2021

Analytics Audit Report

RED CASTLE
HUMAN CAPITAL

EXECUTIVE SUMMARY

This audit reflects an analysis of ACME's current people analytics capabilities, a description of the future state of these capabilities, and a road-map intended to help guide implementation over the next 24 months. This process began with an exploration of ACME'S current state capabilities, including quantitative assessments, interviews, and focus group sessions with human resource (HR) leaders from ACME's global operations. We then described a future state condition and extrapolated a road-map to realize these future state capabilities.

Regarding the current state, ACME has good alignment between its business level strategy and HR focus. ACME primarily competes on the basis of its unique expertise and thus employs a "competitive advantage" focus with its HR management function that emphasizes attraction, development, and retention. Nevertheless, ACME's current people analytics capabilities do not provide it with the intelligence needed to adequately recruit, attract, develop, monitor, and retain key talent.

First, ACME currently possesses few standardized metrics, is unable to segment employees based on key vocational characteristics, and primarily relies on manual analytical processes to house, pull, and analyze data. Although existing reports are high-quality in nature, they primarily reflect annualized attrition with minimal segmentation. There is also no differentiation between functional and dysfunctional attrition. As such, its primary current focus is on operational reporting of the current state of the workforce.

In the future state, ACME will advance these capabilities. First, will utilize systems integration to automate data feeds between existing information systems and reporting dashboards. Second, will acquire and leverage targeted employee experience information that will be used to improve forecasting and enable proactive engagement with employees. will also begin to link HR processes with key performance indicators (KPIs) in the value chain, including project performance data, to understand its strategic business contributions.

TABLE OF CONTENTS

Project Scope and Introduction

4

PROJECT SCOPE AND INTRODUCTION

In the Spring of 2021, ACME contracted with Red Castle Human Capital (RCHC) to conduct an audit of its people analytics function and produce a roadmap to guide the future development of these capabilities. From April through June of 2021, RCHC conducted a primary intake assessment with selected members from the Global HR Leadership Team, a series of one-on-one interviews, and a group focus group session. RCHC also conducted research on ACME's operations and industry. This report summarizes findings from these efforts, along with recommendations that constitute 's People Analytics Roadmap.

What Are People Analytics?

People analytics refers to the application of statistical processes to inform workforce decisions and investments. As an application of evidence-based management, people analytics are intended to help organizations shape and optimize the performance and well-being of their workforce. Thus, the goal of people analytics is not to maximize short-run performance, but to maximize sustainable long-run performance of the organization through its workforce.

Several evidence-based assumptions inform the practice of people analytics:

1. Workforce:

A workforce is composed of the employees, contractors, temporary, and contingent workers that contribute to an organization's value-creation activities. We do not distinguish between traditional employees and contingent or temporary workers because all of these individuals have an important impact on the value-chain ACME provides customers.

2. Power of Evidence:

We assume that data-informed decisions and investments are more accurate than intuition alone. By data-informed, we mean the collection, analyses, and reporting of primary data from a specific organization, and also the use of benchmarked research data from other organizations.

3. Supply Side Impacts:

We assume positive links between the performance of individuals and groups of employees and the broader organization's success.

4. Demand Side Impacts:

We assume that customer experience (CX) is heavily dependent upon the employee experience (EX), and that positive and negative inflections in EX are eventually shared by customers.

5. Tool Agnostic:

Finally, we assume that people analytics can be employed effectively with a variety of different tools, and the tools or solutions that we recommend are intended to be descriptive, rather than definitive. Similarly, we judge the sophistication of a firm's people analytics function not by its tools, but by the manner in which tools are employed to intervene effectively in the workforce.

So what?

We are keenly aware of management “fads” that have been adopted by organizations without producing a return on investment. As a result, managers have rightly become skeptical about the value of adopting new practices or capabilities without a commensurate promise of returns. Thus, it is important to briefly describe how people analytics can impact organizations.

First, the greatest expense for any organization is its human capital, often consuming between 50 and 75% of annual revenues. Yet historically there is little analysis on the quality and returns that accrue from these investments, which precludes managers from optimizing these investments across time. Similarly, at least some portion of employee contributions is discretionary and based on individual motivation. Knowing what drives, enables, or impedes these discretionary contributions is key in producing more from the workforce, and better enabling them to realize their personal goals at the same time.

Finally, as organizations grow, they become more complex, meaning data must replace anecdote as a key influence in decision-making. For example, people analytics can enable organizations to reduce hiring mistakes, better motivate the workforce, enhance workforce skills and abilities, better retain employees, and reduce waste to enhance the bottom line. Thus, far from a fad, people analytics reflects a special application of evidence-based practice to improve and optimize workforce decisions and investments.

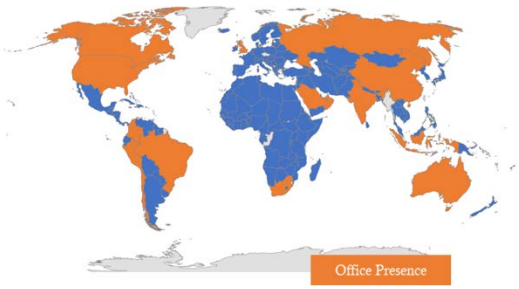
Our goal in this document is to provide ACME with a road-map that it can use to wisely stage and advance its people analytics capabilities to realize these and other savings. We begin by describing the context in which ACME operates.

Company Background and System Complexity

08

COMPANY BACKGROUND AND SYSTEM COMPLEXITY

ACME offers engineering, project, and consultation services globally. Operating in 150 countries from 16 office locations, ACME is a geographically diverse company. Although it has a significant presence in the developed world, ACME also has important access to emerging economies around the globe, which is an important differentiator. Nevertheless, although it maintains a global footprint, ACME still generates a majority of its income from project work originating in Canada, and Canadian operations play a critical role in ACME 's overall financial health.



ACME possesses segment-specific expertise in metals and mining energy, and the development of physical transportation and digital infrastructure. As such, ACME draws on a multi-national workforce primarily composed of engineers and project leaders. It primarily operates in business-to-business (B2B) customer relationships with government, non-government, and corporate customers, creating value through the planning, design, construction, and sustainment of physical facilities.

Thus, ACME 's critical processes include business development and project scoping, proposal development and budgeting, planning, design, construction, and sustainment. Its profitability depends on the extent to which it can generate and sustain new business, effectively deliver value to customers in a timely manner, and efficiently manage project scope and budgets. ACME must also cope with long project lead times that impact cash flow, and uncertainty as it competes against other multi-national firms for business.

Finally, ACME 's employees commonly work in the field, rather than corporate offices. It is common that half or more of the workforce is deployed supporting projects at any given time.

Human resource management (HRM) processes are a critical enabler of these operations, and ACME 's ability to offer value depends on having the right number and mix of professionals deployed at an appropriate time to meet project demands. Furthermore, the global and dynamic mix of projects completed by ACME means that its human resource management function must understand local compensation schemes and regulations, work practices, and labor markets to adequately staff, monitor, and reward its workers. Because ACME is an engineering organization, it must compete for scarce scientific and engineering talent, which increases employment costs and potential turnover risks from employees with skills in high demand. Finally, ACME faces a comparatively high level of complexity in its operations that impacts HRM processes.

We assess "system complexity" as a function of an organization's operations (i.e., business segments), workforce size, geographic operations, and process exposure to change. Varied business segment participation, large workforce size, global footprint, and exposure to change all impact the demands placed on executive leadership and a human resource function. Given that ACME employs approximately 9,000 individuals globally, operates in 150 countries, maintains diverse segments of operations, and its project portfolio is subject to moderate fluctuation, we characterize its system complexity as "High."

ACME's system complexity generally implies that executive and HR leaders are managing multiple processes, projects, and demands simultaneously, which should be understood as the organization considers how best to advance any capability, including people analytics. Organizations facing high levels of system complexity also often benefit from the prioritization and incremental advancement of capabilities, rather than drastic overhauls of capabilities, providing the organization with slack needed to grow while meeting strong ongoing operational demands. Finally, organizations with high levels of system complexity often require multiple levels of approval before changes can be made, meaning change management processes are slower than in lower complexity systems. Thus, planning and anticipated time horizons must be adapted to accommodate this complexity.

See Table XX below for complexity calculations and benchmarks, where higher scores reflect increased complexity.

System Complexity		Focal	Benchmark Comparisons			
		Hatch	Penguin Random House	PwC	Ubisoft	Maple Leafs
Business Segments	Complexity					
1	100					100
2	200		200			
3	300					
4 or more	400	400		400		
Geographic Footprint						
# of Nations	10 Per	1,800	2,000	1,550	290	1,400
Management Footprint						
# of Locations	20 Per	320	40	1,580	1,120	20
Workforce Size						
9,000	.25 Per	2,250	2,650	71,000	4,750	1,000
System Complexity Score		4,770	4,890	74,530	6,160	2,520

Strategic Alignment

People analytics can be employed to help organizations in a variety of ways, but the focus and nature of these interventions will depend on both the business level strategy and the human resources focus of the organization.

Regarding the business level strategy, we seek to understand how organizations compete or seek to compete within a given industry or industries, and why customers uniquely choose their products or services relative to other competitors. Because of the ongoing operational and tactical demands associated with the function, human resource management (HRM) professionals often struggle to "think" and "act" strategically. Nevertheless, an organization's business level strategy directly informs the needs, resources, and processes of HRM, and thus we consider these relationships. Ultimately, people analytics is one mechanism through which HRM processes can be made more "strategic," as it links these processes to strategically-relevant organizational metrics.

Typically, organizations pursue either a low cost or differentiation approach in their business strategy. In a low-cost approach, the organization reduces its production and delivery costs to maximize leverage and profitability for products and services that are charged at an industry mean. In the differentiation strategy, the organization seeks to produce different or additional value for customers by leveraging capabilities or knowledge to offer different services or products than its competitors. These additional capabilities enable organizations to charge higher prices and create switching costs that keep customers purchasing their services or products.

Ideally, the business level strategy of an organization informs the human resources (HR) focus employed by ACME. For example, organizations typically trend either toward a competitive advantage or cost efficiency focus with their human resources function. A competitive advantage focus seeks to build a committed and highly trained workforce that will differentiate the organization from others by the possession of unique skills, relationships, knowledge, and innovation. In this instance, learning and development investments, performance management, and culture shaping programs are common practices for organizations seeking to leverage the workforce for competitive advantage.

