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Final Thesis Paper

Has the Increase of Technology Harmed our Retail Workforce

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The advancement of technology has influenced the increase of production in the work place, as well as harm the well being of humans. Jobs have either been taken from humans and given to a more advanced robotic system thus harming the workforce for humans, it has developed a increase of pressure one individuals for a single task, or it has allowed companies to force for unrealistic standards and goals on employees. The advancement is technology has brought companies, manufacturers, and retailers as a whole greater chances at more effective and efficient ways of reaching the masses as well as assuring a more enjoyable or swift experience while in stores or ordering times. However, there have been reports of employees being replaced by advanced machinery that are able to do the same job and maybe better in some options, as well as reports on overworked staffs with unhealthy work ethics in order for the company to reach their goals. This paper will explain the ways in which the advancement of technology has help make the production and experiences of stores or online better for individuals and the companies that use them, then will explain how it has also hindered the experience for the employees and even for some shoppers.

Positive outcomes with the use of technology:

According to part of my research, the use of technology has help retail stores thrive in many different aspects. Whether in store, on the sales floor, inventory or online, researchers say technology has help boost sales. According to a BizTech magazine staff (2019), they say a study that was conducted proves that in store sales have increased by 5.4 percent over the previous years of 2017. There are 6 different technologies that are said to help the improvement of performance in employees which are Mobile devices, Enterprise mobility management, IT

infrastructure, Data analytics, Radio frequency identification and Beacon technology, (2019).

Mobile devices are what most employees are used to seeing at this point. They are the used of

products such as I-Pads, other tablets or smartphones. They are used for employees to be able to

look up inventory data while still on the sales floor or for faster checkout for shoppers, they are

also a way for your manager to track your efficiency through out the period of being logged in

the device. Enterprise mobility management go hand and hand with Mobile devices. They are

also another way for your employees to track you as well as the mobile devices being used. The

main importance of the EMM is that it is a safeguard for all the card data of shoppers that use the

mobile devices. It ensures the protection of shoppers personal information which is also key in

making consumers feel secured after shopping with at a store. IT infrastructure helps with the

networking, storage and processing of the stores systems, Data analytics help with many things

like ensuring the inventory is in stock, RFID helps with loss prevention of products, and Beacon

technology, similar to the use of mobile devices, is used to give the consumers an extra push

with making purchases.

Kati Chitrakorn from the Business of Fashion (2018), says year 2017 has been the worst

year for brick-and-Mortar retail stores on record, due to the many stores that have close from not

meeting the needs of consumers. One reason for this is the lack of technology used in their

stores. Similar to BizTech, Chitrakorn has listed different types of tech savvy ways to help and

keep retail and many other businesses afloat. The few named were Augmented Reality,

Blockchain, Countless Shopping, and Facial Recognition. The performance of the Augmented

Reality is incredible, it was first designed to help surgeons operate in their present location and

simultaneously improving their accuracy, (Chitrakorn, 2018). Retailer however has found a way

to use it to my understanding as what sounds like a filter. Not your ordinary filters, however. Blockchain is used in the Fashion Industry for retailers to help consumers place a garment under a persist category. These categories range from the exact location where the garment was made, the types of materials, fabrics as well as chemicals used to create the garment, is the garment an original or a knockoff, and get as detailed as is the garment a stollen piece or how much were the manufacturers paid to make the garment, (2018).

Countless shopping is used in retail for the purpose of helping consumers with self checkouts, in a more technical and enhanced way. The technology allows consumers to scan a code in order to enter a store digitally. Scanning items digitally on a shelf will add them to their cart then allows them to checkout once the purchase in completed. The store is aware of each item that is scan and once it is scanned and paid for it is digitally removed from the shelf. Then consumer then comes into the store picks up their items and leave, the receipt is saved on the app. Writer Kati Chitrakorn from Business of Fashion mentions that stores such as Zara, Rebecca Minkoff and Amazon has started implementing these devices, (2018). Another brand that was mentioned was Walmart which I have started to see early holiday commercials in which Walmart advertises the use of this service. Lastly, Facial Recognition has been implemented in many retail stores to help consumers pay for their items. Stores like Walmart has placed this device in their store to track the facial expression of the consumer to rank the level of customer satisfaction, (2018). Other stores are using the facial recognition to document customers that walk into the store. When I say document I mean they will have stored information on their clients and what they like so if the client walks in regardless of their appearance and if any retailer recognizes

them, the device will pick up on who they are and the retailer will know how to be of better service to them.

Chitrakorn has mention Amazon as one of the many companies that has started the use of advanced robotics systems in their stores. Amazon has also implemented robotics in one of their warehouse fulfillment centers. The warehouse located in Staten Island of New York and they literally have robots around the entire building that help run the production of handling customers ordered items as well as packaging the shipping them out. According to Tracey Porpora from Silive (2019), Amazon is 855,000 square-feet that is the size of 26 football fields, and has 2,250 full-time positions. Tracey also mention the fulfillment center is a place where robots and humans work together to pick, pack and ship customers packages. In one department that focuses on the picking the items and sending the off to either be packed or shipped out, robots are there to make things efficient for employees.

