

Talent Analytics Quarterly

Q2 2017

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Maximizing Effectiveness
from Talent Analytics
Investments

Focus on What Clients
Need, Not Want

Five Imperatives for
Organizations Embarking
on a Predictive
Analytics Journey

How to Build an Attrition
Prediction Model

Driving Talent Analytics
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Talent Analytics Quarterly

Q2 2017

CEB Corporate Leadership Council™

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Letter from the Editor

We are pleased to announce that since releasing our last issue, we have now hosted our first three live events for talent analytics leaders in Chicago, New York, and Denver. At each one, the energy surrounding talent analytics was palpable; the rooms were buzzing with peers sharing ideas and tackling key challenges together. We hope you can join us for one of these workshops in the future to network and learn. Through the rest of the year, we'll be making stops in Houston, Toronto, London, and Brussels as well as hosting virtual events for those unable to join us in person.

We begin this issue of *Talent Analytics Quarterly* exploring how you can maximize effectiveness from your talent analytics investments. From our recent survey of over 100 talent analytics leaders, we discovered the most effective talent analytics organizations invest not in improving their technology or redesigning their team structure, but in bettering their relationships.

This quarter, we also feature our regular contribution from CEB's Talent Management Labs with an article on starting your predictive analytics journey. And we dive deep into case examples, exploring how HCL took a hypotheses-based approach to building an attrition model with 90% accuracy, and how TE Connectivity worked to establish rigorous data quality standards across its organization.

Finally, we speak with talent analytics leaders directly. We feature two conversations with current heads of Talent Analytics—David Grainger of DST Systems and Shekar Nalle Pilli Venkateswara of Accenture—and learn how they've built their functions and shaped their work for strategic impact.

As always, we welcome your feedback and suggestions for how we can improve this publication for you and your teams. Please direct any comments or questions to TalentAnalyticsHelp@cebglobal.com.

Sincerely,

Brian Kropp
Practice Leader
CEB Corporate Leadership Council™



Achieve Your Talent Analytics Priorities Through Better Relationships

Talent analytics leaders today are prioritizing...



..improving
data
quality.



...enabling more
widespread use
of analytics.



...making the
talent analytics
function more
strategic.



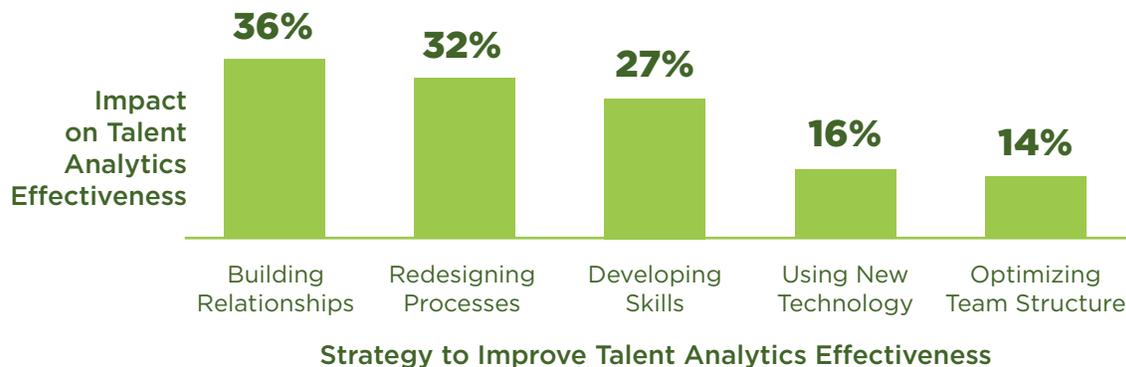
Typical Approach:
Invest in Updating Technology and Structure



Best Approach: Invest in Bettering Relationships

Impact of Strategies on Talent Analytics Effectiveness

Difference in Talent Analytics Effectiveness Between Top- and Bottom-Quartile Organizations at Each Strategy



n = 111.

Source: CEB 2017 Talent Analytics Effectiveness Survey.



Data Quality

Build a system of influence to improve data quality throughout your organization.

Use of Talent Analytics

Bring action planning forward (before analysis) in your project cycle.

More Strategic Talent Analytics

Manage your project plan for influence—determine which processes you should focus on for long-lasting business impact.

**Join our workshop series,
Maximizing the Impact from Talent Analytics Investments,
to learn more.**

Maximizing Effectiveness from Talent Analytics Investments

By Blakeley Hartfelder

Experts predict that by 2020, the digital universe will contain 40 trillion gigabytes of data, amounting to more than 5,200 gigabytes for each person.¹

To put that into perspective, picture each gigabyte as one grain of sand. Forty trillion grains of sand would be 57 times the amount found on all beaches worldwide. As the amount of data available increases, our reliance on it has become a part of our professional and personal lives. When was the last time you made a big purchasing decision without looking at consumer reviews or quality ratings? Similarly, in the business world, it's nearly impossible to have a strategic conversation without bringing data to the table.

This new, data-focused work environment has dramatically advanced the performance of many early-adopting functions. These functions have figured out how to harness more data and more analysis to drive

action. For instance, Marketing has become increasingly sophisticated in collecting customer data (e.g., mining the context of online conversations to understand the interests of different customer groups for improved marketing campaigns) and using it (e.g., applying analytics to identify which social media users are likely to be most responsive to certain ads for better targeting). Unfortunately, in many cases, HR teams are still chasing the analytics dream. Only 12% of you, talent analytics leaders, believe your organizations are effective at using talent data to make decisions. As a result, you are missing out on significant ROI from talent analytics investments.

Achieve Your Talent Analytics Priorities Through Better Relationships

To improve your ROI, you have set aggressive priorities for 2017 and beyond:

¹EMC Digital Universe Study, International Data Corporation, 2014.

- **Improve data quality**—Develop and improve data standardization or governance, or reshape policies related to data privacy and security.
- **Enable use of analytics**—Improve how clients, including HR Business Partners, HR leaders, and line managers, use talent analytics in their decision making.
- **Make the talent analytics function more strategic**—Build a business case for conducting advanced analytics or prioritizing projects aligned to business strategy, not one-off needs.

So you know what you need to achieve to improve the effectiveness of talent analytics at your organizations, but how to accomplish these priorities is a much more difficult question. To answer it, we surveyed talent analytics leaders around the globe to determine how they currently approach their priorities and what is working. We found that relationships, not optimized

structure or better technology, are key to achieving talent analytics priorities and improving talent analytics effectiveness (see infographic on p. 5).

That's right. In a world full of data, the most important strategy you can deploy is strengthening relationships. These relationships may be with data owners throughout the organization to gain access to datasets you need. They could be relationships within your team—who has which roles and responsibilities, and how does the team work together to meet shared objectives? Or it could be the relationships you have with clients, whether they are peers in HR or executives in the organization. How you interact with them, how you influence them, and how you incorporate their priorities into yours all contribute to improving relationships with these individuals.

The most important strategy you can deploy is strengthening relationships.

So, using the relationships lens, how do you tackle the priorities you have in front of you?

1. Better Data Quality: Build a system of influence to improve data quality throughout your organization.

Data Quality—Data’s fitness to serve its purpose in a given context; includes data availability, consistency, accuracy, precision, and completeness

Seven out of 10 heads of talent analytics rate improving data quality as their top objective this year. This data point isn’t surprising when you consider the depth of HR’s data quality woes—only about 40% of talent analytics teams even have access to the data they need, and just less than half are good at standardizing that data.

Data quality is not an easy challenge to solve. Organizations didn’t intentionally get to this place of underwhelming data quality. Instead, HR processes, created long before talent analytics was a factor, just weren’t built for proper data collection, standardization, and analysis. And these processes involve a plethora of stakeholders, from data owners who authorize access to particular datasets and are accountable for the integrity of those datasets, to data consumers who use the datasets and play a part in defining what makes data good enough to use.

Normally, given all the stakeholders involved, the talent analytics professional is responsible for cleaning up talent data. For instance, you are about to start a project on new hire turnover, so you identify which data you need access to, assess its quality, and spend a lot of time cleaning it—standardizing terms, looking for missing fields or information, etc. It’s a painful, time-intensive process, and no matter the

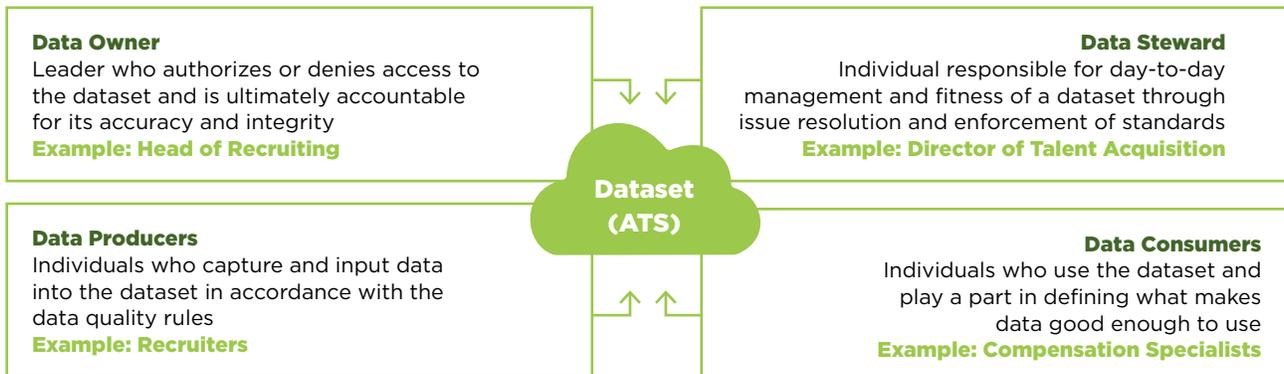
effort you put in, this process only incrementally improves data quality because you are not addressing the root of the problem—poor data being entered into systems in the first place. So what will work? Using your relationships.

