meet the need. Service Employees International Union-United Healthcare Workers West (SEIU-UHW), a statewide union of 100,000 healthcare workers saw in this gap the opportunity not only to better serve patients, but to connect individuals with well-paying, family-sustaining jobs, including medical coders, medical assistants, lab workers, health IT professionals, and health services coordinators.

Additionally, with California having among the nation's highest levels of diversity, SEIU-UHW saw the opportunity to tap into its members' personal and professional networks and create a healthcare workforce training program that can recruit and enroll future healthcare workers who more closely reflect the demographics of the populations they will be serving.

To address this large-scale, system-level problem, SEIU-UHW joined with Western Governors University (WGU), an education partner that delivers a high-quality curriculum, student-centric educational experience, and has a 23-year history of innovating for working learners (and learning workers).

MODERN PRACTICE CATEGORY: Recruitment of underutilized populations (e.g., veterans, individuals with disabilities, older individuals

INITIATIVE:

- The partnership between SEIU-UHW and WGU was conceived not only as a workforce training initiative, but as
 a way to recruit people with the potential to grow in the healthcare industry and then be placed in jobs through a
 union-created healthcare workers cooperative.
- In 2019, WGU launched the Medical Coding Career Accelerator Program, offered by SEIU-UHW to its
 members and people they referred from their own networks. This program culminates in a certificate, but also
 includes several achievements earned along the way, including a Professional Communication and Leadership
 Badge, a Medical Coder Novice Badge, a Ready to Work Badge, and the AAPC Certified Professional Coder
 (CPC®) certification. Additionally, individuals who complete the program earn transferrable college credit,
 making the program itself stackable into a WGU bachelor's degree program in Health Information Management.
- Importantly, the medical coding certificate program includes both the traditional medical coding content that is offered by other training programs as well "power skills" and transition-to-practice skills to strengthen the bridge into practice, making the program unique in its approach to career preparation.
- In February 2020, the partnership launched its second offering—a program for aspiring medical assistants. Other programs planned include offerings in health information technology and care coordination.
- Participants in the program come from many backgrounds, including current medical assistants, healthcare
 environmental services (EVS) personnel, licensed vocational nurses (LVNs), pre- and para-health
 professionals, and individuals from outside the healthcare industry altogether. What unites them is the
 motivation to update their skills, get better-paying jobs, and create better lives for themselves and their families.

OUTCOMES:

- As of early 2020, more than 430 students had enrolled in the Medical Coding Career Accelerator Program, and 25 had successfully completed the CPC coding exam. These initial soon-to-be graduates are now preparing to complete the workplace readiness components of the program and start receiving job placements. SEIU-UHW is actively working with employers across the state to secure those job placements. An additional 100 students had enrolled in the medical assistant program within a month of its launch in February 2020.
- This program has demonstrated how leaders on the workforce side and the education side can work together to
 offer pathways to individuals who may not have access to healthcare careers through other channels—and to
 do it at scale.
- WGU has long worked with employers nationwide on strategic workforce initiatives through such means as tuition reimbursement, scholarships, and other incentives to help employees complete existing WGU programs. Those partnerships have successfully led to thousands of graduates earning career-boosting degrees, but they have essentially relied on employers' hope and trust that their employees would pick up the skills they needed. WGU's partnership with SEIU-UHW has offered a proof-of-concept for a more intentional approach to putting individuals into training and career pathways that fill highly in-demand industry pipelines. The key is that employers, employees, and WGU are all jointly invested in the program's success, making it a truly collaborative model.
- SEIU-UHW will recruit and enroll California students in healthcare workforce training programs through WGU
 offerings. SEIU-UHW's internal structure will enable the program to scale up, with membership and leadership
 doing on-the-groundwork with an emphasis on having "human conversations" to build awareness and
 understanding, recruit candidates, and set expectations to ensure enrolling students are set up for success.
- Within four years, the goal is to prepare 10,000 health professionals a year into well-paying healthcare jobs in
 the state. It is projected that, while SEIU-UHW's member network will be the vehicle through which recruitment
 is achieved, some 75% will come from outside the formal membership base—individuals referred to the
 program by an SEIU-UHW member in their personal and professional networks via their new entity, Futuro
 Health.

A crucial lesson learned at this early state of the program's development has been that careful screening of candidates and clear expectation-setting must be a key part of recruiting and enrolling prospective learners. These training programs require substantial commitments of time, work, and energy, so individuals enrolling must be truly motivated to see it through to completion. Focusing on the "human conversations" during the recruitment stage has been one way to address this need.

