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Delivery for: The Future

SUMMARY

Most of the goods in the world today travel by freight by means of sea, land, air, or a combination of multiple modes. These two articles from the technology news website *The Verge* give a sample as to what is to come in the near future in the world of commercial shipping.

The first article, posted in June 2016, details the recent deal signed between Russian port and oil company Summa Group, and Hyperloop One, a Los Angeles-based startup in the process of creating and manufacturing high-speed transportation through a series of aboveground and underground tubes that would contain capsules propelled by AC motors and air compressors. While the Hyperloop concept was initially conceived by Elon Musk, co-founder of Tesla Motors, SpaceX, and PayPal, as a transonic passenger transportation network, the vision of this deal is to move freight cargo containers that can travel from China to Europe and Russia in a day. While Hyperloop technology is still being developed by several companies and engineers around the globe, many countries in Europe, Asia, and North America are interested in implementing a Hyperloop system, which, if widely realized enough, could, as Russian President Vladimir Putin says, “fundamentally change the global economy” (Hawkins).

The 2010s have been filled with rapid developments in creating commercially available vehicles that can use radar, motion sensors, odometry, and GPS technology to drive themselves. The second article, posted in May 2016, is an introduction to a new San Francisco-based startup called “Otto”. Founded by employees of Google, Apple, Tesla Motors, and Cruise Automation, Otto is in the process of creating hardware and software that can be installed into commercial trucks to make them self-driving. A video made by *The Verge*, and attached to the article, states that over 300,000 crashes and 4,000 deaths per year involve trucks, mostly due to driver fatigue. While Otto says humans will still be needed to operate the trucks on surface streets and to get around certain state regulations on autonomous vehicles, trucks with Otto will be able to drive themselves on highways, “which account for the overwhelming majority of a typical truck route” (Ziegler). Their goal is to decrease the amount of time that trucks and their drivers will need to spend between locations, which will improve efficiency and maximize safety for truck drivers and others on the road. The article compares Otto to companies that are also competing to create autonomous trucks, such as Daimler, which tested its Highway Pilot system in the Mercedes Future Truck 2025, and the Volvo Group, which is working on self-driving trucks in Europe. Otto is completely self-funded with no external investment or funding, and the company hopes to either have service centers install their product onto existing trucks, or partner with manufacturers to have it built into the manufacturer’s newest truck models.

OPINIONS/IMPRESSIONS

The biggest question and concern about the impact of this kind of technology is the impact it would have on jobs. While Otto says truck drivers will still be needed with the current state of autonomous-vehicle technology, all the innovations being made recently in self-driving vehicles point to a more-likely future where, while Otto may not displace jobs initially when it’s

implemented, the inner computing will eventually evolve to the point where it will only need a human to start it up and tell it where to go. Additionally, the amount of people in the world that work in ports, on ships, in trucks, on airfreight carriers, and on freight trains is nearly impossible to count, and Hyperloop and similar technology could replace it all. So the question is, is it ethical to automate millions of these jobs for the greater good?

Automation is as inevitable as invention itself – it's always improving, and it's always happening, and, in my opinion, it is not something that should be stopped. Humans will still be needed at the ports and stations to load and unload freight, confirm deliveries, and send out cargo to new destinations. In addition, freight delivery jobs that can be replaced won't be replaced all at once by machines; technology is a gradual process.

Autonomous freight delivery is only one example of the growing question of what jobs will be taken over by robots next. Theories differ on to what extent, but the fact is that humans have been making tools since before language existed, yet these tools have only so-far facilitated certain industries, helped grow economies, and increased our standard of living. Jobs that have been, and will be, replaced by technology were, and will be, the unskilled, lowly ones that most people don't want to do anyway, and this is nothing new or to fret over. No one has to be an elevator operator anymore because of electronics that make them safer, faster, more abundant, and cheaper than manual human operations. Telephone switchboard operators, who used to sit for long hours at desks in crowded rooms, don't exist anymore because of automated systems. Less people have to work in dirty, mind-numbing industrial factories because of robots. Numerous data-tracking information, such as the New York Stock Exchange, no longer need to be tirelessly and riskingly done by mistake-prone humans. And yet, blue-collar workers are not at war with engineers, and they never will be. Technology allows people to specialize and work

towards higher-paying, highly-educated careers. The more menial jobs that are put in the hands of automation, the more we can get away from the “It’s not an easy job/It’s a dirty job, but someone’s got to do it” mentality. It’s impossible to predict exactly what the future will be like, but it would not be right to hinder human progress, production, or globalization to satisfy some shortsighted outlooks.

Now, while Otto and Hyperloop may seem like they could change the way the world works, their challenge, and the challenge of all future technologies, will not be if whether or not what we can imagine is possible, but whether these new ideas can have start-up costs low enough to compete with conventional systems, even if they will save money in the long-run. Otto is already decreasing costs to transportation companies by creating technology that can built into existing trucks, rather than creating an entire line of trucks from scratch. Electric cars, vertical farms, lab-grown meat, renewable energy, service robots, drone deliveries, space tourism, and whatever else is trending on *Wired* or *The Verge* are all great ideas, but unless they can find a way to make them affordable to most consumers, they will not come close to revolutionizing the world in the way they hope to accomplish. But if they can solve that challenge, we can get closer to a world where technology, like autonomous freight delivery or robots, is not a novelty or is only in business due to a few generous billionaires, but is as much the norm as the smart phone and the family car.

SOURCES

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