Instead of individually building clean datasets, talent analytics teams should strengthen their relationships with other data quality stakeholders to enable them to input and maintain clean data in systems on an ongoing basis. Other stakeholders may not understand what is needed of them or agree that data quality is their responsibility, so it is talent analytics teams’ responsibility to teach and influence. Eventually, these improved relationships with data quality stakeholders will lead to better data in your systems and more day-to-day maintenance, which means less data cleaning at a project’s start.

A few ways to get started:

- **Use root-cause analysis of data quality issues, and provide guides for error-free data management.** Low-quality data mainly stems from flawed business processes. Map where data is entered, changed, duplicated, or moved to determine where errors originate.
- **Measure, flag, and clearly communicate data quality.** Dimensions of data quality matter more or less in different situations. Set different quality standards or thresholds for various datasets, and provide visual cues accordingly (e.g., badges, star levels).

Roles and Responsibilities of Data Quality Stakeholders Using the Example of the Applicant Tracking System



Source: CEB analysis.

Bring Action Planning Forward in Your Project Cycle

What Your Analytics Project Cycle *Should* Look Like



Source: CEB analysis.

2. Improved Use of Talent Analytics: Bring action planning forward (before analysis) in your project cycle.

Currently, just about 1 out of 10 heads of talent analytics believe their team is effective at driving action with talent analytics. Most teams spend significant time building reports or conducting sophisticated analysis, but their clients don't act on their work. This lack of action can have negative consequences for your team—talent analytics team engagement might decrease, or you might have more difficulty proving talent analytics' ROI. You might miss opportunities for your clients as well—to make more informed decisions about how to improve processes and strategies and even how to avoid talent risks.

Many of you try to counter inaction by improving your analysis and perhaps the way you communicate results of the analysis to your clients. You seek to conduct robust analysis around your clients' challenges, and you simplify the way you present the results through improved data visualization and sharpened recommendations. Knowing that your analysis will determine which actions clients should take, you only spend time talking about changes or decisions that need to be made after analysis is complete.

These strategies make sense, so why aren't your clients taking action? Doing so may be harder than you think. Acting on talent analytics insights often requires clients to make changes to the way they do their work or to make decisions counter to their intuition. No matter how robust the analysis or how clear the recommendation, they are just not prepared to act.

A few ways to get started:

- **Create a standardized project intake form that aligns the interests of the client and the capability of the talent analytics team.** Project intake forms should specify the end user of the requested data, support clients in articulating a business case and early hypotheses, and outline potential actions to take based on analysis.
- **Train talent analytics staff to reinforce action or change across the analytics project cycle.** Especially for larger projects, staff should establish regular check-ins with clients during analysis; they can use these discussions to update clients on how the analysis is going but, most importantly, to prepare clients to take action on final results.

To prepare clients to take action, you must establish a solid relationship with them early in the analytics project cycle and nurture it throughout your project cycle. You can't wait until after analysis is complete to start talking to your client about how to use your data and analysis; it just won't stick. Instead, the best talent analytics teams bring action planning (or pre-action planning) forward in the cycle to the scoping phase. These teams scope projects to understand not only what kind of data or analysis they need but also the ways their clients will use the analysis.



Just over

20% 

of heads of talent analytics agree they effectively balance tactical requests and strategic work.

This approach serves two purposes. The first purpose is giving you the context you need to conduct analysis and start formulating recommendations on how to apply results, and the second is getting you and your client to start thinking about changes the analysis might prompt and how to prepare for those changes. The action-focused partnership with your clients should then continue throughout the project cycle—reinforcement of change over time increases the acceptance and understanding of the required change.

3. More Strategic Talent Analytics Function: Manage your priorities for influence, not just alignment.

This notion of analytics-inspired action feeds into many aspects of talent analytics—it's not just what people do with talent analytics, but also what kind of work talent analytics teams do in the first place. However, just over 20% of heads of talent analytics agree they are effective at balancing tactical requests and strategic work. In many cases, this means that talent analytics teams are spending most of their time on tactical work—completing one-off requests, developing standardized workforce reports, or customizing those reports. So teams have little time for more strategic work that actually drives long-term business value, such as using analytics to improve HR processes or talent strategies.

You aren't ignoring what the business needs; in fact, most teams manage their priorities for alignment—reactively setting priorities based on business need. The problem is the client isn't always right—what your clients say they need often isn't what the business needs from talent analytics in the long term. For instance, clients often prioritize urgent, tactical needs over strategic, high-impact requests, and eventually, client requests will outstrip your capacity. For other talent analytics teams, clients might not yet be demanding your support.

Managing your priorities for alignment alone is insufficient because ultimately, what's good for the business is a strategically positioned talent analytic team whose work is integrated into business and HR processes. Thus, the best talent analytics teams manage their priorities for influence. They restructure relationships with clients to proactively shape their priorities based on what their own team needs to have long-lasting business impact. These teams are intentional; they change the way they approach and prioritize their work to reinforce the conversation they want to be having (i.e., strategic) instead of the ones they have by default (i.e., tactical). They follow three rules to prioritize work that meets business and talent analytics team needs:

1. Prioritize requests based on the requestor's likelihood of action and influence, not the requestor's seniority.
2. Showcase your team's unique strengths by choosing projects that align to the specific capabilities and acumen on your team.

3. Most importantly, look for opportunities to improve processes (e.g., high-potential identification, performance management), not just individual talent decisions.

A few ways to get started:

- **Identify influencers in your organization who are interested in talent analytics.**
Review the current list of stakeholders you work with, and determine which ones have been (or might be open to) using talent analytics strategically and are well connected in the organization.
- **Turn a current tactical talent analytics project into a more scalable opportunity.**
Start with your current project queue—is there a project one stakeholder has requested that could have implications for the broader organization?

Conclusion

Because talent analytics is a developing field, there are not yet well-proven, best-practice approaches to every challenge you face. Still, some strategies are better than others at driving talent analytics effectiveness. The best talent analytics organizations apply a relationships-focused lens to their priorities. How you think about the various relationships you have—with your teams, your clients, and your businesses—will matter a lot more than structure, productivity, or technology. An investment in relationships creates a ripple effect for the rest of the work talent analytics teams do, one that will go a long way in transforming your team.

How the Criteria You Use to Set Your Team's Priorities Should Change

Impact of Criteria on Talent Analytics Effectiveness^a

Managing Your Priorities for Influence

Proactively shaping your priorities based on what your team needs to have long-lasting business impact

Influence of the Requestor and His or Her Likelihood of Taking Action

You Should Ask: Does our client have the ability to act on our recommendations or findings?

High Impact

Fit with the Specific Capabilities and Acumen of Your Team

You Should Ask: What project can we do to showcase my team's greatest area of expertise?

High Impact

Likely Impact on Organizational Talent Processes

You Should Ask: How can our work integrate into key HR and business processes?

High Impact

Source: CEB analysis.

^a Impact measured as difference in talent analytics effectiveness between top- and bottom-quartile organizations at following each criteria.

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Focus on What Clients Need, Not Want

An Interview with David Grainger

About DST Systems

DST Systems, Inc. (NYSE: DST) is a leading provider of specialized technology, strategic advisory, and business operations outsourcing to the financial and health care industries. DST enables clients to transform complexity into strategic advantage by helping them continually stay ahead of and capitalize on ever-changing customer, business, and regulatory requirements in the world's most demanding industries. For more information, visit the DST website at www.dstsystems.com.

About David Grainger

David Grainger is the Director of HRIS & Analytics at DST Systems. He leverages experience from both business and technology leadership positions to partner with the business to balance priorities and maximize ROI.



Every quarter, we interview talent analytics leaders to gain their perspectives on issues facing them and their teams. This quarter we spoke with David Grainger about his work at DST Systems.

To get us started, can you tell us about the evolution of talent analytics at DST?

DAVID: When I came to DST a year and a half ago, there wasn't an analytics function in HR. We did a great job of *collecting* data, but not a great job of *using* it. I spent the last year laying the groundwork for moving us into higher-level analysis, like predictive analytics. We did a lot of data cleansing and set up a data quality system, and we looked at custom reports already built into our HR system. We removed invalid or unnecessary reports to make it easier for people to find what they needed. We also did a little in the dashboard area, and I want to continue to advance them to make sure they do what they need to do.

Setting up a data quality system is no easy feat. How did you go about it?

DAVID: Well, this isn't my first rodeo; I've worked with data warehouses at other companies. Data can look clean from an operational standpoint, but there's a greater need for precision when you use data for analytical purposes. We tagged all the HR data with metadata points and separated it into Personally Identifiable Information (PII) data, HR-sensitive data, and corporate information.

This allows us to protect and control what audiences can see, and we can put an emphasis on what data is important. We also tag all data with its center of excellence (CoE) owner. I'm only a steward of the data, not the owner. So we talk to the CoE owner to see at what level of precision the data needs to be.

Speaking of internal collaboration—what does this look like for setting your talent analytics priorities?

DAVID: When I first started the team, the CoEs came to us with priorities such as attrition, talent acquisition, and future skills needs. We are also looking into diversity and inclusion metrics.

