

## AMAZON EMBRACING ROBOTIC TECHNOLOGY MAY MEAN FEWER JOBS



Amazon recently entered into an agreement to buy Kiva Systems, Inc. for 775 million dollars. As part of the deal, robotic technology will be added to Amazon's vast network of warehouses. But will the new technology mean fewer jobs available? The acquisition was approved on Monday, March 19th, and should be closing in the second quarter of this year. Amazon's warehouses, which are known as "fulfillment centers," have generally utilized employers to handle work in favor of robotic technology. These fulfillment centers are vital for the company's popular online retail business, and the centers also provide services to other merchants. Kiva is a developer of automatons that move around warehouses, quickly transporting crates and boxes. Products are placed on shelves, which sit atop robots resembling mobile carts. Orders can consequently be completed much faster and more efficiently. However, it also means that fewer workers are necessary to manage various tasks. Scott Tilghman, an analyst at Caris & Company, said in an article from Reuters.com, "This is a way to improve efficiency. Given the scale of Amazon's operations, it makes sense to have this capability in house." Gap, Inc., Staples, Inc. and Crate & Barrel are three companies that have already utilized Kiva's technology in their warehouses. And although Amazon is just now applying robotic technology to its fulfillment centers, other businesses that have been purchased by the e-commerce company in the past few years, such as Quidsi and Zappos, also have Kiva-supported warehouses. "Amazon has long used automations in its fulfillment centers, and Kiva's technology is another way to improve productivity by bringing the products directly to employees to pick, pack and stow," said Dave Clark, Amazon's vice president of global customer fulfillment. Amazon's attempts to "improve productivity" have been much fiercer recently since the company's growth has necessitated the opening of many new fulfillment centers. Aaron Kessler, an analyst at Raymond James, said that the costs of fulfillment at Amazon have risen from just over eight percent of revenue in 2010 to more than nine percent last year. "That's been a big focus for investors recently," Kessler noted. "It's a big cost. They are shipping so much and increasing volume, so they need to figure out how to get more leverage out of these fulfillment centers." So does that "leverage" mean that the robots are taking over? Or, more specifically, that some of the warehouse workers at Amazon will be losing their jobs? Kiva's technology will indeed render some employees' positions insignificant. But the International Federation of Robotics offers a positive outlook of robotics in the workplace. It credits robotic technology as creating nearly three million jobs and further claims that, in the next several years, robots will be responsible for the creation of a million more. New technology helps save money, which can be used for the addition of jobs – for us humans.