The Power of Skills:
Talent Transformation in a Time of Disruption

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Introduction

Employee engagement has been a critical problem for most organizations for years. Many reasons exist, but the lack of focus on developing critical skills is a big one.

- If leaders can't align on the critical skills for the present and future, it's impossible to design and deliver learning aligned with organizations' business goals.

- If learning is not aligned with business priorities, employees won't know the skills they need to help the business and advance their careers.

- If employees don't find learning relevant to their aspirations, they won't engage with it. Even more damaging, they start to look elsewhere for opportunity.

- That hurts engagement and increases turnover.

Americans Are Checking Out of Work

15% of employees are highly engaged at work.

91% of employees changed companies the last time they changed jobs.

38% of organizations say performance management drives strong individual and organizational performance.

28% of managers check in with their team members at least weekly.

Only **22%** of check-ins focus on coaching, performance goals.

Sources: Brandon Hall Group Research, 2019, 2020; Gallup State of the American Workplace, 2019

This lack of focus on developing critical skills has a huge impact on the business. That's because as companies seek to rebound or change their business models, they won't have the right skills foundation to deal with present problems, let alone the future skills they need to drive new business strategies and agendas.

This eBook provides insights on how to leverage AI to understand skills, and how to develop the skills you need now and in the future. But before we get started, we must ensure we have the same understanding of what we mean by "skills."

A skill is a measure of what someone can do, broken down to its most granular level.

Skills are not tied to a specific job or company.

Skills require training or practice to acquire; if everyone does it, then it's not a skill.

Skills are transferable across companies and jobs.

Skills are the best measure of career progression.

Understanding the Skills Problem

Even before COVID-19, more than half of employers did not have enough talent with the right skills to drive business success. And now, in many cases, new skill sets will be needed as companies begin to climb the steep hill toward economic recovery.

Can Your Organization Meet Its Talent Needs in the Next 1-2 Years?

YES 47%

NO 53%
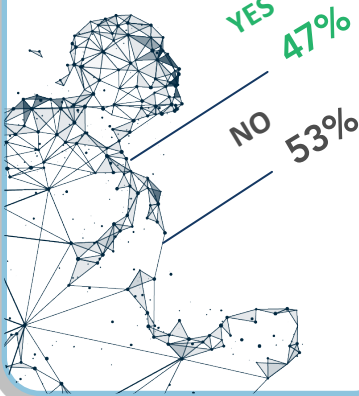
While talent needs can't always be met with current employees, the most cost-effective and strategically sound approach to meeting talent needs is to develop the skills of employees you know rather than rely on external candidates you do not. But without a solid skills orientation — the ability to understand skills and how they intersect different job roles — most employers struggle to build effective career-development programs.

65%

Why Can't You Meet Current Talent Needs?

say:

Learning and development isn't sufficiently linked to career growth and critical job roles

Brandon Hall Group's recently completed career-development study showed that less than one in five organizations have a well-established career-development program. About 60% of organizations are just now building, or recently launched, a career-development program. The good news is that if organizations get a better handle on skills development and integrate it into their developing career growth programs, they can make progress quickly.

Beyond determining needed skills, the biggest obstacle to meeting current talent needs with current employees is that learning and development is not sufficiently linked to career growth and critical job roles. In many organizations, a lot of learning is available but it is not tightly aligned to developing the skills and competencies needed to accomplish business goals.

Brandon Hall Group Career Development Maturity Model

Level 3
19%

We have an established career-development program

Level 2
30%

We have recently launched/ relaunched our career-development program

Level 1
29%

We are formulating a career-development program but have not launched it

Level 0
22%

We don't have any formal or organized career-development program

Barriers Impeding Development of Competencies, Skills

Executives don't agree on how to develop competencies and skills for the workforce.

49%

No long-range plan to identify talent pool needed for the future and the associated competencies and skills.

47%

We don't have IDPs for every employee.

46%

We don't have the right technology to assess and track development of our workforce.