I'm trying to work out a three-year strategy, but it is hard for people to think of their analytics needs more than 12 to 18 months out. I had a meeting with our HR leadership team to make sure we were responding to their immediate needs and getting them to reflect on what analytics could do for them in the longer term. I broke the session into those two parts. First, I asked about immediate concerns or what they needed from us in the next six months. Then I asked them to think further out and strategically: what would they want from talent analytics in an ideal world?

This will be an ongoing discussion as their roadmaps change and as we reach higher maturity levels in our analysis of data. I have found that what people want is not what they need, and as an analytics team, it's our job to identify and provide what they need so they, in turn, can take the right actions.

What about relationships lower down in the organization?

DAVID: We have built a great and collaborative partnership with our HRBPs during our first year as an analytics team. We reach out to other areas through HRBPs, so

We have built a great and collaborative partnership with our HRBPs during our first year as an analytics team.

I trust HRBPs to know the business units they support and what information or reports they need and to be the liaison for communication.

this partnership is important. I trust HRBPs to know the business units they support and what information or reports they need and to be the liaison for communication. It also works the other way around: I go through HRBPs to get access to the data we need from other functions or parts of the business.

How do you build HRBPs' skills to make better use of the analytics function and communicate findings back to their business units?

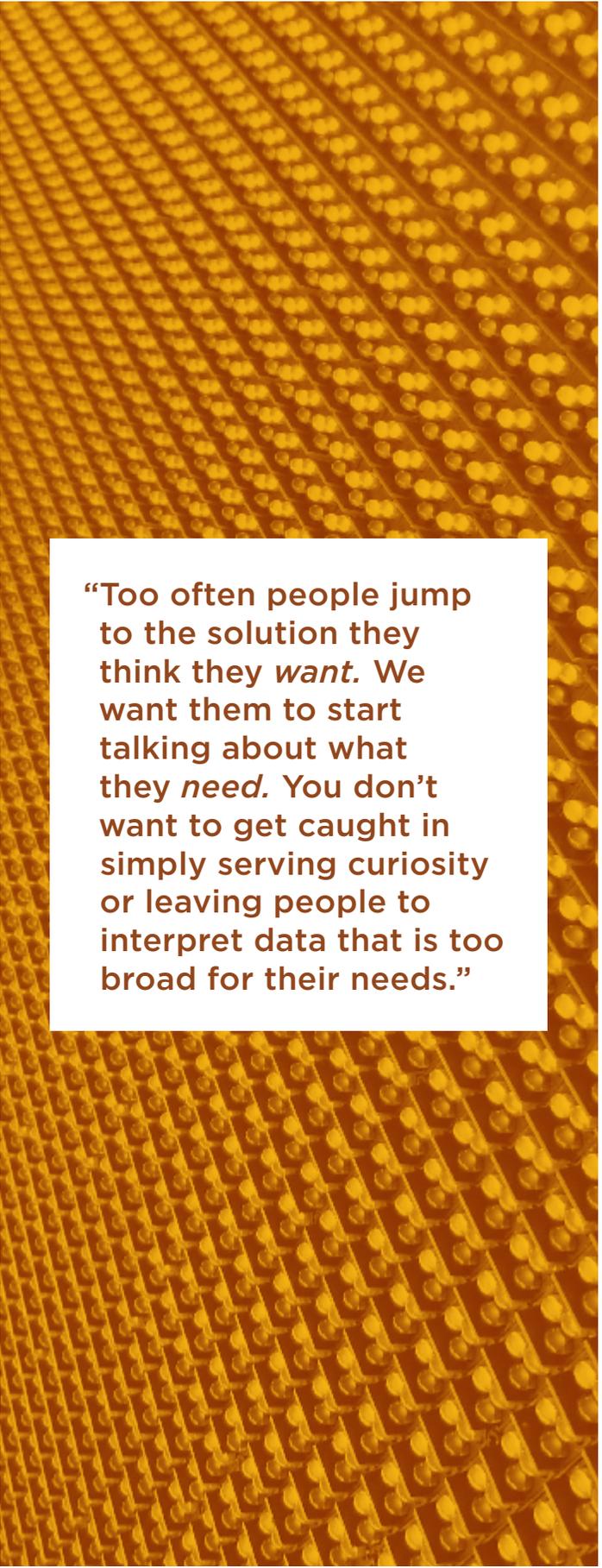
DAVID: We meet with them to go over any reports or analysis we have completed for them, so they feel more comfortable using and defending the data when they go to business leaders with it.

On the intake side, I created a user story template that asks HRBPs to fill in a simple statement. Too often people jump to the solution they think they *want*. We want them to start talking about what they *need*. You don't want to get caught in simply serving curiosity or leaving people to interpret data that is too broad for their needs.

The user story template asks them to build a short narrative. In its simplest version, this is, "As [who], I want [what], so that [why]." HRBPs can apply this template for both reporting and analytics needs. For example, a good reporting request would look like, "As a people manager, I need the percentage turnover of high-performing team members and the training they completed in the last 12 months. This will help me see if there is a correlation between the two data points, so I can potentially adjust team training to achieve a higher retention rate."

When people come to us with their thoughts framed in this user story, they understand what we can help them achieve, and they are more likely to use our insights.

This interview has been edited for brevity and clarity.



“Too often people jump to the solution they think they *want*. We want them to start talking about what they *need*. You don't want to get caught in simply serving curiosity or leaving people to interpret data that is too broad for their needs.”

Five Imperatives for Organizations Embarking on a Predictive Analytics Journey

By Neha Jain
CEB's Talent Management Labs

In a recent survey of more than 200 organizations, only 15% of senior business leaders reported HR analytics led them to change a business decision in the past year.

A clear disconnect exists between what organizations want (i.e., analytics to help solve talent challenges) and what they get (i.e., difficult-to-understand, inactionable insight). When talent analytics teams struggle to translate data into easy-to-understand, actionable insight, it limits the application of those insights. As one executive rightly described, "There's a lot of data out there, but not a lot of information." This sentiment clearly reflects the challenge talent analytics functions have faced in communicating findings that lead to action.

And it's only harder when teams begin predictive work—the processes they use become even more complex to describe and the insights much more nuanced in most cases. However, the power that

56%

of organizations plan to highly increase their investments in predictive analytics in the next two years.



n = 116.
Source: CEB 2017 Talent Analytics Innovations Survey.

insights produced by predictive analytics can have makes it even more important to find a solution to this challenge.

So the question is, what can you do to ensure your analytics efforts actually make an impact?



Talent Management (TM) Labs' Approach to Building Predictive Models for Attrition

TM Labs, the principle research and development arm of CEB's Talent Management group, followed a rigorous, hypothesis-driven process to build and test predictive analytics models. The objective was to:

1. Define key management challenges or questions to ensure proper scope,
2. Create hypotheses and collect the required data to conduct thorough analysis,
3. Conduct a stringent review of analysis and outputs to ensure they meet quality standards, and
4. Develop in-depth assessment of HR and talent research to build crucial imperatives and action items for stakeholders.

The most crucial step in the process is invariably identifying the right talent management challenge

and translating it into the right questions. The best HR functions:

- **Focus on these challenges** as topics of investigation, and
- **Reframe them as specific talent questions** that identify both the outcome they need to achieve and where they need to focus.

It's these types of questions that drive talent analytics effectiveness because they are tied to tangible results that the business and HR would like to see and measure.

This past year, we conducted three predictive projects around attrition across three distinct sectors: food and beverage, pharmaceuticals, and engineering services. The datasets ranged from 200 to 20,000 employees, and attrition rates between 11% and 32% for different talent segments. From our investigation of data and creation of predictive models, we have identified five distinct challenges and corresponding solutions.

Five Common Challenges from Data Acquisition to Solution Delivery

1

Identifying the Challenge

Talent analytics teams lack understanding of business needs, which hinders the identification of the right challenge at the outset.

2

Acquiring the Right Data

Talent analytics teams struggle to identify and then acquire the right data. HR doesn't own all the data.

3

Overcoming Low Data Quality

Data can be low quality and messy. Some common issues are missing values, lack of consistency, or purges by one team without knowledge of other teams.

4

Balancing Actionability with Precision

In most cases, line and business leaders prefer easy-to-interpret results, and they are willing to trade off precision and specificity for ease-of-use and actionability.

5

Communicating Insights

Models alone don't drive action; business leaders need help translating predictive analytics into practical solutions.

Source: CEB analysis.

(as opposed to the attrition rate of all employees), and the talent analytics team knows what type of attrition it needs to address. Accordingly, HR and the business will much more readily understand and adopt the results from the second example's attrition model.



Solution 1: Tie prediction to a clear business need.

What should you do?

Talent analytics leaders should do the following:

- Specify the outcome the business leader cares about (e.g., voluntary, regretted turnover, involuntary turnover).
- Involve stakeholders in project scoping and throughout the project to ensure alignment with their needs.
- Start thinking of change management needs at the beginning of the process to increase acceptance and application of your findings.

Members of talent analytics teams should do the following:

- Get business input during the scoping stages, and embed that input into hypotheses and metrics.
- Link the variables used for analysis with hypotheses the business wants to test.
- Focus on relatively homogeneous talent segments to produce insights that can be used to drive actionable solutions.
- Ensure analytics results tie to business impact (e.g., cost savings, customer satisfaction), not just traditional talent outcomes (e.g., turnover, time to hire).

Challenge 2: Talent analytics teams have difficulty acquiring the right data. Data often sits in multiple systems and platforms and is owned by various stakeholders, making it difficult for analytics teams to access and use.

As a member rightly described, “We understand we have data and know we need to use it to achieve some of our talent analytics priorities this year, but the biggest struggle for us right now is to know where to begin and how to access the right data assets.”

