Nov 30, 2017, 11:07pm EST The Surprising Way Wal-**Mart And Microsoft Cut Turnover And Improve Product** Elizabeth MacBride Senior Contributor ① Entrepreneurs in Guilherme Braga EGALITE Guilherme Braga was a 15-year-old exchange student in Michigan when he had the moment of insight that eventually led him to found a fast-growing, profitable Brazilian startup, Egalite, that is receiving international attention. Braga was struggling in an algebra class when the boy sitting next to him, said, "Do you need some help? Did you understand?" He recognized that Braga was struggling with the language and the different curriculum. The boy was Andrew; he was quadripalegic, and brilliant in math. "He explained everything," Braga remembered. The two struck up a friendship that went outside math class, though they've since lost touch. Most Popular In: Entrepreneurs Agriculture: An Uber Moment For Entrepreneurs Moments of insight often came when entrepreneurs, or entrepreneurs-to-be, are vulnerable. The friendship changed Braga enough so that, nearly a decade later, when he heard about a law employers were struggling to live with in Brazil, he saw an opportunity. The law mandates that companies with more than 100 employees set aside a quota of jobs, 2-5% for people with disabilities (such laws are present in a handful of countries, though not the United States). When he founded his company at the age of 23, Braga tapped into a big opportunity - an estimated 12% of the male population of the world, and nearly 20% of the female population of the world have a disability (that's about 1.12 billion people; of them, about 52 million Americans.) His company, which now has \$350,000 in annual revenue, helps train and recruit employees with disabilities for big companies, including Wal-Mart's operation in Brazil. Its innovative tech platform- much of it delivered via Facebook - has won it international recognition in the form of a grant from the Ruderman Family Foundation. Braga plans to expand to the United States. Innovative ways to include people with disabilities in the workforce are a hot topic now in America and elsewhere. Two things seem to be driving the conversation: first, businesses are struggling to find a stable, skilled workforce. Second, in the wake of Donald Trump's election and the rise of nationalism, there's a countervailing concern about the decline of empathy across the corporate world and in society. Working alongside people who are different is seen as a remedy. Last month, Microsoft CEO Satya Nadella shared the story of how having a son with a disability shaped his life and thinking as a business leader. One of the things I remember most clearly, however, is how Anu's reaction to Zain's birth was immediately so different from mine. For Anu [his wife], it was never about what this meant for her — it was always about what it meant for Zain and how we could best care for him. Rather than asking "why us?" she instinctually felt his pain before her own. ... Becoming a father of a son with special needs was the turning point in my life that has shaped who I am today. It has helped me better understand the journey of people with disabilities. It has shaped my personal passion for and philosophy of connecting new ideas to empathy for others. And it is why I am deeply committed to pushing the bounds on what love and compassion combined with human ingenuity and passion to have impact can accomplish with my colleagues at Microsoft. Microsoft now has an autism hiring program, among other initiatives. The company believes having people with disabilities inside the company improves its products. "When you speak about inclusion and diversity you truly look at things differently. You come up with different ideas and policies that other companies don't," said Shira Ruderman, director of the \$200 million Ruderman Family Foundation. "I view awareness of disability as a big asset. Society is built out of many things." Shira Ruderman NOAM GALAI "The profit world can truly lead social change." The Foundation spends \$8-9 million a year, the bulk on disabilityrelated issues (it also focuses on ties between the United States and Israel and gives to Jewish causes). It took up the disability issue 15 years ago, around the same time Ruderman's nephew was diagnosed with autism, Ruderman said. The family's money came from Morton Ruderman, a Boston businessman who co-founded healthcare tech firm Meditech. "There is a momentum of awareness now," she said when asked how the landscape for people with disabilities has changed, citing CVS, Walgreens, Wal-Mart and Uber as companies that are notable for employing people with disabilities. In Brazil, Egalite's modus operandi, Braga said, is to recruit and offer training based on respect. The do much of that work through Facebook, and currently recruit nearly 1,300 people a month via the platform. A disproportionate number of people using the platform, close to 60%, are women, because the hit higher prejudices as they try to enter the workforce, Braga said. "There were NGOs, but they were not doing (the training and recruiting) as we thought they should be," he said. "Huge corporations don't want a victim inside their workforce." It's now a seven-year-old bootstrapped company with plans to open in the United States, where corporations are waking up to the opportunity. Braga works with Wal-Mart, which has a workforce of 60,000 people in Brazil. Egalite placed 700 people with disabilities there. Braga said that the company found the turnover rate in that group was less than half of what it was compared to the rest of it workforce. "We are now established enough in Brazil. We can show the results. The U.S. is much more open when you prove the results," he said. Follow me on Twitter or LinkedIn. Check out my website. Elizabeth MacBride Follow A business journalist for 20 years and a freelancer for more than 10 of that, I write about turning points in the lives of entrepreneurs and their companies. Print Site Feedback Tips Corrections © 2020 Forbes Media LLC. All Rights Reserved. 