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RESEARCH ARTICLE

The People Behind People Analytics

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Deloitte Consulting LLP

Overview

People analytics has never been more important. As organizations move from surviving to thriving in a world of continuous disruption, leaders are asking fundamentally new questions about the business, its people, and the work they perform. To answer these questions, organizations are using people data in new ways to drive business results in an increasingly complex and dynamic environment.[1]

Our latest High-Impact People Analytics study found clear connections between the backgrounds and skills of people analytics practitioners and the function's maturity.[2] To better understand these connections, we collaborated with technology company Eightfold to dive deeper into profiles of current people analytics professionals. In this article, we share findings that can help build more effective people analytics functions and practitioners.

In This Article

- The connection between team composition and people analytics maturity
- Emerging skills and the evolution of people analytics
- The prevalence of higher education and the diversity of professional backgrounds in the people analytics profession

Eightfold Profile

Eightfold is a technology company based in Northern California that specializes in applying deep-learning artificial intelligence (AI) to predict the next job in an individual's career. Eightfold's career data includes more than one billion unique talent profiles that cover a large and representative sample of the world's workforce.[3] Eightfold's AI technology normalizes the information in a talent profile and uses AI to analyze its contents and add enrichment. As a part of this enrichment, Eightfold detects the career-related skills each individual has added over time along with the relative seniority level of each role they have held.[4]

1. Team composition and skills help drive the maturity of a people analytics function—but they also raise new questions.

Not surprisingly, people analytics practitioners' skills and backgrounds are an important factor of people analytics success in organizations.[5] In our most recent High-Impact People Analytics study, we found higher-performing organizations support the development of people analytics practitioners through specific career paths and focused learning opportunities. We also found people analytics teams comprised of individuals with more diverse professional and educational backgrounds, experiences, and perspectives tend to drive greater business- and workforce-related impact.[6]

These findings raise new questions, particularly about the specific skills and backgrounds of current people analytics professionals and how to enhance them. But instead of conducting another organizational survey,

KEY POINT: Higher-performing organizations support the development of people analytics practitioners through specific career paths and focused learning opportunities.

we approached Eightfold to help uncover answers to these questions by looking at practitioner-level data.

For our people analytics background and skills research, Eightfold located profiles that had a current job function in people analytics and a current employer among the 1,000 largest employers in the United States. The resulting pool included over 7,000 talent profiles of entry- through C-level people analytics practitioners. Figure 1 includes the distribution of this sample by seniority.

Figure 1: Distribution of People Analytics Sample by Seniority
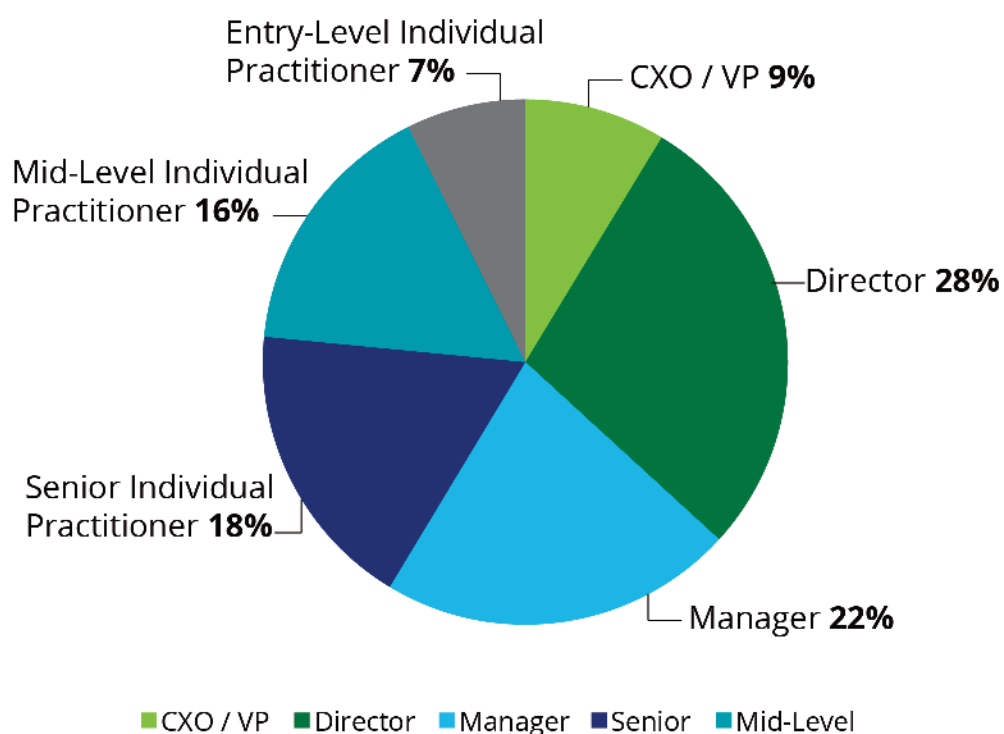
Source: *Eightfold, 2021.*