Meanwhile, a cost efficiency focus views the workforce as a cost center, seeking to maximize efficiency with the workforce by minimizing labor costs. This may include the automation of recruiting and selection processes, inclusion of robotics and digitalization in manufacturing or supply chain processes, standardization of training, onboarding, and product/service manufacturing, and depersonalization of outputs. This difference in focus is ultimately driven by the manner in which an organization seeks to compete in a for-profit context or maximize stakeholder value for government or non-profit entities

After assessing the business strategy and HR focus, we then assess the level of strategic alignment between these two orientations. Strategic alignment reflects the extent to which a business strategy and human resources strategy of an organization support one another. For example, if an organization differentiates its products or services by possessing unique knowledge or capabilities that competitors cannot gain, then it should pursue a competitive advantage focus that seeks to mitigate turnover, grow and develop the workforce, create commitment, and thus maintain or increase this advantage relative to industry peers. Conversely, misalignment would occur if an organization sought to lead strategically with low costs, but also invests significantly in the development and commitment of its workforce. Such efforts would result in misalignment and over-investment in the workforce. Finally, HR leaders may emphasize a different HR focus than other business functional leaders, leading to cross-functional differences that negatively affect alignment between the business strategy and HR focus.

The people analytics roadmap for ACME should be informed by this alignment between strategy and HR focus. For example, if a competitive advantage focus is employed, then the organization will be concerned with developing a committed and long-lasting workforce, and metrics such as turnover, learning, performance management, employee engagement, well-being, and employee development will be important. If a cost efficiency focus is employed, then the organization would prioritize metrics such as workload efficiency, billable hours, and profit/loss. This distinction in metrics is also similar to a difference in focus, with the competitive advantage focus emphasizing people, such as High-Performance Work Systems, and the cost efficiency focus emphasizes processes, such as Six Sigma and Lean.

Neither focus is by itself “right,” but rather more or less appropriate in lieu of how an organization seeks to compete and maximize value for its customers or broader stakeholder set.

We also acknowledge that large enterprise organizations may employ multiple human resource foci at the same time in different business units. Here, the people analytics roadmap should reflect this complexity, treating each business unit as a "distinct organization" or employer.

Strategy Assessment and HR Focus

In every audit, we measure the business level strategy, the level of leader consensus concerning this strategy, and also the HR focus. Consensus is measured by assessing the variation in responses between a group of respondents.

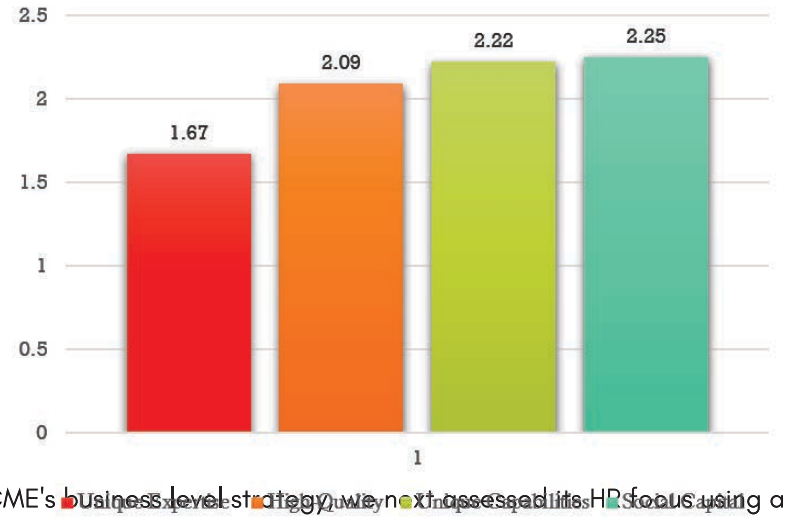
Strategy Assessment Item:
Why do clients choose your organization? Please rank order your value drivers from Most Important (1) to Least Important (5):

Low-Cost: We offer low prices other competitors cannot match.
High-Quality: We produce higher quality outputs than competing firms.
Unique Expertise: We possess knowledge that other companies don't.
Unique Capabilities: We can do things other companies cannot.
Social Capital: We invest more heavily in client relationships than competitors.

Business Strategy Value Drivers:
Strong value drivers are rated between 1.0 and 1.9
Moderate value drivers are rated between 2.0 and 3.5.
Low value drivers are rated above 3.5 or receive no score.

As a global engineering organization, ACME primarily emphasizes its Unique Expertise as a mechanism to compete, even as the results of this analysis show that it also leverages several related business strategies. These include offering High-Quality to clients, Unique Capabilities, and building and leveraging Social Capital (i.e., key relationships). Each of these business-level strategies is complementary to ACME's competitiveness, but place unique demands on the HRM function.

Specifically, expertise, quality, and capabilities are embedded within a highly trained and capable workforce, while social capital reflects the relationships embedded within and outside of the organization. Each of these strategic drivers necessitates strong recruiting and staffing processes to find and hire workers that will accentuate these capabilities, and a retention strategy intended to preserve unique knowledge, access to skills, and relationships. Thus, the talent pipeline becomes a strategic imperative for organizations like ACME. Performance management, compensation advancement, and workforce learning and development programming are also mechanisms useful in accentuating and strengthening workforce expertise.



Having addressed ACME's business-level strategy, we next assessed its HR focus using a quantitative methodology. The measure and items are below:

HR Focus Measure
Please rate the extent to which the following statements describe your organization (100% representing "Fully Describes Us"; 50% representing "Somewhat Describes Us"; and 0% representing "Does Not Describe Us at All."

Competitive Advantage Focus Items:

- Our people provide us with a competitive advantage relative to our industry rivals.
- We seek to invest in people for the long-haul.
- We view turnover as a form of managerial failure.
- Employee professional development is a win for our organization.

Cost Efficiency Focus Items:

- Top management views the HR function as a cost center.
- Cost, not commitment, is a key consideration in our workforce decisions.
- Our top management views employees as liabilities and not assets.
- Employees are easily replaceable.

Mean scores for each HR focus range from 0 to 100. The distributions of these scores can be found in Table XX. A score of 80 or greater represents a strong focus, while a score below 50 is a weak focus. Similarly, consensus is calculated by subtracting the lower focus score from the higher focus score. Consensus scores of 50 or higher are considered "high," while consensus scores of less than 20 are considered "low."

Business Level Strategy	Recommended HR Focus	Minimum Recommended Strength
Low Cost	Cost Efficiency	80
Unique Capabilities	Cost Efficiency	70
High-Quality	Either	60
Unique Expertise	Competitive Advantage	70
Social Capital	Competitive Advantage	80

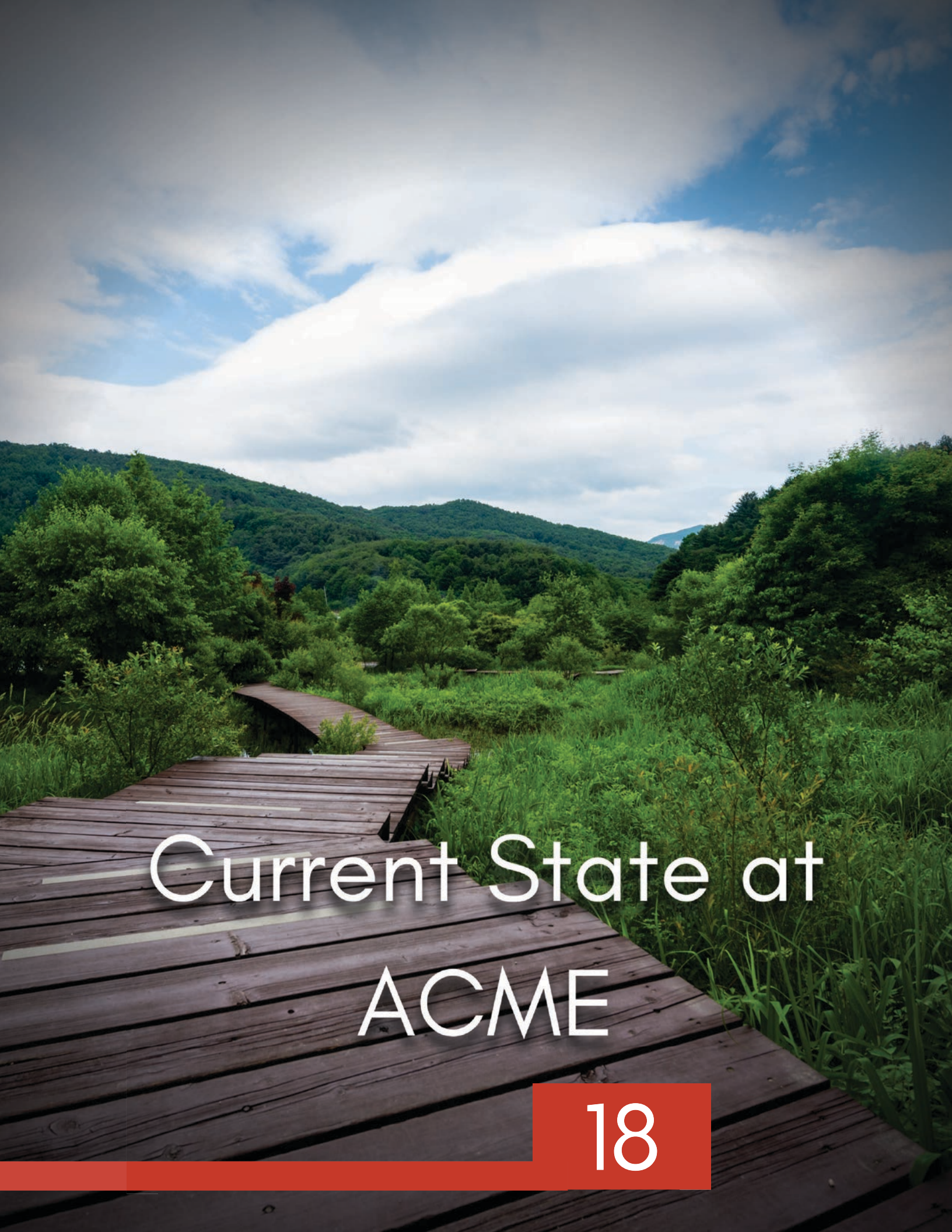
Generally speaking, weak HR focus scores are problematic because they suggest that the employing organization lacks a cohesive strategy directing its workforce investments. Similarly, low levels of consensus suggest a problematic lack of communication and coordination within an HR leadership team. Finally, the level of consensus may be impacted by the workload and communication patterns of HR leaders, with higher workload reducing team communication about strategic priorities.