TITLE: Amazon Upskilling 2025

CASE STUDY: Amazon

AREA: Training

BRIEF BACKGROUND:

In July 2019, Amazon committed to upskill 100,000 of its employees across the United States by 2025 and will invest more than \$700 million to provide access to training programs that will help them move into more highly skilled roles within or outside Amazon. The American workforce is changing. According to the U.S. Bureau of Labor Statistics (BLS), there are now more job openings (7.4 million) than there are unemployed Americans (6 million). In looking at job growth over the next decade, the BLS anticipates some of the fastest growing job areas are increasingly in more skilled areas, including medical assistants, statisticians, software developers, nurse practitioners, and wind turbine service technicians. This provides a huge opportunity for individuals who build additional skills to move into better paying jobs. Through its Upskilling 2025 pledge, Amazon is focused on creating pathways to careers in areas that will continue growing in years to come, including healthcare, machine learning, manufacturing, robotics, computer science, cloud computing, and more. As a leading US employer, we have an important role to play in providing our employees with access to the education and training they need to grow their careers.

MODERN PRACTICE CATEGORY: Training/Upskilling

INITIATIVE: As part of Amazon's Upskilling 2025, the company announced new training opportunities and expanded existing programs to serve employees from all backgrounds and Amazon locations, including:

- Machine Learning University An initiative that helps Amazonians with a background in technology and coding
 gain skills in machine learning. As machine learning plays an increasingly important role in customer
 innovation, MLU helps employees learn core skills to propel their career growth—skills that are often learned
 only in higher education. Divided into six-week modules, the program requires only half to one full day
 of participation a week. MLU is taught by more than 400 Amazon machine learning scientists who
 are passionate about furthering skills in the field.
- Career Choice-Amazon's pre-paid tuition program for hourly fulfillment center associates looking to move into high-demandoccupations. Amazon pays up to 95% of tuition and fees towards a certificate or diploma in qualified fields of study that lead to an in-demand job. The company is investing in expanding the program by building additional classrooms in its fulfillment centers globally and expects to have over 60 on-site classrooms by the end of 2020.
- Amazon Apprenticeship Department of Labor registered program that offers paid intensive classroom training and on-the-job technical apprenticeships with Amazon. This program is tailored to prepare transitioning members of the military, veterans, and military spouses for in-demand, technical roles in cloud computing, including cloud support associate, data technician, and software development engineer.

OUTCOMES:

Career Choice

Since launching Career Choice in 2012, over 25,000 Amazonians have received training for high-demand occupations with a career path, including: aircraft mechanics, computer-aided design, machine tool technologies, medical lab technologies, and nursing. Adult learners typically have significant responsibilities in addition to seeking new job skills and so removing friction between them and completion is key. Significant programaccelerators include bringing classes on-site, providing realistic job "previews", and introducing potential employers to students early.

Amazon Apprenticeship

Launchedin January 2017, Amazon Apprenticeship program has already created pathways for hundreds of candidates working to break into technical careers. Hundreds more will have the opportunity to do the same in the years ahead. Over the last three years, key learnings led us to incorporate a longer "time to fill" for technical hires that graduate from our apprenticeship program, to account for the on-the-job training component. We also learned that our apprentices report that they transition more easily when their supervisor helps them focus both on their technical acumen and on their transition from the military to the civilian workplace.

Machine Learning University (MLU)

Originally launched as a small cohort, the program is on course to train thousands of employees.
Participants, regardless of their graduation year, return to their roles, prepared to deploy the next wave of technology to provide customers with benefits like faster delivery time, more relevant product search results and personalized recommendations. Meeting employees where they are helped accelerate the scale of the program. On site classes, volunteer instructors from Amazon's technical ranks, homework drawn from real-world customer challenges and solutions, and a cohort model that creates collaborative working groups accelerates learning and removes friction between the student and graduation.

TITLE: Second Chance Hiring Initiative

CASE STUDY: JPMorgan Chase

AREA: Recruitment/Hiring

BRIEFBACKGROUND: JPMorgan Chase has expanded its commitment to giving people with criminal backgrounds a second chance by supporting their reentry into the workforce, community, and local economies. One in three working-age adults has an arrest or conviction record, creating significant barriers to employment and economic opportunity for a substantial number of Americans. Policymakers and businesses increasingly recognize that providing education, skills training and employment opportunities to people with arrest or conviction histories helps reduce recidivism, increase public safety, build stronger communities, and strengthen the economy. The firm recently put forth enhancements to our hiring strategy in collaboration with other businesses, community investments in nonprofit partners, and a new <u>public policy agenda</u> to create economic opportunity for more people who need a second chance.