2. Emerging skills support the evolution of the people analytics domain.

To better understand the prevalence of skills, Eightfold calculated skill trends for people analytics practitioners over the last two decades. An individual profile is considered to have a skill in a given year if the profile mentions the skill in a work description associated with that year. Skill trends are normalized to show the prevalence of a skill over time. The year in which a skill is most prevalent is normalized to 100, and numbers below 100 show the relative prevalence of that skill across the public profile database. For infrequently seen skills, a balancing factor is calculated to locate trends in skill prevalence; this factor may cause the peak year of highest prevalence to be a number slightly less than 100. The results of

this prevalence scoring suggest trends with regard to skills in the people analytics domain.

A closer look at people analytics skills signals a clear and sharp increase in those commonly associated with digital transformation, along with an increase in more complex and nuanced analytics related to an organization's talent. Increased people analytics adoption across industries may be driving traditional people analytics skills such as talent analytics and HR dashboards to trend up slightly, while skills specifically related to compensation and employee surveys are trending downward. Figures 2–5 provide additional details on these and other skill trends.

Skills Trending Sharply Higher

Digital HR skills are trending up sharply (see Figure 2), roughly correlating with the current global wave of digital transformation that started in organizations in the 2010s. Technologies related to people and processes require and enable these skills to reimagine work and create value in organizations. People operations, for example, includes all the digital exhaust created as people interact through these technologies. This exhaust may include service tickets created when an employee interacts with a shared services center or data generated at specific milestones along the employee lifecycle. Additional people analytics skills trending up sharply include talent intelligence (i.e., detailed data on external talent markets), employee experience, and workforce insights.

> **KEY POINT:** Digital HR skills are trending up sharply, roughly correlating with the current global wave of digital transformation that started in organizations in the 2010s.

Figure 2: People Analytics Practitioner Skills Trending Sharply Higher
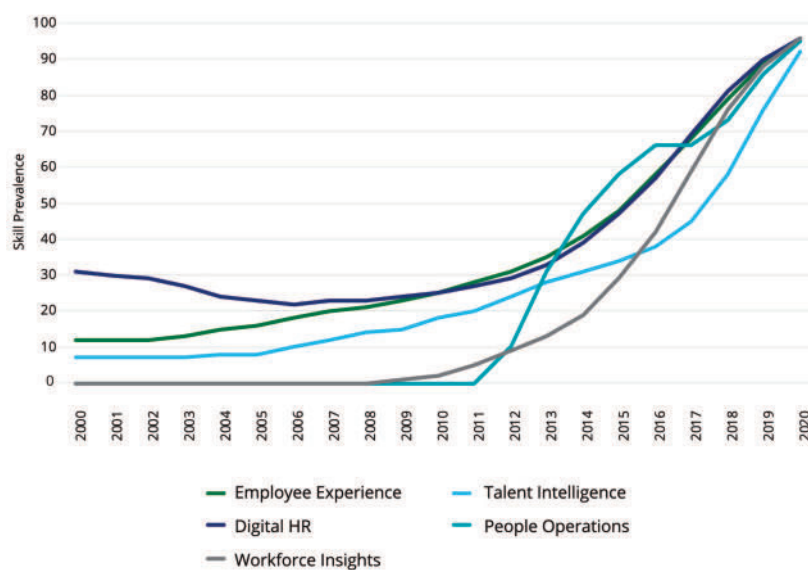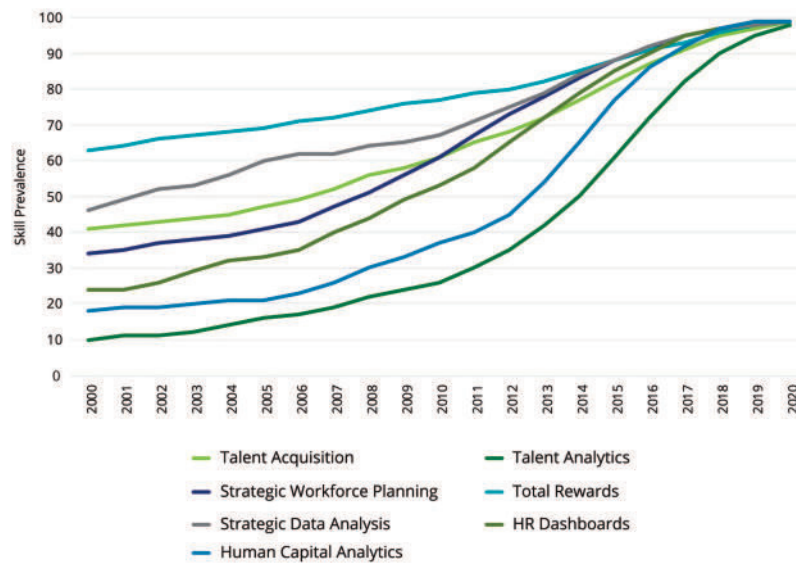