These numbers should also be placed in context. Organizations with geographically distributed leadership teams or multiple business segments typically have lower HR focus mean scores and lower consensus than organizations whose leadership teams are co-located in a single location. Similarly, multi-national organizations have lower HR focus means than organizations operating within a single country because HR practices often vary between countries.

ACME's competitive advantage focus mean was 72/100, while its cost reduction focus was 27/100. This means that although ACME seeks to realize cost efficiencies with its workforce, it primarily leverages the workforce as a competitive differentiator. ACME also showed a moderate level of consensus, with a difference of 45 reported. These numbers are broadly consistent with the nature of its work in engineering and construction, as well as the geographic distribution of its operations around the world.

ACME's most important value driver was its unique expertise (ranked #1, mean score of 1.67/5.0), while it reported a competitive advantage focus of 72/100. This suggests favorable alignment between the strategy and HR focus. This alignment also drives the direction of the people analytics roadmap, and ACME's alignment suggests that the following processes are strategically important for employees:

- Applicant Attraction, Recruiting, and Selection
- Newcomer Onboarding and Socialization
- Learning, Development, and Career Management
- Compensation and Performance Management
- Employee Experience and Well-being
- Retention/Turnover Management



Current State at ACME

18

CURRENT STATE AT ACME

The people analytics roadmap for any organization depends on its Current and Future states. Thus, we began our study by evaluating ACME in three capability categories (i.e., People, Process, and Tools) that are embedded within the people analytics function.

By People, we identified the producers and consumers of workforce intelligence in an organization, and assessed their expertise and beliefs about the efficacy and importance of people analytics. Expertise describes the data fluency required to generate, interpret, and act on workforce intelligence, while beliefs concern the assumptions made about how people analytics can impact one's job role and the broader organization. Expertise impacts the quality with which producers generate workforce intelligence and the manner in which consumers request and leverage this intelligence. Meanwhile, people analytics beliefs help us understand the extent to which producers and consumers see potential value in the acquisition and use of this intelligence.

Next, we identify and weigh existing Processes to gather, organized, analyze, and report data from producers to consumers. We pay specific attention to the questions that can and cannot be answered by existing analytics functions. Similarly, rather than describe each process an organization uses in its people analytics practice, we characterize the general level of sophistication, accessibility, security, and automation with which data are gathered, organized, analyzed, and reported. We also weigh and grade the efficacy of a system overall regarding its ability to answer pertinent workforce questions.

Finally, we evaluate the current Tools, including software programs, employed to gather, store, analyze, and report data by producers and consumers. There are myriad combinations of tools that can be employed to produce actionable workforce intelligence, but our task here is to assess the adequacy of an organization's Tools as they support the efficient delivery of valid, timely, and appropriate intelligence. As RCHC is "tool agnostic," we often recommend examples of tools that could be employed, recognizing affordability, implementation, and even global access are important differentiators of a tool's suitability in a given competitive context.

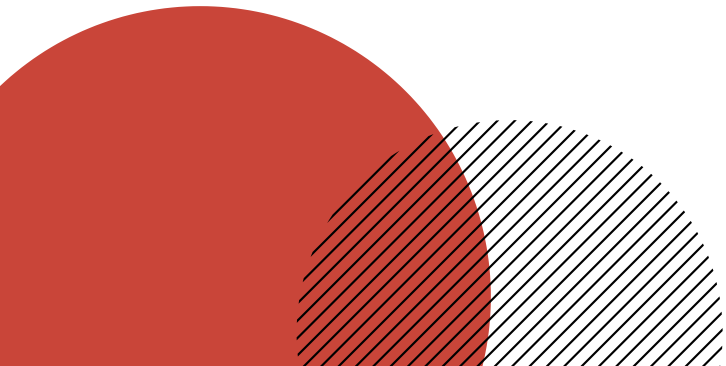
In sum, the current state analysis helps us identify existing capabilities that can be refined and strengthened, capability gaps, and then prioritize the changes needed to surmount and fill these gaps.

Current State - People

Based on interview data, there are approximately 20 producers of people analytics intelligence at ACME. These are housed primarily within the human resource management (HRM) function, and include dedicated Human Resource Information System (HRIS) and operations personnel. In addition, monthly reports are produced for ACME's board and other executive leaders. Finally, various HR leaders around the globe collect, analyze, and report people analytics intelligence on an ad-hoc basis.

ACME has a significantly larger number of people analytics consumers than producers, including its executive leadership team and board, HR leaders, HR team associates, and other leaders throughout the globe. For example, ACME averages 104 unique viewers per month and 68 views per day on its Monthly HR Dashboard, which is also the highest ranked report at ACME. A majority of these users are within the HR function; however, there is still significant demand for this reporting globally, including 16 unique viewers per month and 12 daily views on average. Similarly, there is strong demand for the Weekly Overtime Report, which shows worker utilization, leave, and billable hours. This report is viewed by 13 unique viewers per month, averaging 3 views per day. There are other reports, including a weekly staffing report, that are produced, with varying levels of consumption. However, these numbers generally suggest that there is an existing precedent for the use of people analytics intelligence at ACME, and that existing data are informing leader decisions and investments already.

Nevertheless, although the analytics team possesses adequate access to date, there are challenges at ACME regarding data availability and democratization for non-analytics leaders. For example, some respondents in interviews indicated that they would like access to compensation data. On one hand, compensation secrecy reduces threats of social comparison.



However, compensation-related data also are an important input in ROI calculations, representing the organization's unique investment in each employee. Compensation data are also critical as an input for pay equity calculations. These considerations should be weighed against the provision of greater access to data on certain employee groups (e.g., non-executives) so that HR leaders can effectively integrate these data into analyses.

When considering data accessibility and democratization, we generally recommend adherence to the 3 NSA principles of necessity, security, and accountability. End-users of data must demonstrate a strategic necessity to gain data and capability to use data, measures should be taken to secure data and data outputs against potential threats of breach, and accountability made for the use of data. Third-party organizations can also help provide insight into compensation-related processes that enable ACME to evaluate its practices while still maintaining pay secrecy principles.

We next assessed the expertise and beliefs of an organization's data producers and consumers using interviews and standard scores. A reoccurring theme in interviews and focus groups was the great variation in expertise among HR team leaders and other business leaders at ACME. Although ACME is fundamentally an "engineering organization," and thus most of its employees are competent with analytics, some of the non-engineers that typically comprise the HR function have less expertise and comfort with data analytics. Meanwhile, others embedded within the HR function are highly adept with analytics, and are able to gather, test, and report data using fairly sophisticated methods, including annualization and linear trend analyses.

These qualitative assessments are supported by ACME's mean expertise and beliefs scores, as shown below in Table XX (where 1 is Strongly Disagree, 3 is Neutral, and 5 is Strongly Agree).

People Analytics Expertise (E) and Beliefs (B)	Group Mean Score (1-5)	% Agreement
E - I am confident we have the right metrics in place.	2.33/5.0	0.0%
E - We constantly refine our understanding of what influences our key metrics	2.83/5.0	16.7%
E - We use A/B (or pilot) testing on small groups before making wholesale changes.	3.08/5.0	50.0%
E - I have the training and support I need to effectively use data.	3.17/5.0	41.7%
E- We use workforce data analysis to get focused on what moves the needle.	3.25/5.0	58.3%
E - We have identified and linked business metrics to our workforce objectives.	3.33/5.0	50.0%
E - We have identified measurable objectives shared by management.	3.50/5.0	50.0%
E - I know how data analysis applies to my job and use it daily.	4.08/5.0	83.3%
B - The leaders I interact with understand the power of people analytics and workforce intelligence.	3.50/5.0	58.3%
B - The leaders I interact with believe data can help them be better leaders.	4.42/5.0	91.7%
B - I believe data analysis is important to my long-term success.	4.83/5.0	100.0%

ACME's Expertise mean was 3.20/5.0, which reflects an "Moderate" level of expertise amongst people analytics producers and consumers. As can be seen in Table XX, there was generally little confidence that ACME has the right metrics in place, there is little current effort made to refine existing metrics, and pilot testing (A/B) is seldom employed by management to preview change effects. These all suggests areas of improvement for ACME.

Respondents also indicated that they lacked needed training and that people analytics metrics were only moderately aligned with ACME's value-chain. However, they also noted that they understand how to use data and leverage it in work. Thus, it generally seems that HR leaders are willing to use and leverage people intelligence if they can gain the right metrics at a sufficiently high level of quality.

ACME leaders also reported favorable Belief metrics concerning the potential value of people analytics. Here ACME received a Beliefs mean score of 4.25/5.0 (i.e., "Good"). Fully 100% of respondents indicated that they Agreed or Strongly Agreed that data analysis is important for their long-term success, while 91.67% indicated that their supervisors understand the value of data to improve their leadership. This suggests that ACME's HR leadership appreciates the value of people analytics and desires to further incorporate this intelligence into their work. Even so, there were lower beliefs concerning leader understanding of the power of people analytics and workforce intelligence, where only 58.3% of respondents Agreed. This suggests that efforts should be made to help operational and senior leaders understand how people analytics can improve value-chain metrics outside of the HR function. This may also reflect changing paradigms within HRM concerning the use and value of evidence.

Process

The Process of people analytics reflects the inputs, analyses, reporting, and actions taken based on data. In general, ACME's HR leadership team is working to improve its analytics processes, and there are several initiatives underway to enhance analyses and reporting of data, including in onboarding/socialization and recruiting. ACME also possesses dedicated analytics personnel within its HR function, and some of these individuals have full access to available operational and financial data, which is an important enabling condition for the advancement of people analytics. In particular, there are few data accessibility barriers for ACME to link and integrate data together, which is promising.

