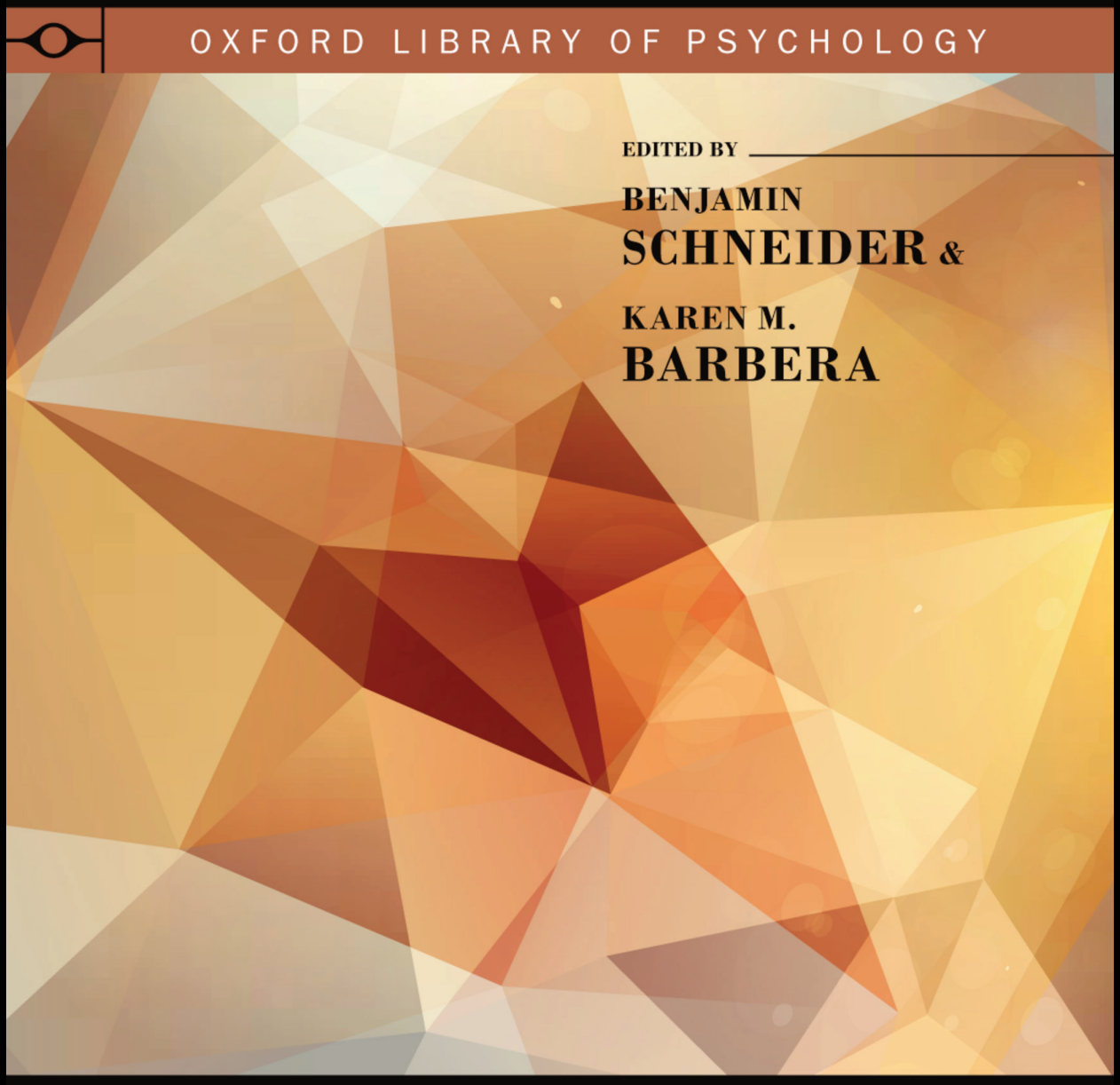

The Oxford Handbook *of* ORGANIZATIONAL CLIMATE *and* CULTURE

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CHAPTER

11 A Big Data, Say-Do Approach to Climate and Culture: A Consulting Perspective

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Abstract

This chapter addresses climate and culture from the perspective of research-based consulting with many organizations over many years to help them maintain or change various aspects of their climate and culture. From that work two key themes are identified that the authors believe are essential to any investigation into climate and culture, whether for purposes of theory advancement, organizational change, or both. One theme concerns the power of using the "big data" that is now readily available in organizations. The other theme concerns the value of understanding the "say-do gaps" that exist in organizations, disparities that arise between word and action both for employers and employees. The two themes are described and illustrated through three deep-dive organizational case studies and through findings reported from an original analysis of compensation and voluntary turnover in 34 organizations. The chapter concludes by offering two implications—imperatives—for theorists, researchers, and practitioners of organizational climate and culture.

Key Words: big data; change; climate; culture; employee turnover; internal labor market (ILM); ILM analysis; pay effects; say-do; strong culture; UnitedHealth Group

Introduction

This chapter is about organizational climate and culture from an applied, data-driven perspective. The case examples herein are derived from our experiences working with organizations as they attempt—sometimes successfully—to create and sustain workplaces characterized by attributes deemed desirable by the enterprise and its leaders (e.g., "we want a pay-for-performance culture"). Our interest is in how attributes of the workplace—climate and culture—are manifest as well as their consequences for both an organization and its individual members. One key theme in this chapter—"big data"—is about capitalizing on data not previously available to better understand existing culture and climate dynamics in organizations and how to change them. Another key theme is what is called here the "say-do gap," which is especially pertinent to matters of organizational culture and climate and which is critical to insight and successful change. Overall, the primary objectives of this chapter are to contribute to the understanding of organizational culture and climate by reporting new findings and insights "from the field" while illustrating the power inherent in say-do and big data as a catalyst to better practice and research.

Say-Do Gaps

Organizations often "say" (e.g., through websites, marketing, strategy documents, internal communications, leaders' speeches, one-on-one conversations) one thing about their actual or desired attributes but implement any number of practices that run counter to those professed attributes. This is far less a matter of intentional deceit than it is a matter of lack of awareness of the divergence, internal to the enterprise, between word and deed. These divergences exist, for large organizations, in a

context of often very complex and dynamic systems of practices in which interactions among those practices, the natures of the people experiencing them, and external events can lead to outcomes far different from what the creators intended. That context is a complicating factor that good data can help clarify. One of the earliest and most notable discussions relevant to say-do gaps in organizations—though the paper did not use that language—was put forth by Kerr (1975) in his classic treatise on the divergence of what organizations hope for and what they actually reward. Kerr offered numerous examples of breaches between what organizations espouse (e.g., a commitment to total quality; teamwork) yet reward (e.g., on-time shipment over quality; individual effort over team accomplishments). For sure, not every organization is plagued by serious say-do gaps. But gaps do occur—this chapter offers several such examples—and they often concern fundamental aspects of the nature of the enterprise such as expressed cultural values. As the case examples reported illustrate, big data plays an instrumental role in helping organizations close gaps and better achieve desired ends (see also chapter 17 on safety climate for another example of issues related to say-do gaps).

