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An i4cp Report

Four Ways to Advance Your People Analytics

EXECUTIVE SUMMARY

The field of people analytics is beyond promising; it is a necessity in any high-performance organization.

Matthew Solomon
Principal, Advanced Analytics
AT&T

At AT&T, people analytics is not a luxury, it's a necessity.

"When making talent decisions or putting together a talent plan for a new year—these are not things you can do without some level of analytics behind you," said Matthew Solomon, principal, advanced analytics.

People analytics at AT&T, which employs a quarter of a million people, was launched in 2015. Under the leadership of the chief human resource officer, a team was assembled, composed of individuals from a legacy HR business intelligence team, some from other parts of HR or elsewhere in the business, and some from DirecTV (a recent acquisition at the time). For the first 18 months, the new team focused on determining what was possible: what data did they have immediately, and what did they anticipate having data for in the future? They also needed to determine the appetite for people analytics at AT&T. What did the business leaders need, and what might they benefit from without realizing it yet?

Like many organizations, the early focus was on attrition analysis. "Our attrition numbers are larger than most companies' entire headcounts," said Solomon. "Previously we'd measured attrition as a percentage on a rolling basis for each business unit. It might go up or down a bit over time, but that was where the conversation essentially ended. Little by little we started to push that envelope and ask questions like: Are you starting to build a profile of high-performing people who are voluntarily separating? Do you understand who that is? Is that healthy attrition and good for the business or damaging because they are people you really want to stay and that you had built an entire talent acquisition strategy around?"

As the people analytics team gained trust through demonstrating some successes, Solomon's team took on more advanced challenges. Given AT&T's size, it's not uncommon to receive 200,000 comments every time they launch an internal survey. Reading all those data points is time consuming, so the team built software to understand, group, and slice the data.

"We provide key insights that indicate systematic differences in scores across the organization so that changes and solutions can be better designed and targeted," Solomon noted. "The huge volume of comment data didn't turn into a 100-page PDF that was a nightmare for busy leaders to read, but rather a simple, meaningful, 10-slide presentation. Most importantly, the comment data became actionable."

AT&T's story is representative of how people analytics (also often referred to as human capital analytics, HR analytics, or workforce analytics) is maturing at an increasing rate.

" Organizations are consistently moving up the value chain from standard reports, to analysis and insights, to data mining and predictive analytics, and ultimately to driving business strategy. While there is still room to grow, organizations are making strides in the right direction.

ROI INSTITUTE®

Patti Phillips
President & CEO
ROI Institute, Chair of i4cp's
People Analytics Board

in

As we noted in i4cp's earlier report *The Promising State of Human Capital Analytics*, "the future focus of professionals in the human capital analytics field will increasingly be on using analytics to guide strategic decisions and affect organizational performance. To sum up the state of human capital analytics in one word: Promising."

It's clear that this shift to driving actions and strategic decision making through analytics has moved from promising to necessary.
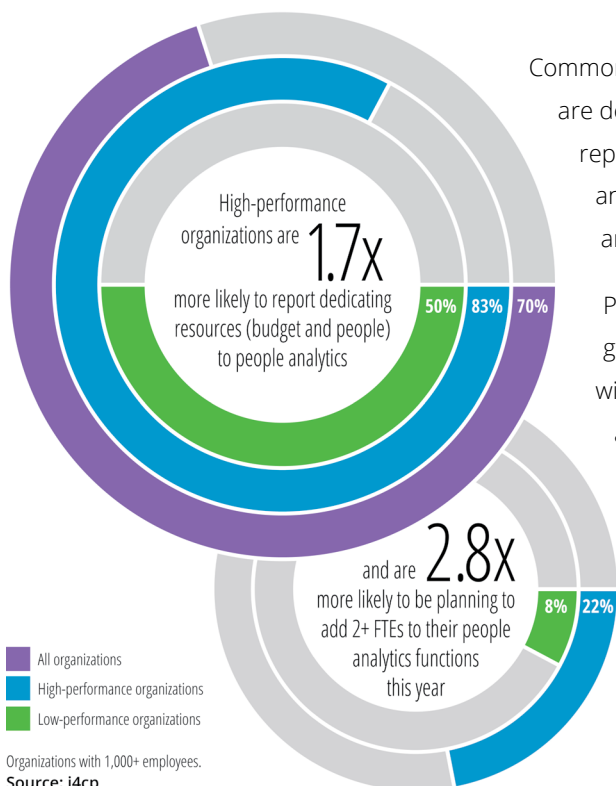
The latest study, conducted through partnership between i4cp and ROI Institute, surveyed analytics professionals in organizations of all sizes worldwide, and asked questions on how those organizations are using people analytics today and how they will grow that use in the future. The results of the survey, along with insights gleaned from members of i4cp's People Analytics Board and other people analytics leaders, indicate that:

- **Resources, budgets, and interest in people analytics are increasing and will continue to increase for most organizations.**

- **The level of people analytics sophistication varies greatly, but an increasing number of organizations are now at a high level of maturity.**

- **The most value comes when people analytics graduates from being an important input to HR strategy to the central driver of HR strategy, and ultimately an important driver of broader business strategy.**

The field of people analytics is beyond promising; it is a necessity in any high-performance organization, providing significant value while continuing to mature quickly, as made evident by the organizations profiled in this report.

Great Promise Has Provided Significant Resource Growth

High-performance organizations are **1.7x** more likely to report dedicating resources (budget and people) to people analytics

50% | 83% | 70%

and are **2.8x** more likely to be planning to add 2+ FTEs to their people analytics functions this year

8% | 22%

- All organizations
- High-performance organizations
- Low-performance organizations

Organizations with 1,000+ employees.
Source: i4cp

Common sense says that when something is viewed as important, resources are dedicated to it; it is not surprising that 70% of survey respondents reported that their organizations are dedicating resources (budget and people) to people analytics, with that number significantly higher among high-performance organizations than low-performers.

People analytics budgets increased overall in 2017; this increase was greater for high-performance organizations and it appears the trend will continue for 2018: 44% of high-performance organizations predict a budget increase versus 5% who expect a budget decrease.

Patti P. Phillips, President and CEO of ROI Institute, and Chair of i4cp's People Analytics Board, noted "When an activity drives results, it is no longer viewed as a cost—it becomes an investment. When investments pay off, increases in investment occur. We are finally seeing evidence that leveraging people analytics to drive business strategy pays off."

A Decrease in Barriers

An additional facet of growth is the reduction in barriers to people analytics in organizations. As outlined above, funding as a barrier has seen a significant drop, from 55% of survey respondents in late 2015 to only 34% in 2017.

Other key barriers that declined in 2017 compared with late 2015 include data integration, skills and competencies, and lack of management support. While this is all good news, other barriers remain stubbornly high and continue to be a drag on the growth of people analytics, including data quality, alignment between reported metrics and the measures that matter to the organization, access to data, and technology.

In addition to these barriers, there are certain analytic skills and competencies that are lacking in many organizations such as quantitative analysis, qualitative methodologies, and storytelling. Of these, we found that one is correlated to superior market performance: *performance consulting*. Those who did not indicate this was lacking tended to be from organizations that have stronger market performance; only 16% of those from high-performance organizations indicated this competency was lacking compared with almost twice as many from low-performing organizations.

The importance of such consulting capability, along with the related competencies of communication and storytelling, arose frequently in our interviews with people analytics leaders. One such leader, Geoff D'Amico, AVP HR at Atrium Health, stressed how vitally important such competencies have been to Atrium's people analytics practice and the business.

"Internal client feedback has improved dramatically through communication strategies that combine impactful straightforward visuals delivered with authentic, passionate, and relevant storytelling," D'Amico said. "Fine tuning and executing these critical skills have supported a culture shift that moves the decision-making process from **emotion > facts > action** to a model of **facts first > emotion > action**. The results are a win-win for both our people analytics team and our organization."