Challenges and the Resulting Solutions for Talent Analytics Organizations

Challenge 1: Starting at the top, talent analytics teams often don't understand business needs, which hinders the identification of the right challenge at the outset.

Consider a case where an internal client sits down with a talent analytics leader to discuss the possibility of a data-driven solution to a people problem. Here, an HR Business Partner (HRBP) based in South East Asia defines the problem, saying, “I want to know if our high attrition can be fixed through data. Can you show me what we can do about it?” Consider another case where the HRBP specifies the target population and links it to a business problem—decreased productivity. The leader clearly articulated the business need and identified the talent segment to focus on

Figure 1: Sample Inventory of HR Data Sources

	Attraction and Selection	Learning, Development, and Onboarding	Performance	Retention/Engagement
Structured	<ul style="list-style-type: none"> • ATS • Assessments • HRIS • HRBP Feedback • Education Data 	<ul style="list-style-type: none"> • L&D System Data/LMS • Internal Academy • Learning Plan • Learning Effectiveness Survey • Onboarding System • Onboarding Effectiveness Survey 	<ul style="list-style-type: none"> • Performance Plan • Performance Reviews (Self/Manager/360) • KPIs/Scorecards • Manager Effectiveness Survey • Performance Management • Customer Performance • Work Samples/Documents 	<ul style="list-style-type: none"> • Compensation System • Time On/Off Tracking System • Employee Engagement Survey • Manager Effectiveness Survey • Exit Interview Data
Unstructured	<ul style="list-style-type: none"> • Selection Process Data (Candidate résumés, cover letters, interview scores, and feedback from interviewer/hiring manager) • Feedback on Hiring Manager Survey • Feedback on Hiring Process • Alumni Circles/Groups 	<ul style="list-style-type: none"> • L&D Effectiveness Survey Text/LMS • Learning Needs • Informal Learning • L&D Program Feedback • Trainer/Training Feedback • Onboarding Process Feedback 	<ul style="list-style-type: none"> • MBOs/Objectives • Manager Effectiveness Feedback • 360-Degree Feedback • Customer Feedback/Complaints • Past Performance Appraisals • Manager Reviews • E-Mail/Calendar Data • Internal Social Media • Voice and Video Recordings 	<ul style="list-style-type: none"> • Employer Value Proposition Data • Organization-Wide Performance System • Exit Interview Data • E-Mail/Calendar Data • Internal Social Media

Source: CEB analysis.

So what exactly makes it so difficult to access the required data? A lot of factors, actually. First, HR doesn't own all the data, and the HRIS doesn't contain information on all crucial predictors of talent outcomes. Also, each additional system comes with distinct owners and taxonomies, leading to irregularities and fragmented data. And for teams incorporating unstructured data, they have an even more difficult time accessing and retrieving data.

Solution 2: Identify data requirements and map them to the right data owners.

What should you do?

Talent analytics leaders should do the following:

- Work closely with business leaders and HRBPs to identify the right sources of data.
- Bring a business leader on board to help you gain access to data that other functions own.
- Engage analytics leaders in other functions to identify hidden data sources.

Members of talent analytics teams should do the following:

- Map possible data sources the organization can access (figure 1).
- Engage HR and business stakeholders to identify data owners.
- Establish relationships with data owners and other analytics functions to make it easier to gain access to their data or expertise.

- Consider how to use unstructured data (e.g., résumés, performance feedback, learning feedback) to improve your model.

Challenge 3: Even when they can get the right data, talent analytics teams must often contend with low data quality. In such cases, they must be innovative enough to make the data work for the prediction project without hampering the accuracy.

Data quality is data's fitness to serve its purpose in a given context. With that working definition, we found that 54% of talent analytics heads cited data quality as the biggest barrier to talent analytics effectiveness, and 60% cited "improving data quality" as their top talent analytics imperative for 2017. Some common data quality issues include missing values, lack of consistency, or purges by one team without the knowledge of other teams, resulting in a loss of access or gaps in datasets.

Solution 3: Diagnose and address data quality issues before starting a project.

What should you do?

Talent analytics leaders should do the following:

- Define data quality standards for individual datasets.
- Assign designated data stewards responsible for defining, maintaining, and improving the quality of each dataset.
- Incorporate measures of data quality in dashboards and reporting.

Figure 2: Sample Data Cleaning Checklist

Sequence/Order of Audits	Type of Audit	Examples	Sample Solutions
Rule 1	Duplicate IDs	Unique ID should be used for each record (e.g., employee ID).	<ul style="list-style-type: none"> Remove all blank or duplicate identifiers. Ensure re-hires have separate identifiers—and records associated with them for their two tenures. ...
Rule 2	Domain Checking	Management level is only junior, mid, or senior (anything else needs to be standardized in these three categories).	<ul style="list-style-type: none"> Code fields to only allow limited responses.
Rule 3	Range Checking	Work experience should only be between 0 and 60 (anything below 0 or above 60 should be excluded).	<ul style="list-style-type: none"> Set limits to eyeball these values, and recode outliers to "missing."
Rule 4	Format Consolidation	Date should be in one single format throughout.	<ul style="list-style-type: none"> Transform all dates to the same format internally. Transform all revenue values into the same currency based on the current exchange rate. Keep raw format as well.
Rule 5	Handling Missing Values	Values could be missing because they haven't been filled in or because of system changes or discrepancies.	<p>Options</p> <ul style="list-style-type: none"> Ignore the case. Fill in the missing value manually. Use a global constant to fill in the missing value (e.g., "unknown"). Imputation: Use the attribute mean to fill in the missing value. ...

Source: CEB analysis.

Members of talent analytics teams should do the following:

- Create simple data-handling checklists for data quality issues, and ensure all datasets are being audited consistently (figure 2).
- Ensure data fixes are common across all datasets, and escalate data quality issues early on, even if this causes delays in new project launches.
- Know when to stop searching for perfect data and how to apply data judgment. Most of the time, perfect data will not exist; closely scrutinize the data and make that judgment call.

Challenge 4: It's hard to strike the right balance between actionability and precision. In most cases, line and business leaders prefer easy-to-interpret results and are often willing to trade off precision and specificity for ease-of-use and actionability.

Working with data and being passionate about analytics often means we want to construct the most accurate models that tell us precisely what will happen to whom. However, that doesn't necessarily lead to results the business can use. In our engagements, we often hear our members describe this conundrum by saying, "Help me understand what led to the outcomes and what my team can do about it, rather than give me the predicted attrition risk to the exact decimal." We need to strike a balance between creating a highly precise model and focusing on building a model that results in actionable insights.

Solution 4: Focus on employee factors the business can drive.

What should you do?

Talent analytics leaders should do the following:

- Understand what the business hopes to learn (e.g., attrition risk of individual employees, changes that will lower attrition risks for all employees).
- Determine which aspects can be influenced, and involve stakeholders to help identify the predictors to choose.
- Understand and include short-term drivers (e.g., improving learning effectiveness) and long-term drivers (e.g., hiring) in the analysis.

Members of talent analytics teams should do the following:

- Work backward from potential interventions to assemble a list of all possible predictors.
- Develop hypotheses behind these predictors in explaining the outcomes.
- Engage with stakeholders to short-list and select the predictors based on actionability.

Challenge 5: Communicating insights is difficult. Since models alone don't drive action, business leaders need help translating predictive analytics into practical solutions.

Analytics teams struggle to drive business action. In fact, just 1 out of 10 heads of talent analytics believes their organization actually makes use of their insights to inform business decisions. We found several common reasons for the lack of action. Some analytics teams think their job is purely doing analysis. Often, they are not familiar enough with the tactics and actions HR or managers can take to address identified talent challenges. Equally important, they don't understand the why behind the results they find, which hampers their ability to make strong recommendations to business leaders, and convince them to act.

Solution 5: Translate results into insights and action steps.

What should you do?

Talent analytics leaders should do the following:

- Understand what business leaders expect; they might ask for prediction, but they really want prescription. Build strong recommendations and opinions based on your understanding of the analysis results.
- Share findings early and continuously so business leaders participate in the analysis and understand its results.
- Ensure the business's participation at the start of a project to validate the choice of predictors and make it easier to draw insights in the end.

Members of talent analytics teams should do the following:

- Look for opportunities to show business leaders what they should be doing differently, not confirm what they know. Analytics is about behavior change.
- Build informal relationships with other HR staff to learn about their work.
- Shadow employees in other analytics teams to learn about their day-to-day work.
- Create occasions for better interactions between data scientists and line leaders so they understand one another's perspective.

Through the five solutions provided, organizations can create a roadmap to improve business application and reach their desired level of analytics impact. Whether the objective is to initiate the right analytics project, enhance preparedness of analytics teams, or deliver the right answer to a business question, incorporating these solutions will increase the likelihood that business leaders will use data-driven insights to improve their decisions.

About CEB's Talent Management Labs

Talent Management Labs is a team dedicated to helping CEB and its customers lead the analytic transformation of talent management. The Labs' scientists conduct research to ensure our talent management products and services are built using the most advanced thinking from a broad range of established and emerging disciplines. For more information on CEB or the Talent Management Labs, please contact TalentAnalyticsHelp@cebglobal.com.



Organizations that focus on analytic impact—the extent to which analysis improves decisions and provides actionable support to key stakeholders—improve key talent outcomes by an average of 12% over the typical organization.

Although there are two paths to improving analytic impact—business application and analytics sophistication—improving business application alone can improve analytic impact by as much as 14%.