Say-do gaps are not just about employers; there sometimes are gaps between what employees say (e.g., through replies to a survey about collaboration) and what they do (e.g., actual extent of collaboration with coworkers). So, for instance, what employees say in an exit interview about their reasons for leaving the organization may not reflect the same things they actually acted upon. These gaps are quite relevant to understanding individual behavior as well as the organizational practices that contribute to them. For present purposes our focus is not about why those gaps exist—for example, whether individuals are motivated to represent themselves in ways that depart from their behavior, or whether individuals do not have easy access to facts stored in memory when saying what they do. Rather, our focus is on revealing the occurrence of those gaps and their implications for the attainment of desired cultures and climates. Again, newly available data in organizations can be very fruitful in identifying them.

Big Data

What is big data? There is no fixed quantity that defines it, but one definition is that big data is that which continues to surpass what data storage technologies and tools can typically handle. Storage tools and technologies are of course themselves not static; they grow in size and efficiency. Data grows concurrently, but faster. How much data is out there in the business world? Brown, Chui, and Manyika (2011) offer one reference point: 15 out of 17 economic sectors of the US economy have more data stored *per company* than the US Library of Congress has stored (as of April 2011). The amount of data that flows daily through social networking sites, telecommunication networks, internet search engines, and national security monitoring systems borders on the unimaginable.

Like never before, big data now exists about employees, their behaviors, the events they experience, their communications, their workplaces, the management programs and practices they encounter, attributes of their leaders and coworkers, and other aspects of work and organizations. The emergence of all this employment-related data is a blessing. Big data is a critical ingredient in the recipe for better research and theories. For organizations, it can help them more effectively create the workplace experiences and outcomes they seek.

Where is all this data? Among the primary sources relevant to organizational climate and culture are the electronic databases that support fundamental employment-related processes. Foremost among them is the human resource information system (HRIS). It is the repository of extensive facts about the individual employees, the contexts in which they work, and the events and management practices that they experience as employees. Data in HRIS systems cumulates over time, thus providing a running record of continuity and change. Older data points are often updated. The data generally is monitored in ways that assure accuracy and quality. Other sources of relevant data may stand to be integrated into the HRIS system or may be available as parallel repositories. Talent management software that is designed to support performance management, development, and succession planning is an example. Another is health and benefits utilization databases that report the facts about what employers and employees are or are not doing related to health and well-being. Timekeeping systems and employee travel databases can be sources of insight into workload, for example. Employee surveys are essential sources of data for informing climate and culture because surveys capture both reports about the nature of the workplace as well as individual reactions to them. The widespread reliance on electronic methods of responding to surveys has made it enormously easier to cumulate such responses.

The growing reliance on identified surveys (Saari & Scherbaum, 2011) creates new and highly valuable opportunities to link reports of employees with other facts about respondents and their workplaces available in HRIS and other data sources. Guzzo (2011) offers a further account of the implications of the era of big data for organizational research and theory. Organizational culture and climate, in our experience, are domains that stand to benefit greatly by capitalizing on big data.

"Big data" is a relative term as used here. The volume of data about employees and their work organizations pales in comparison to that of other domains, such as the volume of annual internet traffic or monthly trading on stock exchanges (the New York Stock Exchange will record well over a hundred million trades a month, NYXData, 2012) or the number of purchased items rung up on Wal-Mart's cash registers every hour. By contrast, workplace events and transactions that inform climate and culture accumulate at lower rates. Surveys for example are commonly done biannually, annually, and perhaps quarterly through "pulse" sampling of employees. Critical incidents in employee lives—pay raises, promotions, internal transfers to a new role, replacements of leaders, absence spells, the choice to voluntarily leave an employer—are characterized, comparatively speaking, by lower rates and longer intervals between their occurrences. Nonetheless, the fact is that the amount of data available today far exceeds what was available only a short time ago. And the wealth of insight these data offer about both individual and collective outcomes paves the way for a whole new understanding of culture and climate dynamics.

Climate, Culture, and Big Data

Climate and culture are venerable, useful concepts that have been overtaken by the era of big data. That is, ways of informing, understanding, and acting on these concepts can be expected to dramatically change with the emergence of types and quantities of relevant but not-previously-available data. Before elaborating on these possibilities it is worth establishing what climate and culture are, where they came from, and how data has been used to measure and act on them.

The concepts of climate and culture are much related. Schneider, Ehrhard, and Macey (2011) describe them as "siblings" and, joining with Schein (2000), assert that they are two closely-related building blocks useful for describing and analyzing organizations. Ostroff, Kinicki, and Muhammad (2013) concur, although their analysis appears to force a bit more space between the two than does Schneider and colleagues' (2011). A quick tour of the culture-climate landscape is in order, borrowing liberally both from Schneider and colleagues (2011) and Ostroff and colleagues (2013), as background.

The concept of culture is anchored in the disciplines of anthropology and sociology. As such, culture easily has been accepted as a property of a social system—like a community, or a country, or an organization. Organizational culture was, in the beginning, investigated by researchers who adopted classical anthropological methods, such as observing the actions occurring in the workplace, experiencing the organization by immersing one's self in it (e.g., participating as an employee), and talking with members of the cultural entity. Climate, on the other hand, is a concept rooted in psychology, and although psychology is interested in social systems, too, by comparison it is a very individual-centric discipline. Psychology's methods of investigating climate also started with observational work but more quickly moved to self-report methods—in particular, structured surveys. This choice of methods brought some trouble at one time with regard to the matter of whether climate is indeed a property of an organization. Critics voiced concern that climate was really something that resided only in the minds of employees, expressed through surveys, and was not per se something about the organization. That criticism has now been put to rest successfully, mostly by asking better questions and by adopting standards of proof regarding agreement among employees' responses such that there is confidence that what they describe is in fact "out there" and thus is a property of the organization and not something totally, personally subjective. More recent research into organizational culture, although maintaining its ties to traditional anthropological methods of data collection, has expanded to include surveys. No doubt researchers of culture using survey methods have benefited from lessons learned by climate researchers.