Fewer report funding as a barrier for people analytics:
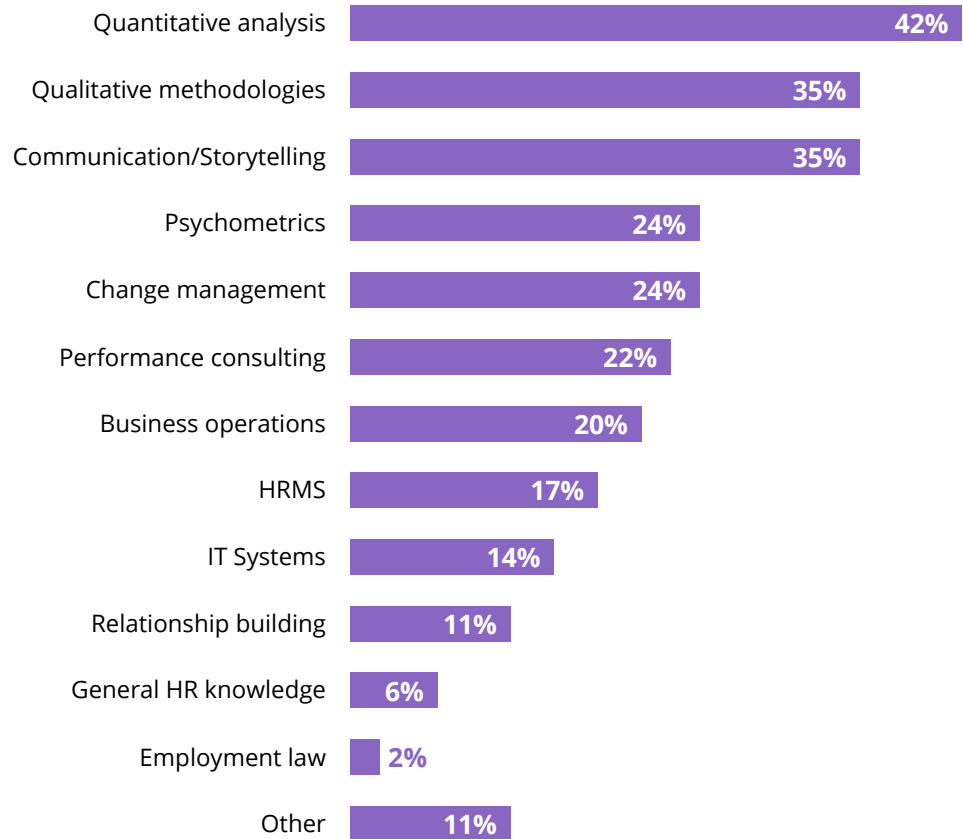
55% in 2015

34% in 2017

Geoff D'Amico
AVP HR
Atrium Health

People analytics competencies that are important but lacking

Competency	Percentage
Quantitative analysis	42%
Qualitative methodologies	35%
Communication/Storytelling	35%
Psychometrics	24%
Change management	24%
Performance consulting	22%
Business operations	20%
HRMS	17%
IT Systems	14%
Relationship building	11%
General HR knowledge	6%
Employment law	2%
Other	11%

Organizations with 1,000+ employees. **Source: i4cp**

COX AUTOMOTIVE™

Brian Taylor
AVP Workforce Strategy & Insights
Cox Automotive

in

Brian Taylor, AVP workforce strategy & insights at Cox Automotive, was another leader who stressed the consultative nature of his people analytics team.

"While we do work directly with business leaders, we have put a strong focus on our HRBP model and developing their analysis skills in a way that positions them as an extension of our analytics team," noted Taylor.

"There are times when our HRBPs recognize a need to pull their analytics partner into key business discussions and this is where my team brings a hybrid skillset. In addition to the analysis work, our analytics SMEs recognize the importance of translating key findings into an action-oriented story. With each successful partnership, we continue to see the demand for our workforce insights team expanding among key business leaders across the organization."

Liz McAuliffe, EVP of human resources at T-Mobile and a member of i4cp's CHRO board, emphasized that "a current challenge is translating people analytics into consumable, visually dynamic information that the senior leadership team and the HRBP community can ingest and actually do something about."

Many organizations struggle with this challenge—McAuliffe offered an innovative tactic she used at T-Mobile:

"We took one of our really talented graphic designers from our HR communications team and embedded her in the people insights team. This has made a tremendous amount of difference in the product that I'm able to deliver to the C-Suite."

T · ·Mobile

Liz McAuliffe
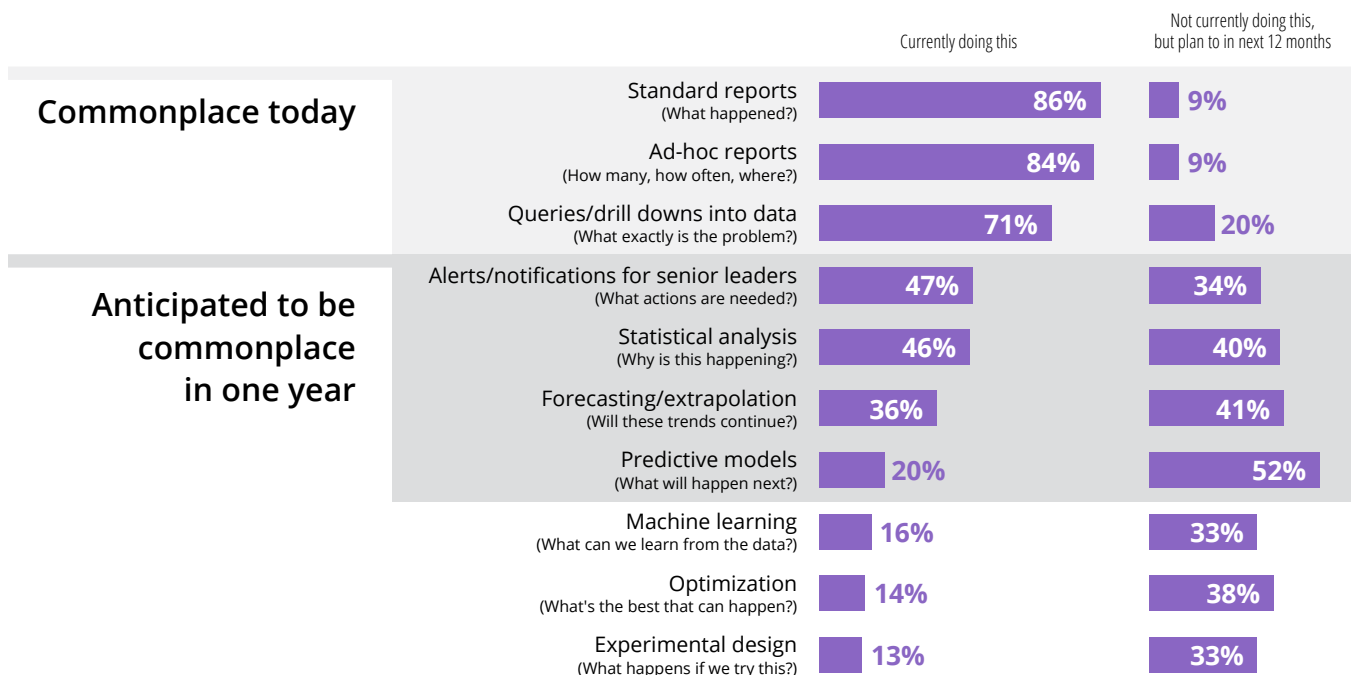EVP, Human Resources
T-Mobile

How People Analytics Practices are Maturing

Anticipated Growth in Projects

While people analytics has been in use for many years, implementation of more advanced analytics is just beginning to take hold. The graph below shows the current state of analytics projects compared to those planned within the next 12 months.

Not surprisingly the majority (70% or more) of organizations are able to provide standard reports (answering the question "what happened?") and ad-hoc reports to answer specific questions (such as "how many, how often, where?"). Most recognize that such outputs are not truly people analytics, but they are necessary to understanding HR and running a business. In addition, a capability that is quite common today is performing queries that drill down into people data to better illuminate a specific problem.

Project types current or planned in the next 12 months

	Currently doing this	Not currently doing this, but plan to in next 12 months
Commonplace today		
Standard reports (What happened?)	86%	9%
Ad-hoc reports (How many, how often, where?)	84%	9%
Queries/drill downs into data (What exactly is the problem?)	71%	20%
Anticipated to be commonplace in one year		
Alerts/notifications for senior leaders (What actions are needed?)	47%	34%
Statistical analysis (Why is this happening?)	46%	40%
Forecasting/extrapolation (Will these trends continue?)	36%	41%
Predictive models (What will happen next?)	20%	52%
Machine learning (What can we learn from the data?)	16%	33%
Optimization (What's the best that can happen?)	14%	38%
Experimental design (What happens if we try this?)	13%	33%

Organizations with 1,000+ employees. **Source: i4cp**

Projects that offer even greater insights and value are becoming more common, as increased attention, resources, budget, and the concomitant reduction in barriers, has naturally led many people analytics functions to new heights of capabilities and ultimately greater impact on the business.

