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The Future of Org1: In Invitae or Out?

Up to now, we've started and ended with offering analytics. We had a lot of wins, and some important wins, but we haven't changed the game. Systematically and organizationally, we weren't equipped to take the next logical step. But we are now.

—ALEX FURMAN CO-FOUNDER, INVITAE

In June 2022, Alex Furman's human resources (HR) department was unique in the biotech world. Almost a decade earlier, as cofounder of the genetic testing startup Invitae, Furman had been tasked with building out the company's HR function and systems. Unable to find a piece of software that could collect useful 360-degree employee feedback for Invitae's non-hierarchical, collaborative work environment, Furman decided to create his own. The resulting project far exceeded his mandate, using communications scraping, a peer ranking system, and several types of employee surveys to provide managers with an up-to-date understanding of team productivity and organizational health.

Over its years of growth, Org1 had provided reams of actionable intelligence to Invitae's managers. But Furman believed that in order for Org1 to continue moving forward, it needed to make the jump from a business intelligence system into the field of guiding analytics; that is, from giving managers the information they needed to telling them what they ought to do with it. Furman was unsure, however, whether Org1 would be able to make this quantum leap under the umbrella of Invitae, and he had begun to consider spinning the system out. While it remained incubated within a biotech firm, Org1's ability to work with outside clients, take on funding, and earn revenue would

Lecturer Heather Whiteman prepared this case, with assistance from Case Writer John Masko, as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

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be limited. But if Org1 spun off from Invitae, it would enter a highly competitive people analytics technology (PAT) market full of companies trying to achieve exactly the same goals. Was it time for Org1 to spread its wings, or did its future still lie with Invitae?

People Analytics Technology¹

As of 2021, people analytics technology (PAT), which referred to software that helped companies manage their workforces, comprised a \$3.1 billion global industry. Since the mid-2010s, PAT had been growing rapidly, with 80% compound annual growth between 2016 and 2021. The COVID-19 pandemic in 2020 and 2021 had been a boon for PAT. As one research organization explained: "When workers weren't physically present, people analytics provided insights into their needs. When organizations needed to pivot to meet changing customer needs, people analytics helped leaders identify staff with the skills and capabilities to lead those efforts."

The PAT industry included platforms that collected data from employees and platforms that analyzed that data. The largest and fastest-growing subsector of PAT was employee engagement data collectors and aggregators (platforms that took the pulse of workforces), which comprised 34% of the industry in 2020 and grew to 42% in 2021. The second largest was multisource data analysis platforms (which aggregated and helped analyze both actively and passively collected employee data). This category represented 23% of the PAT market in 2021. See Exhibit 1 for a breakdown of PAT subindustries.

The PAT field featured three huge incumbents—SAP, Oracle, and Workday—which played in nearly all subfields of the industry, providing both off-the-rack and custom software solutions for people management to businesses around the world. While only part of each company was devoted to people analytics, the combined annual revenues of SAP and Workday were roughly equivalent to the size of the entire PAT industry.

The remainder of the industry consisted mainly of young startup companies, and across the industry, these young companies were on the move. In 2021, 47% of PAT firms received some sort of investment funding, and 30% experienced a merger, acquisition, or change of ownership. According to a leading survey, more than half of PAT firms expected higher than 30% growth for the year 2022.

As of 2022, many PAT firms were combining the subcategories of people analytics in novel ways. Firms were investing in new surveying capabilities, allowing for "more continuous analysis driven by employee listening," and integrating survey data with data gleaned from passive sources (e.g., metadata from Slack, email, or calendars) and internal corporate sources (e.g., sales numbers or results from internal learning programs).³

The result, according to the study, was that the industry was moving inexorably toward a holy grail of guiding analytics, where data inputs were used to offer concrete advice to managers and HR professionals. One such project was Org1.

Garr and Mehrotra, "People Analytics Technology 2022: Executive Summary."

