DATA101: Introduction to Data Science

Lecturer: Dr Ryan Admiraal

WRITTEN ASSIGNMENT

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Short (maximum 1,000 word) essay about:
•What legal, ethical, and cultural considerations would need to be taken into account by data scientists working on a particular problem or question (which you need to identify yourself).
•The written assignment must be on a topic that is not related to COVID.

Utilizing Facebook users' data in maximizing their experience on the flatform.

Facebook is the most popular social media platform worldwide, with 2.958 billion monthly active users on September 30th, 2022 (Meta, 2022). In New Zealand, 74.8 percent of 13+ audiences using the platform in 2022 (KEMP, 2022). Every day, Facebook collects a tremendous amount of data and utilizes it to improve users' experience. For instance, the platform recommends pages, photos, products, or advertising based on the data shadow of users – what they have clicked on, searched, or liked. By tracking users' activities, data scientists are offered a valuable source of data that can be used to identify which contents are the most attractive to a specific group of audiences or improve advertising efficiency. Despite these significant benefits for users and the social networking platform, there are several legal, ethical, and cultural issues that should be considered thoroughly by data scientists.

The fact that social networking platforms collect data from users raises many concerns about information security and personal privacy. According to New Zealand Privacy Act, personal information is defined as "the information about an identifiable individual and information relating to a death that is maintained by the Registrar-General" (Ministry of Justice, 2020). The Information privacy principle 5 states that personal information is prevented from loss, access, use, editing, disclosure, and other misuse. As data scientists of Facebook, they need to ensure that user information is not disclosed or used for unclear purposes. However, it is very difficult to guarantee that such personal information is completely protected. Taking the example of the Cambridge Analytica scandal involving Cambridge Analytica, Facebook, and the US Elections. Cambridge Analytica was found to be using Facebook Data sourced from a Cambridge University professor to work for a Presidential Candidate in the US. This information was used to deceive and manipulate people in order to change their political views and votes(Harshil Kanakia*, 2019). The case shows that user information is possibly shared between companies, and some people are willing to spend money to buy that information to serve many different purposes. And the most important thing is that users are not aware that their data is being illegally sold and used. The question of concern for Facebook's data scientists is whether personal information is being effectively protected the platform as well as the Law; whether the exchange of user information between companies is safe; and who responsible for ensuring such information being used lawfully and for the right purpose.

A vital ethical consideration for data scientists in collecting data on Facebook audiences is discrimination in advertisements. As a global corporation, the data scientists team of the

platform puts much effort to analyse different patterns among nearly three billion users coming from various countries around the world. The platform has to break down the number of users based on different characteristics of language, culture, religion, gender, location, and so on, thereby finding meaningful insights of each user group to help improve the experience on social media. For instance, Facebook cooperates with female product manufacturers to advertise shampoo for women directly to female users; or the social networking platform recommends interesting places nearby the current location of users. However, this zoning is subject to many controversies related to human rights. Doc Searls, Founder of ProjectVRM at Harvard, an ethics and technology research firm, says that utilizing social networking platforms' data is "attractive" for advertisers, but the situation of "bias" between user profiles possibly occurs (White, 2017). One significant example is that it is unreasonable when a platform shows high-paying careers for men and hides them for females and other minor user groups. Therefore, it is necessary to use AI technology that combines demographics in order to help everyone to access advertising equally, regardless of age, gender, or race.

In recent years, there are many concerns about the cultural crisis on Facebook. There has been a notable increase in the number of pages and groups on the platform that promote white nationalism and/or anti-Muslim agendas (Putter, 2019). Although Facebook seems to be trying to ban pages, groups, or posts containing racist elements, such pages and groups are still scattered and cause discomfort, even psychological damage to the concerned. Data scientists have an important role in using algorithms to filter information, predict posts and groups that contain racist content, and remove them from Facebook. Thus, the experience of users, especially those belonging to the minority group, will become more pleasant, and at the same time prevent cases of attacks that lead to psychological problems.

With a huge amount of data collected from users worldwide, there are chances for Facebook to improve the user experience as well as get further benefits. On the other hand, the data is also a great challenge faced by Facebook's data scientists. Data scientists thus have a responsibility to carefully consider the laws, ethics, and artistic requirements applicable to Facebook's performance.

References

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