The number of organizations pursuing analytics projects that produce alerts or notifications for senior leaders (what actions are needed?), statistical analysis (why is this happening?), forecasting/extrapolation (will these trends continue?), and predictive modeling (what will happen next?) is growing fast. In fact, by combining current reality with anticipated plans, 70% or more of those surveyed indicated that they expect their organizations to pursue these types of projects within one year's time—putting them at essentially the same level as standard and ad-hoc reporting today. Of these, the two project types most strongly correlated to better market performance are:
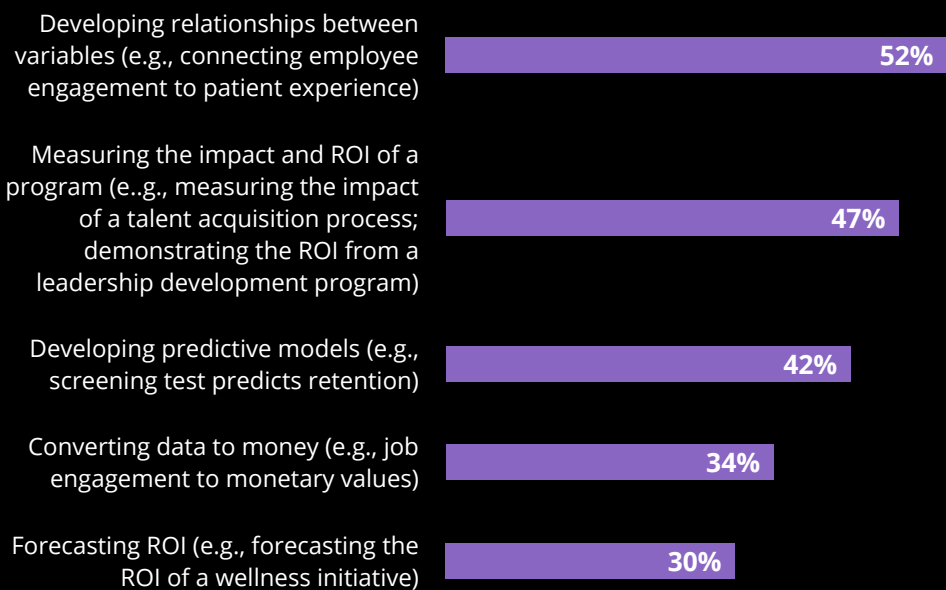
1. **Alerts and notifications for senior leaders —such as engagement or turnover warning signs—was cited 1.3x more often by those from high-performance organizations than from low-performers.**

2. **Statistical analysis (turning raw data into insights) was indicated 2x more often.**

Relationships Between Variables, Impact, and ROI Remain Top Priorities

Our ongoing research on people analytics began in 2015 as a collaborative effort between i4cp and ROI Institute. One goal was to track changes over time in different aspects of people analytics practices. An aspect of this is the relative priority organizations place on the different types of analytics projects.

Both 2015 and 2016 studies showed that developing relationships between variables and measuring impact and ROI of a program were top of mind. We're not surprised that these two types of projects remain top priorities for organizations as compared to other types.

Developing relationships between variables support efforts to ensure data are in alignment with measures that matter to the organization and help determine where opportunities lie for the organizations to make money, save money, avoid cost, or do some greater good. In terms of impact and ROI studies, they are fundamental indicators that solutions to opportunities work. For many organizations, these applications are routine and have become seamlessly integrated into the HR practice.
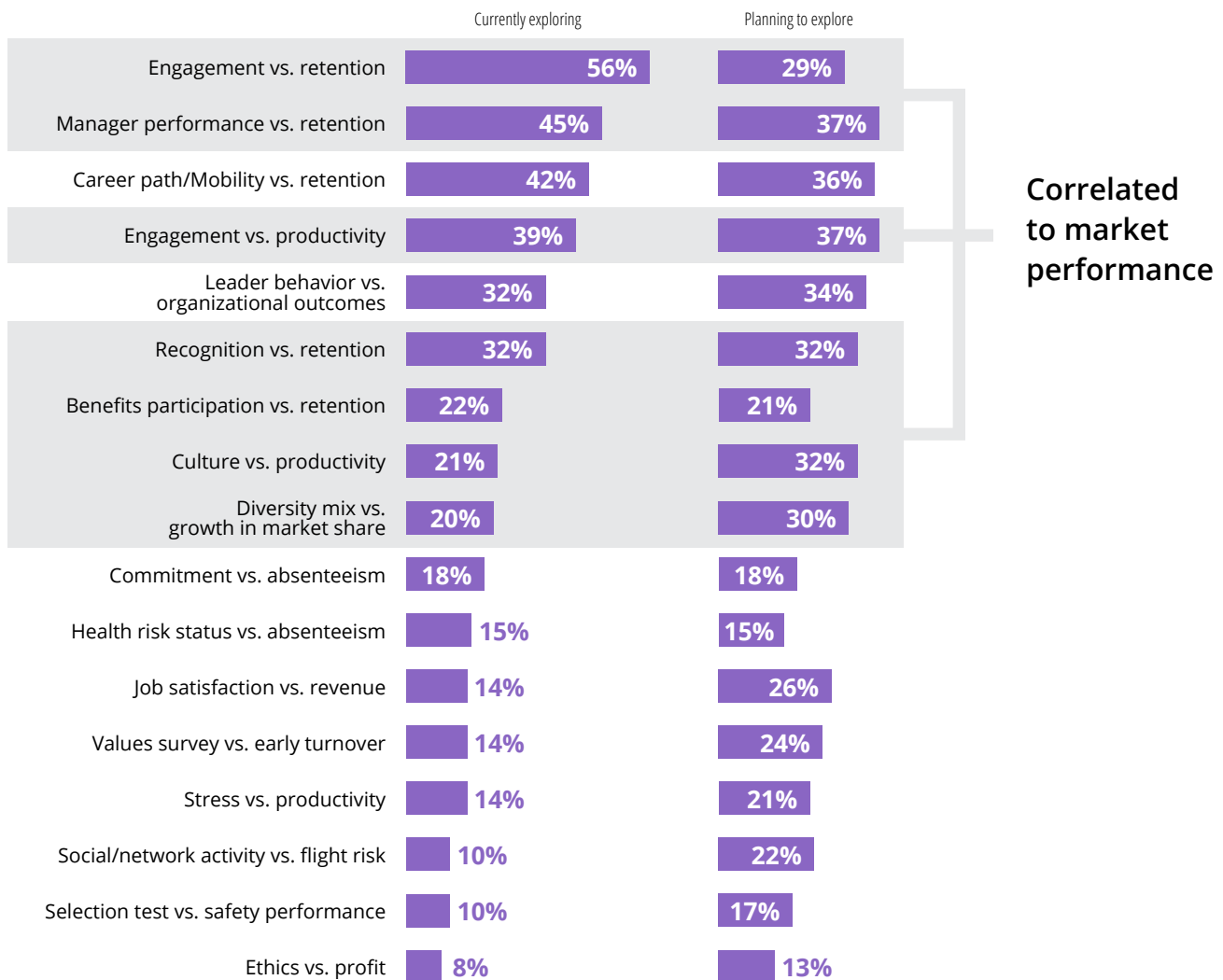
Developing relationships between variables (e.g., connecting employee engagement to patient experience)	**52%**
Measuring the impact and ROI of a program (e..g., measuring the impact of a talent acquisition process; demonstrating the ROI from a leadership development program)	**47%**
Developing predictive models (e.g., screening test predicts retention)	**42%**
Converting data to money (e.g., job engagement to monetary values)	**34%**
Forecasting ROI (e.g., forecasting the ROI of a wellness initiative)	**30%**

Organizations with 1,000+ employees. **Source: i4cp**

Future Growth of Predictive Analytics

While only 20% of organizations are yet focusing on predictive analytics, survey respondents indicated that examining predictive relationships will have the largest increase in the next year (an additional 52%). Given this increase, it is instructive to understand which predictive relationships the early adopters are most often pursuing.

The most frequently cited were those comparing various metrics with retention, along with engagement vs. productivity. Enabling predictive relationships was cited by those from high-performance organizations significantly more than their low-performing counterparts in every area we explored.