Although both climate and culture are accepted as properties of an organization, they are about different things. Culture concerns shared values, beliefs, fundamental ideologies, and shared assumptions that provide an enduring "deep structure" and contextual meaning relevant to everyday action in an organization. Climate is more proximal. It is about here-and-now organizational policies, practices, and procedures and how those are interpreted by employees. It is feasible to think of an organization's

culture as providing broad, underlying reasons why certain practices exist in an enterprise and to think of climate as how those practices are defined and regarded by employees. That is a tidy frame of reference, though it quickly gets complicated. Neither culture nor climate is a single "thing." An organization's culture can have several dimensions to it (a position that is especially associated with survey-based measurements) and can be thought of as existing in different "layers" (e.g., shared basic assumptions being the deepest layer and observable artifacts in the workplace, the layer nearest the surface). Further, any one organization can have numerous subcultures. The construct of organizational climate likewise has evolved to multidimensionality. Current thinking is not that enterprises are characterized by a single climate but rather that multiple climates exist "for" something—such as a climate for safety or risk-taking or customer service. Like culture, climates can differ within organizations ("microclimates"). The climate for service, say, is likely to vary considerably from place to place among the many establishments that make up a grocery store chain under a single brand name (see the treatment of subcultures in chapter 18 by West and his colleagues).

Culture and climate have their own unique DNA by virtue of having originated in very different places, but as siblings they truly share a lot. Both have multiple attributes, both are capable of having considerable variation between organizations as well as within a single enterprise, both are abstract properties of organizations, and both are inferred from data.

Therein lies the rub in the era of big data. There are many, easily accessible data points these days relevant to organizations' climate and culture. As attributes of organizations, each construct must be able to be indicated by multiple types of data. Climate would not be an organizational attribute of much use if it could be indicated only by survey responses, for example, and culture would not be an attribute of much use if it could be indicated only by a content analysis of corporate value statements. The power of big data is, in part, the power of the certainty of measurement it brings by way of multiple indicators of properties of organizations. Culture and climate researchers, theorists, and practitioners now have before them an abundance of potentially powerful indicators of important organizational attributes—but of which attributes, climate or culture?

Consider employee health and well-being. Organizations differ in the health status of their workforces and they differ in how (and how much) they as employers influence that state. These differences are probably not random; instead, they reflect something about the organizations. In one there may be a widely-shared, enduring value about the primacy of employee well-being. Hypothetically speaking, a faith-based health care organization might be such, where it would be fair to say that employee well-being is a core attribute of that organization's culture. Consider another company that embraces employee well-being as a desired state—who would be against it?—but the strength of the conviction about its importance would not qualify well-being as a core cultural attribute in that enterprise. Perhaps such an enterprise—hypothetically, a company that operates call centers—embraces employee well-being for the cost reductions or reduced absenteeism it brings. In either organization there could be practices offered that encourage employee health and well-being such as medical insurance, programs for weight loss and smoking cessation, nutritional counseling, annual flu vaccinations, on-site screenings for selected health risks, intranet libraries of health resources, and recreational athletic teams to name a few. Data are quite accessible about these programs. Details of employee participation in them are available. Program costs are known. Employees might be asked on a survey to assess their employer's efforts to support their health and well-being. (By the way, such a survey item is an excellent example of what a climate-for-health item might look like. But might not the same question legitimately be asked by a culture researcher?) These different types of data about the programs—employee reports, rates of participation, and the magnitude of an employer's investments in them—could convincingly indicate something about that attribute of the organization that concerns employee health and well-being. But which, exactly, of these two closely-related concepts would be indicated, culture or climate?

Our point here is not to challenge the concepts. Rather, our point is that the concepts of organizational culture and climate now exist in an era in which data has "overtaken" them. That is, in addition to traditional methods of inquiry there is an abundance of excellent facts maintained in the electronic files of organizations that are indicative of enduring attributes of organizations, attributes that have consequences. Some of those attributes are of culture and some are of climate. Our guess is that one's going-in theoretical orientation—"I'm a climate researcher" or "I'm a culture researcher"—will

most govern how those data points are marshaled and interpreted. Either way, the era of big data makes the future look promising with regard to generating new insights about climate and culture in new ways, making those concepts better understood and more powerful levers for action. It allows these constructs to be measured and assessed by how they are actually "lived" in organizations, not only by how they are perceived. The abundance of data may also hold the key to resolving debates about the two related concepts. Better yet, this new era of big data may provide greater clarity about how culture and climate influence each other—either as catalysts (e.g., change in one accelerates change in the other) or constraints (e.g., change in one is inhibited by the other, perhaps unless it changes too).

If climate and culture have migrated over time to a point of greater conceptual similarity in research and theory, there is one area in which the difference between them remains profound: in the language of business. The word "culture" dominates in everyday business communication: Our guess is that the word is used one hundred times for every one time the word "climate" is used. In contrast, climate dominates as a focus of scholarly research and publication: There are probably five climate research publications for every one on culture since 2000 (Schneider, Ehrhart, & Macey, 2013). The prevalence of the use of the term culture in business is unfortunate in that many of its everyday mentions are probably really about climate. The case examples that follow mostly adopt the convention of business language. That is, we have a strong tendency to use the word "culture" in the cases below because that is what was used in the settings from which the cases emanate, recognizing that the language in these cases may at times be ambiguous with regard to the "true" distinction between climate and culture.

Digitt—Culture as an Impediment to Change

A particularly interesting example of the business impact of culture and how the say-do perspective can shed light on it is the story of Digitt, a large, global technology and information services company. Renowned for many years as a wellspring of innovation and for "progressive" workforce practices, the tech sector it operated in was undergoing dramatic changes that were profoundly affecting Digitt's business. Stiff competition was arising, particularly from Asia, and a digital revolution was transforming the technologies on which product and service offerings were based.

Digitt's leadership recognized the need to transform both their technologies and business models. They created whole new business lines focused on "digital" and "network" offerings and expanded their business beyond products to include services, responding to a burgeoning trend towards outsourcing of technology-related services. The company quickly adjusted its business models to support these changes. And it introduced a new sales model to drive changes in the way it sold products and services and engaged customers. Everything seemed in place to succeed. But was it?

The changes had profound implications for the kinds of skills, capabilities. and experiences required of Digitt's workforce. A largely new or "renovated" workforce was required. For example, relatively few of the thousands of existing "analog" technicians could be expected to remain working the older technologies and the majority could expect to transition into the new business lines. Some of these individuals were poorly suited for those new lines. The new business lines also created the need for new hires with the capabilities not prevalent in Digitt's existing workforce. Amid all this change is a key question: Would Digitt's culture facilitate or hinder the workforce transformation necessary to business success?