The way things use to work in warehouses were, many different employees would be giving a chart and number of items that needed to be pick out to send off to consumers. The employee would walk down long isles until they found the exact isles they needed to get an item from, scan the barcode of the item, take it off the shelf then place in cart. Once the employees cart is filled they will walk back to a particular area in the warehouse to drop off the items to be packed or shipped. In some cases some Amazon warehouses still operate like this today. The Amazon located in Staten Island, NY however functions with the help of the robots. As I explained many warehouse operate by the employee walking down long continuous isles looking for particular items to scan and walking back long isles just to send the items off, but at Amazon

JFK8 there are robots that carry eight feet tall by four feet wide contains of numerous different items straight up to the employees.

Each employee stands at a station, once the employee signs into that station with their login ID it gives the robots what I would assume alerts that the station is open to bring work to. Once the robots have been alerted they make their way to the station where the employee stands, there is a screen that tells the employee what items they are looking for and a projector that shows exactly on the eight by four container where the item will be, the employee picks the item scans it, places it in a bin to then get send off to either another station of packers or shippers. This is just one department in the whole fulfillment center, each department has a special feature where robots either bring work to the employees or help for example in packing there are robot that help tape the boxes that are fulled with items, then proceeds to the shipping department. Amazon has created a system that has taken their employee from doing things the long and tedious way to establishing a fast and effective way of reaching the mass. Amazon has done this all through the use of robotics and technology.

The harm technology brings to the workforce

The increase of technology has indeed help a lot with the stop of retail stores going under and have been able to help provide better services to their consumers, but have brands stopped to think about the harm they have and will continue to bring their workers. Writer Jonathan Vanian, from Fortune reported that while some workers feel the growth of technology will be great opportunity, others feel that one day they will lose their jobs due to the technology. Others being two out of three retail workers, (Vanian, 2019). Jonathan's report stated that despite many

employees seeing the opportunity aspect that technology has bought, 66 percent still believe that

technology will eventually place them in their job title, and 57 percent believes that technology

will negatively impact them by reducing their wages, hours and thus their benefits, (2019). I can

see why some employees may feel this way due to some of the advancements used in retail

stores that was mentioned by Kati Chitrakorn from the Business of Fashion. One being Countless

checkout, the use of shoppers being able to check their selfs out digitally, then come into the

store to pick their items up, (2018). If consumers can now skip the step of being greeted by

retailers and share interactions among the retailers but is the purpose of paying an employee

hourly for the whole shift or even at all. As an employer or as an owner, a smart way to increase

revenue at a store or your companies is to cut off the number of employees you have working in

your store, especially the ones you really have no use of. By placing technologies such as

Countless checkout as a direct link to your store, you leave a number of great workers with no

purpose thus leads to their termination.

　　　Another report written by David Rotman says that Erik Brynjolfsson a Professor at MIT

Sloan School of Management has been making the argument that the advances in technology has

been destroying jobs faster then they have replacing them, (2013). Professor Brynjolfsson

believes that technology has been eliminating the need for the typical types of jobs and leaving

the workers worse off. (2013). After reading Professor Brynjolfsson statement about workers

being left worse off, I remember what writer Jonathan Vanian, from Fortune reported about how

some employees do feel like the advancement of technology has brought some opportunities

which I assumed they may have meant to go to college and further their education in order to

making more money. So I thought how could they be worse off if they proceed to further their

education then I realized not everyone that has a job can afford to attend college and pay their

monthly bill as well as take care of their families. Another theory is that some workers can take

out loans to help with their education. The set back with that would be they have to pay their

loans back once they graduated so if they are able to get a higher paying job, they probably won't

see much of their money because now they'll have another large bill to handle. Despite the

opportunities some workers believe the advancement of technology will be pushing them for, it

will not be a pleasant push without some type of support.

Another technological advancement I would like to refer back to, what Kati Chitrakorn

from Business of Fashion mentions about Facial recognition. The purpose of Facial recognition

was to help with the services of helping a customer pay for their items as well as to check to

satisfaction of a shopper after they have made their purchases or simply just walking around the

store, (Chitrakorn, 2018). I believe that this feature can result in some workers losing their jobs.

Let's say the device tracks the facial expression of customer that does not appear to look happy.

The employer comes to the last employee that tended to the customer and ask if they may know

why the customer seemed unhappy after her purchase the employee says no. After some thought

and sharing the concern with HR, they decided that based on the data collected from the facial

recognition the employee did not perform his/her job the their best ability and they decide to

terminate the worker. It seems extreme but what if the use of these devices or computer systems

can be a treat to employees jobs in that way. The use of a device such as facial recognition to

retrieve the satisfactory based off a customer expression can determines a numbers of things if

the customer seems unhappy.