Inputs

Employee data are collected primarily at the beginning of the employment process. Ad-hoc data are also collected during learning and development engagements, following socialization/onboarding, and during career management discussions. Most of these data are qualitative in nature, even as there are efforts to increase the utilization of standardized quantitative scales. For example, there is an effort to gain and report satisfaction with new employee onboarding and socialization using quantitative scales. Quantitative scales are important because they enable comparisons between individuals, groups, and even divisions. They also represent the critical input for statistical processes that undergird people analytics.

Even as ACME is advancing and refining its data acquisition and data capture practices, there is no formal performance management process in place. Employees are able to infer their individual performance based on compensation dispositions that can change each year, with raises being based on the extent to which employees fail to meet, meet, or exceed expectations.

Although employment laws differ between regions and countries, the absence of a formalized performance management system represents a potential legal liability for the organization when employment changes, such as termination or promotion, are made. Specifically, devoid of formal performance management processes employing valid quantitative data, ACME possesses no legally defensible way to justify how it differentiates employees in key decisions, including compensation changes, termination, or even promotions.

Another key issue facing ACME is the lack of standardized job coding and maintenance of up-to-date employee data. In interviews, we learned that the HR function has to make inferences about employee qualifications and expertise based on a number of related data fields, rather than looking directly at their educational and vocational backgrounds. In discussions with HR leadership, it became apparent that ACME's cultural emphases on mobility, cross training, and personal development were key catalysts impacting this current state condition.

Specifically, the organization's leadership has worked hard to ensure that individuals are not "siloed," which is also reflected in the matrix-form structure of the organization. However, although internal mobility and growth are admirable goals, the net effect is that the organization's HR team lacks the ability to adequately segment employees on the basis of key qualifications, including tenure (i.e., years in classification), functional background, and performance, representing arguably the most significant deficiency in the organization's people analytics function.

Employee differences are analyzed heavily on the basis of sex (male/female), but there is little data on employee race/ethnicity, except in South Africa where such efforts are mandated. This introduces several problems for HR operations at ACME. Specifically, HR leaders cannot effectively intervene with the workforce devoid of this segmentation, representing a critical gap in capabilities. Similarly, there is no basis from which to understand whether compensation practices are internally equitable (i.e., comparable pay for comparable work, after controlling for individual differences, performance ratings, and tenure). In the same manner, ACME lacks the ability to understand if its workforce investments, such as learning and development, are being fully embraced by all members of the organization. These data are also important in modeling the inclusion and diversity climate of the organization. Thus, any future development of people analytics processes will necessitate the acquisition and ongoing maintenance of these records.

We also assessed the data metrics currently collected at ACME by comparing their availability against "standard" HR metrics. Table XX below shows each of the standard metrics. Column one shows the standard metric. Respondents indicated whether the metric was currently Available within the organization, Aspirational for the organization to acquire, or Unknown. The percentage frequently reflected in the table shows the percent of respondents who reported that a metric was available, aspiration, or unknown. Each metric's responses sum to 1.0 (100%). Although other metrics are used in HR, these metrics are commonly collected in industry and also represent important performance drivers in the academic literature.

Standard Metric	Available (Yes/No)	Aspirational (Yes/No)	Unknown (Yes/No)	Consensus?	Rated Quality?
Time in Classification	85%	8%	8%	High	Low
Individual Performance	85%	8%	8%	High	Low
External Pay Equity	69%	23%	8%	Moderate	Adequate
Learning and Development Goals	64%	36%	0%	Moderate	Low
New Employee Onboarding Success	62%	23%	15%	Moderate	Adequate
Workload	55%	9%	36%	Low	Low
Career Aspirations	50%	42%	8%	Low	Low
Overload	50%	10%	40%	Low	Low
Exit Interview - Reasons for Quit	46%	38%	15%	Low	Low
Internal Pay Equity	45%	27%	27%	Low	Adequate
Supervisor Support	33%	42%	25%	Low	Low
Turnover Risk or Hazard	23%	46%	31%	Low	Low
Engagement	21%	43%	36%	Low	Low
Employer Net Promoter Score	9%	27%	64%	Moderate	Low
Job Satisfaction	8%	50%	42%	Low	Low
Pay Satisfaction	8%	50%	42%	Low	Low
Work-Family Conflict	8%	25%	67%	Moderate	Low
Burnout	0%	36%	64%	Moderate	Low
Motivation	0%	42%	58%	Low	Low
Psychological Well-Being	0%	31%	69%	Moderate	Low

For all standard HR metrics, ACME indicated an average Availability of 36%, an Aspiration of 31%, and 33% were Unknown. Respondents indicated that only two metrics, Time in Classification and Individual Performance, were available (i.e., 80% or more rated availability).

In follow-up discussions, we learned that ACME also collects several additional metrics on an ad-hoc basis, including External Pay Equity, Internal Pay Equity, Learning and Development Goals, Career Aspirations, New Employee Onboarding Success, and Exit Interview - Reasons for Quit. One region also collects employee engagement data.

In Column 6, we also assessed the Quality of these metrics to provide actionable intelligence to HR leaders via statistical processes. For example, the collection of qualitative data in career management discussions is important, but it precludes statistical analyses that would enable differentiation or study between individuals, groups, or across time. Thus, the quality of these data would be rated as "low." By contrast, high-quality data are collected across time, reflect a high level of representativeness (i.e., based on response rates that reflect the entire organization), and enable statistical analyses.

In follow-up interviews, we learned that Time in Classification is actually estimated based on the age of the employee, rather than their tenure in the organization or a given job role. Similarly, we learned that Individual Performance data come in two forms: First, there is the percent of billable hours that a given employee bills during a time interval. This is an objective measure of performance, but does not indicate the quality of work across that interval of time. For example, individuals could bill time for low-quality outputs or even time spent shirking (e.g., engaging in social media instead of working).

Individual Performance is also discussed during the Career Management Discussions and when raises or other compensation changes are made on the basis of whether employees met, failed to meet, or exceeded expectations. However, as noted earlier, ACME lacks a valid and legally defensible way in which to assess individual performance contributions or to justify why these expectations were met, exceeded, or failed. As such, employees lack a basis from which to respond, grow, and improve.

Next, we evaluated the level of consensus among respondents regarding the availability of data. Consensus is important because it highlights how data are gathered, used, and communicated within an HR organization. Generally, “High” consensus is 80% or higher, “Moderate” consensus ranges between 60% and 79%, while “Low” consensus is below 60%. Within ACME’s HR Leadership Team, only 10% of standard metrics (i.e., 2 of 20) had high levels of consensus, 35% (i.e., 7 of 20) were moderate in consensus, and 55% (11 of 20) were low consensus. There was significant variation in reporting and understanding of these metrics, which implies either a lack of consensus concerning availability of data or uncertainty about data availability. The former could also be affected by ad-hoc measurement within different or geographically dispersed business units of the organization.

We also assessed the extent to which attempts to gather data had been successful. For example, during the height of the COVID pandemic in 2020, HR leaders attempted to update emergency contact information. Only an estimated 30-40% of employees responded to this request. This suggests that data acquisition efforts may fail unless they are also accompanied by communication concerning how the data will be used, and accountability for the provision of data.

Analyses

Next, we explored how data are analyzed statistically at ACME. The mechanisms used to analyze data vary significantly, ranging from the basic provision of group descriptive statistics and trend lines, to more sophisticated regression analyses, and then time-series forecasting and decision-support systems that help inform managerial time investments. Analyses also vary in the extent to which they are backward looking, current, or forward looking, with most companies analyzing historical and current data. Analyses also vary on the basis of their automation, with some organizations manually pulling data and others automating the requisition, analyses, and reporting of findings.

At ACME qualitative data are not coded or analyzed systematically, and it is unclear how qualitative records are maintained across time.

Meanwhile, quantitative data are primarily analyzed in Excel and PowerBI to produce group descriptive metrics (i.e., mean scores), group differences based on region and sex (i.e., male/female distinctions), and are "sometimes annualized (e.g., turnover rates). Ad-hoc forecasting also occurs with the organization using trend line analysis.

For ongoing reporting and PowerBI updates, users pull data manually from either SuccessFactors or SAP for analyses. For one-time or ad-hoc reporting, personnel can make requests for analyses that are centralized with corporate. The team conducting analyses is expert and continues to grow in its capabilities, but the manual nature of data acquisition, combined with differences in the structure of data between SuccessFactors and SAP, increases the probability that errors are introduced into data analyses or the interpretation of these data analytical outputs. Furthermore, the ad-hoc production of people analytics reports decreases the reliability of these reports between users, meaning users lack common terminologies and understandings to guide the data pulled, how data are analyzed, consistent reporting, and consistent interpretations. As such, there is variation in the quality and receptivity of analyses in the current state.

This problem will become more important as the organization continues to grow, necessitating training and standardization of analyses. The lack of connections to value-chain data, including project performance, is also detrimental since this is the only reliable mechanism currently available to assess objective group-level performance.

We also assessed key questions that organizations seek to answer using people analytics. Table XX below shows each of the analysis questions, along with its rank as an existing capability or aspirational capability.

Analysis Availability?		% Currently Available?	% Aspiration	Rank
1.	Ability to take exit interview data and act on it to mitigate future turnover.	8.33	75	1
1.	Ability to use well-being and engagement data to intervene with "at risk" employee groups.	0	66.67	2
1.	Ability to calculate the returns from learning and development investments	0	66.67	3
1.	Ability to model turnover risks or hazards	16.67	58.33	4
1.	Ability to gauge learning and development knowledge growth over time	16.67	50	5
1.	Ability to model how employee engagement and motivation affect performance	0	50	6
1.	Ability to produce descriptive statistics about workforce engagement	8.33	50	7
1.	Ability to track employee psychological well-being change over time	0	41.67	8
1.	Decision support systems for workforce planning	25	41.67	9
1.	Ability to model how employee engagement impacts the customer experience	0	41.67	10
1.	Workforce staffing forecasting	66.7	33.33	11
1.	Ability to model safety incident risks or hazards	66.7	25	12

The results clearly indicates that ACME generally lacks the ability to answer key workforce questions and respond. Only two metrics – workforce staffing forecasting and safety incident risks/hazards – were reported as "available" by a majority of the HR leadership team. Given the lack of time series analyses or group-level segmentation, ACME lacks the ability to produce sophisticated and robust estimates of risk and hazards as found in Cox-based regression or time-series models. Put another way, ACME can model historical and current data, but it does not yet use these data to predict future states based on probability or survival models.