Predictive relationships

	Currently exploring	Planning to explore	
Engagement vs. retention	56%	29%	
Manager performance vs. retention	45%	37%	
Career path/Mobility vs. retention	42%	36%	
Engagement vs. productivity	39%	37%	**Correlated to market performance**
Leader behavior vs. organizational outcomes	32%	34%	
Recognition vs. retention	32%	32%	
Benefits participation vs. retention	22%	21%	
Culture vs. productivity	21%	32%	
Diversity mix vs. growth in market share	20%	30%	
Commitment vs. absenteeism	18%	18%	
Health risk status vs. absenteeism	15%	15%	
Job satisfaction vs. revenue	14%	26%	
Values survey vs. early turnover	14%	24%	
Stress vs. productivity	14%	21%	
Social/network activity vs. flight risk	10%	22%	
Selection test vs. safety performance	10%	17%	
Ethics vs. profit	8%	13%	

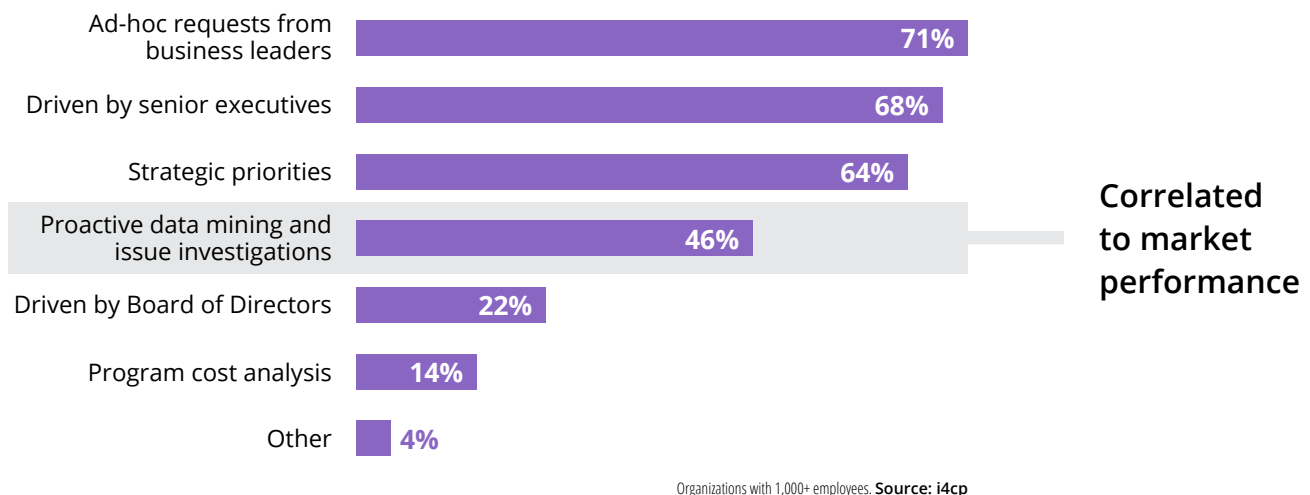Organizations with 1,000+ employees. **Source: i4cp**

Most of these top relationships correlated with superior market performance, but not all elements were widely cited. Two that were less frequently cited, but had strong correlation with market performance, were culture vs. productivity and diversity mix vs. growth in market share. Based on i4cp's work with high-performance organizations, we expect these to grow in focus over the next few years.

Beyond predictive analytics, additional project types such as machine learning (what can we learn from the data?), optimization (what is the best that can happen?), and experimental design (what happens if we try this?) are currently conducted by relatively few (yet more advanced) people analytics teams. However, these are predicted to grow dramatically in the next year, and will soon be as common as statistical analysis, forecasting, and predictive modeling are today.

Customer Requests Drive Volume; Proactive Analytics Drives Value

How these various project types are identified is also a compelling aspect in the story of the maturation of the people analytics function. Through both our survey results and interviews with people analytics leaders, the clear majority of projects come from business leaders, either directly or very often mediated through HRBPs, as these individuals are the primary customer for a centralized people analytics function or center of excellence.

How are people analytics projects identified for analysis?

Ad-hoc requests from business leaders	**71%**
Driven by senior executives	**68%**
Strategic priorities	**64%**
Proactive data mining and issue investigations	**46%**
Driven by Board of Directors	**22%**
Program cost analysis	**14%**
Other	**4%**

Correlated to market performance

Organizations with 1,000+ employees. **Source: i4cp**

While these sources produce the most volume, another project source showed a strong correlation to market performance: proactive data mining and issue investigations. This was indicated **1.5x** more by those from high-performance organizations than low-performing, and highlights how those in top organizations are thinking about their business or industry. In short, they are forming a premise or hypothesis, and then asking intelligent questions, versus simply collecting all data and spending time trying to figure out what it means.

An interesting example of this originates from Genentech, where Chase Rowbotham is head of people analytics. Genentech's business is based on innovation: they don't view themselves as a generic pharmaceutical company, but rather an innovative biotechnology company that tackles unmet patient needs. It has long been held at the company that

Genentech

Chase Rowbotham
Head of People Analytics
Genentech

cohabitation is critical to driving collaboration and innovation. The company is located in the San Francisco Bay Area, a region that has experienced strong economic growth and job creation. A byproduct of this success has been crowded infrastructure and subsequently, there was increasing frustration from Genentech's employees.

People analytics decided to investigate. Without all of the necessary data readily available, Rowbotham began by asking questions to offer additional insight.

"How might we quantify and codify this problem? We had employee addresses, but we didn't know how long it takes them to travel to work each day," recalled Rowbotham. "But other companies have this information. So we leveraged Google's API and were able to validate our hypothesis that the average commute time had increased (it had nearly doubled over the last 15 years). Not only was infrastructure more crowded, but people had also migrated farther away from our South San Francisco campus. We now had objective data proving what had previously been expressed anecdotally."

When the CEO and executive team were shown the results, they became increasingly curious and so the analytics team pressed forward and connected their findings with turnover data.

"We built a survival model," Rowbotham noted. "That is, a similar analysis that we leverage to understand the efficacy of our medicines relative to the current standard of care." The analytics team categorized their employee population into one-way commute increments of 15 minutes (e.g., 0-15 minutes, 16-30 minutes, etc.) and discovered that employees who had one-way commutes of 45 minutes or more had higher turnover rates.

With this further result in hand, the senior team started thinking about what could be done. What has resulted are numerous outcomes at Genentech, approaches that respect the need for the company to innovate and provide employees with support and flexibility:

- A comprehensive working flexibly framework was rolled out in Q1 2018. This philosophy focuses on teams and provides managers with tools to support having conversations with their teams which will ultimately establish team norms and an approach to embrace working flexibly in support of running their business.

- Furthermore, Genentech is experimenting with alternative commute options as potential mechanisms to alleviate the strain of having to commute to Genentech during peak traffic conditions.
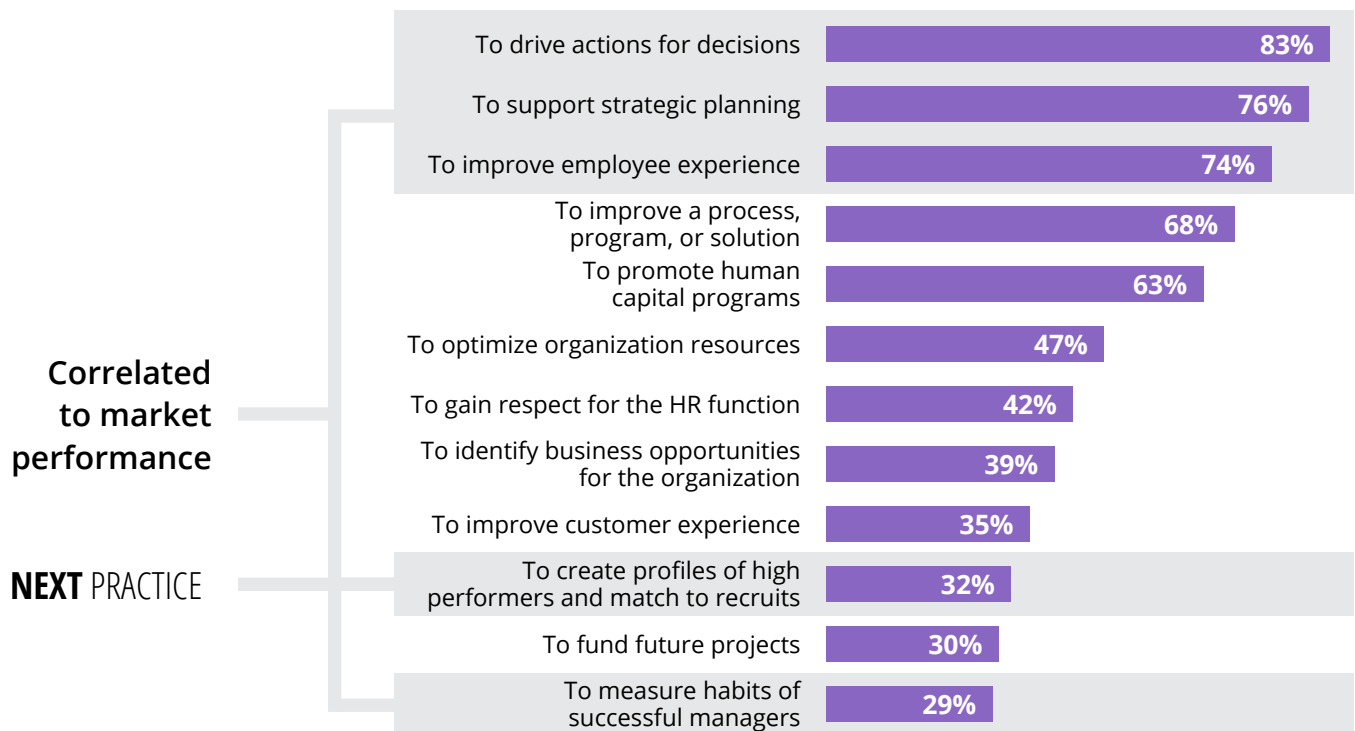
These outcomes remain in their early phases, but Genentech's leaders believe they will bolster the company's goal of enabling its employees to do their best work. Rowbotham summarized it well when he said "We didn't use a bunch of anecdotal stories, we took a very scientific approach to the problem. That is what people analytics is: our mission is to improve individual, team, and organizational success by developing hypotheses, running experiments, and using data and analytics."