How to Build an Attrition Prediction Model

Takeaways from HCL's Hypotheses-Based Approach

By Marianne Stengel

Over the past few years, HCL Technologies (HCL) has developed an attrition prediction model that is now 90% accurate in predicting who will leave the organization.

More importantly, by turning these predictions into recommendations for managers, the model helped stall attrition rates.

Six out of 10 talent analytics teams plan to work on attrition prediction, making this type of project the second most common after workforce planning.

However, as with all analytics projects, the insights talent analytics produces may fail to drive action—a model might identify indicators that accurately predict attrition but are hard to act on (e.g., personality). Even with accurate and actionable indicators, if findings aren't communicated clearly to direct managers, all they do is give a manager advance notice of attrition without being able to do anything about it.

HCL mitigated these risks when developing its attrition prediction model by heavily involving the business in hypothesis generation and designing a dashboard to push action recommendations to direct managers. While attrition



indicators vary across organizations, other teams can study the lessons HCL's talent analytics team learned throughout this process.

Lesson 1: Don't rely on exit survey data.

Like most other organizations, the team used HCL's exit survey tool as a starting point to develop hypotheses as to why employees were leaving. However, when they ran these first hypotheses by business leaders, they pointed out two fundamental flaws with the data:

1. Employees might not understand their own motivations for leaving.
2. Employees might choose to misrepresent their reasons to keep the door open to return to HCL at a later stage (e.g., employees often name career growth as their main reason, where in reality, issues with a line manager pushed them to look elsewhere).

To prove this suspicion, the team engaged a vendor to run phone-based interviews with 1,500 employees who had left HCL six months before. By using text analytics to compare interview data with exit survey data, the team was able to show that in certain parts of the business, exit data did not fully capture reasons for attrition.

Lesson 2: Explore non-survey-based sentiment indicators.

Looking for alternative data sources, the team spent a month with a data technology analyst from HCL's central Enterprise Architecture team to understand what data HCL's systems and platforms (e.g., HRIS, innovation networking platforms, internal service requests) capture. The purpose was to trace the breadcrumbs employees leave through their technology use to create hypotheses based on what dissatisfied employees do, not what they say.

This work led them to use the number of service desk requests raised and the satisfaction scores given as indicators for attrition.

Expecting multiple iterations, the team kept this first model intentionally nimble, using data from 4,000 employees from one service line. The model predicted attrition with 45% accuracy, so the team decided to collect more input from business leaders and HR Business Partners (HRBPs).

Lesson 3: Talk to business and talent leaders to create segment-specific hypotheses.

To learn what differentiated a good employee experience, HCL identified leaders and HRBPs to speak with who had reversed attrition in their teams or who had teams that the model predicted with lower-than-average accuracy. Conversations with business leaders focused on which factors outside the organization drive attrition: the hiring intensity in the city or state, demand for niche skills, or compensation gaps to market. Conversations with HRBPs rounded out the picture of how different employees perceive their work (e.g., how their experiences differ if they are innovating new tools or supporting routine processes). This led the analytics team to collect data around exits in the immediate team and to calculate compensation gap "risk zones" for different cities and jobs.

The hypotheses created and tested based on these conversations led to the discovery of new indicators to add to the model, which the team expanded to 20,000 employees. Accuracy improved to 76% but business leaders, managers, and HRBPs remained skeptical.

Lesson 4: Iterate, iterate, iterate.

Drawing on their refined hypotheses about employee behaviors, the talent analytics team once again collaborated with the data technology team to dig deeper into the traces employees leave in technology systems. This investigation led them to discover what they termed the "tech trigger," a combination of three factors: employees who study the exit process on the intranet without activating it, visit their leave balance tracker, and download their pay stub within a short period of time have the highest tendency to leave.

The Evolution of HCL's Attrition Prediction Model

Iteration 1 Variables

- **Employee demographics** (e.g., age, gender, tenure, business unit, distance from home to work)
- **Work environment** (e.g., move to manager with a lower 360-degree feedback score, number of team members in the same location)
- **Work structure/engagement** (e.g., quality of project, engagement score)
- **Performance** (e.g., performance rating)

Iteration 2 Variables

- **Employee demographics**
- **Work environment**
- **Work structure/engagement** (e.g., type of role, exits in team)
- **Performance** (e.g., drop in performance rating by one or two points)
- **External variables** (e.g., salary gap to market, attrition in specific skill set, demand for skill at city or region level)

Iteration 3 Variables

- **Employee demographics**
- **Work environment**
- **Work structure/engagement** (e.g., tech trigger: study but don't activate exit process, check remaining leave, download pay stub)
- **Performance**
- **External variables**

Source: CEB analysis.

This final data discovery work took six months and resulted in a model with around 90% accuracy, meaning 9 out of 10 times, when the model tags an employee as high risk for leaving in the next six months, the employee indeed resigns in that time frame.

Lesson 5: Drive actions with predictions.

Even the most accurate prediction will not stop that employee from leaving. The team therefore decided they had to create recommendations for direct managers to act on. They created a monthly report to highlight trends and predictions for different groups of employees and recommend actions



to retain employees. In addition, direct managers and their HRBPs receive a monthly attrition prediction dashboard that flags individual employees who are at high risk of leaving and the reasons why. Managers and HRBPs together can decide which of these employees are worth retaining based on skill criticality and then can split responsibility for addressing the reasons for dissatisfaction.

The attrition prediction model has been worth the effort: since it launched, HCL has maintained its attrition rates compared to its competitors in the IT services industry, which have seen a 2%-5% increase.

Summary of Lessons Learned

What other organizations can take away from studying HCL's process:

1. Treat your exit data with a healthy dose of skepticism.
2. Look for data that measures what employees do, not what they say.
3. Study the outliers (e.g., teams with better-than-average or worse-than-average retention rates, teams where your model isn't as accurate in predicting attrition) to improve your hypotheses.
4. Prepare for multiple iterations; keep your first model small because it will require improvements.
5. Don't assume your work is done with the creation of an accurate model. You must socialize the results and make it easy to use with clearly articulated recommendations.

Listen to the replay of our webinar, [Building Predictive Attrition Models](#), featuring Gaurav Vasu, Global Market Intelligence and Analytics Lead at HCL, to learn more about HCL's work in this space.

Driving Talent Analytics Impact at Accenture

An Interview with Shekar Nalle Pilli Venkateswara

About Accenture

Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology, and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions—underpinned by the world’s largest delivery network—Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With approximately 401,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives.

About Shekar Nalle Pilli Venkateswara (Shekar NV)

Shekar Nalle Pilli Venkateswara (Shekar NV) leads global talent analytics for Accenture. His team of data scientists around the world helps inform the company’s talent strategy.



Passionate about technology and innovation, Shekar holds a broad range of HR experience in talent analytics and workforce planning. Prior to Accenture, Shekar was Marriott International’s senior director of HR Analytics and Talent Management. In addition, he has held leadership positions in workforce planning and talent analytics at Hewlett-Packard and Capital One.

Shekar holds an MBA in finance and strategy from Vanderbilt University and currently lives in Virginia with his family. In his spare time, he is actively involved in organizing STEM programs at his teenage son Yash’s school.

Every quarter, we interview talent analytics leaders to gain their perspectives on issues facing them and their teams. This quarter we spoke with Shekar Nalle Pilli Venkateswara (Shekar NV) about his work at Accenture.

Tell us about the state of talent analytics at Accenture today.

SHEKAR: Accenture's talent analytics practice is well established. We collaborate with business partners and senior HR executives to define priority projects and key deliverables for the year, and we provide ongoing support by conducting monthly operational reviews and developing advanced predictive models for areas such as joiner quality and retention. In addition, we provide different forecasting and scenario planning tools and embed analytics in various HR processes like our Talent Supply Chain and Total Rewards program.

We also support special projects at Accenture with the intent of gathering talent intelligence, such as external social media analysis and benchmarking, and deploy new analytical techniques, like organizational network analysis, to provide a more cohesive view to make talent decisions.

Can you describe how your team is structured to support those five areas?

SHEKAR: We're a global organization and our team spans geographies, including Argentina, India, the Philippines, Poland, Czech Republic, and the United States. We have a core team that supports advanced analytics and a broader, global team that supports our businesses and geographies where we operate. Our core team of analytics professionals focuses on advanced modeling techniques, such as using statistical packages, data visualization, computer programming, operations research, and organizational psychology. The broader team ensures business processes function effectively on a day-to-day basis.

It sounds like you've built quite a large team. Can you tell us more about your hiring strategy?

SHEKAR: Our hiring strategy has a really strong focus on diversity in addition to the obvious focus on technical and analytical skills we deliver to clients. We strongly

believe our diversity makes us stronger, smarter, and more innovative, and in my opinion, having a diverse team is key to building successful analytical insights for a global company like Accenture. Not only does diversity bolster the team's technical skills, but it also helps provide a better understanding of cultural and professional differences in our local markets. Having knowledge of the local law and practices, as well as the cultural ramifications, are critical to us as a global company.

As you think about managing the large scope of projects on your agenda, what are the top challenges you face in your role today?

SHEKAR: Aside from regular challenges like resource allocation and prioritization of analytics needs, our biggest challenge is drawing the line when it comes to the usage of sensitive data, such as individualized survey data, gender, and ethnicity information. There is so much data available to use, and it's no longer a question of "Can we?" but rather, "Should we, just because we can?" For example, companies collect an assortment of data about their employees

(e.g., leave records, individual strengths, engagement data). With all that data comes huge responsibility—including determining who can view the data and to what levels they can drill down to. For gatekeepers of data, one of the biggest challenges is how and where to draw a line.

And what has been your approach to protecting data so far?

