Machine Learning in Grocery Shopping

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I believe machine learning could be used to create the most cost-efficient grocery purchase app that can collect data from all the nearby stores and based on what the customer is asking for, pick out the ones with the cheapest price, and have them delivered to their door. The application will be kind of similar to Uber Delivery, but instead of the customer spending time browsing through each option, the cheapest option will automatically be presented and processed once the customer approves. I think in today's world, while most supermarkets offer pickup and delivery, the customer is limited to the contents of that store and will be forced to pursue other stores for other necessary products. With this application I am proposing, everything will be accumulated into one complete purchase list without additional browsing. Over time it can form an automated grocery ordering list that way the user wouldn't need to go through the entire process of picking the best items out of the recommendations. The automation will require user preferences of ingredients, the time of the week they typically order, the items will be selected based on grocery market proximity, and

Ethical concerns that will arise will of course be the decision for the customer to share their location as well as grocery markets understanding that this application will consistently compare their item prices to other stores, possibly creating the opportunity that most people will avoid the higher priced item. Grocery stores price their items higher based on a practice called zone pricing. Zone pricing is the raising of prices based on the location of the store geographically as well as its distance from other stores (Ebben, 2010). This in turn will force the company to back out of the app, losing both business and options for people to pick from. If people have preferences for certain brands, this could lead to a large issue. Additionally, for those who are very rural, this application wouldn't be of much assistance as the delivery costs could be much more than the profit made selling the items. This will require some big business

decisions and some critical thinking to solve. There wouldn't be any political implications for this application, but economic implications would be that some supermarkets could make more business than others, especially for the customer's convenience, which could hurt them financially and lead to issues for people visiting their physical locations.

With these ethical concerns and economic implications in mind, I still believe the application could prove useful for those without access to transportation or are at severe distances from grocery markets. It could also be used by the general public so that they can consistently work on living and saving money especially in parts of the world where the cost of living is higher.

Sources

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