MODERN PRACTICE CATEGORY: Recruitment of underutilized populations

INITIATIVE:

- To further broaden the applicant pool for job opportunities, JPMorgan Chase has enhanced the hiring process and expanded our commitment to building a diverse workforce by taking several key actions to implement a dedicated strategy to recruit, hire, and retain people with criminal backgrounds at JPMC.
- JPMorgan Chase "banned the box" to increase access of people with criminal backgrounds to fill jobs at the firm. This helps ensure qualified applicants with criminal backgrounds receive the same consideration as any other applicant, when their background has no bearing on job requirements.
- The firm launched new collaborations with community organizations to help JPMorgan Chase further build its
 pipeline for hiring people with criminal backgrounds—whose histories fit within industry regulatory
 guidelines—through training and mentorship programs, starting in Chicago. Some of the Chicago-based
 organizations that the firm is collaborating withinclude Skills for Chicagoland's Future, Cara, the Safer
 Foundation and the Cabrini Green Legal Aid. Roles and pathways that identified include remittance
 processors, operations analysts, lending and account servicing specialists, and associate bankers.
- The firm's recruiting and selection process helps ensure that candidates, including those with a criminal background, are evaluated based on their qualifications. The firm's onboarding hiring process will then individually assess each person's criminal background against matters of law as a regulated Firm, as well as the safety and welfare of our employees and customers.

 In addition, JPMorgan Chase is working with other employers committed to adopting and promoting second chance hiring policies by sharing best practices, insights, and learnings. Specifically, we plan to publish a toolkitfor other financial services firms to be nefit from our model and to increase second chance hiring across the industry.

- In 2018, JPMorgan Chase hired approximately 2,100 people in the U.S. with a criminal background.
- In 2019, JPMorgan Chase hired more than 3,000 people in the U.S. with a criminal background.
- Many were arrested for or convicted of low-level crimes such as disorderly conduct, personal drug possession, and DUI (driving under the influence), and are employed in entry-level jobs such as transaction processing, and lending and account servicing.

TITLE: IowaWORKS

CASE STUDY: State of Iowa

AREAS: Recruitment and Hiring

BRIEF BACKGROUND: Iowans are hard workers and traditionally have one of the highest labor participation rates in the country. Through our Future Ready Iowa initiative, we have set the ambitious goal of ensuring that 70% of Iowans in the workforce achieve training or education beyond high school by the year 2025. The below initiatives play a role in helping achieve that goal.

MODERN PRACTICE CATEGORIES:

- 1. Use of Artificial Intelligence in recruitment, hiring and/or training
- 2. Modernizing job postings
- 3. Recruitment of under utilized populations (e.g., veterans, individuals with disabilities, older individuals)
- 4. Use of data to improve job matching

INITIATIVES:

- Virtual OneStop: lowa's new state labor exchange system
 - Delivers to employees an automated screening and ranking algorithm based on a job posting matched against a job seeker's profile
- National Labor Exchange:
- IowaWORKS centers offer training to job seekers on how to develop their LinkedIn profiles to take advantage of LinkedIn's machine learning and targeting processes
- Skillful State Network: lowa's participation in this network will expand pilots around skills based recruitment leading to more modern job descriptions
- Offender Connections: Iowa has four, in-state, re-entry career planners.
 - Connecting offenders to Registered Apprenticeship programs, opportunities to earn National Career Readiness certificates, and interview skills training.
 - lowaWORKS centers provide job fairs and trainings on-site at these Community Based Correction centers and in many local jails
 - The Juvenile Justice Task Force is implementing comprehensive system-wide reforms to juvenile reentry policies and processes.
- Refugee Connections
 - Four of the lowaWORKS centers house a Refugee RISE/AmeriCorps volunteer to assist refugees with workforce skills and training.
 - Expanding childcareresources in the refugee population to allow parents greater chances of work opportunities and introducing kids to early childhood education
- Youth Connections
 - One of the best practices is the partnership between Iowa Workforce, the IowaWORKS centers and iJAG across Iowa. From teaching career ready

- workshops in the classroom, to connections with services and programs in the IowaWORKS centers, to co-outreaching to business with the iJAG counselors to develop internships for students in a real-world setting, this partnership is reaching youth with barriers and connecting them with employment and training opportunities.
- One of the other best practices is the partnership between Iowa Workforce and the Department of Human Services, which works to connect with youth aging out of foster care.
- o lowa also has a strong partnership with Job Corp in Ottumwa and Denison, Iowa, connecting youth while in training to employment, internship and registered apprenticeship opportunities, workforce prep classes and further training after their program is completed.

