



MIDDLE SKILLS FOR  
THE MIDDLE CLASS

**How skills-based hiring can  
reverse middle class decline.**

**The impact of a shrinking middle class:  
a growing upper class without a continued  
strong middle class will lead to inequality  
on many levels outside of income alone,  
including family structure and education.**

## Introduction

For generations, the middle class has played a central role in the American economy—promoting the development of human capital through skilled workers and creating stability within political and economic institutions. The middle class has been the primary driver of our gross domestic product (GDP) while providing the bulk of the tax dollars for services rendered to all Americans.

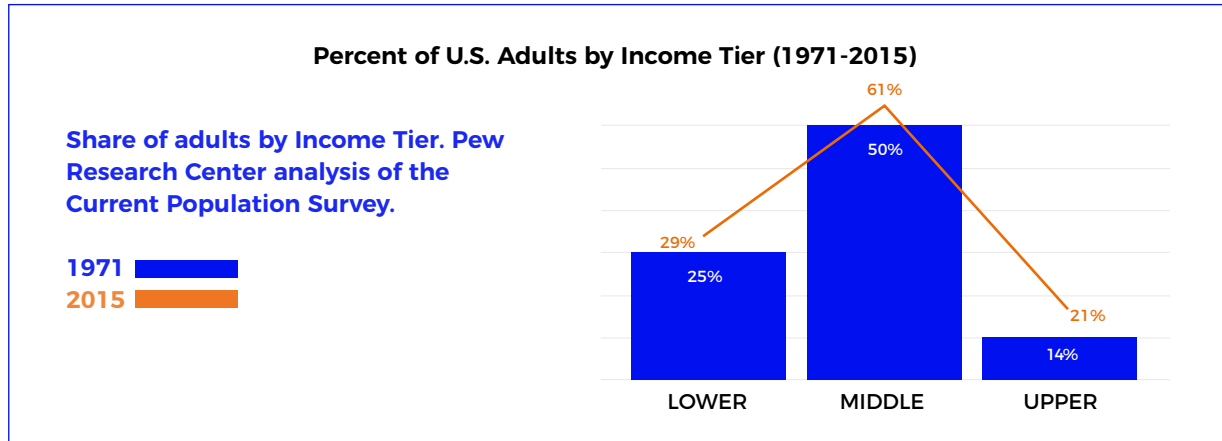
### What is the middle class?

The middle class can be defined many ways; Pew Research Center defines it as two-thirds to two times the national median income for a household size. That equates to an annual income of between \$46,960 and \$140,900 for a 4-person household.<sup>1</sup> To illustrate the breadth of the middle class, here is what Pew Research Center showcases as the lower end of middle class by household size.

| HOUSEHOLD     |    | 1      | 2       | 3       | 4       | 5       |
|---------------|----|--------|---------|---------|---------|---------|
| UPPER INCOME  | \$ | 72,521 | 102,560 | 125,609 | 145,041 | 162,161 |
| MIDDLE INCOME | \$ | 24,173 | 34,186  | 41,347  | 48,347  | 54,053  |

However, despite its significance, the middle class has been shrinking steadily since 1971; it is at its lowest point in history, having decreased 11 percentage points in size (and economic power) from 61% to 50% of the American public over the last four decades.

While the middle class shrank, the opposite held true of the lower and upper classes, growing 4 percentage points (from 25% to 29%) and 7 percentage points (from 14% to 21%), respectively.<sup>2</sup> Now, for the first time, the upper and lower economic tiers combined are equal in size to the middle class.



Though we encourage upward mobility and laud increased individual wealth, a growing upper class without a continued strong middle class will lead to inequality on many levels outside of income alone, including family structure and education. As for economic sustainment and development, the middle class is the foundation for the majority of jobs that comprise the domestic workforce.

The number of available jobs is increasing across the United States. Just last week President Obama announced the 73rd month of continuous private sector job growth<sup>3</sup> across the country. However, employers face growing challenges to identify and fill positions, our labor force participation rates are at their lowest levels since 1977<sup>4</sup> across all segments, and the number of workers that can only find part-time work remains just 67% above pre-2008 levels.

There are tens of millions of middle-skill jobs in the United States today<sup>6</sup> making up the largest segment of our labor market.<sup>7</sup> These jobs are defined as those that require education beyond high school but not necessarily a traditional two or four-year degree. They include jobs in industries such as high tech manufacturing, agriculture, hospitality, healthcare or construction, to name a few, and can carry sizable salaries with 39% paying \$50,000 annually or more.