It also lacks the ability to conduct “root cause” analyses because it does not assess employees enterprise-wide for metrics like engagement, burnout, and leadership quality. This precludes the integration of these data in regression models that would help highlight factors that affect employee performance, retention, and other outcomes of interest in the value chain.

In interview and qualitative feedback, respondents indicated that there is reluctance to embrace the utilization of these data by executives, and historical attempts to capture these data have been met with resistance from non-HR leaders. In further research, it became apparent that anonymous data were collected in prior attempts, which precluded targeted segmentation and intervention by managers. Thus, the quality of prior tests, rather than the importance of the test itself, became a driving factor influencing management’s receptivity to the collection of employee metrics. Specifically, the collection of anonymous data enabled ACME to understand its workforce in general, which is good, but not to identify strengths and weaknesses that enabled it to act.

This is troubling in many respects. To use a medical metaphor, employee assessments represent something akin to an “annual checkup” with a physician. Targeted assessment of the workforce enables organizations to highlight and benchmark “high performing” sectors, but also understand otherwise tacit leading indicators of employee decisions and behavioral outputs. The reluctance to collect and analyze these data is akin to skipping the annual checkup, which precludes baseline comparisons and the identification of problem areas.

Perhaps because of these negative historical precedents, we note the low base rates for the desire to advance capabilities overall. Specifically, ACME's analytical aspiration mean was only 50% across all capabilities, suggesting that HR leaders as a group do not view the acquisition of these capabilities as critical to their work or possible. We judge that these low numbers likely reflect misunderstandings about the power of these capabilities to transform the workforce, but they also will ultimately impact how ACME's HR function utilizes and acts on data in any future state.

Reporting

Reporting reflects the manner in which the outputs of analytical processes are communicated and consumed. Reporting may be automated in software solutions or dashboards, produced in an ad-hoc manner in conventional documents or presentations, or even sent in “raw” form to consumers who interpret the statistical findings without related context or interpretation.

At ACME, data are primarily reported using PowerBI dashboards, which became a de facto standard following development of this capability by Finance. Data are also reported in a conventional manner using MS Office PowerPoint and Word documents, while Excel and PowerBI are the primary tools used to analyze data. ACME maintains the capability of the SAP Analytics Cloud (SAC), which could provide easier access and pre-built dashboards based on existing data. However, the emergence of PowerBI has negated the use of these reporting capabilities.

Although they are based on manual data pulls and integration, we judge the sophistication of ACME's existing PowerBI dashboards to be “High” in quality. They are easily understandable, contained a variety of segments based on existing data, and represented in a visually-appealing manner.

Further ad-hoc dashboards have also been produced for campus recruiting efforts from the South Africa office and also evaluating learning participation by the corporate learning and development team. These examples suggest that ACME possesses latent and generally under-utilized capabilities in reporting data, which is quite promising. Finally, rather than represent data findings alone, the dashboards also contain target benchmarks useful in understanding and interpreting metrics, which is excellent.

ACME's current analytical state is actually quite common relative to its peers, and reflects a mix of operational and advanced reporting. Fully 56% of sampled companies operate at Level 1, which is Operational Reporting.

Such operational reporting is typically backward looking, emphasizes efficiency and compliance, and episodic reporting. Next, 30% of sampled organizations are at Level 2, which is Advanced Reported. People analytics for these companies includes operational reporting, but also an emphasis on benchmarking, scorecards, and real-time dashboard reporting for business level leaders. Only 10% of surveyed organizations are at Level 3, which focused on People Analytics to evaluate root-causes of problems, identify future problems, and produce actionable solutions. Finally, 4% of companies have arrived at Level 4, which emphasizes future-looking predictive models, scenario planning and forecasts, sophisticated risk mitigation mechanisms, and a strong integration with business level metrics.

Organizations can advance their analytical sophistication significantly without commensurate investments in software applications or other tools. For example, root-cause analyses can be accomplished using the data tools suite in Microsoft Excel, while predictive future-oriented models can be developed in open-source software programs such as R. The important takeaway is that an organization's people analytics sophistication depends more on the questions it answers than on the tools or software used to answer those questions.

Actions

Because of deficiencies in the availability of targeted data metrics, lack of standardization enterprise-wide regarding metric meaning, and ad-hoc analyses of data, ACME generally lacks the ability in its HR function to intervene effectively and proactively to mitigate emergent HR concerns. There are three major exceptions we were told: First, ACME tracks and reports requisition staging and time lags for new employment roles, even as interviews indicated that these data are sometimes unreliable. Such efforts can be useful in project planning, and also as an accountability mechanism for recruiters.

Second, ACME annualizes turnover projections that are made available to managers for them to intervene. These projects are provided to managers along with benchmarks to help them intervene if turnover levels are excessively high. However, even as it is commendable to possess these metrics, it is also important for ACME to produce historical turnover comparisons and turnover to date, which enable better interpretation of these data. Turnover levels for small teams also may be exaggerated because the loss of a single team member can dramatically inflate annualized projections.

Finally, ACME tracks learning and development (L&D) participation enterprise-wide. Here however, we note the distinctions between L&D participation and knowledge growth. The former tracks the extent to which employees participate with a given L&D program, while the latter assesses real learning as a result of exposure to program. We are not aware of any metrics currently employed to measure knowledge gain across time. This would necessitate the acquisition and testing of subject matter knowledge before and after a learning and development program, with the different reflecting knowledge gain or loss. Group comparisons, such as analysis of variance or covariance, could be employed to test whether L&D program exposure resulted in commensurate changes in performance, retention, or other metrics of interest.

Ideally, ACME would possess the right mix of metrics, analyses, and valid reports to identify potential problems and intervene effectively to mitigate the emergence of these threats. Such actions would also change the nature of HRM from a reactive function to a proactive function.

Current State – Tools

ACME maintains several software solutions to assist in the acquisition, analyses, and reporting of data. Specifically, its core HRIS architecture relies on SAP for data lake/database record-keeping and SuccessFactors for employee and management interfaces. ACME purchased, but does not use, the SAP Analytics Cloud, instead relying on PowerBI to integrate, analyze, and report data. Project leaders at ACME also use iPAS CV as a team composition tool when staffing their project teams; although, these data are not yet integrated with ACME's remaining HR data. Finally, ACME uses Cornerstone to track participation within its learning and development programming.

SAP and SuccessFactors are viable tools for an organization of ACME's size and complexity. However, it should also be noted that SuccessFactors reflects a suite of modules that vary in utility and cost, and SuccessFactors lags behind other software tools, such as Visier and OneModel, in its predictive reporting capabilities. Similarly, Cornerstone is in many ways an industry-leading learning management system, but it lacks the ability to link L&D program participation and knowledge gains to downstream employee behaviors, including performance or turnover.

For analysis purposes, ACME relies on Excel and PowerBI. These are adequate for many uses, and can even provide group-level comparisons and regression outputs, but ACME does not possess the tools needed to conduct more sophisticated analyses, including predictive modeling and time series modeling. Software suites, such as R, mPlus, SPSS, and SAS represent widely adopted platforms that can enable these analyses. Nevertheless, in general the presence of these systems provides ACME with a foundation from which to begin advancing and integrating data in ways that enable more sophisticated analyses and reports.

Overall Grades

Finally, we assessed the overall "grades" of ACME's people analytics practice from A (Exceptional) to F (Failing). This was done by asking HR leaders to grade the department's abilities overall across several dimensions, as shown in Table XX below.

Analysis Grade (From HR Leader Group)	Letter Grade	Mean Grade
Obtain the VARIETY of data we need.	D	1.92
Obtain QUALITY data sufficient to make better decisions.	C	2.00
Get agreement to approach workforce issues in a different way than in past.	C	2.50
Apply a methodology that allows the use of data to test assumptions.	D	1.50
Meet with stakeholders to fully understand the problem and validate the value of analytics.	C	2.42
Design a simple analysis to confirm/refute key assumptions to advance the analysis process.	D	1.83
Apply a methodology to refine thinking to questions that can be answered with data.	D	1.75
Involve others in decisions without non-constructive debate, indecision, or conflict.	C	2.58
Ability to turn fuzzy ideas (culture or leadership) into concrete quantitative measures linked to business metrics.	C	2.25
Ability to translate findings into actionable steps for non-HR leaders	C	2.17
Overall Current State GPA	C	2.09

As shown in Table XX, ACME's overall GPA was a 2.09 ("C" letter grade average). A majority of Red Castle clients possess similar grade scores, and it is important that this grade be interpreted as a "starting point" for the advancement of future capabilities. In particular, unlike many other companies of commensurate size within the Red Castle family, ACME already possesses a foundation with its People, Processes, and Tools that it can refine and advance. Its HR leadership also possesses positive beliefs about the ability of people analytics to advance its practice and add value, which is quite important.

Future State at ACME

36

FUTURE STATE AT ACME

In describing the Future State at ACME, we drew on industry leading best practices, informant qualitative and quantitative data, and academic research to cast a vision of how people analytics will eventually be used.

Data Structure and Housing

In its future state, ACME will possess a unified datalake or database integrating historical and new data. This datalake will automatically pull new data from related information systems, and coding will be used to automate basic analyses and report these dynamically in dashboards accessible throughout the organization. Data security measures will ensure that sensitive data are secured against potential loss or breach.

Producers

ACME will also continue to leverage its analytics team/HRIS personnel, and these individuals will play an instrumental role in the production and reporting of people analytics outputs. In the future state, this team will monitor dynamically-updated metrics using standardized dashboards, relay important emergent contingencies, and enable HR team members and business to proactively intervene to mitigate problems. Because of automation in data feeds and analyses, this team will now transition from operational reporting to proactive engagement with business leaders throughout the organization.