The Maturing of Data Uses and Users

Just as there are various kinds of people analytic project types, there are also a wide range of reasons that such projects are undertaken. When asked which reasons best represent how data are used from people analytics projects, the top three responses all strongly correlated with market performance.

The top response *driving actions for decisions* increased from 74% to 83% and *supporting strategic planning* increased from 68% to 76% in the last 2 years. Similar increases were reported for most of the data uses studied.

People analytics data uses

Data use	%
To drive actions for decisions	83%
To support strategic planning	76%
To improve employee experience	74%
To improve a process, program, or solution	68%
To promote human capital programs	63%
To optimize organization resources	47%
To gain respect for the HR function	42%
To identify business opportunities for the organization	39%
To improve customer experience	35%
To create profiles of high performers and match to recruits	32%
To fund future projects	30%
To measure habits of successful managers	29%

Correlated to market performance

NEXT PRACTICE

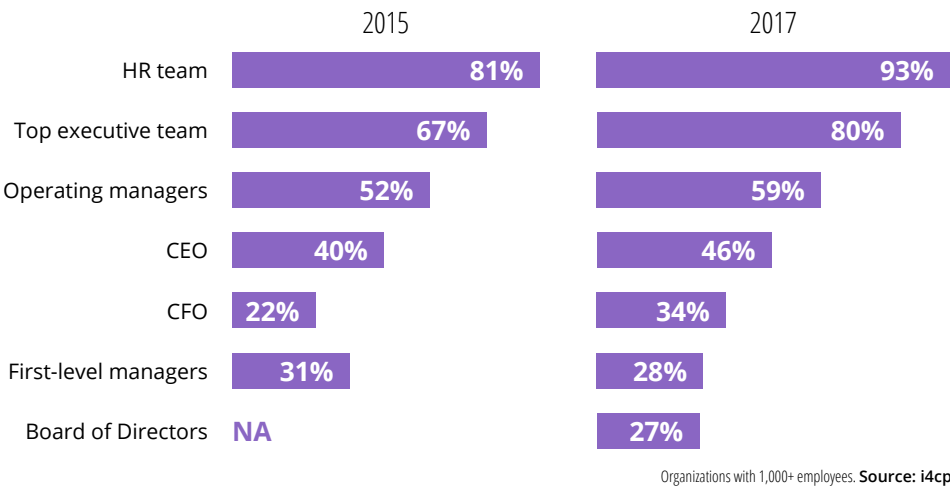Organizations with 1,000+ employees. **Source: i4cp**

One project driver—*creating profiles of high performers and matching them to recruits*—correlated with better market performance, although it was indicated by only a small number of respondents. Chosen by **2x** as many high-performance organizations as low-performers, this finding echoes a result from a **2017 i4cp pulse survey** on people analytics. The 2017 study found that knowing who (among your total workforce) possesses the qualities or capabilities most common among your top talent is a key strategic value of leading organizations. These insights can help increase quality of hire

or even aid in matching employees with mentors, though care needs to be taken to avoid letting such data-driven considerations work against the goal of increasing diversity in the organization.

In addition to positive trends in the reasons people data is being used, it is clear there is solid expansion in *who* is making use of the data.

The query *Who uses the results from analytics projects?* found that virtually all roles saw increases in 2017 from 2015. While the HR team is the leading choice, it is encouraging that *top executive team* is now cited at 80% of organizations. Coupled with the CEO's approaching 50%, these are important indicators of just how far the use of people analytics has come in recent years in its ability to impact the business.

Who uses the results of people analytics projects?

	2015	2017
HR team	81%	93%
Top executive team	67%	80%
Operating managers	52%	59%
CEO	40%	46%
CFO	22%	34%
First-level managers	31%	28%
Board of Directors	NA	27%

Organizations with 1,000+ employees. **Source: i4cp**

While these increases are positive, one of the ongoing challenges with people analytics can be ensuring utilization of the data and insights by the intended customers.

Petra Smith, VP of human resources at Seattle Children's Hospital, described an innovative solution. "One of my analysts built a dashboard about people analytics dashboard utilization, that is, a dashboard about dashboards," said Smith. "Using this we can drill into individual usage and see if they are accessing the dashboards we've provided them … or find out if a particular dashboard is lying dormant. Knowing this is important in tracking whether what we are providing has value, and whether data is perhaps not being used optimally, such as a dashboard that is intended for weekly use but is only being viewed monthly."

Seattle Children's

Petra Smith
VP of Human Resources
Seattle Children's Hospital

Mature People Analytics Functions:

What Do They Look Like and Where Do They Live?

Reporting vs. Analytics

Although the entire discipline is rather new, the picture of what a mature people analytics function looks like is starting to come into sharper focus. It involves regularly providing data-driven people insights that guide critical business actions and decisions. From an HR perspective, it also involves supporting, guiding, and even framing all HR strategy.

For organizations that are not as mature with analytics, there are several important considerations to start with. First, it is important to recognize that true analytics projects, as opposed to standard reporting, help to answer critical questions or drive decisions. Many don't yet realize this, as the 2017 study found that 66% of respondents reported that their organizations don't distinguish people data reporting from people data analytics. Overall, 31% said their organizations make this distinction, and this number was higher for high-performance organizations (38%) than low-performers (25%). Making progress on this fundamental question is critical for maturing the practice of people analytics.

66% of organizations *don't* distinguish people data reporting from people data analytics.

Alexis Fink, senior director, talent management at Intel, has recognized this dynamic several times throughout her career.

"In many teams there's not a clear distinction between data projects, which are typically more about reporting, and what I'd consider a true analytics project, which is intended to drive a decision," Fink explained. "Both are important, but quite different. Reporting is often focused on metrics and dashboards, which generally won't trigger action unless things are getting out of control. In contrast, a true analytics research project is designed to inform an unclear or complex decision. Reporting can tell you what has happened, and analytics can tell you what to do."

Charlotte Nagy, AVP People Analytics at USAA, provided further motivation for why organizations need to make this distinction.

"For us, in terms of team structure, operational reporting is separate from strategic analytics," said Nagy. "If it wasn't, then the day-to-day reporting needs would overwhelm and take over the analysis work. In addition, our goal over time is that reporting will become more and more automated, freeing up analysts to perform analysis rather than producing routine reports."

Choosing a Home for People Analytics

A fundamental and yet frequently debated question regarding people analytics maturity is where the team should reside in the organization: inside HR or in a dedicated analytics/business intelligence function?

Nearly 85% of respondents reported that people analytics resides in HR, with only 3% stating it was in a dedicated function (with no difference found between high-performance vs. lower-performing organizations). But when asked where it *should* reside, the response in favor of HR dropped to 61% overall, while those indicating a dedicated analytics/business intelligence function rose to 25%. Residing in a dedicated function in the future was cited more from high-performance organizations (31%) than low-performers (20%), initially seeming to suggest that this might be a preferable future home for people analytics.

People analytics leaders, however, are quick to point out that this is a very nuanced issue, and one that very much depends on specific factors at each organization. There are very real pros and cons of each approach they argue, with no universal right answer.

"We have a hub and spoke model at USAA," said Nagy, "with a Chief Data & Analytics Officer in place to make sure we have consistency in methodologies, access to
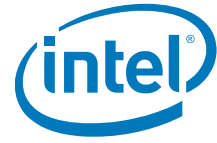
Alexis Fink
Senior Director, Talent Management
Intel

Charlotte Nagy
AVP, People Analytics
USAA

technology, an enterprise-wide information strategy, and common practices for developing our analytic talent. The spokes are embedded in the different aspects of the business, such as people analytics in HR, financial analytics in Finance, and so on. This model allows us to leverage resources from across the company that HR could not afford on its own, and develop subject matter expertise to most effectively support the business and our employees."