## Middle Skill Job Demand

A 2013 study conducted by Burning Glass reported 7.3 million online job postings, nearly 600,000 per month, for middle-skill jobs, out of a total of 19.9 million online job postings.<sup>8</sup>

Employer survey data further validated the demand for middle-skills jobs while highlighting a gap in skills among job seekers. In a study by Accenture that surveyed 800 HR managers, 69% of companies cited that their inability to attract and retain middle-skills talent frequently affected their performance. In another study by Harvard Business School, 38% of companies reported it was either very difficult or somewhat difficult to fill middle-skills positions.<sup>9</sup>

**Among the factors contributing to the middle class decline is the rapid adoption of technology in the workplace that has displaced workers who lack the skills required for the information age.**

According to Accenture, the manufacturing industry felt the largest impact, with 47% of respondents citing an inadequate availability of middle-skilled workers. Beyond manufacturing, research and economic data have consistently documented the existence of skills gaps across industries, geography and demographic groups.

In addition to the effect of technology on actual work, we have seen technology also impact the way in which people learn about and apply for jobs. The Internet age has created a single-click application process, allowing job seekers to submit applications with ease, but producing unmanageable results for employers.

On average employers are receiving between 80 and 100 applications for a single job posted (an average that spikes in specific industries), making it difficult for employers to differentiate candidates with the skills needed. Consequently, employers are forced to rely on imprecise proxies, like degree level and years of experience, to approximate skill levels and weed out unqualified applicants.

**There's an imbalance between supply & demand of middle skills.**

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**Companies like Google are transforming the way they recruit and the information they gather about viable candidates, for example they no longer ask for a candidate's GPA because they've seen no correlation between school performance and work capacity.**

**However, many employers recently reported they no longer rely on these established proxies; in particular, employers are overlooking the education or degree proxy, as 90% agree that graduates today lack the skill sets they need.**

Despite the presence of 5.4 million open positions nationwide,<sup>10</sup> we are experiencing the highest unemployment or underemployment rate among our young people in history, including those with a college degree.

With traditional educational paths failing to produce long-term employment options (The New York Federal Reserve reports 44% of college graduates were underemployed in 2014), we've seen a rise in the nontraditional "bootcamp" model of education and training. Designed to close the technology skills gap in the un/underemployed, firms like General Assembly, Codecademy, Udemy, Startup Institute, Flatiron School and Dev Bootcamp created online and offline coding bootcamps. As the demand for their style of training increased, so did their offerings; each has expanded its training to include additional design and marketing curricula.

This new model of education and training is responsive to the current needs of individual employers and employer groups, and demonstrates how developing greater clarity of employer demands can create successful pathways for educators to offer in-demand training and for individuals to learn in-demand skills.

## Reversing the Trend

Notwithstanding the national debate about the existence of a skills gap, real



companies have real challenges finding the right talent to develop and grow their businesses. And to fix this problem we need to ensure employers can find the talent they need. Reversing the erosion of the middle class starts with addressing the skills gap and creating a middle-skills labor market that is comprised of active with participants who possess in-demand skills, and who become better job prospects with greater earning potential.

Tackling the skills gap first requires close examination of the current gaps to determine the skill deficiencies that need to be addressed. Though seemingly obvious at a high level, there often isn't clear, actionable data around which skills are desired in the marketplace and where these skills can be acquired. There is an immediate benefit when employers provide clarity around the requirements for various positions.

#### **A new model for education and training**

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Within a given applicant pool, there may be groups of job seekers with relevant skills but perhaps not the exact experience or education level the job description requires. Through traditional methods these candidates may be disqualified. However, a closer examination of the actual skills held by applicants may reveal that they, in fact, meet the requirements. Due to outdated hiring practices and tools, these skills are often lost in translation and candidates are never considered.

**Uncovering these talent pools requires employers rethink how applicants' prior experiences are translated into their fit for a position. This requires putting greater emphasis on skills matching.**



By doing so, employers clarify the relevant skills and broaden the talent pool, while at the same time providing clarity about the qualifications against which an individual will be measured and making it easier to evaluate a larger applicant pool. The translation of military experience to the private sector is a great example of how this works: translating real world skills and experience in the field, from military code to civilian vernacular used by non-military employers.

Regional skills gaps exist all over the country and require workforce development efforts to be agile and responsive to changes in the marketplace. Employers face an economic environment that rapidly changes, and the skills they demand will continually evolve along with it. Workforce development programs must be able to monitor changes in demand and respond with timely, relevant programs that develop in-demand skills. This requires greater transparency, visibility and access to aggregate labor market data at the local and regional level.

Without this type of dynamic feedback mechanism, program curricula will continue to lag behind market demand – jobs will go unfilled, job seekers will remain unemployed and the economy will not grow.

## Start with the Demand Side of the Equation

While the macroeconomic view of the erosion of the middle class, driven by the skills gap, is compelling and tends to draw public and policy attention, solving the problem requires equal attention and focus. This requires a better understanding of, and engagement with, the “demand” side of the labor market equation: actual businesses that are hiring.