45%

Source: 2019 Brandon Hall Group Competency
and Skill Development Study

The biggest barrier is that executives don't agree how to build capabilities for the workforce. The inability to create models that make sense and are usable has left leaders squabbling among themselves about how to improve workforce capabilities. This is because most organizations don't have the tools and expertise to evaluate and understand skills and skill gaps.

This lack of capabilities has a negative impact on the business. The research shows that organizations that can't meet their talent needs:

↓ Struggle with employee engagement

↓ Have a hard time retaining top talent

↓ Are not agile in reacting to changing market conditions

↓ Suffer from a lack of creativity and innovation.

Critical Questions

To improve the situation, we must start by answering some fundamental, critical questions. They include:

What skills are available in my organization?

How are these skills being applied?

Do we have the skills we need to meet today's goals?

We need a strategy for the future. We will make investments and decisions to enable us to plot a course to improved performance outcomes. This is how we prepare for changing business dynamics, such as industry disruptions, a retiring workforce, consolidations and sell-offs. This is when our key questions begin to take a different form, such as:

Will we have the skills we need to meet tomorrow's goals?

Are there hidden pockets of potential we should begin to deploy?

Who are our critical people?

Why Skills Are So Hard to Use

Companies face huge talent challenges:

- They struggle with **retention**: retaining their top performers

- They struggle with **engagement**: keeping their workforce productive and focused on its needs and the needs of the organization

- They struggle mightily with **mobility**: helping their workforce find their next internal opportunity, since the great majority of workers in the U.S. change companies when they change jobs

- And they struggle with **performance**: building meaningful plans to motivate and build the capabilities of each employee

At the center of these challenges is skills. Specifically, companies struggle to manage their workforce with skills. It's the common thread among the reasons companies can't meet their talent needs in the coming years.

We've already described skills as defining what a person can do. It's not a hard concept, but using skills as a practice has been difficult for several reasons:

The number of skills has exploded over time. As our world grows more complicated, with more products and services, the number of distinct skills has kept pace. Eightfold, a company using artificial intelligence to transform how enterprises manage their talent, detected more than 1.4 million unique skills by analyzing over 1.2 billion talent profiles and capturing context and additional data from sources all over the world.

The relationships between skills and roles change over time. For example, new software programming languages make it easier to perform some programming jobs. What software engineers did in 1980 is quite different from what they do in 2020. In fact, there is significant evolution every year.

Skills ontologies — libraries of skills and skill relationships — are almost impossible to maintain manually. Imagine trying to manage a library, with thousands of books always going in and out. That's already hard. Now, imagine that the library grows every month and you have to reorganize it every six months. That's what organizations are up against.

