

Supply Chain Visibility and the Internet of Things

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Throughout every level of the supply chain, it's important for companies to maintain visibility. For instance, in order to make sure products and parts get to where they're going, companies need to be able to track progress from the warehouse to the customer. However, companies don't always have the visibility they want and need. According to a 2014 survey by Smart Manufacturing Technologies, 40 percent of manufacturers have no real-time visibility of company processes. This lack of tracking ability can have unintended negative consequences for businesses.

Process visibility - companies tracking where their products are in the supply chain - is one thing that could affect company operations. Asset visibility is another important piece of the manufacturing puzzle. Warehouse workers and managers need to be aware of the location of their products and equipment, because if they spend too much time looking for things that slows down productivity and can harm a company's bottom line in the long run. Adrian Jennings, vice president of manufacturing industry strategy at Ubisense, wrote in an article for Manufacturing Business Technology that if products are being searched for and not shipped, that could lead to a slowdown of cycle time and therefore increase inventory and decrease throughput.

However, there is hope for warehouse management practices. The advent of the Internet of Things has made big waves in the manufacturing industry recently. By using smart sensors and attaching them to products, companies can track exactly where a product is in the warehouse or where it is in the supply chain. This latest industrial revolution is being referred to as "Industry 4.0," because it's changing the way the manufacturing and shipping industries do everything within their operations, from locating products to tracking them and everything in between. According to PricewaterhouseCoopers, 35 percent of business nowadays utilize some kind of sensor technology to streamline processes, and their use of these processes is helping to increase supply chain visibility.

RFID to the Rescue

Radio frequency identification devices make up part of Industry 4.0. Because they connect products to warehouse management software, they can increase a company's visibility by helping to track products and streamline data collection. According to RFID Arena, they help warehouse employees make sure things are where they're supposed to be with no errors or discrepancies.