**By understanding the distinct and precise challenges that businesses face in the hiring process, we can better identify the skills required in the marketplace, which will drive our efforts to address the talent shortage.**

Solving this problem for employers requires the adoption of a skills-based hiring process where employers focus on the actual skills and competencies required for a position, not just the experience and education level they assume are







have a two-year degree but would otherwise be a good fit based on their skills and experience. In short, the job description may be excluding people who have the skills to perform a job, but perhaps do not have the credentials. In this case, there may be too few applicants as the potential applicant pool was narrowed unnecessarily.

#### **What is the skills-based hiring?**

**Skills-based hiring effectively matches the supply and demand of specific skills between job seeker and employer, enabling information sharing between these parties, and creating a more cohesive match between employer and employee.**

By using skills-based hiring, employers can eliminate their reliance on imprecise proxies, such as education and experience, allowing for a more finely calibrated, skills-based screening process that increases the likelihood of finding qualified candidates based on the true needs of the employer. Additionally, by relying on a skills-based hiring model with greater transparency of skills, employers help create a roadmap for success for candidates who are often inhibited by traditional education or experience proxies.

Lastly, skills-based hiring creates opportunities for diverse candidates who are often limited or inhibited by traditional education or experience proxies, allowing for job opportunities based on their current skill sets and providing a success roadmap for continued workplace advancement.

By matching their work, education and other life experiences directly to the job profile developed by the employer, a job seeker has a transparent way to directly match their skills.

**By using skills-based hiring, employers can more finely calibrate their candidate screening, increase the likelihood of finding qualified candidates, and create a roadmap for success for both candidates and employees.**

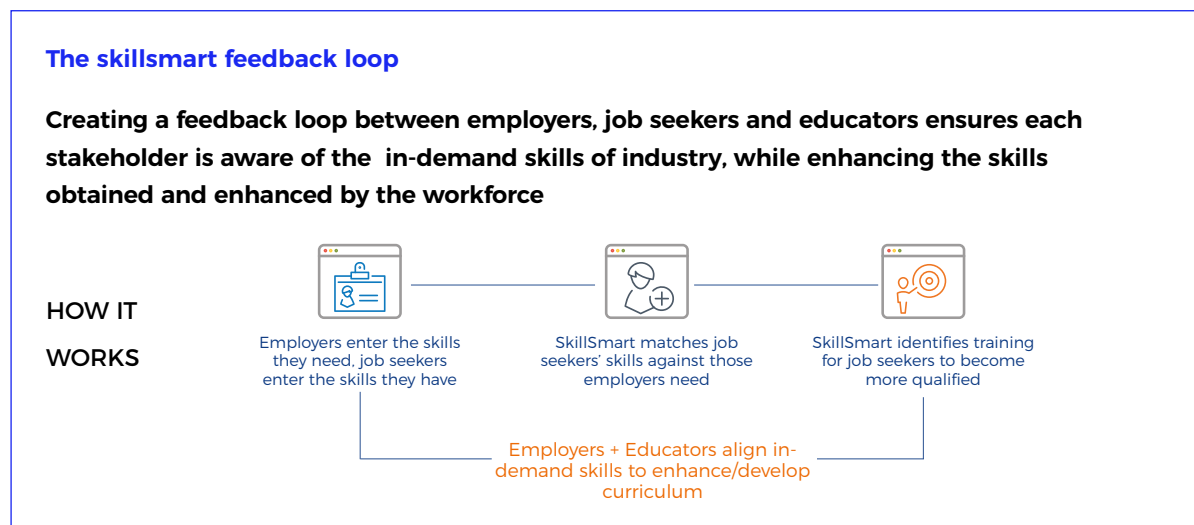
## Closing the Skills Gap: SkillSmart in Action

As skills-based hiring practices gain traction, some forward-looking employers provide a glimpse of what the future will hold, like one leading global hospitality and entertainment company that is working with SkillSmart to implement a skills-based process to staff thousands of middle- and high-skills jobs.

### The Hiring Challenge

As it expanded into a new market, the company was faced with hiring approximately 4,000 people across several hundred new positions. In the past, when opening a new property, they had used job fairs and online job boards to collect resumes. While this approach typically resulted in a large number of resumes, they were faced with the time consuming and daunting task of sorting through those resumes to match applicants' experience with the requirements of a given position.

This process was even more challenging when entering new markets where many applicants may not have, for example, direct employment experience working in hospitality or entertainment. The business needed a better way to evaluate the skills gained from prior experiences of the applicant pool and match them with the requirements of their open positions. The use of the traditional resume had proved not up to the task.