Source: *Eightfold, 2021.*

Skills Trending Moderately Higher

Skills that help provide deeper insight into an organization's talent are trending up moderately (see Figure 3). These skills are commonly applied

to the more granular data available on talent and talent markets, including talent acquisition, total rewards, human capital analytics (including DEI and required reporting), and strategic workforce planning. As access to people data is increasingly democratized at many organizations, HR dashboard skills for practitioners have also trended somewhat higher.

**Figure 3:** People Analytics Practitioner Skills Trending Somewhat Higher

Source: *Eightfold, 2021.*

Skills Holding Steady

People analytics skills such as organization design, workforce performance and planning, and HR strategy and metrics are holding relatively steady in terms of prevalence over the past decade (see Figure 4). This performance suggests these skills are fundamental to the practice of people analytics as organizations continually seek to understand workforce composition and how people affect organizational performance.

Figure 4: People Analytics Practitioner Skills Holding Steady
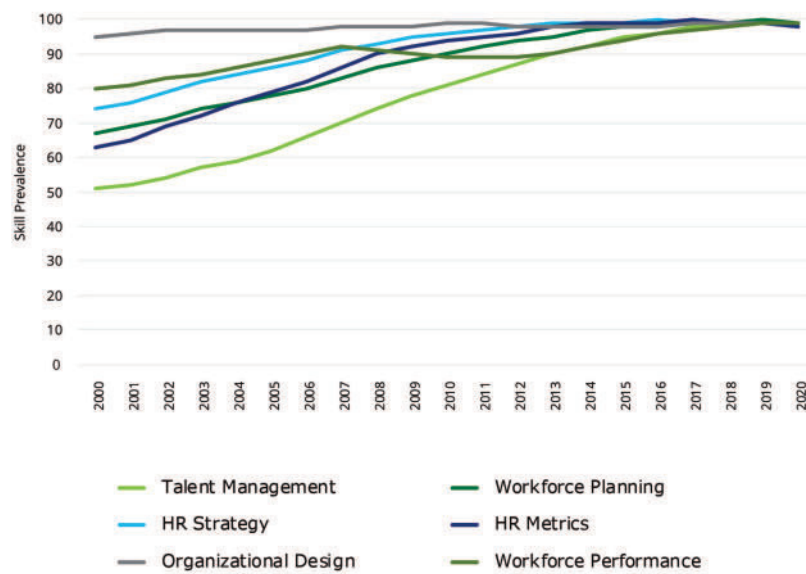
Source: *Eightfold, 2021.*

Skills Trending Downward

Compensation planning and survey skills are trending down in favor of more nuanced active and passive data collection approaches (see Figure 5). This may be due in part to the increased focus on broader total rewards skills and the fact that compensation-planning activities and external market compensation data are now often enabled by vendors and the tools and dashboards they provide. The prevalence of employee survey skills has also declined as solution providers increasingly provide both survey design and analysis, leaving organizations' people analytics practitioners to focus on emerging trends and the more operational data generated through workplace technologies.