Certainly, *if* people analytics is to be housed within HR, it will be most effective if the CHRO is a strong and influential business leader. In such cases it is often also best for the people analytics function to report directly to the CHRO, as opposed to reporting up through one of the functional HR silos. In this way, people analytics can have a broad perspective on all of HR and be in a better position to drive HR strategy.

People Analytics Resides in HR

Pros:

· No issues with people access, confidentiality, or privacy for highly sensitive HR data.

· Well positioned to drive HR strategy and greatly influence broader business strategy, particularly if the CHRO is a strong and influential player on the senior leadership team.

· Better positioned to drive policy and behavior change based on the results of people analytics insights.

Cons:

· If the CHRO is not a strong and influential player on the senior leadership team, then people analytics is at risk of having little—if any—impact on business strategy or results.

· Potential lack of alignment with company-wide data standards and analytics methodologies.

People Analytics Resides in a Dedicated Analytics/BI Function

Pros:

· Centralized data standards and consistent analytics methodologies used across the organization.

· Enhanced ability to integrate people analytics data with other business data.

· Enhanced ability to pool and deploy analytics team talent (e.g., data scientists) across various functional areas (people analytics, marketing analytics, sales analytics, etc.).

· Enhanced ability to leverage different methodologies and learn and grow in analytics capabilities across the organization.

Cons:

· Potential disconnect from HR expertise, HR strategy, and an influential CHRO, thereby impairing the impact of people analytics results.

· Increased risks regarding access, confidentiality, or privacy of highly sensitive HR data.

Because each organization is different, there is no universal right answer to the question of where a people analytics function should reside. The above pros and cons can be leveraged and mitigated, but what really matters is that the organization:

· Preserves data security and privacy for all people data

· Aligns data standards and governance, and analytics methodologies

· Promotes communication between analytics specialists and HR expertise

· Grows people analytics capabilities that can drive strategy and impact business outcomes

Moving Forward with Your People Analytics Function

So how does a people analytics function grow from reporting, to analysis and insights, to framing and driving HR and business strategy? Obviously having greater resources is key, but assuming resources are available, how and where do you allocate them?
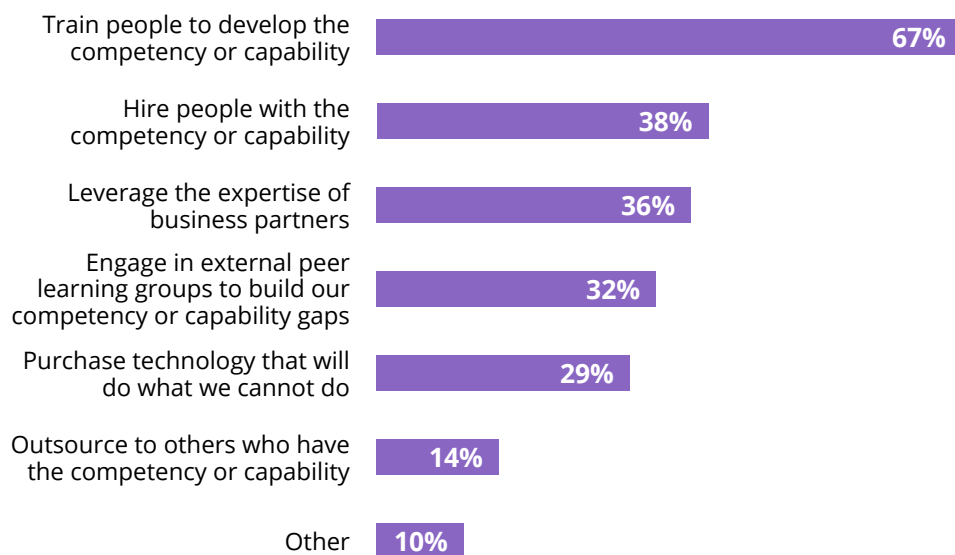
The wisdom from the leaders at the organizations profiled in this report sheds light on various aspects of resource allocation. But the maturity level of the organization needs to dictate how the function works with its various consumers. At any point in time, the different consumers—HR COEs, HRBPs, line-of-business leaders, the senior leadership team, the CEO—are likely to be in different places regarding what they want, what they need, and their level of sophistication in leveraging data and analytics. Most experts advise analytics professionals to be flexible and patient enough to connect at different levels from week to week.

1. Focus on Talent on the Team

When it comes to building out the people analytics function, a recurring theme we heard from many leaders was to be intentional about hiring resources or growing the existing team. However, given the dearth of available analytics talent, most companies are focused internally.

To address competency gaps on a people analytics team, *training existing employees* was by far the most common approach. However, some of the biggest competency/capability gap areas—quantitative analysis, qualitative methods, psychometrics, etc.—are not easy areas in which to train existing employees. Where training is challenging, other approaches will be needed, such as hiring new people, outsourcing, leveraging business partners, etc.

Approaches to address the competency or capability gaps in people analytics in the next 12 months

Approach	%
Train people to develop the competency or capability	67%
Hire people with the competency or capability	38%
Leverage the expertise of business partners	36%
Engage in external peer learning groups to build our competency or capability gaps	32%
Purchase technology that will do what we cannot do	29%
Outsource to others who have the competency or capability	14%
Other	10%

Organizations with 1,000+ employees. **Source: i4cp**

Matthew Solomon at AT&T offered three pieces of advice in building out the talent on a people analytics team:

- Hire people who are ready and willing to pivot, educate themselves, and do what is needed to fit the team's overall strategy.

- Develop their skills through practice and coaching sessions, especially when it comes to consulting and storytelling. Not everyone will have an aptitude for this, so be ready to have frank discussions when necessary.

- Temporarily rotate or imbed talent into other functions to upskill them and gain specific competencies that may be lacking.

To help expand people analytics bandwidth, Sunny Patel, people analytics and insights leader at Cardinal Health, has leveraged their young leadership program called EMERGE.

"We have one of the people from this program that rotates in and out of our group," explains Patel. "This is great for our team, but also for the young leader as they gain experience in analytics from our thriving people analytics function."

Arun Chidambaram, global head, talent analytics at Pfizer, noted a common challenge in the people analytics function: too many don't fully comprehend the HR function.

"HR analysts make a big mistake when they don't understand how the human resource function works," notes Chidambaram. For example, if you are working on a regional project in a particular market, you can have the best data scientists and the best models, but if you don't understand the ground rules of the country, the culture and other social factors, then the analysis may not work well. The analytics function sometimes applies the math too quickly instead of understanding how the business works."

CardinalHealth

Sunny Patel
People Analytics and Insights Leader
Cardinal Health

As a solution for this, Chidambaram suggests that as a people analytics function continues to mature, it can be best to specialize by having two main areas: client facing and non-client facing.

"In this model, a client facing group within the people analytics team connects with business units and HRBPs to understand the problem, manage projects and run post-hoc analysis and interventions," explains Chidambaram. "Whilst this group should have basic core analytical skills, their expertise will be weighted more towards consulting, storytelling, communication, and project and program management. The subject matter expert (or non-client facing role) requires deep subject matter expertise across critical disciplines such as data engineering, research and data science, experimentation and design thinking, visualization/reporting, and technology. Today's team structures typically expose members to both sides (SME and client facing)—and the potential challenge of this model is that some analysts will find it hard to let go of the other side as they face the decision on what direction to specialize in."

Since people analytics projects often require a range of skills and expertise, in building out the function it is helpful to get clear on just what will be involved and in what phases of a typical project. Intel has created one such model that categorizes four types of expertise, and then maps those to a seven-step process of a typical people analytics project.

Arun Chidambaram
Global Head, Talent Analytics
Pfizer

Process Step	CONTENT EXPERTISE — Specific Domains, Complexity, Measurement	DATA EXPERTISE — Extraction, Transformation, Management	ANALYTICS EXPERTISE — Analysis, Visualization, Validation	INFLUENCING EXPERTISE — Insight, Partnerships, Actions
Asking the right **question**	■			■
Identifying the right **method** to answer that question	■		■	■
Locating or generating the **data** to answer the question	■	■		
Effectively and appropriately **analyzing** those data		■	■	
Developing **insight** based on the analyses	■		■	■
Taking **action** based on that insight	■			■
Measuring **results** to determine whether your action was effective	■	■	■	

2. Integrate Far and Wide

Having the right people on the people analytics team is critical, but so too is integrating the function with other functional areas of the business. HR functions such as talent acquisition, workforce planning, compensation and benefits, employee engagement and performance management were the most common to integrate. However, no single functional area was said to be integrated by more than 40% of respondents, perhaps indicating that integration today remains opportunistic.

