

The first ethical issue for a computer professional is the misuse of personal information, from employees' information and data in their email accounts to the customers' data on its website, including personal information and credit cards.

Personal information is valuable. We call it "new gold" (COMPTIA, 2021). The cause of misuse of personal information can be, for example, the data was accessed by an inappropriate person, the leaking of information while collection, improper information storage, colleagues may expose the customers' personal information accidentally, by email or shared on personal social media, etc. (IEEE, 2011).

To protect personal information from misuse, securing the information system is vital. There are two aspects of the information security system's security: physical and logical, to achieve confidentiality, integrity, and authorisation availability. The solutions can be encryption of data transmission and data storage; restricting the users from accessing the data and modifying the system with user classification; setting up a period that allows the users to access the data, such as during the office hour, but not for the rest of the day.

Also, we need to legalise data collection and preservation. According to The Fair Information Practice Principles (FIPPs), we need to set out the regulations, which principles are:

1. No personal data record-keeping system is secret;
2. Individuals can find out how does their personal information is being stored and used;
3. Individuals able to choose and prevent their personal information from misuse
4. Individuals able to amend their personal data from the system
5. The company should ensure that personal data are being used correctly and have measures to prevent the misuse of data (IEEE, 2011).

The second issue is an unclear responsibility for managing personal data and technology. It is always confused about who is responsible for different technologies or data after the expansion or growth of the company. For example, who is responsible for the big data, cyber security measure or management of personal data: who is accountable to data the personal data is confusing at this point, Or when integrating a credit card payment system will the third party, who will be responsible if there is any breach. It is the responsibility of everyone, but it's very easy to have confusion once an incident has been happened (COMPTIA, 2021).

To overcome this issue, we need to create a culture of responsibility. Education for the employees is essential to let them understand that they are responsible for the ethical and safe use of technology. Also, reviewing and updating the governance document will help regulate the fair use of data (COMPTIA, 2021).

The third ethical issue is using AI. It's widespread, but much personal information is collected while building an AI system. These can be including:

1. Data for face recognition: Face recognition is one of the popular MFA and physical login authentication methods, such as the front door login of a company; facial recognition data is collected and stored in the company's database. Therefore, it is a potential risk for staff to misuse, collect without permission, etc. Also, facial recognition will cause a human rights issue, for example, limiting someone's freedom by recognising their face through CCTV.

2. As AI ables to replace humans, job replacement will lead to a concern of job security from the employees (COMPTIA, 2021).

3. Acquisition of data: Any gathering, data use, and its processing will involve data privacy. Compliant with the code of data ethics. For example, the GPDR is the biggest concern always. Also, the impact of proper use of personal data affects the person themselves and society. For instance, self-driving and high-frequency systems are the AIs learning based on the preferences and interests of the users, but it never covers everyone's preferences. Therefore, we can see many cars crashing from the self-driving system or the market disaster due to the high-frequency trading systems (IEEE, 2019).

Although AI benefits the growth of the company a lot, we need to improve, create a map of perfection, and make sure we have compliant with the AI ethics:

1. Every use of data should be legal, whether civil or criminal.
2. The use of AI should consider the social cost. When designing an AI system, we should not use the social cost excessively.
3. Use the AI what is expected during the initial design.
4. Being aware of the actual use of AI does not according to the expected use,

References:

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