¹ Material from this section drawn from Stacia Garr and Priyanka Mehrotra, "People Analytics Technology 2022: Executive Summary," RedThread Research, May 17, 2022, https://redthreadresearch.com/pat-2022/.

² Garr and Mehrotra, "People Analytics Technology 2022: Executive Summary."

Origins of Org1

In 2010, a group of four geneticists and software coders—Sean George, Michele Cargill, Alex Furman, and Mat Falkowski—founded a venture-backed startup called Locus Development (Locus). As executives at a startup with fewer than 20 employees, the founders divided all Locus's executive functions between them. George focused on the business, Cargill on the science, and Furman on the technology (Falkowski departed soon after the company was founded).

Shortly after its founding, Locus took on a strategic investment from a 10-year-old cancer-focused genetic testing company Genomic Health, which hoped to commercialize Locus's technology. Over time, the plan for a strategic partnership was scrapped in favor of Genomic Health's Locus-focused team coming over to Locus under the new company name Invitae.

Integrating new employees and hiring rapidly in the aftermath of the merger, the three founders suddenly found themselves managing 150 employees instead of 20, many of whom came from a different company with its own distinct culture. As this culture clash began to create employee conflicts that undermined Invitae's work, the founders realized that they lacked the proper HR infrastructure to deal with the problems. For the company's first two years, that infrastructure had not been necessary, but now it was—urgently and all at once.

The founders set about interviewing outside candidates for a new HR leader position, but they had trouble finding someone who fit Invitae. They quickly realized that it was necessary to bring on someone who would, in Furman's words, "make the right call, not the political call," so they decided that one of the founders should take on the HR position.

Furman, in his words, "drew the short straw." With a successful career in software and bioinformatics, he had little knowledge of HR. He knew that a daunting task awaited him: "The company was at a critical point. Things were beginning to blow up and strategic decisions weren't being made, because it wasn't clear who would make them."

In his new role as HR leader, Furman tackled the low hanging fruit first. He straightened out Invitae's organizational chart, making it clearer who the decisionmakers were, and intervened in unhelpful circular employee arguments. But he quickly grew frustrated by the lack of available mechanisms for collecting and acting on employee feedback.

He began looking for existing HR software to deploy at Invitae, but could not find any that fit the company's networked workflow. The HR software on the market tended either to practice top-down evaluation (in which bosses reviewed their reports and reports reviewed bosses) or, if it allowed for 360-degree feedback, employees or their managers nominated the reviewers. Allowing employees to choose only those reviewers likeliest to give positive feedback left managers trying to guess who could provide the best review. Furman also discovered that very few systems allowed senior management to be involved in the review process as reviewees. "It can't be mutual accountability for everyone except me and my whiskey drinking buddies," Furman said.

Org1 in Beta⁴

So, Furman decided to build the software he needed himself. He found a useful foundation in probability and statistics.

Furman's HR software, Org1, started from a core assumption: At companies that worked collaboratively to produce products, collaborators—not managers—were the people best positioned to offer constructive feedback. Org1 was therefore designed to collect feedback using a rating system called the Peer Rank Score (PRS), which was calculated using aggregated ratings by each employee of their peers along two axes: teamwork and skill.

The decision of who would review whom was based on an analysis of employee communications that determined who worked with whom most. Employees would rate the teamwork and skill of each coworker they worked with closely, and a rank would be created by matching up the aggregate rating of each employee head-to-head against the aggregate rating of each coworker who reviewed them. Each "win" in this head-to-head comparison earned points for the winner and lost points for the loser.

Three weighting factors were applied to these comparisons. The first was the PRS of the employee doing the review (reviews by higher-PRS employees, who were sometimes more senior, but often not, counted for more). The second was the expected result of the employee comparison based on their PRS. (Employees with a higher overall PRS were expected to win a head-to-head comparison with employees with a lower PRS based on their past high performance. Results contrary to that expectation therefore counted for more, to avoid the creation of self-fulfilling prophecies.) The third was the range of scores awarded by a given employee (employees who tended to give all reviewees similar ratings had their spread artificially widened, and employees who gave widely divergent reviews had theirs artificially contracted).