A recent report has been published on October 16, 2019, on the unhealthy work

conditions of Amazon located in Staten Island, NY. Tracey Porpora from Silive (2019), has

reported that employees at the fulfillment center are forced to work faster with limited amounts

of breaks and it has resulted in injuries or physical pain in about 66 percent of workers. The

average schedule for an employee at Amazons Fulfillment Center is a ten hour shift. It can start s

early as 7:15am or 6:15am and end at 5:45pm or 4:45pm. That is truly an eleven hours of work

with the exception of a 30 minute break and two 15 minute breaks. Due to the time of shift starts

most employees are expected to wakeup very early hours in order to get ready for work which

most workers complain they don't have time to get or make breakfast. At the warehouse there are

frigerators with frozen breakfast goods which will not always be a fresh start to a workers day.

From the time a worker clocks in at 7:15 they are timed, they are then expected to make it to

their stations within 15 minutes of the morning stretches and is continued to be timed from that

time until the first 15 minute-break. If a worker decides they have to use the bathroom between

the times of clocking in and breaks, they are timed. If an employee takes longer then 13-15

minutes to get back to their station and start working it is considered TOT, Time off Task. With a

time off task that is as long as 15 minutes you can get an automatic writeup. In addition, if you

are in a department in which you are timed for your performance and your performance has been

too low, that can also result in a writeup and lead to a termination. One can understand

employees are reporting injuries and / or physical pain.

In conclusion, the advancement of technology has influenced the increase of production

in the work place, stores have been able to connect with your consumers on a more efficient

level, they have helped consumers shop at a more convenient time and place or in the comfort of

their homes, and it has made it possible for retailers to track the satisfaction levels of your

consumers around the store, while also using these devices to keep data on a shopper stored so

when she shopper came into a store, the retailer would know who the person is and what the

person likes thus being of better assistance to the shopper. The use of these devices have

ultimately saved some Brick-and-Morton stores from shutting down. Although the development

of more technology used in stores has help in ways of keeping Brick-and-Morton's afloat, no one

may have expected it to hurt their employees in a physical and economic way. Workers have

complained that they feel the time will come where they will be replaced by these advanced

devices and others have been forced to work harder in order to achieve the goals and

expectations of their employers. I myself have seen recently a store go from having five to six

employees cashing customers out to seeing six new builtin kiosks being placed in the store and

only three employees cashing out customers, so I understand what workers mean when they say

they feel they will be replace sooner or later. As far as being forced to work harder, I also

understand this feeling because I worked for a company that had very high expectation of their

workers due to the use of robotics systems in the store.
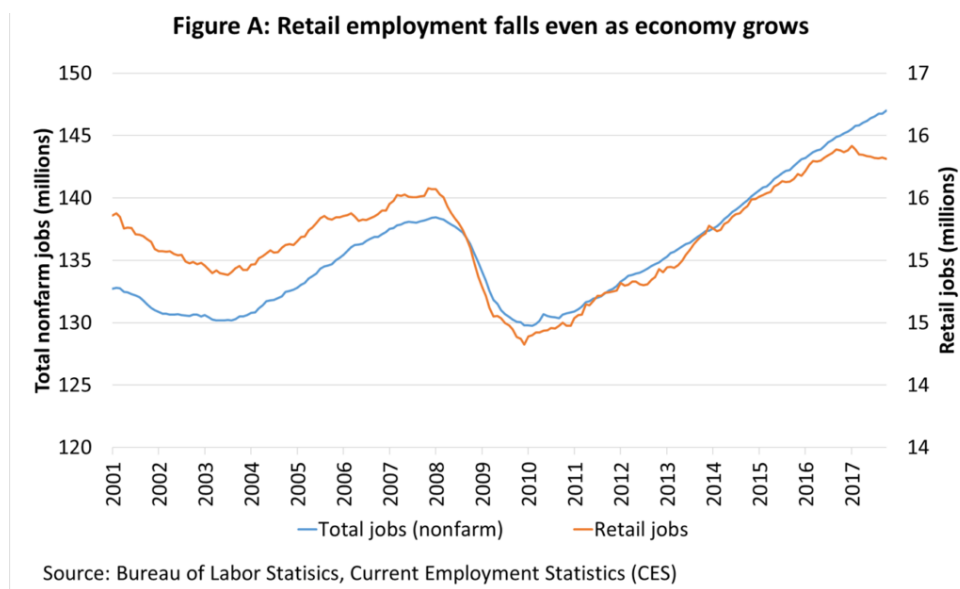

Figure 1: Industry at a Glance: The Future of Retail. (2018, April 16).

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