Digitt had a widely-recognized and exceedingly strong culture that emphasized innovation, teamwork, employee participation in decisions, and performance-based rewards. The latter was manifest in a layering-in of multiple types of rewards at all organizational levels, including annual merit pay adjustments, annual bonuses tied to team and business unit performance, profit sharing, and employee share ownership, along with various other reward and recognition programs. At the time the authors started working with them there were literally hundreds of bonus plans in place, mostly defining payouts for performance at the team, business unit, and geography levels. The overriding message of this panoply of rewards was that employees share a common destiny, that their own fate was tied to how well the organization and the teams to which they belonged fared. Discussions with top leaders in the business lines and in HR pointed to a common understanding of the company culture and the values behind it. And a reading of the company's internal reward program documents painted a compelling picture of a pay-for-performance organization.

To complement the understanding of what was said about the culture, we the authors relied on big data to further inform the realities of the place.

Specifically, an internal labor market (ILM) analysis was conducted, drawing on up to 10 years of employee data, to statistically measure and model the drivers of key workforce outcomes, such as promotion, turnover, pay levels and growth (for a more detailed discussion of the ILM construct and modeling methodology, see, Nalbantian, Guzzo, Kieffer, and Doherty, 2004). An ILM analysis simultaneously models, statistically, the flow of people (e.g., who gets promoted, who stays) and management practices (e.g., where the monetary rewards actually go) to identify the drivers of these flows and practices as well as the impact of these practices on key workforce outcomes such as retention or performance. The ILM analyses rely on individual-level data, such as employee attributes, states, and responses to their workplace. In Digitt, a key application of the ILM approach was to "follow the dollar trail"—that is, to identify empirically how rewards were being implemented and to identify the profile of employees who were successful in the organization, where success was indicated by rewards earned. The ILM approach, which emphasizes statistical control and temporal order, gives confidence in making causal inferences that enable one to draw a coherent, fact-based picture of the kind of workforce Digitt was creating. Because organizations often become what they reward, understanding reward dynamics in Digitt was a key element in understanding its ability to execute its culture change and to create the workforce required for future success.

The ILM analysis showed that Digitt had a strong internal labor market that was insulated from outside labor market dynamics. That is, talent was largely built from within, with low rates of entry among mid- and late-career professionals. Most positions were filled internally through promotion or transfer. A particularly telling indicator of such market insulation was that, all else being equal, voluntary employee turnover was completely insensitive to changes in unemployment rates in the domestic markets in which Digitt operated. That is, no matter how favorable a local economy might be (or not) in the many places where Digitt operated, there was little local market-driven variation in Digitt's turnover. Such insulation from changes in external labor market conditions is typically seen in organizations that have a supracompetitive reward package or premium employment brand as such circumstances can make employees oblivious to, or unconcerned with, opportunities outside the organization. Also, organizations that substantially "back load" their rewards—say, with tenure-based vesting of benefits or a steep trajectory of pay growth with length of service—can make it prohibitively costly for employees to leave after a certain length of service. These conditions pertained to Digitt's rewards.

Modeling also showed that for all the pay-for-performance words and intent, employee tenure was actually the single biggest driver of promotion and pay. Consistent with Digitt's orientation to build its workforce, the profile of a successful employee was "young and highly tenured." Those doing well were typically professionals who came into the organization right out of school and developed and advanced within the organization, often staying within a single line of business. Such success was persistent: Those promoted frequently early in their career continued to advance more quickly later. Past merit increases strongly predicted future increases as well. The relatively few mid- and late-career hires fared significantly less well. In effect, for employees, "return to experience here in Digitt" (calculated as the coefficient on Digitt tenure in statistical models of drivers of pay) strongly trumped "return to general work experience elsewhere" (calculated as the coefficient of age in that same model, in which age is used as the proxy for general work experience). Of the various performance-related factors explaining pay variation, enterprise and business unit performance dominated individual performance. Indeed, less than 5% of the total "pay for performance" dollars allocated annually was linked in some way to individual performance.

A direct result of this state of affairs was that a substantial proportion of so-called pay-for-performance dollars allocated through variable pay programs actually ended up going to low performers. Figure 11.1 shows three types of compensation (bonus payments, various recognition awards, and profit sharing) paid to employees in each of four performance quartiles. As can be seen, the highest performers were rewarded not much more than the lowest performers, and for some forms of compensation the lowest-quartile performers received more than higher-performing counterparts. Close to $100 million a year flowed to lowest-quartile performers when all elements of performance-related pay were added up. Moreover, a significant amount of those payments went to individual chronic low performers, those who remained persistently in the lower performance quartile for the 5 years covered in the pay analysis. About 6% of the domestic workforce constituted such chronic low performers. This was the inevitable consequence of a system in which "being there"—an employee's tenure and

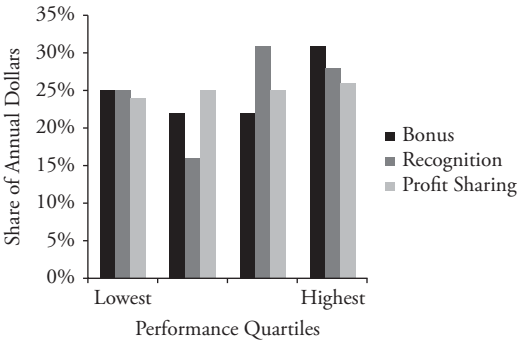

Figure 11.1 Compensation and performance in Digitt.

unit worked in—mattered more than individual performance.

In some sense, one might argue that the analysis of archival data confirmed many aspects of what leaders perceived the culture to be. A team-oriented, participative culture might well be expected to value tenure, longevity within business units, and group over individual performance. The authors would not argue against that point. But had we relied solely on the articulated representation of the culture, we would have come away with a very misleading view of the role of pay for performance. It is clear that Digitt's business and HR leaders underestimated the dominance of tenure over performance in driving rewards and mistook the proliferation of incentive programs as a signal they were paying for performance. In reality they were not. The dollar trail showed that they were paying for membership and for longevity.

This reality had important consequences for Digitt during this time of transition. For one thing, there was little incentive for those whose capabilities least fit the specifications of an emerging, digitally-based business to exit the organization. In contrast, those newly-hired individuals with relevant experience elsewhere were in the least favorable position and were, statistically speaking, the most likely to leave. Given where the entire sector was headed, they also had more opportunities on the outside. Moreover, the allocation of substantial rewards to low performers contributed to a very low turnover rate (about 5% per year). Because the old line businesses, relying on analog technologies, were still profitable albeit declining, many of the low and chronically low performers receiving larger variable pay awards were analog technicians in the units favored by bonus plans keyed to business unit performance. As the newer businesses were still in ramp-up and not yet so profitable, the workforces they employed were underpaid relative to their future value. In a way, instead of having the businesses of the past subsidize the businesses of the future, Digitt was having its higher performing, new and high-skilled talent subsidize employees whose value was fast eroding. Not surprisingly, patterns of turnover were not consistent with the future needs of Digitt's business.