Changing Relationship Between Skills and Roles

> *With recipes and Blue Apron, anyone can be a chef.*

> *Grammarly has made everyone a better writer. What does an editor do now?*

> *Tesla offers self-driving. What will drivers do in the future?*

> *If you know how to search well, an average programmer can become expert.*
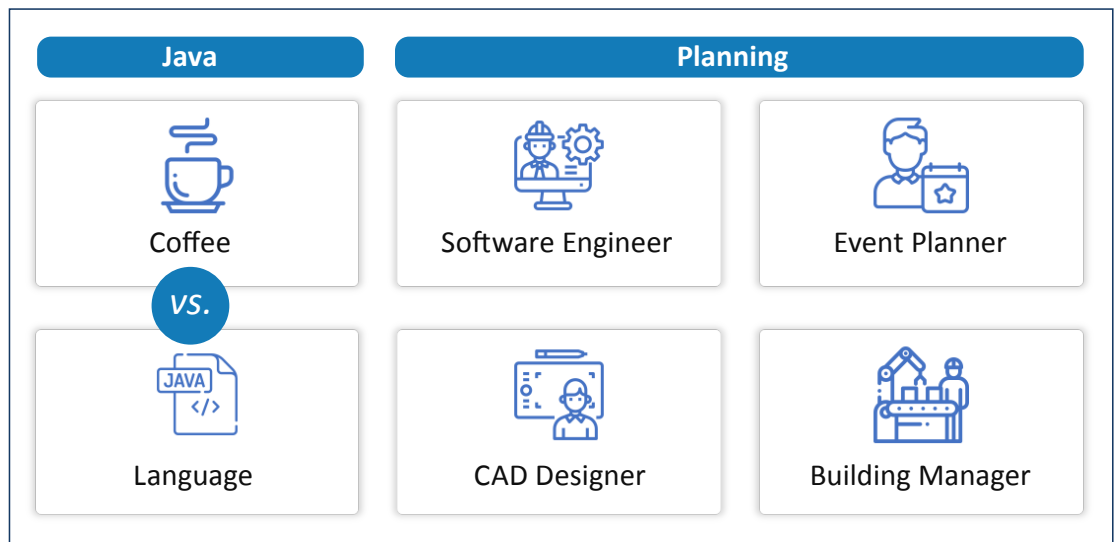
Skills definitions evolve. Think about this in terms of some common skills, such as communications. Are you a good communicator? In 1980, what would that mean? Maybe you're good on the phone or write well. Today, communication involves email, chats, social media, texts and more. What it means to be a good communicator has also changed.

The context of skills changes. This means that it's not merely the number of skills, how skills relate to roles, or even what a skill means. It's questions such as: Is one skill a prerequisite to learning another, and has that changed? Are certain skills very likely to appear together? Or appear very rarely together in the same person? If you learn one skill, does it make it easier to learn another? The answers change over time, too.

The Importance of Context

How we talk about skills can be confusing. A single word often has multiple meanings.

Skills Are Meaningless Without Context

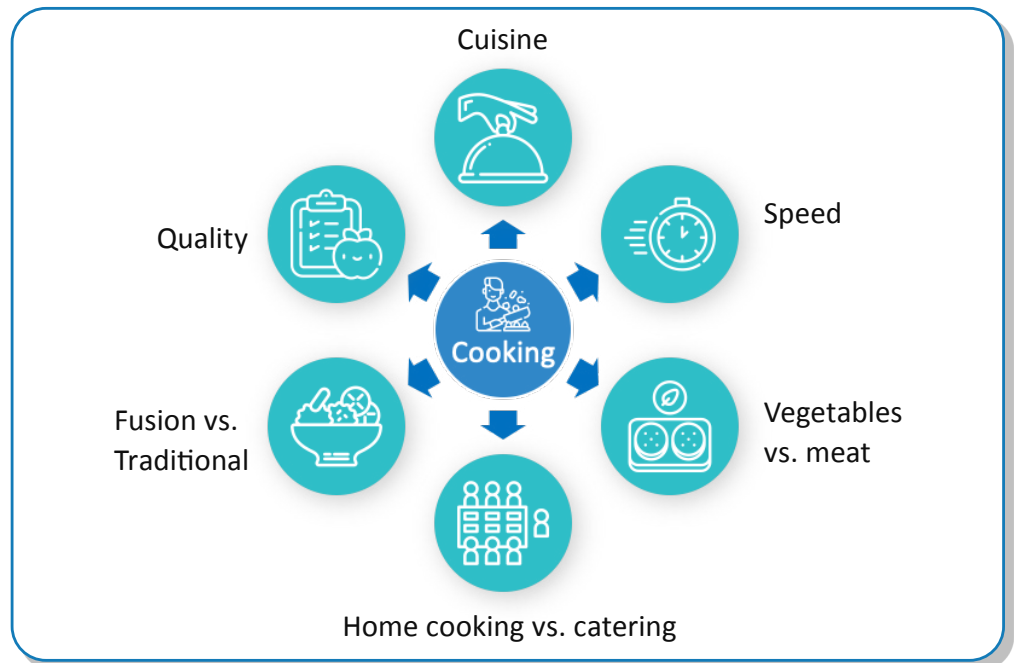| Java	Planning	
Coffee	Software Engineer	Event Planner
vs.		
Language	CAD Designer	Building Manager

Source: Eightfold AI

One is the issue of synonyms; a word literally can mean two different things. Java, for example, is a common programming language. It's also the name of an island in Indonesia and from that we get a popular term for coffee. If someone knows java, does that make them a software engineer, or a barista?

