

Assignment 6.1

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TCH 115: Robotics of the Future

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Research an issue in today's society that could be fixed with a robotic system and come up with your own solution.

Shoplifting is a problem that has increased since the COVID-19 pandemic. A spokesman for CVS, Michael DeAngelis, stated that they “experienced a 300% increase in retail theft from their stores” since the pandemic began. Some states, like California, have made some shoplifting legal. For example, it’s only considered a misdemeanor in California if you steal \$950 or less. Furthermore, California has made it illegal for retailers to confront shoplifters, which is outlined in California’s Senate Bill 553. However, California recently amended that senate bill to add an exception for ‘safety personnel’ to be able to confront shoplifters. Unfortunately, most businesses can’t afford dedicated safety personnel. This leads me to my solution, a Robotic Loss Prevention Guard.

Recently, Elon Musk’s company Tesla, unveiled their new robot that helps you with daily tasks like completing house chores or running errands. In an ideal world, my solution would involve working with Tesla and adding a layer of shoplifting prevention to their Tesla Bot.

Figure 1



Tesla Bot (2024). Screenshot retrieved October 12, 2024 from <https://www.tesla.com/we-robot>

The Robotic Loss Prevention Guards would add two elements of security. One is intimidation. I mean, who would want to go up against an emotionless robotic security guard whose only goal is to retrieve stolen items? According to Neurolaunch.com psychological intimidation is a form of emotional abuse, fear, manipulation, and coercion to control and dominate others. Adding an intimidation tactic to loss prevention can deter potential shoplifters from wanting to deal with the repercussions of a Robotic Loss Prevention Guard.

The second would be the technology aspect. Each item in the store would have an electronic tag or sticker on it. The electronic tag cannot be removed by a tool other than the keys (also known as tag removers) at the registers. If an item can't have a tag placed on it, a sticker can be used. The sticker can only be deactivated if scanned by the store's specific scanner at the register.

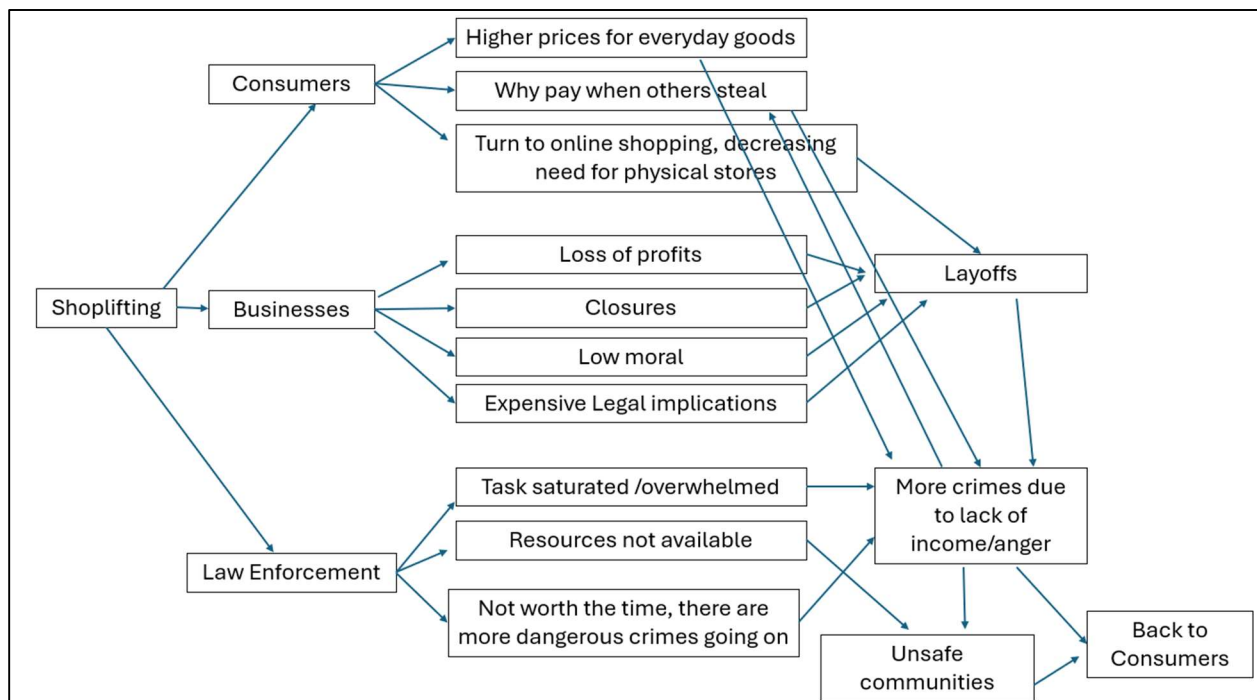
If the tag is not removed or the sticker is not properly scanned it will alert the Robotic Loss Prevention Guard to confront the shoplifter. The Robotic Loss Prevention Guard will alert the shoplifter that they need either to leave the item(s) before exiting the store, return to the register, speak to a store associate, or that law enforcement arrival is imminent. The notification will be loud and intimidating. The Robotic Loss Prevention Guard will have the ability to chase cars up to 40 mph. The store managers will have specific codes to disable the Robotic Loss Prevention Guards.

Robotic Loss Prevention Guards can be leased for \$700 a month. A Tesla representative will work with you and your store when it comes to setting up metrics for the Robotic Loss Prevention Guard(s). An additional insurance policy can be purchased for \$45 a month through Tesla. The insurance policy intends to protect retailers from any bodily harm the robotics can cause during pursuits.

Lastly, I would like to work with Congress on adding verbiage into federal and state bills that add protection for companies wanting to use Robotic Loss Prevention Guards. The goal is to decrease shoplifters and ensure the safety of store personnel. If the Robotic Loss Prevention Guard is successful, the next goal would be to add similar robots to schools. These robots would have the ability to scan for weapons like knives and rifles.

In conclusion, when researching shoplifting, I relied heavily on systematical thinking similar to what we did in class with health systems. By using systems thinking I was able to show the three main entities shoplifters initially affect which are consumers, businesses, and law enforcement. From there I was able to visually lay out how it can affect entire communities. Hopefully, Robotic Loss Prevention Guards will come to fruition.

Figure 2



Note. Screenshot of systems thinking presentation via PowerPoint by Ashley Kennedy.

References

Tompkins, A (February 15, 2022). Why has shoplifting been ‘out of control’ since the pandemic began? Retrieved October 12, 2024 from, <https://www.poynter.org/reporting-editing/2022/why-has-shoplifting-been-out-of-control-since-the-pandemic-began/>

Guidelinelaw (January 21, 2024). California \$950 theft and shoplifting law 2024. Retrieved October 12, 2024 from, <https://www.guidelinelaw.com/california-theft-law/>

Phan, K and Ramirez L (September 15, 2023). California bill does not make it illegal for employees to confront shoplifters. Retrieved October 12, 2024 from, <https://apnews.com/article/fact-check-california-bill-553-shoplifting-illegal-false-808408149947>

Tesla (2024). We Robot. Retrieved October 12, 2024 from, <https://www.tesla.com/we-robot>

NeuroLaunch editorial team (September 14, 2024). Retrieved October 12, 2024 from, Psychological Intimidation: Recognizing and Overcoming Manipulative Tactics. [https://neurolaunch.com/psychological-intimidation/#:~:text=Psychological intimidation is a form of emotional abuse, but its effects can be just as devastating.](https://neurolaunch.com/psychological-intimidation/#:~:text=Psychological%20intimidation%20is%20a%20form%20of%20emotional%20abuse,)