This problem was compounded by the insulation of Digitt's internal labor market. Lack of market sensitivity of turnover and rewards meant market signals about the changing valuation of different workforce segments within Digitt were not being received. *Internal* labor market signals about relative value were telling lower-performing analog engineers to stay at Digitt, even as *external* labor market signals would have communicated depreciation of their value and the need to upgrade and/or re-allocate their human capital. With its premium brand and multiplicity of rewards, Digitt had indeed become a best place to work but, increasingly, for the wrong kind of people.

Strong cultures are often viewed as good things and favorable to business success. For a long period of time, this was clearly true for Digitt. The culture described was largely responsible for their business success over many years. It helped them secure a loyal, capable, and engaged workforce and allowed them to invest in that workforce efficiently, with little fear of seeing those investments walk out the door to contribute instead to competitors' success. It helped them focus on innovation by allowing them to build and sustain strong teams that would not be destabilized by high levels of unwanted turnover. And it helped keep their workforce engaged with a clear focus on the well-being of the organization, rather than narrow individual concerns (see a similar discussion of culture as a potential impediment to change in chapter 32 by Small and Newton of McDonald's).

When business conditions changed fundamentally, the very culture that had been such an asset became a liability. It impeded the organization from quickly adjusting its workforce to new business requirements. Yet even in the face of such clear evidence that the internal labor market was failing to produce the type of workforce that the business required, change would not come easily. Strong cultures also create strong allegiances. At Digitt, faith in a long-standing culture that had served the company and all its stakeholders well would make the culture difficult to abandon. Many leaders had a strong devotion to the written and unwritten rules

of what it meant to be a Digitt employee. As practitioners of evidence-based consulting, the authors are inclined to believe that, when confronted by hard facts of seriously faulty practices that endangered the very survival of the company, leaders would make the adjustments required for their organization to succeed in a new environment. The future would take precedence over the past. But this was not the case. The strong culture bred resistance to change. Even simple recommended changes, such as adding an individual performance gate to determine access to payouts under team incentives, were viewed with suspicion. Leaders who dared to propose fundamental change became casualties of the processes they initiated. It took several years of dire financials and several rounds of ineffective voluntary reductions in force programs before the vaunted Digitt culture succumbed to reality and adjusted to better align with business needs.

MultiCo—Planning a Culture Change to Drive Business Growth

MultiCo, a diversified media company, is a case about planned culture change. Say and do data strongly influenced those plans. In the early 2000s, MultiCo was performing exceedingly well with double-digit revenue growth and a surging stock price and was led by a long-tenured CEO with a reputation closely identified with the company. But the CEO and his leadership team were not complacent. Looking forward, they were concerned that desired growth could not be sustained under their current business strategies. Each of their key business segments operated in mature sectors that were unlikely to support continued high growth. Aside from opportunities to expand operations outside the United States, something had to be done to find new sources of value in markets already served.

MultiCo's leadership focused on two new paths to foster growth. One involved acceleration of progress to deliver product in more technologically advanced ways, relying on electronic media. The other path involved finding new ways to expand business relationships with the current customer base by creating synergistic cross-selling, bringing all their main business lines to the same customers. The vision here was to shift from a product to customer focus in which MultiCo would become the prime source of information "solutions" to address customer needs. MultiCo would thus have both a content and delivery advantage over competitors. To execute this strategy successfully, MultiCo realized that it may need to depart from old ways of doing things with regard to how its workforce would be managed.

Planning for change in workforce management practices started with a careful listing of future business requirements into key workforce requirements—that is, given the desired end state, what specific workforce management practices and employees will be necessary to get there? This specification relied heavily on expert opinion as elicited through a survey of leadership supplemented with selective follow-up interviews. Several key points emerged from this process:

- A greater reliance on technology would elevate in importance those in the company with technological expertise and the capacity to innovate through technology. Further, to develop new solutions, employees would need to exhibit entrepreneurial behaviors and a penchant for prudent risk taking.
- Tapping synergies across the business would best be served by having a cadre of professionals with enough hands-on experience in the different businesses to truly understand how the various capabilities could come together to create new offerings and new organizational capabilities.
- Emphasizing a new customer-centric focus over the old product-centric focus suggested that knowledge of the customer and long-duration relationships with them would be critical to success. For the workforce, the implication was that employee tenure and home-grown talent would become increasingly important sources of value to the business.

An ILM analysis was performed to capture current realities about workforce dynamics to identify more thoroughly what to preserve and what to change to best achieve the goals of the new strategy. The analysis uncovered some significant gaps between these objectives and how the enterprise and its employees were behaving. One thing that immediately jumped out was the inordinately low spans of supervisory control maintained by the company. The median span of control for the organization overall was 3, with the largest business unit having a median span of 2 and only the smallest unit having a median span as high as 5. The vast majority of supervisors at MultiCo managed groups of fewer than 5 employees. These small spans of control existed in a context of strict top-down governance policies, such as top leadership sign-off on even modest expenditures. Command and control indeed was a salient attribute of the culture, a view

affirmed by survey responses. How could employees be encouraged to take initiative and act entrepreneurially when subjected to so much top-down direction and supervisory scrutiny?

Another significant misalignment was the gap between the stated importance of knowledge across business lines via hands-on experience and actual rates of internal mobility across business lines in MultiCo. There was, in fact, hardly any movement of people across businesses. Figure 11.2 presents a mobility matrix for the three core business units and Corporate. It shows that trivial proportions of employees in each unit were moving annually into another unit (for further discussion of mobility matrices see Nalbantian & Guzzo, 2009). The highest rate of movement (2.4% annually) involved transitions from Corporate to one of the three business units. Thus, few employees were being equipped with—or being given the opportunity to acquire—the very experience and knowledge needed to drive cross-business collaboration. Not only was cross-business mobility relatively infrequent, those few who did make such moves enjoyed no lasting benefits as a result: They were no more likely to see their career advance or their pay grow following such moves. One further deterrent to cross-business moves was that financial rewards favored some units over others. Being in the "right" business had a strong influence on an individual's financial outcomes and appeared to contribute to the reluctance to move out of those units.

