**Ethics in Data Analytics**

*Scenario 1: Customer loyalty at a supermarket is using shopping data to suggest products that a specific customer might like to purchase.*

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| Pros | Cons |
| * Allows for customised experience for customers when purchasing items, for example, if a customer like buying a certain type of apple like Granny Smith, they could be offered a discount if they purchased a certain weight * Provides suppliers what items are in high demand and whether if an item is not longer profitable to sell, based on time of year and week. For example, incentivising purchasing popcorn on weekends during lockdown period using customer loyalty cards | * Some customers may not be comfortable sharing customer’s buying and eating habits as well as their medical/religious conditions. For example, if a customer only buys gluten free products due to allergies. * Some retail bodies may see this as an opportunity for gaining profit as they treat shopping data as a revenue stream, potential of data being exposed to unauthorised third parties. |

*Scenario 2: Medical bodies (such as hospitals and government) are able to allow insurance companies to see your medical history and data, so that insurance companies are able to better price their insurance policies.*

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| Pros | Cons |
| * Allows for patients to have customised health insurance based on their needs. E.g. allocating funds to chiropractor sessions for a patient with back pain * Provides transparency between patients and doctors which can lead to reduced doctor visits and lower chance of emergency admissions | * Algorithms built on medical data can also include patient’s socio-economic status, ethnicity and residency status factors could have biases that discriminate on low-income earners, large families, people of colour or non-citizens * Data sharing for some patients between insurance companies may cause suspicions for users, who may be worried about maintaining their confidentiality with new technologies emerging |

*Scenario 3: Online maps use location data from users' mobile devices to figure out which restaurants are popular (i.e. by tracking how many people go to a restaurant through the use of GPS on people's phones)*

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| Pros | Cons |
| * Popular restaurants can utilise their promotion from the developers of the maps app, increasing their revenue and profit margins, due to increased impressions and foot traffic * Allows for competition between neighbouring restaurants for higher foot traffic | * Consent of customers’ location may not be given or customers be aware of the data permissions of the app when data is captured and has the possibility of being sold to third party companies that may breach data privacy laws, locally and internationally. * Unpopular restaurants or restaurants with low foot traffic may be not directed to potential customers. |