Figure 5: People Analytics Practitioner Skills Trending Downward
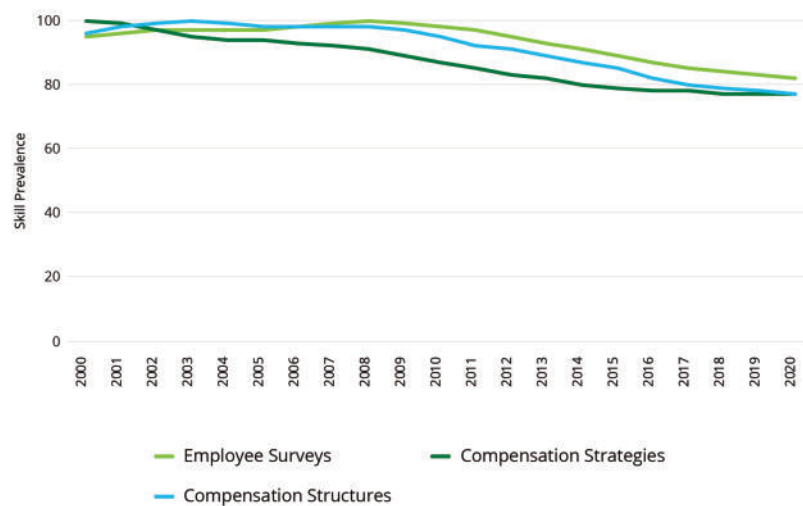
Source: *Eightfold, 2021.*

Overall, these trends suggest a shift in the focus of people analytics and the skills required for a robust people analytics function. Rather than providing a view of organizational talent merely as supply and demand of interchangeable parts, people analytics is becoming more focused on understanding the human side of business and explori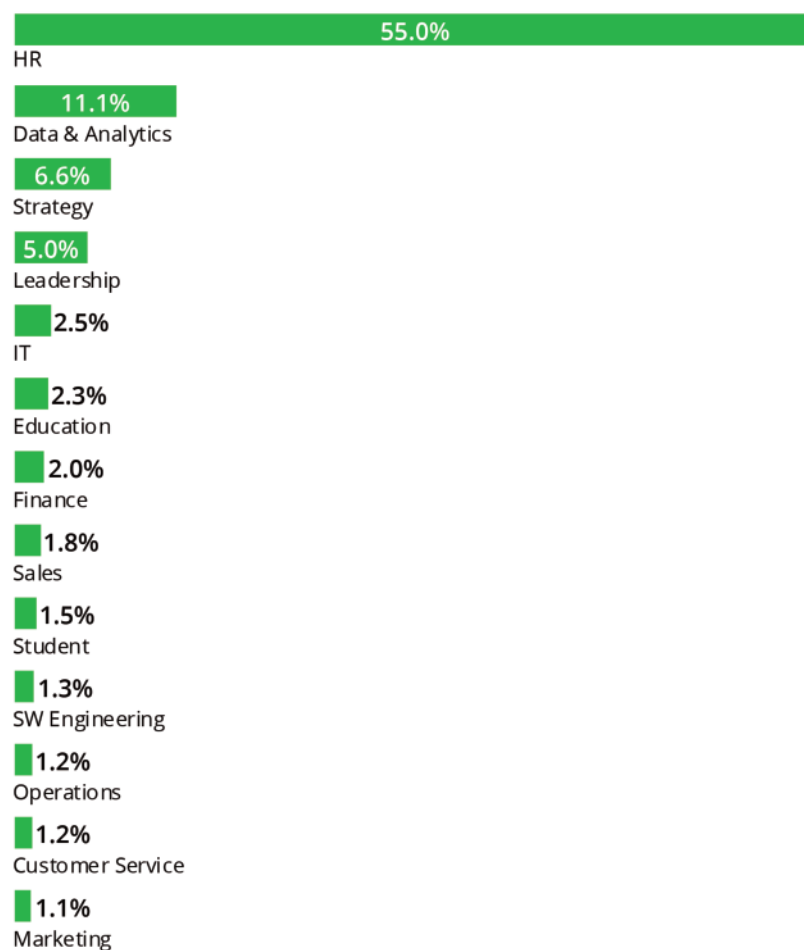ng new ways the workforce can create and deliver value. And people analytics, as much as any professional discipline, is evolving to take advantage of the greater insights and strategies available as workplace technology generates additional types and greater volumes of people-related data.