Also, MultiCo embodied more of a "buy" than "build" orientation toward talent. That is, there were significant numbers of experienced new hires being brought into the middle and upper levels of the organization. Recall, though, that leadership believed that a key to future success was home-grown, highly tenured talent. The practice of bringing appreciable numbers of people who got their experience elsewhere was at odds with that. These experienced newcomers tended to be more highly paid as well.

There were some areas in which practices were nicely aligned to the desired future state. Finding creative professionals and talented "artisans" who also had business acumen would not be easy but, in leadership's view, was essential to making their business strategy succeed. MultiCo's internal labor market seemed geared to support this goal in that modeling showed that those with business backgrounds and experience were being more highly valued in rewards as were high-potential and high-performing employees relative to others, although the extent of differentiation in their rewards was not equally strong in all business segments. Not surprisingly for a command-and-control type organization, those in supervisory roles were doing significantly better than their "individual contributor" counterparts. With constant pressures to streamline operations and hold down costs, supervisory roles carried the power to control expenditures, which was valued.

The culture change—and the accompanying new management tactics—needed for future success focused on three core components:

- A shift toward "building" over "buying" talent—to lengthen and strengthen customer relationships, better enable the sale of multiple products and services to customers
- Talent management practices that supported high current performance while encouraging the long-term growth of careers in the company with the accumulation of broad, firm-specific knowledge about lines of business and their customers
- A reward system emphasizing careers and long-term value over current-period pay so as to induce "productive tenure"

MultiCo's leaders regarded the plan as one for creating a culture of "high performance and innovation" as opposed to their traditional orientation to "steadiness and craft." To help sustain the planned change, the company identified what it regarded

Percent of Employees Who Changed Organizational Units Annually

		Changed to			
		Unit 1	Unit 2	Unit 3	Corporate
Changed From	Unit 1		.03	.25	.78
	Unit 2	.08		.19	.59
	Unit 3	1.22	.41		.05
	Corporate	.21	.67	2.40	

Figure 11.2 Internal mobility in MultiCo.

as markers of the new culture—a scorecard of metrics—to guide the change effort.

Defining an organization's culture is not a straightforward process of engaging in a diagnosis of current state, defining a future state, and specifying markers of the movement toward the desired cultural attributes. It is more complex than that. There is, however, particular strength given to the diagnostic and planning process through the application of the say-do perspective and the use of big data. It forces leaders to grapple with observed regularities in the organization and, especially, how those regularities depart from the policies and practices they intend and the values they profess. These insights often force a productive rethinking of the future state they desire and the routes to it. A telling example of this relates to a special program that had been launched at MultiCo to secure and develop leadership talent. The program, personally championed by MultiCo's CEO, targeted top graduates from "the best" business schools. The program reflected the CEO's view that some number of new-breed, high-powered individuals versed in state-of-art management skills and knowledge were required to drive business growth. Top-tier business schools were regarded as the only sources of such talent.

Because the program had been in effect for 5 years, it was possible to evaluate how these types of new hires were faring. The analysis showed that, all else being equal, these individuals were indistinguishable from their less-pedigreed counterparts in terms of multiple proxies for success—performance ratings, promotions, and pay growth. And although they cost about 10% more due to the market premium for salaries of graduates of top-tier schools, they were also 25% more likely to quit in any given year. This was certainly not what the organization intended and not what the CEO expected to occur.

Two interpretations of these findings were debated in the company. One offered that these highly-pedigreed new hires were simply not the kind of talent the business required. The backgrounds and capabilities they brought were, in effect, ill-suited for MultiCo and the fact that these talented individuals were not thriving was a sign that MultiCo's internal labor market was actually valuing them correctly and inducing them to leave. As one of the business segment leaders said: "I always knew our business would be better off with folks from modest schools—B or even C-level schools—but with a real hunger for success and the desire to stay and learn the business inside out."

The other interpretation, more widely embraced by leadership, suggested something considerably different. This view held that these hires were valuable to the business. But the existing culture was rejecting them, like foreign tissue. Specifically, the command and control management structure was not one in which this kind of talent—who were seen inclined to independent action, initiative, and risk taking—could thrive. A culture that valued stability, reserve, and the application of craft had little tolerance for the more aggressive, shake-things-up style of the high-pedigree talent. Ironically, by this construction, the CEO-sponsored program for hiring the "best and brightest" was clashing against attributes of the organizational culture that the CEO himself had so strongly contributed to. In the face of the data, the CEO personally struggled with the idea that he was creating an organization that was not attractive to top-tier talent, but he could not bring himself to embrace the idea of pulling back on things (e.g., the strong command-and-control milieu) that made the organization less attractive to the top-tier talent that he so valued. As a leader, he wanted contradictory things. This contributed to the observed dichotomy between say and do, an inherent contradiction in fact that rendered impossible aligning espoused values with organizational practices. The discomfiting reality of this schizophrenic state could not simply be willed away by the CEO.

Reward Systems as Expressions of Culture—A Multicase Perspective

Reward practices were critical to both the Digitt and MultiCo cases. More generally, companies often point to their reward systems as critical expressions of their organization's culture. "Pay for performance" is a widely shared value, even an ideology. So embraced is it as a cultural value that it is often publicly demanded—of teachers, for example, and of CEOs—by a variety of stakeholders including public interest groups, shareowners, and watchdog organizations. Fair pay also is a core value widely shared. Fair pay, especially for large employers, is enforceable by law, but even in the absence of legal encounters and enforcement agency actions the principle of fair pay is widely embraced and actively implemented. Pay practices, too, are a core part of the "value proposition" that employers offer prospective and current employees.

This section takes a broad, data-based view of pay as an expression of culture, examining pay

practices for their impact on behavior, specifically the employee-initiated behavior of voluntary turnover. Our primary objective is to illustrate, in this era of big data, opportunities that exist to illuminate aspects of organizational culture on a scale not previously possible.

The method of analysis used here is a synthesis of real-world cases. In each case the authors have tested, through statistical modeling over multiyear periods, the impact of compensation practices on a variety of outcomes. The results presented here are tallies—frequencies—of findings that speak to pay and its impact on just one outcome, voluntary turnover. The findings come from our work with 34 companies from diverse industries. Of those, 12 employed more than 50,000 employees, 12 between 10,000 and 50,000, and ten fewer than 10,000. Most are North American-headquartered and many have global operations. Close to a million lives are represented in the analyses on which this summary is based.

