Using people analytics to drive business performance: A case study

A quick-service restaurant chain with thousands of outlets around the world is using data to drive a successful turnaround, increase customer satisfaction, and grow revenues.

by Carla Arellano, Alexander DiLeonardo, and Ignacio Felix

People analytics—the application of advanced analytics and large data sets to talent management—is going mainstream. Five years ago, it was the provenance of a few leading companies, such as Google (whose former senior vice president of people operations wrote a book about it[1]). Now a growing number of businesses are applying analytics to processes such as recruiting and retention, uncovering surprising sources of talent and counterintuitive insights about what drives employee performance.

Much of the work to date has focused on specialized talent (a natural by-product of the types of companies that pioneered people analytics) and on individual HR processes. That makes the recent experience of a global quick-service restaurant chain instructive. The company focused the power of

---

[1] See Laszlo Bock, *Work Rules!: Insights from Inside Google That Will Transform How You Live and Lead*, New York, NY: Hachette Book Group, 2015.

people analytics on its frontline staff—with an eye toward improving overall business performance—and achieved dramatic improvements in customer satisfaction, service performance, and overall business results, including a 5 percent increase in group sales in its pilot market. Here is its story.

THE CHALLENGE: COLLECTING DATA TO MAP THE TALENT VALUE CHAIN

The company had already exhausted most traditional strategic options and was looking for new opportunities to improve the customer experience. Operating a mix of franchised outlets, as well as corporate-owned restaurants, the company was suffering from annual employee turnover significantly above that of its peers. Business leaders believed closing this turnover gap could be a key to improving the customer experience and increasing revenues, and that their best chance at boosting retention lay in understanding their people better. The starting point was to define the goals for the effort and then translate the full range of frontline employee behavior and experience into data that the company could model against actual outcomes.

Define what matters. Agreeing in advance on the outcomes that matter is a critical step in any people-analytics project—one that's often overlooked and can involve a significant investment of time. In this case, it required rigorous data exploration and discussion among senior leaders to align on three target metrics: revenue growth per store, average customer satisfaction, and average speed of service (the last two measured by shift to ensure that the people driving those results were tracked). This exercise highlighted a few performance metrics that worked together and others that "pulled" in opposite directions in certain contexts.

Fill data gaps. Internal sources provided some relevant data, and it was possible to derive other variables, such as commute distance. The company needed to supplement its existing data, however, notably in three areas (Exhibit 1):
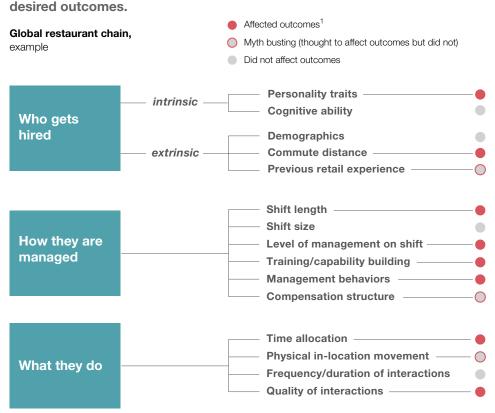
- First was selection and onboarding ("*who gets hired* and what their traits are"). There was little data on personality traits, which some leaders thought might be a significant factor in explaining differences in the performance of the various outlets and shifts. In association with a specialist in psychometric assessments, the company ran a series of online games allowing data scientists to build a picture of individual employees' personalities and cognitive skills.

- Second was day-to-day management ("*how we manage* our people and their environment"). Measuring management quality is never easy, and

the company did not have a culture or engagement survey. To provide insight into management practices, the company deployed McKinsey's Organizational Health Index (OHI), an instrument through which we've pinpointed 37 management practices that contribute most to organizational health and long-term performance. With the OHI, the company sought improved understanding of such practices and the impact that leadership actions were having on the front line.

- Third was behavior and interactions ("*what employees do* in the restaurants"). Employee behavior and collaboration was monitored over time by sensors that tracked the intensity of physical interactions among colleagues. The sensors captured the extent to which employees physically moved around the restaurant, the tone of their conversations, and the amount of time spent talking versus listening to colleagues and customers.

Exhibit 1

Analysis identified which employee features correlated to the desired outcomes.

Global restaurant chain,
example

● Affected outcomes[1]
◌ Myth busting (thought to affect outcomes but did not)
● Did not affect outcomes

Who gets hired
- *intrinsic*
  - Personality traits ●
  - Cognitive ability ●
- *extrinsic*
  - Demographics ●
  - Commute distance ●
  - Previous retail experience ◌

How they are managed
- Shift length ●
- Shift size ●
- Level of management on shift ●
- Training/capability building ●
- Management behaviors ●
- Compensation structure ◌

What they do
- Time allocation ●
- Physical in-location movement ◌
- Frequency/duration of interactions ●
- Quality of interactions ●

[1] Targeted outcomes were customer-satisfaction scores by shift, revenue growth by store, and speed of service by shift.