Using segmented data that includes organizational tenure, job tenure, individual differences, supervisor, and functional background, this team will be able to produce quality reports that reliably and validly inform managerial actions. Their strategic contributions will also improve as they assess, measure, and report on continuous improvement mechanisms that can advance ACME's workforce in new ways. Finally, these individuals will possess the analytical acumen to conduct sophisticated statistical analyses, teach others in the organization how to interpret these data, and act as a reference for business leaders throughout ACME's enterprise.

Staffing System Improvements

ACME will also significantly improve how it assesses the viability and strength of its staffing practices. It will incorporate, track, and analyze four key metrics used to measure staffing outcomes. First, the referral source for a candidate measures the manner in which the applicant became aware of the job opening. For example, internal referrals and referral bonuses can be used to increase the number of applicants attracted to a role by leveraging existing employee social networks. Similarly, a company's website can post jobs and enable applicants to apply directly with the company. Organizations may also choose to employ third-party resources, including online web recruitment or traditional recruiting resources, to attract applicants for roles. Each of these recruiting sources will be monitored to enable ACME to understand where it most efficiently and effectively finds high-performing employees.

ACME will also calculate and monitor its staffing yield, or the ratio describing the number of applicants required to produce a single high-performing employee. It will consider the ratio of applicants to candidates, candidates to interviews, interviews to offers, offers to employment, and finally differentiate employees on the basis of performance. The ratio's size is inversely related to its efficiency, meaning smaller numbers are better than large numbers. By measuring the through-put, or number of individuals, at each stage, it is possible to identify constraints that can be managed and improved in the staffing process.

Staffing yields also will vary as a function of the job, specialization of skills, and local labor market conditions. Highly specialized roles may have higher yields than more general job roles, while tight labor markets generally increase staffing yields.

Third, ACME will assess fill time, or the amount of time between the requisition for a new employee and the hire of a new employee. Finally, new hire performance is a measure of the staffing system's effectiveness, and HRM recruiters will be incentivized and rewarded based on the performance of new hires they brought into the organization.

In this way, ACME will be able to refine and improve its staffing practices to ensure that it attracts and hires the right people in a timely manner.

Analytics Consumers and Use Cases

In the future state, the number of analytics consumers will also increase significantly. HR and business leaders will be trained in the use of people analytics to increase their analytics acumen. ACME's leadership will possess a baseline level of analytics acumen, with some leaders emerging as "subject matter experts."

Business leaders throughout the organization will have access to continuously-updated information on the health of their workforce, as well as the status of job requisitions and staffing processes. They will also receive updates showing current attrition, comparisons with historical attrition, and estimates on the future probability of turnover within their units. Business leaders will be held accountable for the health and turnover of employees within their units, and rewarded when they exceed expectations.

Individual employees will also receive performance management guidance in an ongoing manner. Specifically, based on self- and supervisor-reports collected randomly throughout the year, as well as integrating billable hours, individuals will understand how they are uniquely contributing to ACME's overall performance, and also receive guidance on ways of maintaining or enhancing contributions. These performance management metrics will also inform compensation and employee changes made by management.

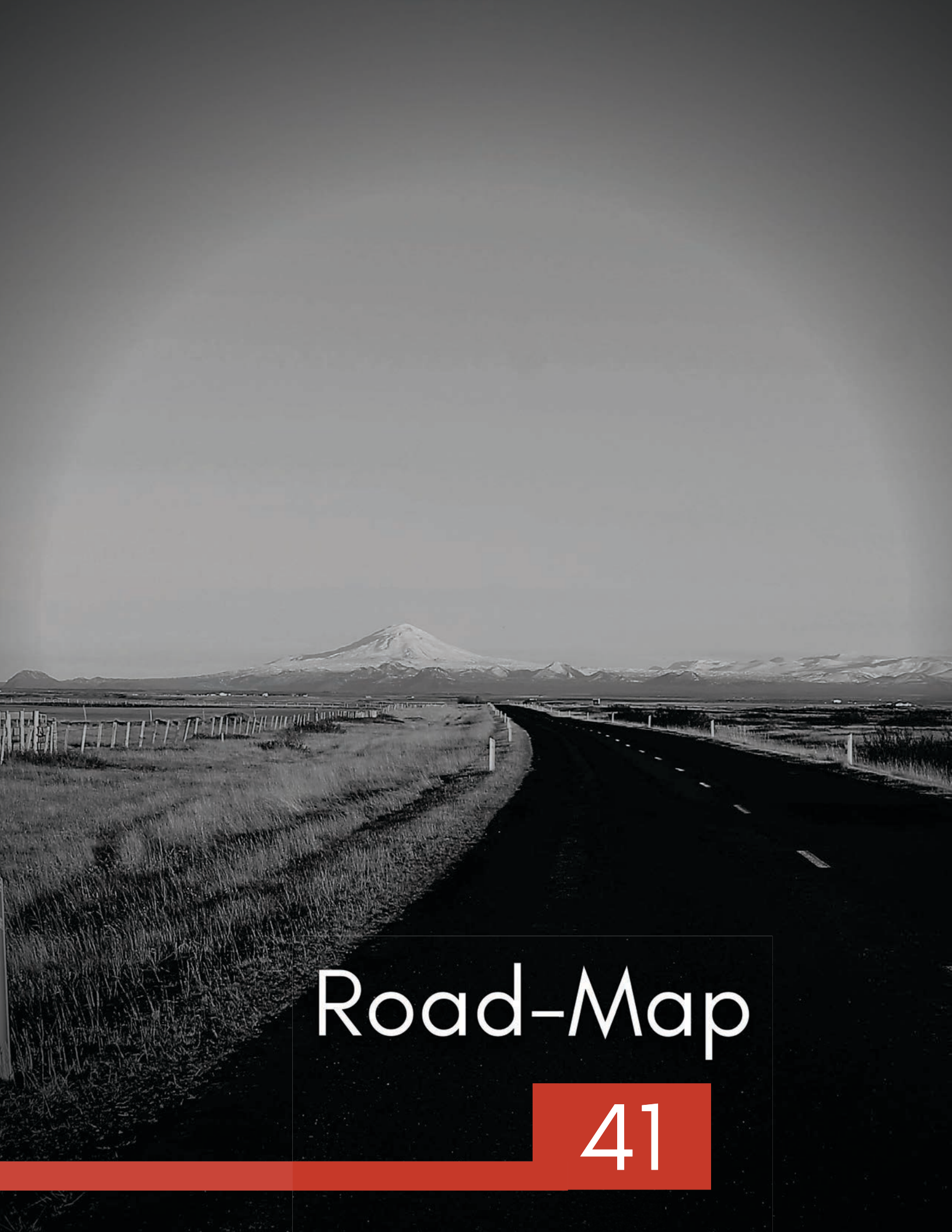
HR leaders will also possess metrics on the functionality of turnover, distinguishing between functional and dysfunctional turnover on the basis of the controllability of turnover and performance of employees. Turnover metrics will be distinguished between involuntary and voluntary separations. HR and business leaders will also receive group-level assessments on the well-being, motivation, job embeddedness, engagement, and status of the employees they manage, and segmentation will enable them to identify "hot spots" where intervention is necessary and why people are at elevated risk of turnover.

ACME will measure the return-on-investment (ROI) for its learning and development (L&D) programs, and adapt programs based on this feedback. All workforce investments will be linked to financial performance, turnover, and engagement metrics to accomplish this task. The inclusion of segmented data will also enable ACME to identify groups that are not benefitting from participation in L&D programming, and act to identify and remediate causes of non-participation.

ACME will also offer increasingly sophisticated compensation choices to employees. Here, drawing on data collected intermittently, ACME will enable employees to customize the discretionary (i.e., non-legally mandated) contributions, and customize how they receive benefits. Employees will be able to adapt their benefits across different life stages to reflect their unique needs, ranging from additional personal time off to extra educational support.

HR and business leaders will also receive decision-support metrics to help guide their time investments. Specifically, after assessing the well-being and health, turnover, and performance of groups under their supervision, leaders will receive guidance on suggestions of how to invest with the workforce, where to counsel or intervene managerially, and how to track the efficacy of these interventions across time. Business leaders will also be able to proactively contact HR leaders and gain needed assistance to manage workforce concerns.

ACME will also continue to assess and refine its organizational culture, working to enhance inclusion, diversity, and psychological safety among employees. HR and business leaders will have access to these indices and be able to monitor these to intervene effectively within the workforce. Ultimately, ACME will possess world-class people analytics capabilities that enable it to enhance and support strategic initiatives and global growth. It will score at a "B" or higher across all capability grades within 5 years, and will enhance at least 25% of its key metrics to a "B" or higher within the next 24 months.



Road-Map

41

ROAD-MAP

The following road-map is intended to help guide ACME's development of its people analytics capabilities over the next 24 months. In each quarter, we describe tasks, systems, and tools (as applicable). Some future states presuppose the completion of prior objectives, while others are independent and may be implemented at any time.

Quarter 1: Months 1-3

Task 1. Standardize and update employee records, including formalizing job codes, employee company tenure, job tenure (i.e., time in classification), and functional background. Update these within ACME's HRIS.

Task 2. Improve analytics acumen and provide a baseline understanding of analytics to HR leaders. This includes training HR leaders on people analytics use cases, required metrics, and basic data output interpretation.

Task 3. Requirements gathering. Based on the training provided to HR leaders in Task 2 of Q1, engage in requirements gathering for the adoption and prioritization of new workforce metrics and processes, including engagement, well-being, stress responses, workload management, embeddedness, leadership ratings, company ratings, individual performance, and other key performance indicators (KPIs). Discuss benchmark levels for these metrics.

Quarter 2: Months 4-6

Task 1. Based on progress in Q1, Task 1, continue standardizing and updating employee records, including formalizing job codes, employee company tenure, job tenure (i.e., time in classification), and functional background. Update these within ACME's HRIS.

Task 2. Based on requirements gathering outputs (Q1, Task 3), prototype employee communication and assessment mechanisms. Refine key metrics to collect, determine the timing of collection, and methods of collection. Prototype and test targeted assessments.

Task 3. Engage in requirements gathering for performance management process enhancements. Refine key metrics, incorporate objective project data (when applicable), and define methods of collection.

Task 4. Integrate and standardize all employee data collections across ACME's regions.