A more subtle context issue, and probably more common, is that the same word has a different meaning as a skill depending on the role. Suppose you say someone has planning skills, for example. What does that mean? A software engineer may plan code testing and release cycles. For a graphic designer, it may involve drafting steps. For a building manager, it may mean working with a government planning department. And an event planner works with vendors, budgets, and timelines. Bottom line: It is difficult to manage skills based on words alone.

**Abilities
like cooking
require multiple
dimensions
of skills.**

Cuisine

Quality

Speed

Fusion vs.
Traditional

Vegetables
vs. meat

Cooking

Home cooking vs. catering

Source: Eightfold AI

Another challenge around context is, what does that skill really mean? Cooking, for example, is a common ability. But when you say someone has cooking skills, what does that actually mean? (See illustration above).

Does it mean they can cook from every cuisine? Likely not. Sichuan Chinese cooking is a different skill from French cooking.

What about speed? Someone who cooks very quickly might have short-order cooking expertise. Slow cooking might be a barbecuing skill. They are separate, but both "cooking."

What about different foods? A home cook who is a vegetarian may have little skill in cooking meat.

So, any one skill has a lot of nuances. Cooking on its own leaves out a lot of context, and there may be dozens of different skills you could consider "cooking."

AI: The Future of Skills

Eightfold's Approach to Skills

- **A self-learning model across data coming from different sources to understand relationship, context and matching**

- **Data used to build skill understanding:**
  - ▷ **1 billion+ resumes**
  - ▷ **Job descriptions**
  - ▷ **University data, course data**

Skills can't be used or managed if you only have manually built and maintained a skills library. It won't help you understand the people or the relationships among skills. A traditional skills database won't help you understand roles. You will fail to understand the skill itself.

But there is a way forward; through artificial intelligence. When an AI deep-learning model uncovers the relationships among skills, between skills and roles, and how skills change over time, and isn't confused by issues of context, you can finally use skills the way you want to. This is what Eightfold does.

How Eightfold AI Works
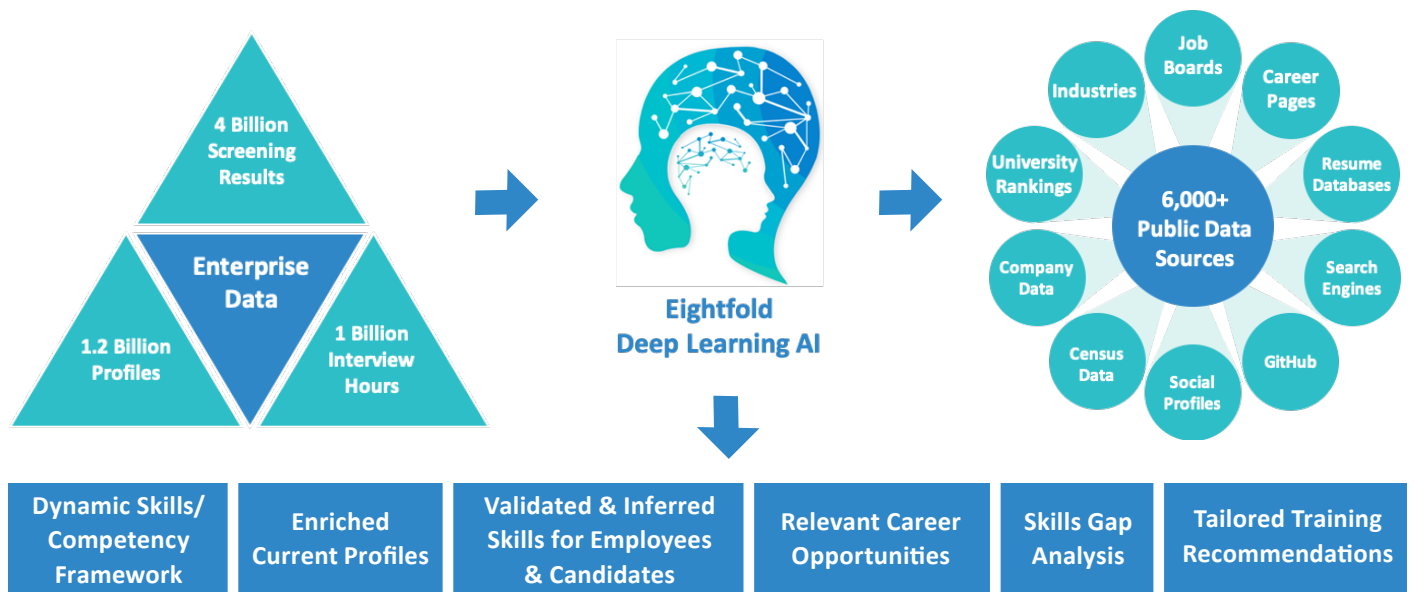
Source: Eightfold AI