A First Test

The Org1 system got its first trial on the employees of Invitae in 2014. To test out the system, Furman mapped it onto the company's data on base salaries and spot review bonuses. ("Spot review" was a system where Invitae employees could choose to conduct a peer review of a coworker at any time. These reviews were typically acknowledgments of a job particularly well-done, and were used by management to reward exceptional employees with non-cash bonuses, like a dinner out or a weekend retreat.)

In the trial, Furman found that Org1 PRS scores had no discernible correlation with salaries, but a high degree of correlation with spot review bonuses. The 99 employees who had been nominated for a spot review bonus over the preceding year had a mean PRS score nearly three times that of the 162 employees who had not. Among spot review bonus nominees, PRS scores also rose with the number of spot review bonus nominations they received.

Furman's learning from this experiment was twofold: first, that PRS was highly effective at predicting the top performers in a networked system like Invitae's, and second, that Invitae's salary data showed that the company was not hiring in a way that rewarded the best performers with the

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⁴ Material in this section and the section following is drawn from Sofia Dukoka et al., "Wisdom of collaborators: a peer-review approach to performance appraisal," White Paper, December 2019.

highest salaries. Many critical contributors, according to PRS, turned out not to be senior employees. Invitae needed to do better.

Org1's social graph also offered valuable insights on the company's information sharing. As Furman put it, "the first time I saw the graph, and saw who was interconnected to whom, I thought there was a bug in the code. But it turned out that the code was fine. There were just a whole bunch of quiet, awesome people around the company who handled a lot more than I realized. I didn't know about them, but Org1 did." Furman added that by and large, these quiet performers tended to be women.

Furman's early experiment with Org1 had shown not only that the system had significant predictive power, but that it could teach him and his cofounders things they did not know about their own company. Determined to develop the software further after a successful early trial, Furman hired a small team of developers. Over the years that followed, he would bring on a user experience (UX) designer, a tester, and even a social scientist.

In 2015, he formed his first partnership with an outside organization: the London Gates School, an English language learning center that prepared Eastern European students for college in the UK. For several years, the London Gates School would provide invaluable feedback on the product.

Org1 in 2022

By 2022, Furman and his team had built Org1 into a robust integrated software product that offered a range of analytic tools to managers and employees at Invitae. Org1 painted a detailed picture of communications, collaborations, and morale across the company, from top executives to the rank-and-file, spanning a range of functions from basic scientific research to product management and delivery.

While Org1 incorporated traditional manager review functions like those available in Workday and other mass market products, it also offered a customizable range of other survey and data collection tools, giving managers and HR continuous feedback on the organization. As Invitae's CTO Eric Fleischman put it, "With traditional HR software, feedback is cadence-oriented. There's a manager and peer review season that's quarterly or annual, and people rush to get it done by the deadline. With Org1, there's less feedback collected each time, but it's more frequent. That makes it possible to contextualize the feedback we get."

This meant that Invitae employees completed several different types of surveys per quarter, in addition to two traditional performance reviews per year (see **Exhibit 2**). While there was sometimes grumbling at Invitae over the frequency of surveys, HR Business Partner Sarah Zeller believed that the product was more than worth it: "It's really not that laborious; each of the surveys can be done in around ten minutes, and the intelligence we get from it is invaluable."

Team Reviews

As in the original testing phase, Org1's peer review system continued to be built on an algorithm that monitored communications around the company (via email, Google Calendar, Slack, and Jira tickets) and created a communication score for each pair of employees that added up to a comprehensive communications map. Frequency and timing of communications were measured, creating a dashboard for each employee on who they had met with (whether one-on-one or in larger groups), when, and for how long.

End of Preview

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