Functions where people analytics was said to be extremely or very integrated

Function	%
Talent acquisition	39%
Workforce planning	38%
Compensation and benefits	38%
Employee engagement	36%
Performance management	36%
Leadership development	28%
Training and development	27%
Succession planning	23%
Diversity and inclusion	22%
Operations	18%
Finance	17%
Organizational design	17%
IT	15%
Compliance and risk management	12%
Marketing	9%
Sales	8%

Correlated to market performance

NEXT PRACTICE

Organizations with 1,000+ employees. **Source: i4cp**

Integrating with the compliance and risk management function was far less common, with only 12% of organizations indicating it was extremely or very integrated with their people analytics function. But, because it had the strongest correlation to market performance of any function, this is a **next practice** for organizations to consider. Beyond functional areas of HR, people analytics leaders should also start looking to integrate with other areas of the business, most notably operations, IT, and finance.

Seattle Children's Hospital spearheaded integration and collaboration between their workforce analysts and their operations and finance leaders. Petra Smith noted that they are "beginning to match up the demand for talent based on patient volumes, with the supply for talent that we either have or are recruiting for. For example, for our critical care nursing teams we've been able to hypothesize what volume of people we need beyond the budget because of things like leaves of absence, orientation periods, and so on. This has really stabilized our business even during difficult periods such as flu season."

3. Invest in Technology and Tools

As with talent on the team and broader business integration, an organization's people analytics technology needs are also driven largely by its maturity level. Technology improvements typically start by automating what was manual and time-consuming, but can eventually grow to include artificial intelligence, machine learning, and predictive modeling that can increasingly make possible insights that were previously unachievable.

For instance, to grow people analytics at Cardinal Health, Sunny Patel had to move beyond their existing HCM tool, which was not built for people analytics.

"Our HCM tool was built to run transactions, and it has an object-based database that was not well-suited to empower analytics," Patel commented. "We needed to bring a lot of disparate data together and take snapshots of it at various points in time, so we decided to create our own SQL database engine to enable this." They have since complemented this engine with additional tools for data visualization, statistical analysis and more. Now the team has created a series of robust dashboards that empower all of HR – all HRBPs and all COEs – to answer questions with the right degree of executive depth.

Lincoln Financial Group is upgrading its people analytics technology, too. The company has successfully created an enterprise HR dashboard and closed gaps in data governance and data definitions, creating consistency for each metric reported. But getting there hasn't been easy.

"Up until now much of our work has been very manual, very time consuming, and in some cases very challenging to put together the data and/or analysis at Lincoln Financial," says Michael Semo, VP, HR. To match the function's maturity, Lincoln Financial is doing two important things: implementing a technology upgrade with Visier and increasing analytics-related training. Lincoln Financial expects that these changes will facilitate the leap of people analytics from important input to driving force of HR strategy.
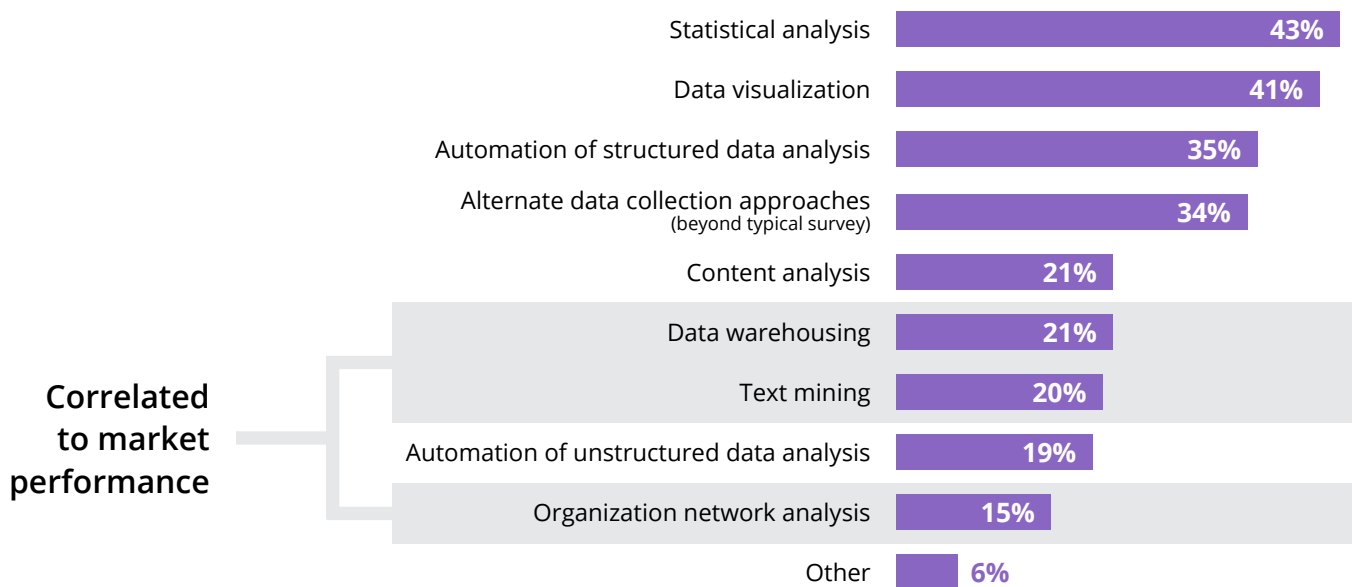
Michael Semo
VP, HR
Lincoln Financial

When it comes to growing capability by adding new technology, those from high-performance organizations indicated they needed the following **2x-4x** more often than low-performers:

- **Organizational network analysis,** which can be used to help map collaboration across the enterprise or even predict where the next significant innovation might arise.

- **Data warehousing,** which provides opportunities for people analytics to impact other parts of the business by storing and integrating data from multiple sources.

- **Text mining,** which can now involve the application of artificial intelligence to narrative comments provided in customer and employee surveys or other text-rich data sources. Using machine learning and natural language processing, these powerful platforms can review thousands of comments quickly, categorizing them into topic areas that are familiar and easy to understand, and determining their sentiment.

Technology indicated as the greatest current needs

Statistical analysis	**43%**
Data visualization	**41%**
Automation of structured data analysis	**35%**
Alternate data collection approaches (beyond typical survey)	**34%**
Content analysis	**21%**
Data warehousing	**21%**
Text mining	**20%**
Automation of unstructured data analysis	**19%**
Organization network analysis	**15%**
Other	**6%**

Correlated to market performance

Organizations with 1,000+ employees. **Source: i4cp**

4. Build Trust through Incremental Success

All of the above—building a strong people analytics team, integrating it with other key functions, and enabling it with ever-better technology—will increase the odds of making people analytics successful internally. But one other factor is also crucial: building trust in the data. With tough decisions, sometimes it seems easier to challenge the data rather than boldly forge ahead, and when mistakes are uncovered it can be tough to rebound from them. At all levels, but particularly the executive level, data governance is critical (see i4cp's report *Data Governance: The Foundation of Data-driven Decision Making*).

But when there is trust in the data, as well as trust in the people presenting data and making recommendations from it, organizations can move quickly and decisively forward.

Matthew Solomon at AT&T described a process for building the necessary trust for a people analytics function:

- Be patient, focus on building relationships, and earn trust by consistently providing value.

- Over time, evolve from being reactive to requests by being more proactive partners, to even offering solutions where people didn't even know they had a problem.

- Don't do analytics for analytics' sake. This will destroy any chance for your team to build trust, and to become a part of the talent strategy. Always bring actions and insights to the table, not just data.

- No matter the stage of your function, always focus on providing value. This need not be in the form of dollars and cents, as there are many different types of ROI. Focus on providing insights that will help change the business for the better.

In the end, success with people analytics is not just about data and analytics, it is also about people. It is important to develop a cohesive and cross-functional people analytics team, and just as important to build trusting relationships that will impact the business.
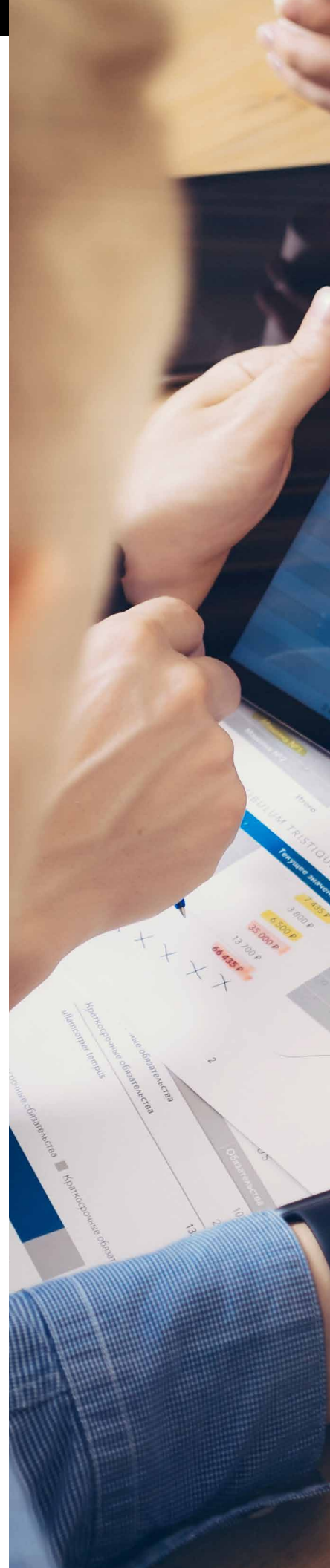
Conclusion and Recommendations

The field of people analytics has been steadily maturing over the last decade, providing significant business impact. Capabilities are increasing, lessons are being learned, and barriers are being overcome. Organizations are consistently moving up the value chain from standard reports, to analysis and insight, to data mining and predictive analytics, and ultimately to driving business strategy.