SHEKAR: We have a very strong principle. When we're collecting data, we declare very clearly what the data will be used for. Transparency is key; it builds trust. We obtain explicit consent from employees on sharing their data when we expand the HR analytics domain to new dimensions. Usually, even if only a small proportion of our people choose to share their data with us, we still have enough of a sample to make meaningful conclusions. That's the beauty of a large organization like Accenture.

A common challenge we've heard from talent analytics leaders is their analyses aren't being used. The insight is interesting, but actionability is lacking. Have you found a way to overcome that?

SHEKAR: We use a simple framework to prioritize our projects. It's a simple 2x2 matrix that helps us determine which projects have the potential for bringing the highest

When we're collecting data, we declare very clearly what the data will be used for. Transparency is key; it builds trust.

ROI but are also the easiest to implement. We prioritize those projects that fall in this quadrant—it pulls both the high-quality insight and actionability levers.

Can you give us any examples of high-impact talent analytics projects you've worked on?

SHEKAR: We've done several innovative analytics projects related to inclusion and diversity. For example, our top leadership tasked us with assessing our leave policies to determine if we were offering all that we could to help new parents navigate the challenges of raising a family while pursuing their careers. To do so, we did a very rigorous statistical analysis to find the ideal leave policies in our geographies. This helped lead to the decision to significantly expand maternity and paternity leave benefits in Argentina, India, Malaysia, the Philippines, and the United States.

This has very positively affected our people. It provides new parents who choose to be at home following the birth or adoption of a child with greater support and helps to ease their transition back to work. In addition, since we've rolled out our enhanced maternity leave policy in these geographies, we've seen a sizeable reduction in moms leaving their job after the birth or adoption of a child. It was a win for our people, our company, and the industry in general—and we believe we're impacting society at large.

How are you tracking the progress of your current diversity-driven practices?

SHEKAR: We prepare long-term forecasts to see how our current practices will drive results by 2020, 2030, and so on. We have also developed very sophisticated techniques to see the impacts of our hiring rate, promotion rate, retention rate, etc. to predict what the future workforce will look like at Accenture. If we don't like a predicted outcome, we can be proactive and determine the best ways to change it—an ability we didn't have in the past. With this approach, we are not only being a lot more ambitious in thinking about where we want to be, but we are also devising strategies for getting there. That's where the real transformation is happening.

Can you give us an example of a successful intervention?

SHEKAR: Our analysis around our talent pipeline and the extent to which we were engaging women during the interview process helped us launch several new innovative recruiting campaigns. Some of the campaigns are digital solutions, using different kinds of technologies that open up our sourcing channels so more women candidates get to know Accenture and are encouraged to apply. We are continually innovating in this space and making progress. In fact, we surpassed our goal of having women comprise at least 40 percent of new hires by 2017 earlier than expected.

What is your vision for the future of talent analytics at Accenture?

SHEKAR: We're heading toward more cloud-based solutions, machine learning and deep learning, and more artificial intelligence-based recommendations that can suggest your next career move or learning and mentoring opportunities. I do see us bringing a more consumer-like experience to our people in their work environments, like Netflix or Spotify, where through limited user interaction, the platform comes ready with personalized recommendations. We've also already shifted toward leveraging more and more open-source statistical packages, like R, that provide more flexibility while simultaneously reducing cost of analysis.

Do you have any advice to help other talent analytics leaders drive impact?

SHEKAR: Prioritization of business and data needs is the key. You need to aggressively prioritize projects based on the highest ROI potential as well as ease of implementation. Second, I'd focus on articulating the business need as clearly as possible so existing data sources and tools can be used to provide quick and efficient solutions.

The world of open-source technology and statistical packages has not been fully leveraged for talent analytics. Nowadays, analytics tools are being developed at a fraction of their original cost, which will become the norm for our field as well. I'd recommend using those tools and focusing on hiring or even borrowing some key skills from other teams in the organization to fill the talent gap.

A great analytics leader will be someone who not only has a background in data but also has a vision for how to use data and analytics. Having a vision is essential for successfully embedding analytics in key processes so decision makers have access to the critical pieces of information they need when they need it.

This interview has been edited for brevity and clarity.

A great analytics leader will be someone who not only has a background in data but also has a vision for how to use data and analytics.

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Making a Strategic Shift with Data Quality

By Fiona Lam

Data quality rises to the top of many priority lists, but not just because it is foundational to conducting effective talent analytics work. Talent analytics leaders also recognize its importance in painting an accurate picture of HR's ability to inform business decisions.

Despite this emphasis, today's talent analytics leaders still face poor data quality. In fact, 54% of organizations cited data quality as the top barrier to effective talent analytics. So, what makes improving data quality so difficult? There are two primary reasons:

70%

of talent analytics leaders rate improving data quality as a high or essential priority.



n = 212.
Source: CEB 2017 Future of Talent Analytics Survey.

1. Inconsistent Data Management Standards and Processes—HR does not have a standard set of definitions or procedures for inputting or managing data.

2. Lack of Data-Producer Accountability for Input Errors—Data producers, or those who are responsible for feeding data into HR systems, are not motivated to input accurate data.

How TE Connectivity Solved the Challenge

TE Connectivity understood the importance of data integrity to HR's credibility and recognized that, to shift from a reporting to a strategic analytics function, it would first need to address its data quality concerns.

"I brought in a new team member to shift the dial on analytics, but for him to be able to make a difference, we had to tackle several foundational initiatives, starting with improving the data quality of our HRIS and ATS platforms."

Erik Olsson
HR Director Process and Technology
TE Connectivity

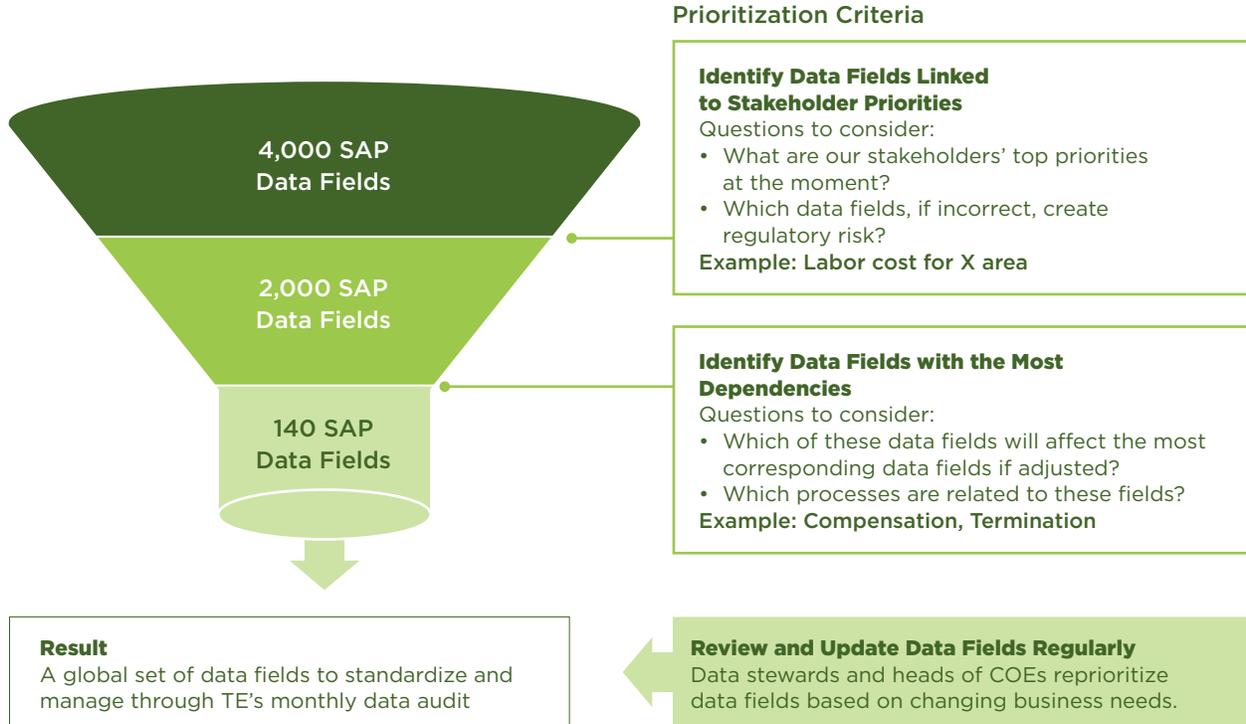
To address this issue, the talent analytics team at TE used a continuous improvement approach to standardize all data definitions and processes across the business. The team also created Q scores (data quality scores) to formally measure and report data quality to hold data producers accountable. Let's take a more detailed look at the steps TE took:

1. Prioritize Data Fields Based on Business Impact Rather Than Urgency

Rather than attempting to correct every missing or delayed data field on a one-off basis, the analytics team first identified fields most closely aligned to business priorities, then narrowed them down to those with the most dependencies (e.g., fields that rely on other fields to be accurate). This prioritization exercise created a trickle-down effect where correcting the data fields with the most dependencies allowed the corresponding fields to fix themselves.

For the prioritized data fields, the talent analytics team standardized a common set of definitions and processes across all countries and businesses. The team then documented these standards in data and process dictionaries for future reference. As business priorities change, data stewards

Figure 1: TE's Data Fields Prioritization Exercise



Source: TE Connectivity; CEB analysis.

and heads of COEs review data fields regularly to reprioritize additional fields to standardize.