18.852 views | May 28, 2020, 05:00am EDT Can Shovel-By-Shovel Data **Analysis Make Mines More** Sustainable? Jeff Erickson Brand Contributor Oracle BRANDVOICE | Paid Program Innovation Sprawling mining operations are feeling the squeeze—new challenges from the pandemic and economic slowdown are only compounding pressures that have been grinding on the industry for some time. These include mining ore deposits in ever harder to reach locations, and myriad changes aimed at improving sustainability in their business. One consensus: The way forward is to make operations much more efficient. They're looking to new digital technology for options. MineSense shows operators exactly what grade of ore-whether copper, zinc, nickel, or iron—is in each dip of their massive shovels. COURTESY OF MINSENSE "We've seen that a lot of the mining companies now have built 'innovation teams' to really look for ways that they can mine more efficiently and sustainably," says Frank Hoogendoorn, chief data officer at MineSense, a Vancouver, Canada-based tech company that's carving out a niche in helping mines become more sustainable. Mining companies have been chipping away at waste for years with geologists, engineers, and data scientists building detailed models that point to where digging should be most fruitful. MineSense fills in a missing piece of the puzzle by showing operators exactly what grade of ore-whether copper, zinc, nickel, or iron—is in each dip of their massive shovels. This information has two powerful effects: It can help miners avoid throwing away useful ore, and if the ore grade they're digging is lower than what they modeled, they can avoid wasting time, water, and energy trying to process it. Either way, MineSense's feedback helps improve resource planning. "We allow them to mine much more precisely and much more surgically," says Hoogendoorn. MineSense is already working with some of the world's largest mines in Canada, Chile, and Peru, and was recently named one of the Top 100 Global Clean Tech companies. MineSense, a Vancouver, Canada-based tech company, is carving out a niche in helping mines become more sustainable. COURTESY OF MINESENSE MineSense works by attaching a device to the shovel bucket that uses x-rays to virtually sift through the bucket's contents and inform the operator in real time what's there. Onboard the shovel, software does a quick calculation; is the ore grade as high as expected or not? That data flows to the mine's fleet management system, which directs the load confidently toward processing or away from it. That data also gets sent to a cloud-based data warehouse where MineSense data scientists have applied different types of analytical and machine-learning models. Those insights are shared with the mine operators in near real-time dashboards, Hoogendoorn says. **Getting the Job** It's not a given that Minesense's innovative approach would find acceptance with mine operators. "Lots of people think they have the killer solution for mines," but tight production schedules mean shift superintendents rarely stop or slow operations and test them. "Our goal is to reduce the friction and be as noninvasive and nonintrusive as possible," he says. "Particularly on the data side." That's easier said than done. "We're scanning constantly and produce a large amount of IoT data as soon as the shovel's done digging," Hoogendoorn says. While the system is making decisions onboard the Frank Hoogendoorn, chief data officer at MineSense. COURTESY OF shovel, it's also streaming data to Oracle Cloud Infrastructure, "where we will continue to collect large amounts of data and scale up very, very quickly." Hoogendoorn's team uses Oracle Autonomous Data Warehouse to store data for access by data scientists, and to deliver clientspecific dashboards using Oracle Application Express, or APEX, which is Oracle Database's popular built-in, low-code development framework. For Hoogendoorn, this is an unbeatable combination. "As a chief data officer, my number one priority is to get clean data in front of as many people as possible so they can use it," including PhDs in computer science, applied statistics, and geophysics who work for MineSense or for its customers. • Get started with Oracle APEX and an always-free service in Oracle Cloud Oracle Autonomous Data Warehouse deploys, tunes, secures, and backs itself up with no human intervention—letting Hoogendoorn's team meet their ambitious goals while spending less on database maintenance and more on development and reporting using Oracle APEX. "The way MineSense works is very dynamic," says Adrian Png, from Insum, a firm that helps MineSense architect its data solutions. "They are ambitious about going out and ingesting new datasets" from mining operations, he says. "And their data scientists are always experimenting and doing discovery across entire datasets." Oracle Cloud Infrastructure lets them scale up to handle the work, he says, and provides a playground of other services that MineSense's inquisitive developers and data scientists can try. MineSense works by attaching a device to the shovel bucket that uses x-rays to virtually sift through the bucket's contents and inform the operator in real time what's there. COURTESY OF MINESENSE For now, says Hoogendoorn, "Oracle Application Express is an absolute killer feature. As far as I know, the Oracle platform, particularly with Autonomous Data Warehouse, is the only platform out there with a built-in, fully integrated application development framework that lets you build and deploy applications all from within the platform, without having to install anything else." Hoogendoorn recalls the time his team was starting a high-stakes project with a large copper mine in Chile, which is run by one of the largest mining companies in the world. The team needed to get data in front of their research team, "and they were expecting that this was going to be a weeks or months-long project, and we literally did it in about two days," he says. "We gave them a fullfeatured web portal with access to all the data, complete with interactive reporting and data visualization features, and they were just absolutely gobsmacked that we got that up and running so quickly." With Autonomous Data Warehouse and Oracle APEX on Oracle Cloud Infrastructure, "I know now that I can continue to deliver as we bring on big new clients and their analysts," he says. "We're going to get a data tsunami very, very quickly," as more of the world's largest mining operations prepare to use the system. "And I've got zero concern that we're not going to be able to handle it," he says. That despite the fact that his team is planning new types of sensors "that are going to give us completely new and quite large data feeds." "We are fundamentally a data company," says Jeff More, CEO of MineSense. "The data we produce, combined with our advanced machine learning algorithms, is at the very core of the value we generate for mines. We needed a powerful platform to demonstrate and deliver that value, which we now have." It's the combination of analytical power and easy access to data that makes it powerful. "I've got a world class, scalable super secure, super powerful database engine, and with the build-in application development tools, I can build and deploy applications right away so that I can get people access to data," he says, "I don't know of any other platform where I can do that 'outof-the-box'." Thus, Hoogendoorn and MineSense have the confidence to help move the rugged mining industry toward an efficient, digital future. **Jeff Erickson** Jeff Erickson is content strategist for database and data-driven innovation at Oracle. An award-winning script writer and columnist, Erickson is a former editor of... Read More Privacy Print Site Feedback Tips Corrections Reprints & Permissions © 2020 Forbes Media LLC. All Rights Reserved. AdChoices

Breaking

More

Featured

Forbes

Billionaires

Innovation

Leadership

Money

Business

Small Business

Lifestyle