THE INSIGHTS: CHALLENGING CONVENTIONAL WISDOM

Armed with these new and existing data sources—six in all, beyond the traditional HR profile, and comprising more than 10,000 data points spanning individuals, shifts, and restaurants across four US markets, and including the financial and operational performance of each outlet—the company set out to find which variables corresponded most closely to store success. It used the data to build a series of logistic-regression and unsupervised-learning models that could help determine the relationship between drivers and desired outcomes (customer satisfaction and speed of service by shift, and revenue growth by store).

Then it began testing more than 100 hypotheses, many of which had been strongly championed by senior managers based on their observations and instincts from years of experience. This part of the exercise proved to be especially powerful, confronting senior individuals with evidence that in some cases contradicted deeply held and often conflicting instincts about what drives success. Four insights emerged from the analysis that have begun informing how the company manages its people day to day.

Personality counts. In the retail business at least, certain personality traits have higher impact on desired outcomes. Through the analysis, the company identified four clusters or archetypes of frontline employees who were working each day: one group, "potential leaders," exhibited many characteristics similar to store managers; another group, "socializers," were friendly and had high emotional intelligence; and there were two different groups of "taskmasters," who focused on job execution (Exhibit 2). Counterintuitively, though, the hypothesis that socializers—and hiring for friendliness—would maximize performance was not supported by the data. There was a closer correlation between performance and the ability of employees to focus on their work and minimize distractions, in essence getting things done.

Careers are key. The company found that variable compensation, a lever the organization used frequently to motivate store managers and employees, had been largely ineffective: the data suggested that higher and more frequent variable financial incentives (awards that were material to the company but not significant at the individual level) were not strongly correlated with stronger store or individual performance. Conversely, career development and cultural norms had a stronger impact on outcomes.

Exhibit 2

Frontline employees fell into four personality archetypes.

Distribution of employees at a global restaurant chain

0	25%	50%	75%	100%

Socializers	Potential leaders	Entrepreneurial taskmasters	Conservative taskmasters
High EQ,[1] more altruistic and trusting Risk takers, highly spontaneous	High EQ Good at multitasking Follow up with others Most like high-performing general managers	Lower EQ, less altruistic Good at planning and executing Higher appetite for risk and innovation	Low EQ Good at planning and execution Very focused, not good at multitasking Conduct work within boundaries provided (not risk seeking)

[1] Emotional Quotient, a measure of self-awareness and sensitivity to others

Management is a contact sport. One group of executives had been convinced that managerial tenure was a key variable, yet the data did not show that. There was no correlation to length of service or personality type. This insight encouraged the company to identify more precisely what its "good" store managers were doing, after which it was able to train their assistants and other local leaders to act and behave in the same way (through, for example, empowering and inspiring staff, recognizing achievement, and creating a stronger team environment).

Shifts differ. Performance was markedly weaker during shifts of eight to ten hours. Such shifts were inconsistent both with demand patterns and with the stamina of employees, whose energy fell significantly after six hours at work. Longer shifts, it seems, had become the norm in many restaurants to ease commutes and simplify scheduling (fewer days of work in the week, with more hours of work each day). Analysis of the data demonstrated to managers that while this policy simplified managerial responsibilities, it was actually hurting productivity.

THE RESULTS (SO FAR)

Four months into a pilot in the first market in which the findings are being implemented, the results are encouraging. Customer satisfaction scores have increased by more than 100 percent, speed of service (as measured by the time between order and transaction completion) has improved by 30 seconds, attrition of new joiners has decreased substantially, and sales are up by 5 percent.

We'd caution, of course, against concluding that instinct has no role to play in the recruiting, development, management, and retention of employees—or in identifying the combination of people skills that drives great performance. Still, results like these, in an industry like retail—which in the United States alone employs more than 16 million people and, depending on the year and season, may hire three-quarters of a million seasonal employees—point to much broader potential for people analytics. It appears that executives who can complement experience-based wisdom with analytically driven insight stand a much better chance of linking their talent efforts to business value. Ⓠ

Carla Arellano is a vice president of, and **Alexander DiLeonardo** is a senior expert at, People Analytics, a McKinsey Solution—both are based in McKinsey's New York office; **Ignacio Felix** is a partner in the Miami office.