

The Right Workforce Turns Data into Rocket Fuel for AI Projects

dataconomy.com/2019/05/the-right-workforce-turns-data-into-rocket-fuel-for-ai-projects/

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2019

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Breaking down the workforce options for AI developers to structure raw data for machine learning. Here is a look.



While it may seem like artificial intelligence (AI) has hit the big time, a lot of work needs to be done before its potential really come to life. In our modern take on the 20th-century space race, AI developers are hard at work on the next big breakthrough that will solve a problem and establish their expertise in the market. It takes a lot of hard work for innovators to deliver on their vision for AI, and it's the data that serves as the lifeblood for advancement.

One of the biggest challenges AI developers face today is how to process all the data that feeds into machine learning systems, a process that requires a reliable workforce with relevant domain expertise and high standards for quality. To address these obstacles and get ahead, many innovators are taking a page from the enterprise playbook – where alternative workforce models can provide a competitive edge in a crowded market.

Alternative Workforce Options

Deloitte's [2018 Global Human Capital Trends](#) study found only 42 percent of organizations surveyed said their workforce is made up of traditional salaried employees – and employers expect their dependence on contract, freelance and gig workers to dramatically increase over the next few years. Accelerating this trend is the pressure business leaders face to improve their workforce ecosystem as alternative workforce options bring the possibility for companies to advance services, move faster and leverage new skills.

While AI developers might be tempted to tap into new workforce solutions, identifying the right approach for their unique needs demands careful consideration. Here's an overview of common workforce options and considerations for companies to select the right strategy for cleaning and structuring the messy, raw data that holds the potential to add rocket fuel to your AI efforts:

In-house employees – The first line of defense for most companies, internal teams can typically manage data needs with reasonably good quality. However, these processes often grow more difficult and costlier to manage as things progress – calling for a change of plans when it's time to scale. That's when companies are likely to turn to alternative workforce options to help structure data for AI development.

Contractors and freelancers – This is a common alternative to in-house teams, but business leaders will want to factor in extra time it will take to source and manage their freelance team. One-third of Deloitte’s survey respondents said their human resources departments are not involved in sourcing (39 percent) or hiring (35 percent) decisions for contract employees, which “suggests that these workers are not subject to the cultural, skills, and other forms of assessments used for full-time employees.” That can be a problem when it comes to ensuring quality work, so companies should allocate additional time for sourcing, training and management.

Crowdsourcing – Crowdsourcing leverages the cloud to send data tasks to a large number of people at once. Quality is established using consensus, which means several people complete the same task. The answer provided by the majority of the workers is chosen as correct. Crowd workers are paid based on the number of tasks they complete on the platform provided by the workforce vendor, so it can take more time to process data outputs than it would with an in-house team. This can make crowdsourcing a less viable option for companies that are looking to scale quickly, particularly if their work requires a high level of quality, as with data that provides the intelligence for a self-driving car, for example.

Managed cloud workers – A solution that has emerged over the last decade, combining the quality of a trained, in-house team with the scalability of the crowd. It’s ideally suited for data work because dedicated teams become develop expertise in a company’s business rules over time by sticking with projects long-term. That means they can increase their context and domain knowledge while providing consistently high data quality. However, teams need to be managed in ways that optimize productivity and engagement, and that takes something. Companies should look for partners with tested procedures for communication and process.

Getting Down to Business

From founders and data scientists to product owners and engineers, AI developers are fighting an uphill battle. They need all the support they can get, and that includes a dedicated team to process the data that serves as the lifeblood of AI and machine learning systems. When you combine the training and management challenges that AI developers face, workforce choices might just be the factor that determines success. With the right workforce strategy, companies will have the flexibility to respond to changes in market conditions, product development and business requirements.

As with the space race, the pursuit AI in the real world holds untold promise – but victory won’t come easy. Progress is hard-won, and innovators who identify strong workforce partners will have the tools and talent they need to test their models, fail faster and ultimately get it right quicker. Companies that make this process a priority now can ensure they’re in the best position to break away from the competition as the AI race continues.