The following are some of the key recommendations surfaced in this research for organizations looking to advance their people analytics practice:

✓ **Reporting vs. analytics.**
Separate analytics from reporting, at least in roles and responsibilities if not in actual department structure. Doing so will allow for bandwidth to pursue high-value projects, such as those arising from proactive data-mining, and avoid your top talent getting bogged down with traditional day-to-day reporting requests.

✓ **Home for people analytics.**
Consider carefully the pros and cons of where people analytics should reside in the organization, with the goal being to best position people analytics to provide input for, and ultimately help drive, HR and business strategy.

✓ **Team structure.**
Offer mobility for people analytics team members so that they can develop both hard and soft skills according to their interests and aptitudes, and so that the function will be agile enough to flex to the varied projects that will surface over time.

Skills development.

Baseline quantitative skills are a must, but don't forget to build up the people analytics team's consulting, story-telling, and communication skills. These are just as important; without them all the math and data in the world will not translate into actionable insights.

Integration.

Look for opportunities to integrate and partner with other areas of the business, both within HR and outside of HR, such as other analytics centers of excellence in sales, marketing, or elsewhere.

Technology.

Invest in technology, but only when it is needed. Take a hard look at your existing HR platforms, as many legacy systems were not built with today's people analytics needs in mind, so additional software for data visualization, statistical analysis, data warehousing, and more will eventually be needed.

Build trust.

Ask questions of yourself and your people analytics customers: what data do you have today and what data will you have available soon? What is the appetite for people analytics among your HRBP community, functional business leaders, and senior leadership team? Be patient, as most in the organization will not be analytics experts and might be uncomfortable with the emergence of data-driven insights into the strategic decision-making process. Take on projects, both reactively and proactively, and build trust over time through one success after another.

Analytics maturity

LEVEL 4
Driving Business Strategy

LEVEL 3
Data Mining and Predictive Analytics

LEVEL 2
Analysis and Insight

LEVEL 1
Standard reports

The Final Word

In closing, we give the last word to some of the people analytics leaders interviewed for this report, who we asked to share their vision of what people analytics can and should be at their respective organizations. Here is what they said:

"We want data analytics to inform all people decisions. We don't and can't capture everything about people in data. We can't represent with data what doesn't exist yet. But we are getting to a point where our insights are ready, on-demand, for managers, for employees and for leaders of the organization to consume in the moment when they need it. Tell me where my team is strong, tell me where my team has opportunity, tell me what I can do about it, and most of all, tell me why it matters. Ultimately, we want to not just drive insights, but to drive action – to drive positive team changes that improve people and business outcomes. That is the business that people analytics team is in: driving better people and business outcomes."

– Chase Rowbotham, Genentech

"People analytics should be the backbone of HR strategy, allowing us to connect the dots across all of HR. Analytics would not own each HR COE's strategy, rather analytics would help orchestrate all of the strategies so they work together."

– Sunny Patel, Cardinal Health

"The future of people analytics is bright. We look to have information that's connected from business outcomes and financials to our talent information. People analytics data can be in the hands of business leaders, for them to access directly, as a critical component of driving business outcomes. It comes down to drawing the thread between our business strategies and outcomes and how we can better leverage our greatest asset, our people."

– Michael Semo, Lincoln Financial

"The goal is for people analytics to be the basis for all talent strategy at a high level throughout the corporation. People analytics needs to sit at the table with our head strategists every single year, throughout the year."

– Matthew Solomon, AT&T

People Analytics at Capital One: A Flexible Team Creates Impact

i4cp's research on organizational agility clearly shows the value of increasing the fluidity of internal talent to address areas of emerging need and opportunity. Those from high-performance organizations were **2x** more likely than low performers to say they encourage the movement of talent across the enterprise. They were also more than **2x** as likely to have leaders, at any level, who are effective at moving talent to address changing business needs.

Leadership effectiveness at developing and/or moving talent to address changing business needs

60%	Executive-level	**41%**	Mid-level
30%		**17%**	
54%	Senior/function-level	**35%**	First-level
23%		**14%**	

■ High-performance organizations ■ Low-performance organizations

Organizations with 1,000+ employees indicating highly/very highly effective. **Source: i4cp**

Guru Sethupathy, head of people analytics at Capital One, leads a team that has come to be seen internally as a center of excellence, and has structured his team of around 45 with talent mobility and skill development in mind. As an example he noted "I have and am continuing to build a team with diverse expertise that comes together in an efficient and flexible model. My team includes strategic consultants, business and data analysts, data scientists, data engineers, economists, and IO-psychologists. I've structured my team in a way where people can have different opportunities and can choose to go deep in one area, or rotate to diversify their skills and get different opportunities. For example, someone wanting to build consulting skills can move to one of my LOB-facing teams, someone wanting to build product development skills can move to my Product team, and someone who wants to do more blue-sky analytics, insights, and experimentation can move to my Labs team."

This flexible talent model on the people analytics team has enabled them to pursue a diverse set of projects over time, identified both through HRBPs and directly from

"Stay close to your customers – your HRBPs and business leaders – as this is critical to making sure that the work you do is aligned with the priorities of the business and will have real impact."

Guru Sethupathy
Head of People Analytics
Capital One

business leaders. One example is an HR organizational health dashboard that brings together a wide array of people data and also serves as a diagnostic tool for a business leader, with a planned future version to include machine learning to provide predictive and prescriptive insights.

The team at Capital One has also undertaken projects on D&I to understand drivers of diversity (or lack thereof) in various areas of the business. Workforce visioning on the future of call-centers in light of the rise of artificial intelligence is one specific area, along with a variety of other topics including people leadership, employee engagement, and enablement. "In particular, we are moving beyond descriptive statistics to identify drivers to affect policy change and to nudge behavioral change," said Sethupathy.

With the right leadership, a flexible team, and strong tools, there seems to be no end to the types of projects that people analytics can support. On this point, Sethupathy shared that "there are a hundred things you could be doing: are you doing the right dozen things? Stay close to your customers – your HRBPs and business leaders – as this is critical to making sure that the work you do is aligned with the priorities of the business and will have real impact."

About the Study

The Institute for Corporate Productivity (i4cp), in partnership with ROI Institute, fielded a study in October 2017, in part as an update to a study conducted in December, 2015. Each organization disseminated a detailed survey questionnaire to their respective databases, which include learning and HR analytics practitioners and leaders. The survey resulted in usable data from 379 respondents, which was analyzed by i4cp's research team. For the qualitative interviews, participants were drawn from the survey, i4cp's People Analytics Board, and i4cp's Workforce Analytics Exchange. All participants spoke in exclusive interviews with i4cp and were provided opportunity to review their remarks for consistency and accuracy prior to publication.

Definitions

Next Practice: Approaches correlated to positive market performance practiced by a relatively small number of top-performing organizations that other organizations should consider implementing.

Market Performance Index (MPI): This index defines high-performance organizations based on their self-reported multi-year performance in profitability, revenue, customer satisfaction, and market share.

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i4cp is a research and advisory firm that discovers next practices in human capital. Our member organizations rely on i4cp to ensure that their efforts will make the greatest impact on the business today and in the future. Through superior research, peer collaboration, tools, and data, we provide insights that help organizations better anticipate, adapt, and act in a constantly changing business environment.

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About ROI Institute

Founded in 1992, ROI Institute helps organizations evaluate the success of projects and programs, including measuring the financial return on investment (ROI). Their mission is to develop, refine, and support the use of the ROI Methodology in all types of applications and settings. ROI Institute leaders and consultants strive to achieve this mission by conducting research, writing and publishing, consulting, speaking at conferences, and building serious capability in individuals who become Certified ROI Professionals. ROI Institute continually pushes to remain the global authority on measurement and evaluation of all types of projects and programs.

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