

Amazon, the biggest e-commerce platform, has become so ingrained in our society that buying anything online is synonymous with it. Many people are aware of the positive and negative impacts of the company, but the convenience of the platform prevents people from choosing alternatives. In the words of Hasan Minaj's *Patriot Act*, Amazon, "Convenience is the commodity that matters most to our generation."<sup>1</sup>

E-commerce is growing larger every passing year and it is increasingly evident that brick-and-mortar in-person stores may no longer be around. Movements like "shop local" and "buy local" are popular because of the many benefits of local small businesses. One of the many reasons to buy local is the typically more sustainable processes used in creation of consumer goods. Another reason to support small businesses is that you are directly supporting someone's dream. The main drawback of small businesses is that it usually is not as convenient as large businesses. For example, if you wanted to purchase groceries, clothes, and electronics, it is very unlikely that one trip to one local business could meet all of your needs. However, a trip to a large chain store like Target or Walmart would most likely be able to meet all of your needs.

Therefore, a clear need for a tool that allows user customization to meet personal sustainability goals to offset the environmental impact of online shopping was discovered and Pachira was created. Pachira is a small step in making individual consumerism more intentional and informed. We want to empower our users to make more informed decisions about their personal impact while still being convenient and user-friendly. Users can search for local alternatives filtering by large and/or small businesses. This allows for them to be able to make informed decisions as there are tradeoffs the user can optimize for: convenience or sustainability.

Pachira is a combined web application and browser extension that aims to increase the sustainability of online shopping in a world increasingly embracing e-commerce. Users install a browser extension that will scrape their online shopping cart contents. Pachira will then give users a score based on their cart contents and give users the option to view alternatives. All the suggested alternatives are brick-and-mortar local stores filtered based on user preferences such as business size, distance from the user, and other factors. We also provide environmental impact scores of our alternatives to help users make more informed purchasing decisions. If a user selects a presented alternative, we will provide an eco-friendly route from their location to the brick-and-mortar destination. Pachira also aims to allow users to steadily improve their sustainability and track their progress. This is done by data visualization of past use and allows users to easily see their impact and empowers them to continue to set new sustainability goals for their consumerism.

While corporations have a greater need to reevaluate their large environmental impact, individual efforts toward sustainability are still important on a smaller scale. Pachira empowers users to hold themselves accountable to their own sustainability standards and allows them to take control of their personal environmental consumption.

<sup>1</sup> Minhaj, Hasan, “Amazon | Patriot Act with Hasan Minhaj | Netflix” *Youtube*, commentary by Hasan Minhaj, 4 Nov. 2018, [youtube.com/watch?v=5maXvZ5fyQY](https://www.youtube.com/watch?v=5maXvZ5fyQY)