Minority Connections

- The State Workforce Development Board created the Minority Unemployment and Outreach Standing Committee to address disparities in the minority unemployment rate in Iowa.
 The goal of the subcommittee is clear and measurable: to reduce unemployment in minority communities by five percent (or to the state average) in five years.
- Reverse Job Fairs like the annual one held in the Cedar Rapids/Iowa City corridor, enable employers to engage and interview a diverse group of candidates to help fill their talent pools.

Disabilities Connections

- The State Workforce Development Board established a Disability Access Standing Committee to lead statewide efforts to: 1) ensure that lowa's one-stop delivery system meets all accessibility requirements for individuals with disabilities; 2) increase accessibility for individuals with disabilities to the programs, services, and activities of lowa's one-stop delivery system; 3) continuously improve the provision of services within the one-stop delivery system; and 4) improve opportunities for individuals with disabilities in competitive integrated employment.
- Rekindling Iowa's Untapped Workforce, held at the Fort Dodge Public Library, is a businessemployer panel that has successfully utilized the untapped workforce of individuals with disabilities.

Using Data to Improve Job Matching

- lowa's newest labor exchanges system, Virtual OneStop (lowaWORKS.gov) offers employers the ability to post job orders, send automated correspondence, analyze current industry data, and utilize an array of search, screening, and ranking tools to help identify suitable candidates.
- The system also includes the Sapphire Technology analysis tool, which uses proprietary
 pattern matching algorithms to determine exactly how well a job seeker's education and
 experience matches an employer's requirements. Automaticalerts notify employers
 when a potential candidate meets the qualifications of a posted job listing.
- lowaWORKS.govalsoallowsjobseekerstoexplorelabormarketdatabyindustry occupation, showing them advertised job openings, employer information and wages all the way down to county level, giving them the ability to narrow searches to exactly the jobs, locations and companies that are hiring.

TITLE: Industry and Workforce Collaboration Team & Applied Learning Opportunities

CASE STUDY: WSU Tech

AREA: Recruitment, Hiring, Training

BRIEF BACKGROUND: WSU Tech builds and maintains relationships with employers and job recruiters. Their hope is that when a position needs to be filled, employers will think of their students first! Applied Learning is the umbrella term used at WSU Tech to describe any type of opportunity for students to partner skills and concepts learned in the classroom with on-the-job training experiences in industry.

MODERN PRACTICE CATEGORIES:

- 1. Modernizing job postings/recruitmentstrategies
- 2. Learn/Earn opportunities

INITIATIVE:

Recruitment

- Online job board:www.kansasworks.com
- Interview Days: Companies send interviewers and WSUTech prepares students for a line-up of interviews
- Industry Day: Companies come to campus to recruit, potential employees, share information about your company, meet students/graduates, and network with faculty.
- Nepris: a software platform that connects industry to classrooms, helping to direct the conversation for educational training choices to drive workforce growth for the region. Allows for virtual facility tours, employer hiring pitches, etc.
- Student Shirt Sponsorship: Companies can sponsor an academic program's uniforms for the year and their logo appear alongside WSUTech's for a year-round marketing opportunity.
- Lab Naming: Increases a company's exposure to students by sponsoring a lab on campus

Applied Learning

- Earn and Learn: Provides an opportunity for a student to begin working in industry while attending school. The wage and number of hours the student is required to work varies by employer.
- Internship/Clinical: Links classroom or lab theory with an experimental learning opportunity. A
 minimum of 45 contact hours are required to complete a 1 credit hour internship course. Most WSU
 Techinternships require 180 contact hours. Employers are encouraged to provide students a living
 wage.
- Registered Apprenticeship: Awork-based learning model that meets national standards for registration
 with the U.S. Department of Labor. Generally, students are required to complete a minimum of 144
 hours of classroom training and 2,000 hours of on-the-job training each year of the apprenticeship.
 Apprentices start working from day one with incremental wage increases as they become more
 proficient.

- Benefits for Business and Organizations:
 - Enables employers to begin attracting future employees in high-demand careers at the high school
 - Assists young people in understanding what employers expect of employees
 - Seek to "Keep local talent local"
 - Contributes to academic growth of students and prepares a highly skilled workforce
 - Provides an opportunity to share experiences, insights, and knowledge with students, and subsequently, improves supervisory and motivational skills of employees
 - Energizes current employees who serve as mentors
 - Strengthens partnerships with WSU Tech
- Benefits for the Community
 - Produces a world-class workforce that drives a vibrant regional economy
 - Establishes a positive community image that is an asset to economic development
 - Improves the recruitment pool of qualified employees
 - Improves prosperity and the quality of life for all citizens