3. People analytics practitioners' backgrounds underscore the importance of advanced educational degrees in the field but suggest an opportunity for more diverse professional backgrounds.

In addition to seeking an understanding of people analytics skills trends through this research, we explored the professional backgrounds and levels of educational attainment today's people analytics professionals possess. The insights derived may allow for more precise planning by both practitioners and organizations as they build their people analytics careers and teams, respectively.

Eightfold's people analytics talent profile data indicated a clear trend of increased prevalence in advanced degrees at more senior organizational levels as well as a heavy concentration of practitioners who worked in HR prior to their current people analytics role. Figures 6 and 7 indicate the professional backgrounds and educational attainment levels of this sample of people analytics practitioners.

KEY POINT: People analytics is becoming more focused on understanding the human side of business and exploring new ways the workforce can create and deliver value.

Eightfold's analysis of people analytics practitioner backgrounds categorizes the function of the role the person held immediately prior to starting their current people analytics position (see Figure 6). The results show over half of people analytics practitioners come from an HR position. This is not surprising, given the need to understand the employee lifecycle and HR processes, along with the opportunities to collect and analyze people-related data along the way. Other common prior roles for current people analytics practitioners include data and analytics roles more generally, along with strategy, leadership, and IT positions. This reflects some diversity of professional backgrounds in the people analytics function but also presents an opportunity to increase the variety of people analytics practitioner experience sets by bringing in more individuals from other domains outside HR.

Figure 6: Most Common People Analytics Practitioner Prior Functions

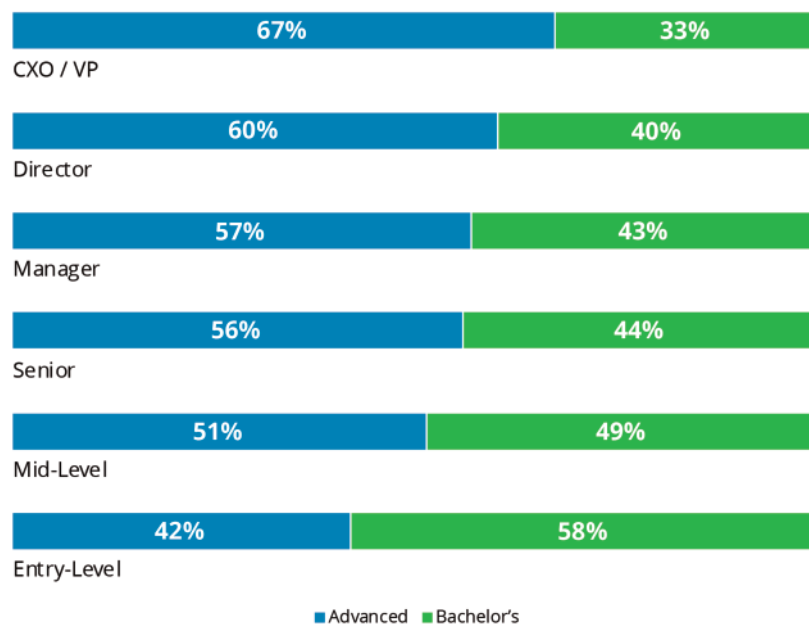|	
HR	55.0%
Data & Analytics	11.1%
Strategy	6.6%
Leadership	5.0%
IT	2.5%
Education	2.3%
Finance	2.0%
Sales	1.8%
Student	1.5%
SW Engineering	1.3%
Operations	1.2%
Customer Service	1.2%
Marketing	1.1%

Source: *Eightfold, 2021.*

As indicated by Figure 7, advanced degrees are prevalent throughout the people analytics profession, with an increased prominence at more senior levels. In this analytical, highly specialized profession, it appears there is some value to pursuing graduate degrees. This may not always be the

case, however, as technology solutions start to address the more specialized aspects of people analytics, such as data science and visualization. As indicated in our High-Impact People Analytics research, a key driver of people analytics maturity is the ability to work with internal customers to understand the business challenges that can be addressed with people analytics and apply these insights in context.[7] It remains to be seen if demand for these and other consultative skills will impact the prevalence of domain-specific education attainment in the people analytics field over time.