Although for present purposes findings are aggregated to the organizational level, it is important to note that the findings are rooted in individual-level analyses using the same statistical modeling methods of analysis in each of the 34 cases. Except for data about local labor market conditions such as unemployment rates and employees' commuting distances, which we as consultants provided, data for all analyses were taken from HRIS and other databases maintained by the organization. The time period over which the impact of pay on turnover was assessed typically was 3 to 5 years per organization, with the period of analysis longer for several organizations. The outcome of interest, voluntary turnover, excluded all forms of employer-initiated terminations, retirements, and "other" (e.g., health-related) reasons for employment ending. The aspects of compensation assessed for their impact on voluntary turnover were:

- Base pay: Both the amount of base pay and base pay growth (growth calculated over the most recent 3-year periods)
- Variable pay: Whether variable pay (e.g., an annual bonus) was received and the amount received
- Long-term compensation: Typically this came in some form of stock-based compensation, such as stock options or stock shares. As with variable pay, whether such compensation was received and the amount received were measured.

In all cases predictive logistic regression analysis was used to test the relationship between an aspect of interest (e.g., bonus pay amount) during a given period (typically one year) and the recorded event (yes-no) of an individual's voluntary turnover during the following period (typically the next year). All statistical models contained extensive control variables reflecting attributes of the individual employee and of their workplace (e.g., tenure with the employer, function or line of business, location, etc.). Although many of the control variables are common across analyses, differences exist due to available data and case-specific considerations. The time-series nature of the analysis and the extensive control variables give us a good measure of confidence to speak about the causal influence of pay practices on voluntary turnover.

Figure 11.3 shows the frequency (number of cases) with which each of six aspects of compensation was found to have (or not have) a statistically significant effect on turnover. Two types of significant effects are displayed: A negative effect on turnover ("reduced") which indicates that as the amount of pay increased voluntary turnover likelihoods

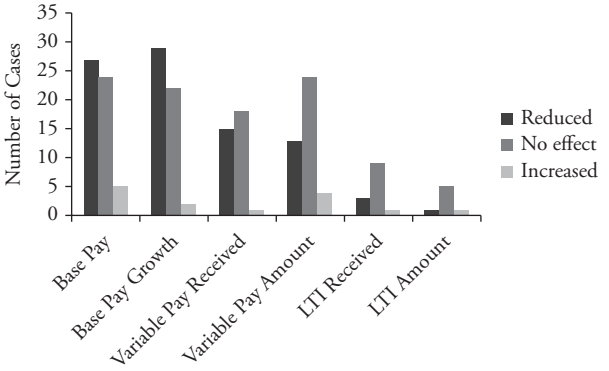

Figure 11.3 Pay effects on voluntary turnover.

decreased and a positive ("increased") effect which indicates that as the amount of pay increased voluntary turnover also increased. Also displayed is the incidence of no statistically significant effect of pay on turnover. Briefly, results indicate the following:

- The two aspects of base pay examined—the amount of and base pay growth—tended to reduce voluntary turnover about as often as they did not (in fact, the sum of "no effect" and "increased" exceeds the frequency with which base pay reduced turnover).
- The two aspects of variable pay—its amount and whether it was received at all—also had inconsistent effects on turnover. In fact, the absence of any effect of variable pay on turnover is the most frequent outcome for variable pay.
- The results show no consistent connection between either the receipt of or the amount of long-term incentives—typically awarded in the form of shares of stock—and voluntary turnover, though the number of cases in which these effects could be evaluated is decidedly fewer.

These findings were also explored by type of employee role and by time. For role, employees' paid salaries were broken out versus those paid by the hour and no strong differences were seen. Also, no detectable change in the pattern of results by time was perceived—in particular, pre-2008 recession versus post. Overall, these findings reinforce prior meta-analytic research documenting enormous variation in pay's consequences (see Guzzo, Jette, & Katzell, 1985).

What does one make of these results with regard to organizational culture? For one thing, it seems that for all its pervasiveness as a cultural marker of organizations, how companies talk about pay is one thing and how employees respond to it is quite another. Perhaps for pay more than for any other human capital practice, consequences are highly sensitive to organizational context. Sometimes the design of pay programs may not be well-matched to the organizational context, contributing to its variable effects. For example, variable pay in circumstances of low autonomy and high managerial control cannot be expected to influence employee behavior much at all and may be little more than a way of management transferring business performance risk to employees. Further, follies in the design of processes for administering pay (Kerr, 1975) also likely contribute to pay's inconsistent effects. We remain convinced that compensation is a cultural, value-laden matter in organizations and we believe that compensation is a particularly fruitful area for research on the intersections of culture and climate: Much of the observed between-organization variability in pay's consequences appears attributable to differences in organizational climates for rewards.

Making Cultural Changes Happen Successfully: A Case Study

UnitedHealth Group provides health benefits and health services directly to employers, governments, providers, payers and individuals, affecting more than 75 million people worldwide. Several years ago it embarked on an effort to change its culture, a top-down effort that targeted many aspects of how the company does business, including changes in the nature of its relationships with customers, in internal operational methods, and in how it approached its markets. As part of this effort, emphasis was placed on creating a different workplace for its employees, one that would better support espoused core values of the enterprise (e.g., innovation, performance excellence) and the pursuit of business growth. Our focus here is on that part of the change effort directed at the workforce and the employee work experience.

When the change began UnitedHealth Group was an enterprise with a track record of aggressive growth through acquisitions, several of them large. The acquisitions brought in new customer bases and new product and service lines. The company was also a buyer of talent more than a programmatic developer of it. To illustrate, for every one internal vacancy that was filled by a promotion three were filled by acquired or newly hired talent. Further, the company had not been especially successful at retaining and integrating acquired talent. Employee morale was not especially high, as registered by annual employee surveys, and voluntary turnover occurred at undesirably high rates, especially among those considered to be top talent (high performers thought to be candidates for positions of leadership). There was also an interesting, unique dynamic going on with regard to employee development and voluntary turnover. Analysis revealed that lateral movements by employees—that is, changes of role, function, and business unit—were developmentally beneficial in that individuals who made such moves were, all else equal, significantly more likely to be promoted in the following calendar year relative to similarly-performing employees in comparable roles who made no such move. Here is where the uniqueness comes in: Individuals who were

promoted became more likely to voluntarily leave the company in the following year. Up or out career dynamics are not unfamiliar (e.g., tenure-track faculty positions in universities, associate to partner in a law firm), but UnitedHealth Group was characterized by up *and* out. A successful spell of employment in UnitedHealth Group was, all too often for the company's preferences, a way of getting one's ticket punched en route to a career elsewhere.