At Eightfold, our deep learning is about people's careers. The outcome AI tries to predict is: What is an individual likely to do next in their career, based on what we know about them?

In the illustration above, the data we have about people in our enterprise is represented on the left. The AI model (center) learns about the rest of the world from the data on the right, which is public data from many different sources.

The enterprise data includes more than 1.2 billion profiles of individuals, representing a substantial portion of the world's workforce. These profiles include information about the jobs people have had, the accomplishments they have described, their education, their companies, etc. Therefore, good predictions can be made for any career.

In addition, there is a tremendous volume of information about people's career movements — the jobs they have had, but also the jobs they applied for, interviewed for, offered, and accepted. This amount of detail, in screening and interview results, is a big part of what makes the AI model so effective.

The public information gives additional context. Public data knows things that a recruiter might know and the AI should know — which colleges are well-regarded, which regions are commutable to which other regions, and so on.

The deep learning then combines this information to create predictions about what someone is likely to do next in their career, what job someone can succeed at and how they can reach their potential. This AI is delivered through specific applications as shown at the bottom of the illustration.

In other words, the AI figures out which factors predict success in a career. The AI can recognize distinct skills, more than 1.4 million of them, and it can calculate how they relate to each other and to jobs and titles and companies, and how they change over time. This capability finally makes skills the driver of talent transformation.

# How Eightfold's AI Helps You Manage Workforce Skills at Scale

Here are several ways you can use AI to transform your talent processes:

Find candidates who can do the job.

You can use skills to define what you're looking for in a candidate and focus on just those candidates. This is far more flexible and nuanced than a keyword search, though you can force this system to look for keywords, too — and set other requirements as you would in a typical job description.

Evaluate candidates based on skills.