KEY POINT: Advanced degrees are prevalent throughout the people analytics profession, with an increased prominence at more senior levels.

Figure 7: People Analytics Practitioner Highest Educational Degree Attainment

Level	Advanced	Bachelor's
CXO / VP	67%	33%
Director	60%	40%
Manager	57%	43%
Senior	56%	44%
Mid-Level	51%	49%
Entry-Level	42%	58%

■ Advanced ■ Bachelor's

Source: *Eightfold, 2021.*

Conclusion

Skill and professional background trends among people analytics practitioners signal a profession that is evolving—like organizations—to meet the social and business demands of a changing global economy. These changes include a greater emphasis on more granular and specialized workforce insights and employee experience and a focus on preparing organizations and their talent for the future of work.

These findings suggest a starting point for the continuous development of people analytics teams and professionals within organizations as the business environment continues to evolve and as organizational leaders increasingly look to people data to help make fundamental business decisions and solve key people-related challenges.

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⊙⊸ Key Takeaways

- Higher-performing organizations support the development of people analytics practitioners through specific career paths and focused learning opportunities.
- People analytics practitioner skill trends suggest a domain that is evolving toward a more nuanced understanding of the human side of business and exploring new ways the workforce can create and deliver value.
- The most common prior role for current people analytics practitioners is HR; other common prior experiences include more general data and analytics roles, along with strategy, leadership, and IT positions.
- In this analytical, highly specialized profession, it appears there is some value to pursuing graduate degrees.

Eightfold Description & Methodology

Eightfold is a technology company based in Northern California. The company specializes in deep learning artificial intelligence that predicts the next job in an individual's career based on their skills, work history, education, and other relevant factors. Eightfold provides this AI as enterprise technology for global businesses, which use the technology to optimize their functions for recruiting, career sites, job transfers, workforce learning, and other talent-related needs. Governments also use Eightfold's AI to power employment exchanges with job matching for their citizens.

Eightfold's artificial intelligence creates predictive models from a large data set of career information, including talent profiles of individuals, past hiring decisions, job descriptions, and publicly available data. The models do not consider personally identifiable information or personal characteristics, and Eightfold complies with relevant privacy and operational security standards in the jurisdictions where its technology is used. The company believes its careers data set is the largest of its type and that it offers a novel way to understand work trends. The Eightfold careers data includes more than one billion unique career profiles, covering a large and representative sample of the world's workforce. By applying deep learning AI to this data set, Eightfold can calculate the factors that contribute to the most probable career movements, define transferable skills across different careers, benchmark the growth or decline of skill sets, and answer many other types of questions that are of interest to business decision-makers, researchers, and policy makers.

In providing artificial intelligence tools to support talent decisions, such as hiring, Eightfold takes significant steps to ensure fairness, trust, and user control. Eightfold uses technical and operational methods to prevent bias against individuals based on their personal characteristics, such as their race or gender expression. Eightfold technologies provide explainability

on the reasons why any prediction is offered, with clear and transparent disclosures that the end-user can understand without prior training.

Each prediction offered by Eightfold technology, such as a job recommendation for a candidate or a recruitment recommendation for a hiring manager, leaves the final decision to the end user and does not automate any decision that a person would make in the absence of assistive technology. This ensures that the AI tool is ethically deployed with human oversight.

Eightfold maintains its global website at www.eightfold.ai.

Endnotes

1. *2021 Global Human Capital Trends: The social enterprise in a world disrupted—Leading the shift from survive to thrive*, Deloitte Insights, 2021.
2. High-Impact People Analytics research, Deloitte Consulting LLP, 2021
3. A talent profile is a record of an individual's career. This information can originate from resumes, public websites, job applications, and other sources.
4. Eightfold's models do not consider personally identifiable information or personal characteristics, and Eightfold also complies with relevant privacy and operational security standards in the jurisdictions where its technology is used.
5. High-Impact People Analytics research, Deloitte Consulting LLP, 2021.
6. High-Impact People Analytics research, Deloitte Consulting LLP, 2021.
7. High-Impact People Analytics research, Deloitte Consulting LLP, 2021.

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