As business conditions evolved the company would continue to engage in acquisitions but the nature of those acquisitions was expected to change. Future acquisitions would be smaller and company leadership expressed the view that the human capital that would come with them would be essential to success because the acquisitions were anticipated to be more about the delivery of health-related services than contractual benefits offerings. These evolving conditions elevated the importance of retaining and making the most of acquired talent. The push for organic growth—such as through in-house innovations—also would rise in importance (see Burke's chapter 24 on organizational change).

So changes in many workforce management programs and practices were introduced. New succession planning processes were put in place to enhance the capacity to fill important positions as they opened due to growth and vacancies. Successful succession planning requires a stock of internal talent prepared to move up, so several development tactics were implemented to enhance the internal supply of talent such as training programs focused on developing general managers and better ways of identifying and managing high-potential employees. Internal mobility, which had already proven its developmental value, was now more assertively managed, supported by such things as programs for facilitating an employee's successful transition to a new role. The employee experience would likely be affected by these changes, and that is one reason why the level of employee engagement became accepted as an important marker of successful change. Another reason for the emphasis on engagement was the belief that raising it would serve the company's business interests in general and in particular contribute to a reduction of unwanted talent losses (chapter 21 by Albrecht has an extensive discussion of employee engagement).

Underlying all these workforce-related efforts to support the overall cultural change was an elevated reliance on data and analysis. Analyzing and applying data is a core capability in many parts of the enterprise, so perhaps this choice is not surprising. Three important sources of data guided the workforce changes. One is the all-employee annual survey. It provides insights on several issues and is the source of record for the level of employee engagement. Second, the company replaced its generic human capital dashboard with one more tailored to the change efforts. The company, in fact, continues to improve its dashboard and reporting with regard to its workforce. Third, the company committed to ongoing ILM analyses. These ILM analyses would take advantage of the era of big data by integrating UnitedHealth Group's HRIS data, employee survey data, and data from other sources and then using that data to analyze cause-and-effect relationships between, for example, new workforce management practices and outcomes such as individual performance, talent development, and retention. The ILM approach also enabled careful tracking of changes in engagement and its consequences, the focus of this analysis.

The average level of employee engagement has risen year-over-year in UnitedHealth Group since it began its change efforts. Further, annual rates of voluntary attrition have fallen during the period, by about half. On the surface this feels like a success story. But to what extent was the rise in engagement levels actually driving the turnover reduction? Other factors could be driving it. For example, the culture change effort was sustained during a time of general economic distress and rising unemployment rates. To what extent is the observed decline in turnover a reflection of external economic conditions and not employee engagement?

UnitedHealth Group's ongoing ILM analysis yields the answer. One part of this analysis each year uses logistic regression models to identify drivers of voluntary employee turnover. Data about potential drivers are recorded in one year and are used to predict the actual incidence of voluntary turnover (yes/no) in the following year. There is a wealth of individual-level and organizational unit-level data that goes into the analysis, with choices about what to include in the analysis strongly guided by relevant research literatures in organizational psychology, labor economics, and related disciplines. For example, included in the analysis as potential influences on employee turnover are such things as individuals' pay, pay growth, tenure, recent promotion history, type of job performed, the experience level of their supervisor, their supervisor's span of control, size of the work unit, work location, and level of engagement (along with selected other measures from the annual survey). Added to the analysis is

unemployment rate information for each employee's work location. For present purposes, all other factors in the models can be considered control variables, given the focus on engagement's impact on voluntary turnover. Four year-over-year logistic regression models are the core of this analysis. The models are big not only in terms of the number of control variables in them but also for their large sample sizes (which range from 62,734 to 77,674, depending on the year).

Results show that many of the control variables mentioned above indeed influence employees' choices to quit this organization. After accounting for the impact of these other factors employee engagement also is a statistically significant factor influencing voluntary turnover in each of the four models as well: The higher an employee's level of engagement in the prior year the lower their likelihood of their quitting in the following year. Interestingly, a test comparing the magnitude of engagement's regression coefficient in the most recent year to that of the first year of the analysis shows the most recent year's coefficient to be significantly larger, indicating a growing strength of engagement to retain employees in this firm. In short, as a marker of culture change, the level of engagement was rising and so was its impact.

Several other markers of a successful culture change exist. For example, evidence indicates that more recently acquired talent is better retained and integrated. The unwanted up and out career dynamics have been disrupted. More time is needed to fairly assess the impact of some other changes—for example, certain talent development programs will require years for their consequences to fully materialize. It is also important to note, though, that the change is not occurring at the same rate or with the same success in each part of the enterprise. There is within-enterprise variation, consistent with the notion that subcultures exist in large, complex organizations.

Say-Do, Big Data, and Two Recommendations

This chapter offers a perspective—emphasizing say-do and big data—on the science and practice of climate and culture. Looking ahead, this experience-based perspective leads us to offer two straightforward recommendations—imperatives, perhaps—with regard to future investigation into organizational climate and culture. The first is that we advise investigators—whether driven by a primary interest in theory development or practical application—to take account of both say and do data simultaneously because doing so will enhance the success of their efforts. The learnings that arise through the juxtaposition of say and do data are so strong in our experience, and often so at variance with what is learned when relying on either source alone, that we are of the view that the only way to effectively gauge, understand, and change climate and culture is through synchronizing this dual lens.

Sources of data about behavior ("do") illustrated in this chapter are largely archival, the electronic footprints left by employee and employer actions as recorded in HRIS and other databases, and sources of "say" data illustrated here are mostly from interviews and surveys. Whatever their specific source, archival and self-report data have imperfections. And although the strengths of each type of data can to some degree compensate for the weaknesses of the other, our call for the use of both types is less about measurement error reduction and far more about the value of comparing and contrasting one type data against the other in the process of interpretation, whether that interpretation is to refine a theory, plot a course for organizational change, or both.

The second recommendation is to embrace what big data brings: a new world of interwoven hypothesis-testing and discovery. Relying on big data is not the equivalent of atheoretical "dustbowl empiricism" which Miner (1997) illustrates as gathering a great many measures, say several hundred, throwing them into a computer and interpreting the resulting observed covariations. This might be called pure "data mining" today. There is plenty of opportunity to start with one's theories when working with big data on matters of climate and culture. But the fact is that today's data—the breadth and number of data points, the multiplicity of feasible indicators of constructs and relationships, the span of time over which dynamics can be tracked with reliable indicators—far exceeds that on which most culture and climate theories have been built. This new expanse of data will permit ample theory testing and it opens wide the door to theory-driven discovery. Using big data and embracing the process of discovery should be a boon to theorists, offering a fount of ideas and insights otherwise hidden from view. Indeed, for the foreseeable future in this era of big data we believe that the process of discovery will surpass the process of testing established theories as the engine of progress in climate and culture research.

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