Task 5. Begin building predictive turnover models using historical and current data. The outputs of these models will be exit probabilities, and will be used to inform future modeling.

Quarter 3: Months 7-9

Task 1. Based on progress in Q2, Task 1, continue standardizing and updating employee records, including formalizing job codes, employee company tenure, job tenure (i.e., time in classification), and functional background. Update these within ACME's HRIS.

Task 2: Quality-control existing HRIS data. Fill gaps with 95% participation from the workforce as a goal.

Task 3: Upon completion of Task 2 in Q3, begin system engineering and integration between HRIS to automate data flows into PowerBI or other reporting mechanisms.
Quarter 4: Months 10-12

Task 1. Based on progress in Q3, Task 1, continue standardizing and updating employee records, including formalizing job codes, employee company tenure, job tenure (i.e., time in classification), and functional backgrounds. Update these within ACME's HRIS.

Task 2. Based on progress in Q3, Task 3, continue systems engineering and integration between HRIS to automate data flows into PowerBI or other reporting mechanisms.

Task 3. Integrate new staffing metrics and processes into HRIS. Develop and refine staffing dashboards to reflect these new metrics.

Task 4. Improve analytics acumen and provide a baseline understanding of analytics to non-HR business leaders. This includes training business leaders on people analytics use cases, required metrics, and basic data output interpretations.

Quarter 5: Months 13-15

Task 1. Based on progress in Q4, Task 1, continue standardizing and updating employee records, including formalizing job codes, employee company tenure, job tenure (i.e., time in classification), and functional background. Update these within ACME's HRIS.

Task 2. Based on progress in Q4, Task 2, continue systems engineering and integration between HRIS to automate data flows into PowerBI or other reporting mechanisms.

Task 3. Train business leaders and HR leaders on utilization of the new staffing metrics and dashboards.

Task 4. Train leaders on performance management best practices. Leaders throughout the organization will receive training on best practices for performance management, including the use of rating scales, key factors influencing differentiation, and the use of these data as a workforce advancement mechanism.

Quarter 6: Months 16-18

Task 1. Integrate performance, turnover, and workforce data to begin building a decision-support system. Alternatively, review potential solutions that supply this intelligence.

Task 2. Refine turnover prediction models. Based on available data, estimate quit probabilities and risks for employees using logistic regression, Cox regression, or accelerate failure time models.

Task 3. Conduct an internal pay equity study. Specifically, model compensation differences based on performance, job type, sex, tenure, supervisor, region, work location and shift, and other individual differences. Calculate differences, if any, between employees as a function of these differences. Report findings to HR leaders.

Task 4. Review and quality-control systems integration efforts. Review data democratization and security practices, and implement best practices to avoid security breaches.

Quarter 7: Months 19-21

Task 1. Improve learning and development knowledge assessment. Standardize L&D metrics. Collect L&D historical data, and link to historical project performance to estimate ROI.

Task 2. Refine performance management metrics. Conduct training with new managers on performance management practices. Link performance management metrics with aggregated group project performance and billable hours.

Task 3: Based on progress in Q6 Task 1, continue development of decision-support systems.

Quarter 8: Months 22-24

Task 1. Based on the findings from Q7, Task 1, refine existing systems or consider new solutions that can fill these gaps.

Task 2: Based on progress in Q7, Task 3, continue development of decision-support systems.

Task 3. Systems evaluation of the people analytics function. Engage HR leaders and key business leaders to ascertain strengths, gaps, and areas of opportunity for further refinement.

Task 4. Re-assess the quality of metrics, analytical processes, and grade ACME's overall analytical capabilities. Report on differences from the current state to future state.

Task 5. Based on the results of the tasks above, produce a new road-map to guide ACME's development.

Task 6. Begin aligning HR and business leader compensation with established workforce metrics.

Additional Implementation Considerations

46

ADDITIONAL IMPLEMENTATION CONSIDERATIONS

In this section, we discuss best practices for implementation, including a consideration of threats that could derail otherwise well-intentioned changes in people analytics.

- Question 1: How successful are most people analytics projects?
- Question 2: How do people analytics projects fail?
- Question 3: What can you do to ensure your people analytics project will succeed?

People analytics can produce competitive business advantages that are difficult for other organizations to disrupt and emulate, but the acquisition and leveraging of these capabilities requires careful consideration of implementation. In short, the main questions to answer are “what” and “how” questions, as opposed to “why” questions.

One of the significant problems in people analytics is that most of the published cases of people analytics (Google, Facebook, Amazon, Starbucks, Walmart, Merck, Genentech, Chevron) have resulted from multimillion-dollar investments. These early adopter organizations present the spoils of their investments at conferences, and their unusual early ventures in this domain have been written about in major news publications Harvard Business Review, Wall Street Journal, The New York Times, and The Atlantic for over a decade. The early adopter efforts discussed and written about are most likely the main reason your organization is considering how to best implement people analytics.

Of course, the proverbial elephant in the room of 2021 is, "How can I achieve similar results with fewer resources?” You also likely suffer from the problem that the people you work with don't yet understand people analytics. Finally, where should you put your time and attention to achieve results?

At the outset of any critical, potentially costly, and challenging endeavor, it is helpful to survey the landscape to understand the probability of success and the factors that differentiate most between success and failure.

You need to grasp the critical factors and control them, or you are pursuing actions that you do not deeply understand and have a high probability of failure. Thus, we describe below what differentiates the probability of success of a people analytics project, and how to maximize value (relative to the cost inputs) in this process.

Definitions of Success and Failure

Given that the answers to the questions hinge on the classification of success and failure, it is important to characterize what is meant by "success or failure." For purposes of this discussion, success means that the project resulted in changes (in thought or behavior) that had a measurable impact on some outcome deemed to be important to the organization's performance or competitive differentiation. We do not characterize success as implementing a system or completing a series of tasks per a contractual project agreement. For example, dashboards can be helpful in representing data outputs to consumers. However, the completion of a dashboard is not, by itself, a measure of success.

Rather, utilization and action based on the dashboard (or any related report) would be considered success. This suggests that the production of people analytics intelligence is a necessary, but insufficient, condition for success. Instead, it is the consumption of people analytics intelligence that differentiates success or failure. This also implies that the development of people analytics capabilities will require inclusion of data consumers (i.e., users) early in the adoption process. Their needs inform the process of analytics advancement, and also help determine the likely probability of utilization within an organization.
Question 1: How successful are most people analytics projects?

Based on 2019 data from HR leaders, 83% believe that the analysis of people, or people analytics, is essential to the future of human resources and investments are increasing across all industries.

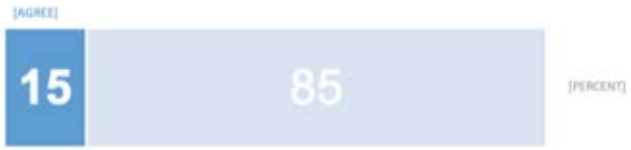
OPTIMISM IS HIGH

At the last poll, nearly 80% expect investment in people analytics to increase over the near term. That was up about 10 points from the previous survey, reflecting a steady increase in capability investment.

INVESTMENT IS INCREASING,

The problem is that many organizations are getting left behind. These include organizations working to change the world - children's hospitals, non-profits, start-ups, and government agencies - to name a few. Nearly all industries outside of technology could fall into "left behind" category, which is where most people work, representing a significant human resource challenge.

15% **AGREE** talent analytics has led them to **change a business decision** in the past year.



Source CEB 2018 Analytics Survey. n = 1590.

33% "Talent analytics **changed their mind about what actions to take.**"

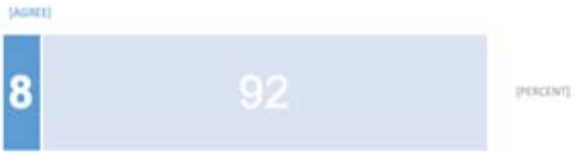
Source Gartner 2019 Talent Analytics Survey. n = 1057.

30% "Talent analytics **changed their mind about the cause of a problem.**"

Source Gartner 2019 Talent Analytics Survey. n = 1057.

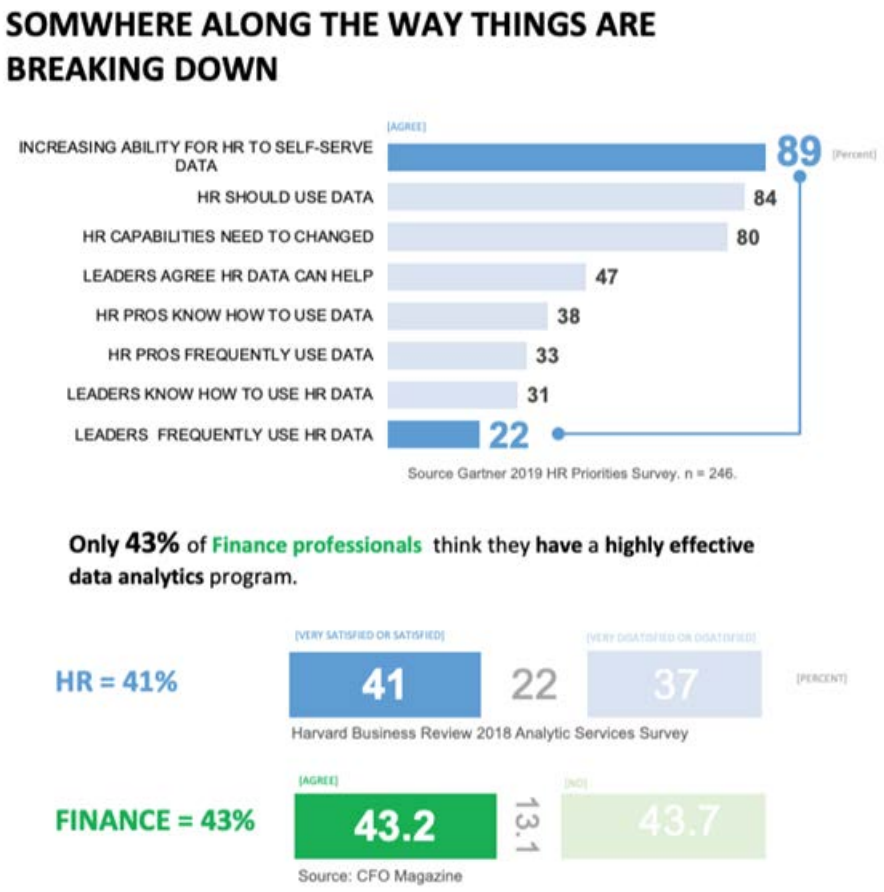
Of course, it is not as easy as, "get some data, have people analytics." The numbers tell a different story. Only 33% of HR professionals surveyed by Gartner agree that people analytics changed their minds about the causes of a problem or what actions to take. Only 15% of those surveyed agree that people analytics has led them to change a business decision.