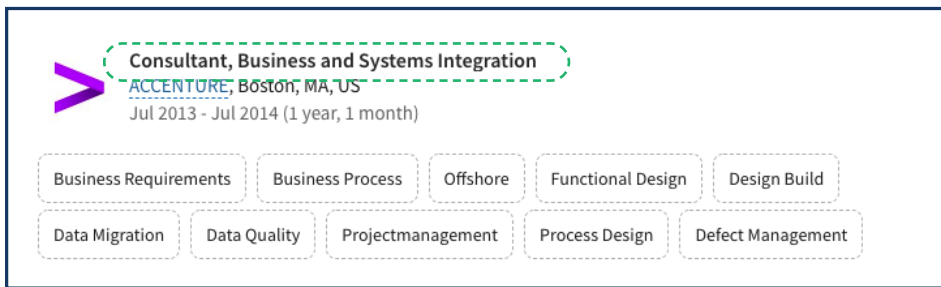With this information, you can specifically evaluate how a candidate matches your skill needs.
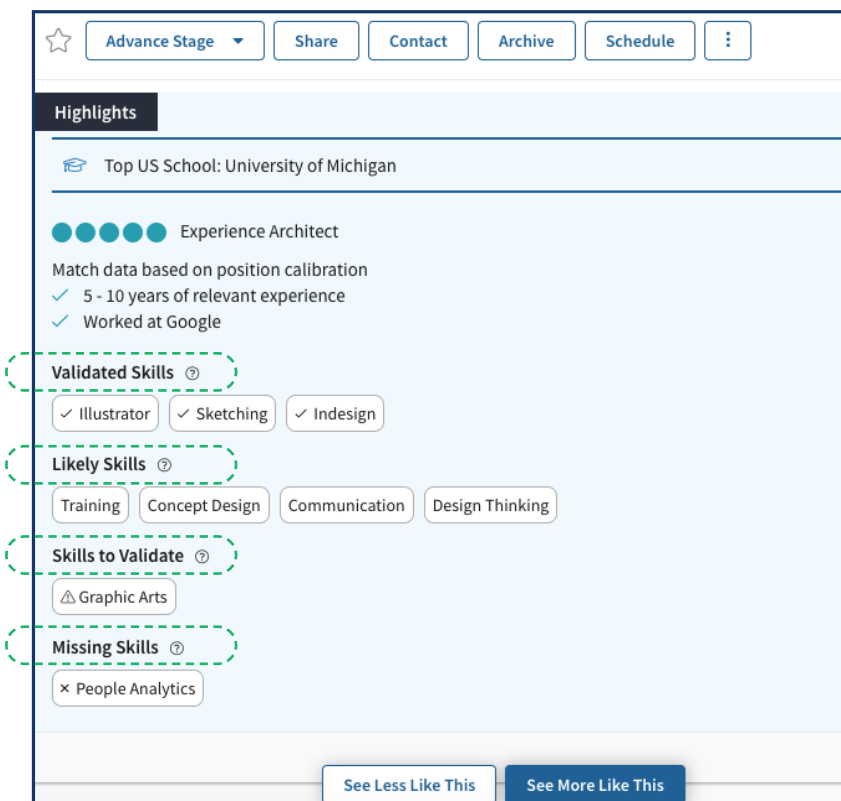
Source: Eightfold AI

In the illustration on the left, you can see three validated skills. That means these are skills the AI is very confident this person has, probably because they've described that skill or a nearly identical skill on their own profile and had jobs and experiences that prove they can do these things.

You can also see four likely skills. Based on everything else we know about the person, we can predict with high likelihood that she has these other skills today, even though she hasn't said so directly.

You can also see one skill that you need to validate. This is a required skill for the job; the person indicates she has it, but the AI doesn't see enough information to determine if she can really do it. Finally, there is one missing skill.

This ability to use skills as a real recruiting tool is extremely powerful. It means skills can be your recruiting strategy, you can ask the right questions for each candidate, you can understand what training to offer at hire and much more. It's transformational.

> Consultant, Business and Systems Integration
> ACCENTURE, Boston, MA, US
> Jul 2013 - Jul 2014 (1 year, 1 month)
>
> Business Requirements | Business Process | Offshore | Functional Design | Design Build
>
> Data Migration | Data Quality | Projectmanagement | Process Design | Defect Management

Source: Eightfold AI

Fill in the blanks for candidates.

So, what else can you do with skills? You can fill in the blanks.

In the Illustration above, you can see a consulting job from seven years ago. This individual provided this job on his resume with no additional information. But that's okay because the AI has seen so many examples of similar profiles, it can infer that this person probably gained these skills from that job. They are likely skills.

Show candidates why they should apply

You can turn this skills-based hiring process around 180 degrees and show a candidate the same information in a version appropriate for their needs. This AI can detect the skills a candidate has based on their resume, then show them the jobs that best fit their skills and experience, and list exactly which of those skills meet their capabilities.

This is a transformational power to add to your career site, especially when your application volume is increasing. This is faster, more transparent, and inclusive for candidates. It provides the candidate with a great experience during her first interaction, which sets your company up for hiring success. Candidates are more likely to apply, more likely to aim for the right job, and more likely to see you as an innovator.