## A New Approach

The company partnered with SkillSmart to take an innovative approach to recruiting and talent development. This new skills-based approach requires real-time skills matching to provide job seekers with clarity about exactly which skills are desired. SkillSmart translated the company's multi-page job descriptions into job profiles clearly outlining the prerequisites and skills needed. Interested job seekers created online skills profiles to identify their relevant work, military, education, and other life experiences. These skills are then directly matched to the requirements of a specific position.

As job seekers continue to build out their skills profiles, they'll receive specific feedback as to where gaps exist among the prerequisites and required/desired skills for the position. This feedback mechanism provides information about specific training and education needed for the position(s) of interest.

The company receives instant feedback on thousands of applicants, giving them data on the potential fit of the applicant pool across dozens of positions. They quickly identify, using a proprietary scoring algorithm, the best-fit candidates to schedule for interviews, thus eliminating the time-consuming resume screening process. The result is a quantitative approach to applicant screening in a consistent format.

This process extends beyond the applications submitted by individuals. In addition to identifying talent for immediate needs, the company benefits from a talent development pipeline that continues to produce candidates with the skills desired.

## The Impact

In the first few weeks after launching the skills-based process, approximately 5,000 job seekers registered and began building profiles, with each expressing interest in an average of two positions. SkillSmart's skills matching algorithms replaces



resume screening by translating and matching job seekers' skills. Instead of combing through countless resumes, in various formats, to determine how well the applicant pool matches the open positions, this global hospitality and entertainment company now has a forward-looking view of the labor market.

By using data to segment job seekers based on a skills match scoring algorithm, the company is able to highlight candidates in a straightforward, more unified way. Further, the company is now able to use this labor market data to be strategic about its community and education investments.

## Continued Workforce Development

To help build a sustainable pipeline of talent, the company, local community colleges and SkillSmart formed partnerships to develop more responsive workforce development solutions. In less than six months, this collaborative effort has begun to prosper as one local community college developed a custom, accelerated "bootcamp" that focuses on the required skills identified by the company for success in the hospitality and entertainment industry.

The community college now offers a new certification that is attainable in a single semester. This program saves students significant time and tuition costs when compared to the prior program that required several semesters to complete.

The SkillSmart solution presents ongoing opportunities for the region well into the future. The company and community colleges will continue to collaborate on training and education programs using historical aggregate data of local skills demand, pinpointing exactly where skills gaps exist and enabling better applicant tracking and placement. It is expected that this skills-based and data-driven approach will serve as the model for other local partnerships supporting workforce development.

**Instead of combing through countless resumes, in various formats, employers can use standardize skills profiles in a forward-looking view of the labor market to assess how potential candidates precisely match their workplace needs.**



## The Future is Here

Diplomatic Courier and Gallup recently hosted the Global Talent Summit prompting attendees and participants to envision the state of jobs, education and workforce development in the year 2050. While it would be foolish to try to predict exactly what the jobs of the future will look like, what we know for certain is that they will require an appropriately skilled workforce.

There is cause for optimism regarding closing the skills gap and reversing the middle class decline, however it largely depends on the widescale adoption of talent development models that are transparent, nimble and responsive to the needs of industry. Skills-based hiring which enables information sharing between parties, effectively matches supply with demand between job seeker and employer, and it provides market signals based on the aggregate skills data resulting from these transactions.

For the middle-skills population, evolving to skills-based hiring means a clearer path for skills development, greater job placement opportunity, and economic stability.

SkillSmart makes this process easy and dynamic. By capturing the demand signals from employers in a scalable platform, SkillSmart allows for the real-time matching of job candidate and employer profiles, and creates a critical feedback loop that provides a constant stream of updated data related to local skill-gap conditions.

This information can then be used to inform and guide educators and trainers and their programs to ensure they're being developed to equip learners and job seekers with the skills necessary to meet industry demand. This model will grow the middle class, providing the necessary foundation for a competitive workforce into the next century.

**Evolving to skills-based hiring means a clearer path for skills development, greater job opportunity, and economic stability for the middle-skills population.**



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This paper was written in partnership with Valerius Consulting.

## About SkillSmart

SkillSmart's platform provides a single source of connectivity between employers, job seekers and educators. We equip users with a deeper understanding of their existing skills, market demand for those skills, and a clear pathway to gaining new skills. We help people become better qualified and more marketable by analyzing their skill sets to provide career development.

For employers, we help them identify and recruit new talent, and nurture and grow existing talent. Our leadership team combines years of experience in human resources, education, technology, data analytics, software development and public administration. Our strong relationships with industry leaders throughout the nation provide the foundation for necessary partnerships to develop the country's workforce to fill the demand-driven needs of employers.

Learn more about us and our technology product suite at [www.skillsmart.us](http://www.skillsmart.us)

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