8% **AGREE** they are **getting significant returns** on analytics investments.



Source CEB 2018 Analytics Survey. n = 1590.

Finally and importantly, only 8 percent agree they are getting significant returns on their investment.
While the number of organizations with self-service access to data has increased to 89%, somewhere along the way, things are breaking down because only 22% say that their organizational leaders frequently use the data.



Even other functions that are sometimes thought of as more mathematically advanced than HR have remarkably similar statistics. Nearly the same number of HR and Finance professionals agree they have a highly effective data analytics program.

The problem is not technology. The problem is that technology for answering good questions exceeds our ability to ask good questions. The second problem is that our technology is powerless against forces that operate against the willingness to accept answers if the efforts do not confirm what others intuit, decided, or hoped. Thus, technology advancement must be coupled with training and development to help managers leverage and lead with data.
Question 2: Why do people analytics projects fail?

There are many influences that can derail analytics advancement in organizations. Thus, our intent is not to comprehensively cover all bases, but rather to point out those reasons for failure that are less obvious, focusing on the counterintuitive and paradoxical reasons for failure we have observed in other cases.

In people analytics, the trouble at the outset is that many HR professionals perceive people analytics to be exclusively a technology problem. They think if they just implement suitable systems this problem will be resolved, and no shortage of software companies sell this "one stop solution" rhetoric. The deeper issue is that data are innately idiosyncratic to specific organizations operating in unique contexts, meaning leaders must possess the capability to effectively interpret and act on data if such intelligence is to truly inform their choices and investments.

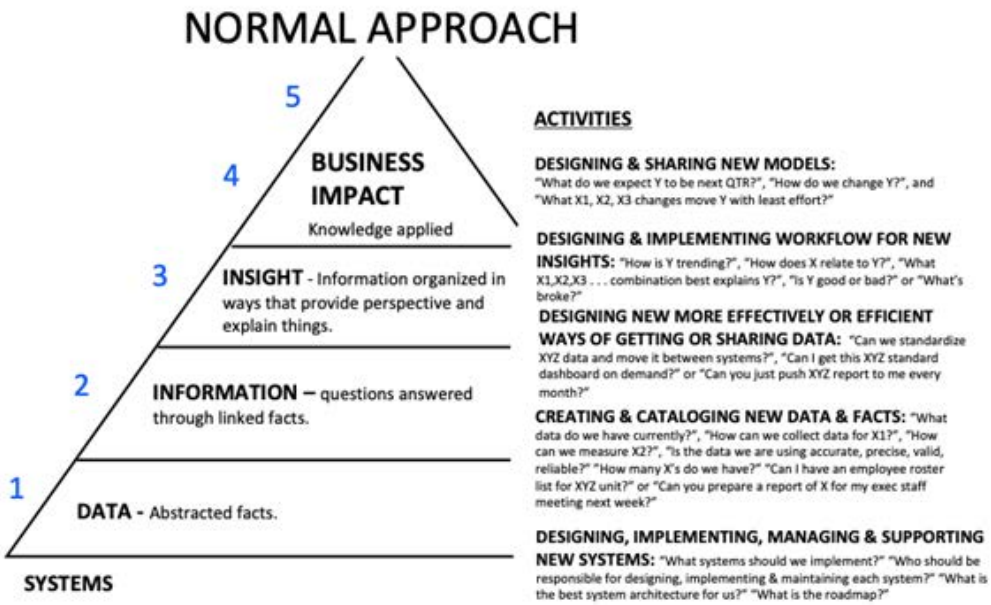
Cost & Value

People analytics projects also fail because they are poorly aligned with high-value problems. Choosing problems that have high value is a crucial risk. Value is not a natural characteristic of the data or the analysis. Value is created by the size of the problem, the range of possible options in how you respond to that problem, and the range of uncertainty about those options. The more considerable risk is not if you can produce an analysis - the risk is that you did so but worked on a problem that nobody cared about.

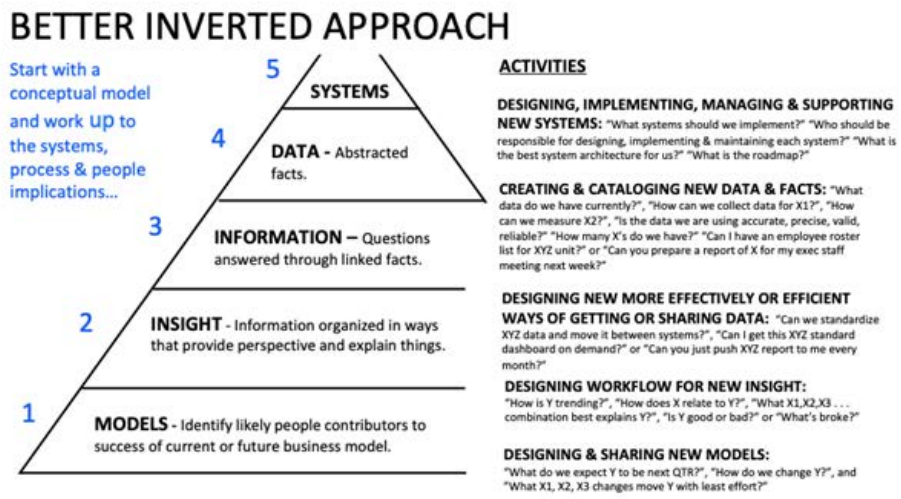
The way most organizations think about project phasing and risk is all wrong. Indeed, many companies try to get started with a self-service dashboards that integrate and visually represent workforce data. These are critical, but they rest on the assumption that individuals need the data and that these data will highlight a strategically-important process. Unfortunately, in many instances, all of the data gets organized, streams are automated, and all the dashboards get built at some tremendous cost, but these efforts don't seem to help solve any significant problems, help people make any decisions, or help people arrive at any profound insights.

Question 3: What can you do to ensure your people analytics project will succeed?

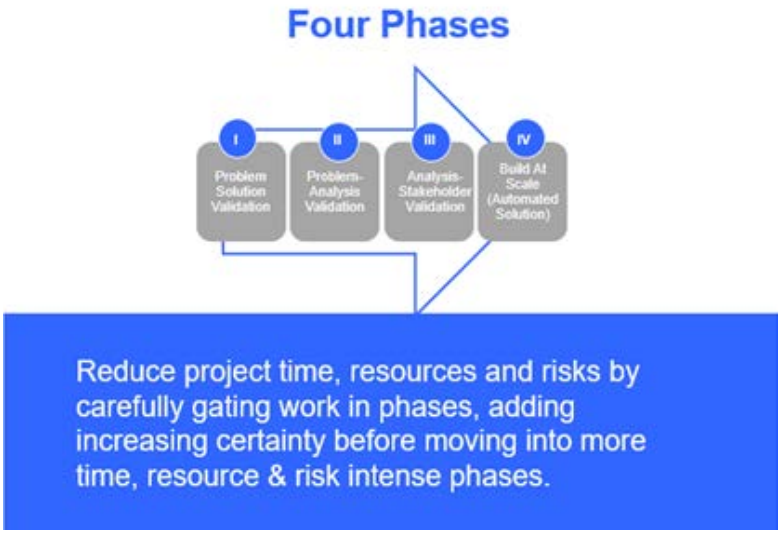
This pyramid below is the way that most organizations approach people analytics. They begin at the bottom by designing, implementing, managing, and supporting new systems. Then they create and catalog data and facts from those systems. Following this step, they then prepare more efficient ways of getting and sharing data from these systems and delivering data. Then, they form a mathematical model of how they think problems work to offer insights that will result in a business impact.



As we are learning, the problem is that they rarely, if ever, get up to the top of the pyramid before they have run out of resources. To surmount this issue, we need to get much more focused on the problem at the outset and how we think the problem works. As shown in the figure below, it is instead more useful to begin with data consumers, ascertaining their needs and then extrapolating methods to fill these needs.



This approach improves the design and feedback of any analytics process because it is intended to solve a specific problem of strategic or operational importance to the organization. The project phasing looks like this:



There are also a number of "implementation considerations" that should be made when advancing the people analytics capabilities, and many of these require finesse and social skill to navigate.

First, although HR leaders often possess power and resources to guide the function as they see fit, it is critical that senior leaders be included as early stakeholders in this process. Beyond providing approval for subsequent measures, this step also legitimizes the journey with others, increasing organizational support for this process.

Second, we encourage each organization to develop an "analytics advancement team" comprised of current producers and key (or representative) consumers. These individuals can provide key insights to expedite planning, implementation, and improvement of capabilities, but also can act as "change agents" within the organization, helping clarify the purposes of this change to others who may be impacted.

Third, beware of psychological ownership and territoriality. These reflect innate human tendencies to claim and defend resources or processes from others, which can include organizational processes and resources. Individuals who view people analytics advancement as a threat will often establish overt or tacit barriers that reduce an organization's ability to grow and change. Proactive and early engagement to and communication with this individuals are useful in helping surmount these challenges. Pilot testing, or A/B testing, can be useful in understanding the potential effects of new analytical processes to develop a "proof of concept" before such practices are adopted enterprise-wide.

Fourth, we emphasize the importance of staged advancement. It is all too easy to become fatigued by change efforts, including people analytics advancement, and such fatigue can stall or even cripple advancement. To mitigate fatigue, we encourage frequent communication with the change team, celebration of milestones, and also flexibility in implementation.

Conclusion

56

CONCLUSION

This people analytics audit sought to qualify ACME's current capabilities, cast a future state vision, and establish a road-map to guide advancement of its people analytics capabilities. It is hoped that these measures will support ACME's continued growth and emergence as a world-class engineering organization and employer.