Give employees the tools to move internally

This is much like the experience you offer candidates; with skills you can provide employees a new way to move internally. An employee can see an open job and the skills she has that match its requirements. If the employee thinks the AI is missing one of their skills, they can add it — or learn it! This experience for employees is important because of the skills, but it is also a digital self-service experience. You don't need anyone to be in the office. It puts career management in your employees' control.

Give employees the tools to grow

If an employee is missing a skill they need to grow, they can identify that skill and discover resources to learn the missing skill. This could be both external learning platforms or your LMS content. With this capability, your employees aren't limited to adding skills they need for the job they are applying to now. They can also think about future jobs or potential paths they are just curious about. The AI will let them choose a career target and identify the skills gap and how to fill it.

Benchmark and plan for the future

As an HR leader, you want to know where your organization is strongest and where you need to learn more. Eightfold AI helped a Fortune 200-level company with a department of team members who work with the public. The team analyzed the skills of each of thousands of team members, aggregated them, and compared them with the skills of comparable workforces at peer companies. This allowed the company to see how the skills in its department and peer companies were trending over time. This information is used to drive training and changes how the company hires.

Eightfold Customer Success Stories

Global technology company.
Skills-based hiring reduced recruiter time for hiring by 50%.

500

Fortune 500 financial firm.
By evaluating skills at scale, redeployed 40% of employees impacted by a downsizing action.

Global airline.
Skills-based candidate experience increased application rate by 120% and candidate quality by 43%.

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About Eightfold AI

Eightfold is an AI company based in Silicon Valley, working with enterprises across industries and around the world. The company uses artificial intelligence technology to transform how enterprises manage their talent throughout the talent lifecycle, from recruiting and hiring through employee mobility, retention, and skills development.

The company's AI approach is also designed to prevent bias and support diversity. This AI approach is transformative because it helps companies to think about talent differently.

Traditionally, you hired someone who had "done the job before and could be trusted to do it again." Today, skills change so quickly that if you hire someone who has done just the exact job before, the job will change so that their existing skills are no longer sufficient or possibly not even relevant. So, you need to hire, promote, and think about what people can learn and what they can become — not just what they can do today. In other words, you need to hire for potential.

The ability to deliver on human potential with AI requires real expertise in artificial intelligence. Eightfold's founding team are world experts and are at the cutting edge of delivering business-ready AI. To achieve the best results with technology, you need to have the best technology — and that is what the Eightfold team is delivering to companies today.

To learn more, please visit

eightfold.ai

eightfold.ai

About Brandon Hall Group

With more than 10,000 clients globally and 25 years of delivering world-class research and advisory services, Brandon Hall Group is focused on developing research that drives performance in emerging and large organizations, and provides strategic insights for executives and practitioners responsible for growth and business results.

Some ways we can help …

MEMBERSHIP PACKAGE

Includes research library access, events, advisory support, a client success plan and more.

ADVISORY OFFERINGS

Custom Research Projects, including surveys and focus groups interviews. Organization Needs Assessment for Transformation, Technology Selection and Strategy.

EXELLENCE AWARDS

Global recognition showcasing leading programs and practices with a library of case studies.

PROFESSIONAL DEVELOPMENT

Virtual and on-site certification programs, workshops and webinars supplemented with research-driven assessments and tools.

ORGANIZATIONAL EXCELLENCE CERTIFICATION PROGRAM

recognizes world-class HCM programs that transform their organization and achieve breakthrough results. This designation is the next step beyond the HCM Excellence Awards, which focus on a single program, and looks at the department as a whole.

SMARTCHOICE PREFERRED PROVIDER PROGRAM

uniquely places HCM service and technology companies at the top of organizations' consideration list of vendors. It adds an unmatched level of credibility based on BHG's quarter of a century's experience in evaluating and selecting the best solution providers for leading organizations around the world.