Data Stewards: HRBPs or HR Generalists with prior data experience who are responsible for fixing errors and conducting root-cause analysis for the errors in the HRIS platform

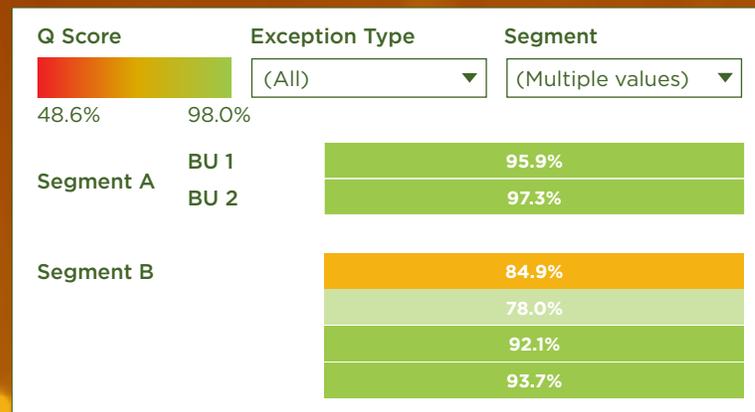
2. Increase Data Transparency and Drive Accountability Through a Public Q Score

The talent analytics team developed a Q score they calculate monthly to assess the data quality health of each business unit. It's determined by the number of HRIS errors in a month and divided by the number of employees within each business unit. As one of TE's six KPIs, it incentivizes data producers to ensure their data quality remains in good standing.

Q score = # of HRIS errors per month/# of employees in each business unit.

To promote transparency and increase peer pressure for improved Q scores, the team publishes each Q score in a public data quality dashboard that all business units can access. Once the scores are published, the talent analytics team holds a monthly data governance meeting with data stewards and business unit representatives to review shared challenges and discuss resolution steps as part of the continuous improvement process. During these meetings, each stakeholder is given a self-service interactive Q score dashboard to pinpoint and address the root causes of their errors. This activity ensures data producers feel accountable and understand how to make future improvements to their Q scores.

Figure 2: TE's Q Score Dashboard



Agenda for Monthly Governance Meeting

Attendees: talent analytics team, business unit representatives, data stewards

Timing: 30 minutes

1. Top five exceptions across all business units
2. Individual business unit "hot spots"
3. Discussion of common challenges and resolution steps
4. How TA can support you and next steps

Solve Shared Challenges in Monthly Meetings

Monthly governance meetings create a forum for friendly competition and solution sharing.

Focus on Errors Caused by Process Issues, Not People

Rather than placing the blame on individual data producers, conversations focus on resolving data issues over time. This shifted the mood of the meetings from adversarial to collaborative.

Figure 3: Data Quality Audit Summary



Source: TE Connectivity; CEB analysis.



TE's Governance Program Leads to Significant Data Quality Improvement

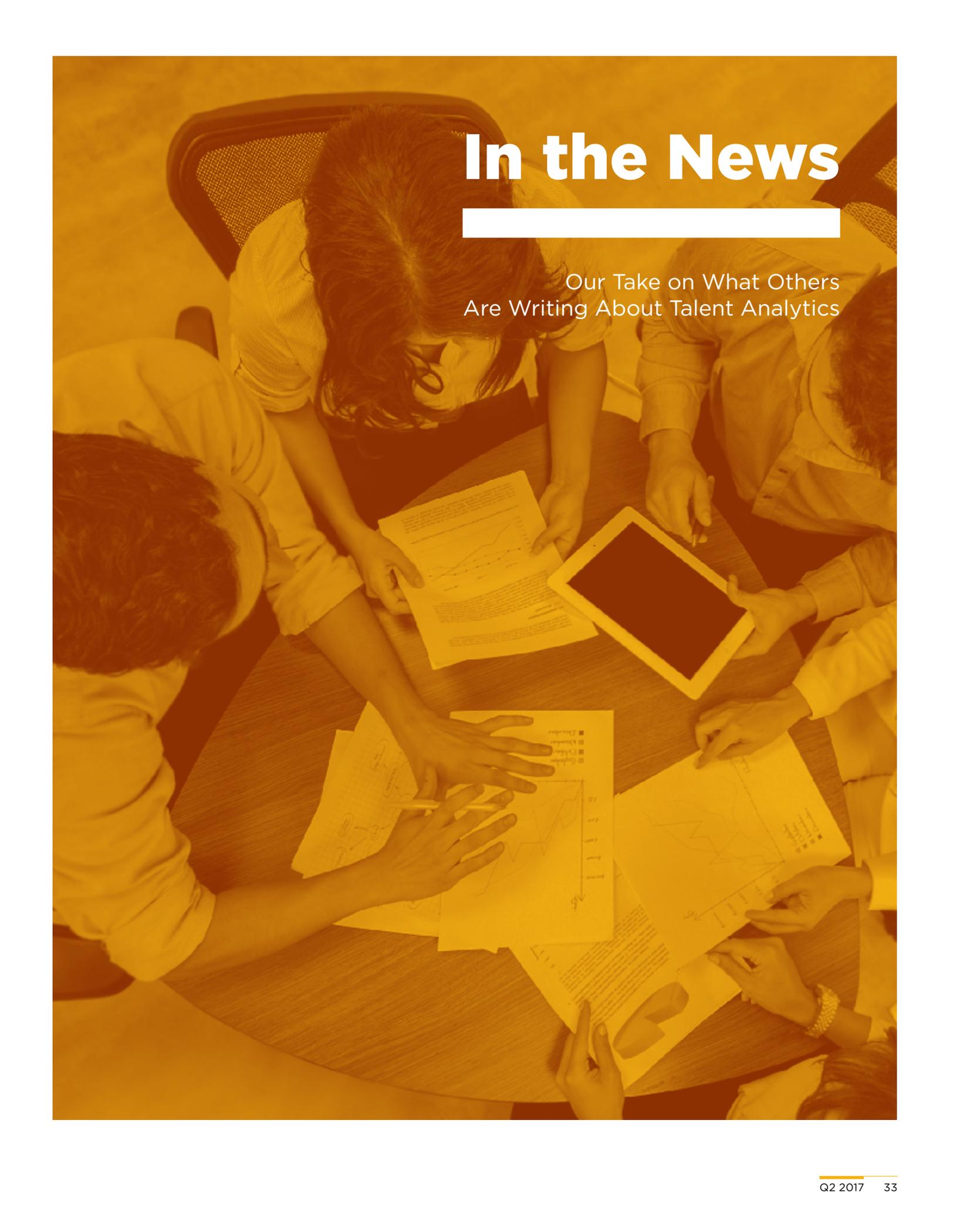
TE's data quality dramatically improved as a result of the data governance program—the number of data errors in the HRIS system dropped from 60,000 to 2,000. In addition, the remaining 2,000 errors captured in the system are largely caused by delayed entries rather than missing or incorrect data. Furthermore, regular Q score improvement discussions with data and business stakeholders shifted the perception of HR from a historically administrative and reporting function to a data-driven strategic business partner.

What You Should Take Away from TE's Approach

Data quality transparency creates public pressure on data producers and business leaders to improve it. This ensures data producers take extra precaution when inputting data into HR systems to maintain high data quality. As one of the top barriers to talent analytics effectiveness, data quality, once addressed, can improve HR's credibility as a data-driven business function.

“In the past, our conversations with the head of HR or business leaders would center on whether our data was correct; now, we can focus on what the data actually shows.”

Jake Girardot
Sr. HR Manager
Technology & Data Governance
TE Connectivity



In the News

Our Take on What Others
Are Writing About Talent Analytics

The Employee Experience Advantage Book Review

By Caitlin Dutkiewicz



“There is no employee experience without people analytics.”

In his new book, *The Employee Experience Advantage*, author Jacob Morgan repeatedly advocates for organizations building a people analytics function. His motivation is simple: for organizations to design effective employee experiences, they must truly understand their workforce.

Ultimately, Morgan’s goal is to get organizations to shift from “creating places they assume people need to be to creating organizations where people truly want to be.”

Morgan spends most of the book overviewing and building the business case for his new employee experience framework.

He calls for organizations to invest in three employee experience environments—the physical, the technological, and the cultural environments—so employees have “the workspaces they want, the tools they need, and a culture they can celebrate.”

The book lets down a bit in addressing the very real barriers many organizations will face when trying to implement his suggestions—challenges like resistance to change and the stronghold of legacy cultural behaviors. Still, this book will equip HR leaders looking to invest in the employee experience with great data, stories, and starting points. And talent analytics leaders will certainly walk away with new ideas for measuring the employee experience and with an assured sense of their role in shaping the future of work at their organization.

Promise of Talent Analytics Remains Unrealized

Originally appearing on *Talent Daily*

A recent survey from the New Talent Management Network¹ highlights the difficulty many employers have when it comes to implementing an effective talent analytics program.

The survey found that 85% of organizations were already conducting people analytics. Of those who aren’t, 69% plan to start in the next 12 months, meaning over 95% of organizations are expected to use some type of people analytics in 2017.

The authors write that, unfortunately, most organizations haven’t moved very far beyond establishing an analytics function, most are using relatively unsophisticated tools, and most are only collecting and analyzing basic data on metrics, such as turnover, time to hire, and engagement. Their top-line findings were as follows:

“1. Big Promise; Small Reality—There’s significant discussion about people

analytics but far less substantive work being done. In reality, most organizations are using the same tools that existed years ago to produce the same analyses companies have always produced. Excel remains the dominant analytical tool, and turnover analysis remains the dominant statistic. There are good (not guaranteed great) things to come, but today’s companies lack confidence in their ability to produce anything beyond basic insights.

2. Backstabbing Data—The data that companies were counting on to release deep talent insights has stabbed them in the back. It turns out the data is dirty: inconsistent, scattered, unreliable, and sometimes just plain inaccurate. The lack of clean data is blocking the road to HR analytic success. While companies say that lack of analytics software hinders their success, they should remember the old adage, “garbage in; garbage out.”

3. Lean, Green, and Unloved—Companies aren’t confident in the capabilities of their admittedly new and small talent analytics teams. This

may seem like a function of company size or investment, but we found a larger team or more advanced platform doesn’t automatically translate to more confidence in the talent analytics function. In a troubling finding, more companies said their people analytics team hinders their analytics work than helps it.”

These findings match what we’ve been hearing from our members. During a peer benchmarking session at our Reimagine HR conference in Miami this past September, talent analytics professionals from a variety of organizations offered insight on their functions. They said their analytics functions were mostly still small but growing, and while analytics was doing well at interpreting employee engagement and retention data, the key challenge was in using analytics to draw actionable insights and drive business decisions.

¹ New Talent Management Network, “Still Under Construction: The State of HR Analytics 2016,” http://www.talentstrategygroup.com/application/third_party/ckfinder/userfiles/files/NTMN%202016%20HR%20Analytics%20Reports.pdf.



Will Machine Learning Exacerbate Corporate Inequality?

Originally appearing on [Talent Daily](#)

Over the past year, we've looked at a few examples of the corporate inequality phenomenon—a significant and ostensibly widening gap between the profitability of wealthy, high-performance firms and less productive, less wealthy firms.

This profitability gap naturally leads to another gap—in the compensation, benefits, and perks these companies can afford for their employees. And according to one scholar's theory, the rewards gap even contributes to income inequality and social stratification in the United States today.

One area in which larger and wealthier organizations would seem to have an edge is in acquiring scarce and expensive talent in emerging technological fields, such as artificial intelligence (AI) and machine learning. This idea raises concerns that tech giants like Google and Tesla, rushing to grab up all the AI talent they can,

will lead to brain drain at smaller firms and even universities.

Another reason larger, wealthier companies might have a head start in profiting from these new technologies centers on what those companies already have. In a keynote address at March's Strata + Hadoop World conference in San Jose, CA, Cloudera cofounder Mike Olson warned because machine learning depends on access to enormous datasets, its main beneficiaries will be big companies that already own vast amounts of data and can already implement these technologies to scale, according to Matt Asay at *TechRepublic*.¹

In fact, the mountains of data that we now enjoy are a direct result of high-quality, open-source software running on commodity hardware: more applications churning out more data for more people. Despite this low-cost hardware and software and its impact on machine learning, let's be clear: big enterprises are the primary beneficiaries. Why? Olson went on to explain that among enterprises doing

over \$1 billion each year in revenue—Cloudera's target customer—"the appetite for these [machine learning] capabilities is insatiable" as they "absolutely have the data at scale."

Data, after all, is necessary to train the machines. A small company could have big plans, but without big data to feed those plans, it's a losing battle. As such, large enterprises are in a prime position to use big data to enrich themselves and effectively hold off would-be, smaller competitors.

As a partial remedy to this challenge, Asay calls for more open datasets, such as those created by [Stanford University's DeepDive project](#).

"This is a new frontier in 'open source,'" he writes, "and we need to explore it more."

¹ Matt Asay, "Why Machine Learning Benefits the Rich, and Everyone Else Is Toast," 17 March 2017, *Tech Republic*, http://www.techrepublic.com/article/why-machine-learning-benefits-the-rich-and-everyone-else-is-toast/?utm_content=buffer01916&utm_medium=social&utm_source=linkedin.com&utm_campaign=buffer.

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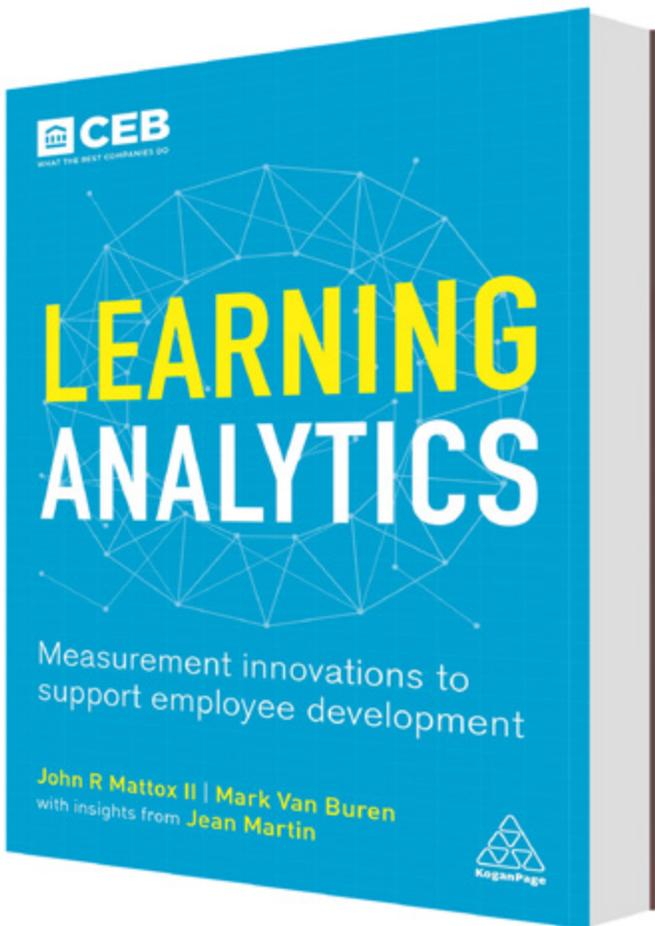
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- How can we build **relationships** to take advantage of analytics capabilities elsewhere in the organization?

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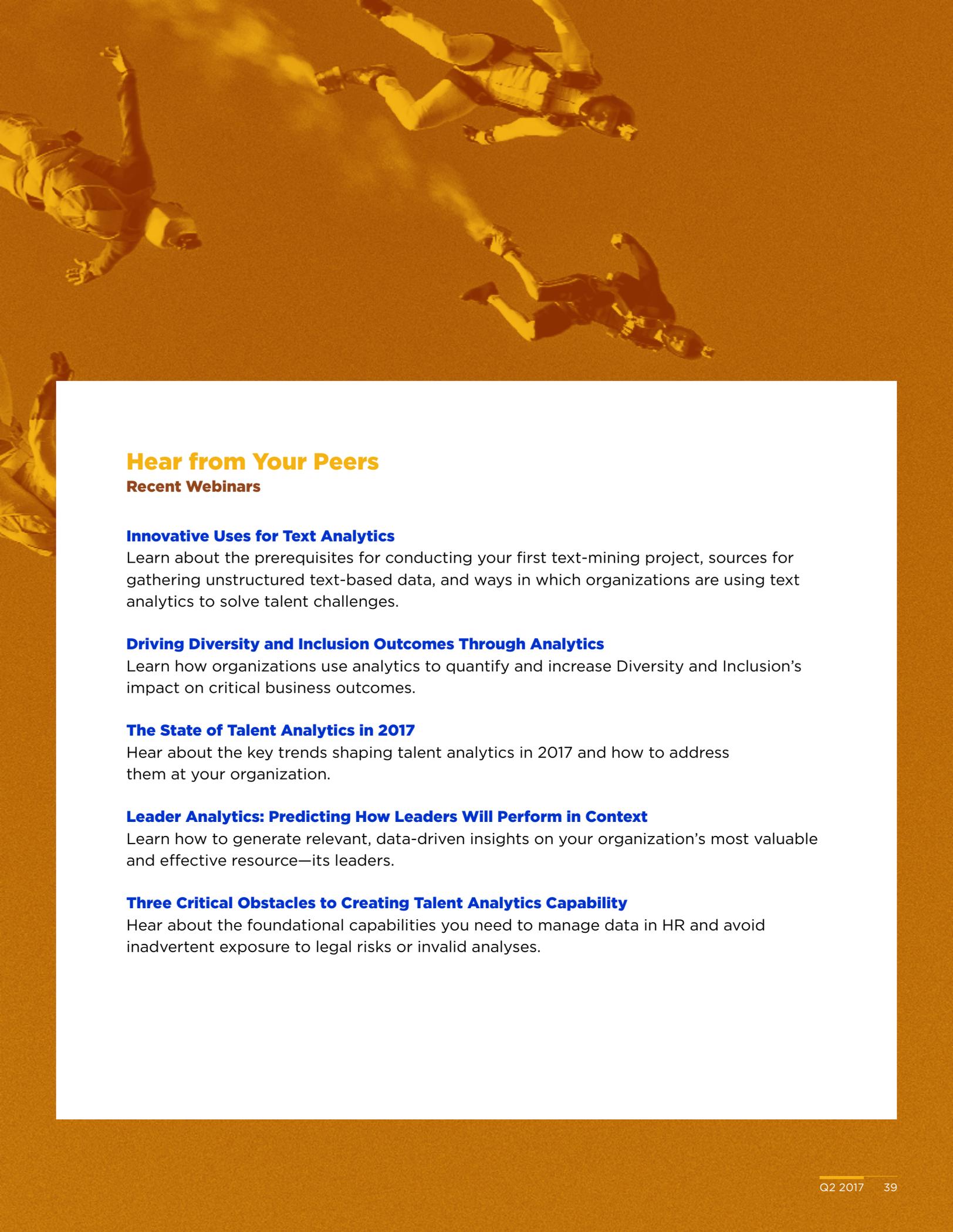
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