Reflective activity - ethics in computing

Read Stahl et al (2016) and Bott (2014) Chapter 1.

In the Stahl et al (2016) paper, the authors state that “many of the authors involved in researching the ethics of computing remain wedded to their disciplinary traditions and fail to provide actionable advice to relevant stakeholders.”

Consider yourself as a relevant stakeholder, a Computing professional working for a company of your choice. Examine how one or more of the ethical issues mentioned affect your role in the company and what actions you would need to/can take. You should justify your stance by also reviewing any papers included in this study or other relevant literature. Your discussion should also highlight the impact your actions would have on applicable legal, social and professional issues. Please note that there is no right or wrong answer here, this exercise is to help you evaluate the legal, social ethical and professional issues that affect computing professionals in industry.

Stahl et al. (2016) go into great detail about various ethical issues discussed in computing literature. The review is thorough, and helpfully it provides a sense of scale through illustrations such as a word cloud, tables and graphs. The discussion also provided a useful insight into the direction of technology and its terminology, such as the agency example where agency is “conceptually associated with the idea of being capable of doing something that counts as an act or action” (Himma, 2009: 19), with most papers reviewed “concerned with something other than someone being an agent” (Stahl et al., 2016: 24).

Privacy was, by some margin and increasing, the most discussed topic of ethics and computing, illustrated in both a topic connections map on (Stahl et al., 2016: 21) and a temporal development chart (Stahl et al., 2016: 28). Privacy is a very broad topic though, so continuing with the principle of selecting a topic that featured heavily in the discussion, and hence is of relatively high importance, “consent” was discussed regularly in the same context as privacy (Stahl et al., 2016: 22), was one of the top issues (Stahl et al., 2016: 13) and scored highly in the table of social and practical issues (Stahl et al., 2016: 15). Consent is therefore the issue selected to assess the potential impact on a computing professional.

We can start by considering legal and regulatory requirements. The ePrivacy Directive, colloquially knows as “the cookie law” is European legislation that requires user consent before cookies, other than those that are “strictly necessary” to the operation of a website, to be used. It also requires that consent can be easily withdrawn (Koch, N.D.). There are many more details concerning the types of cookies with different purposes and durations, but suffice to say a computing professional developing a website for use within the European Union would need to be careful to adhere to the ePrivacy Directive to not just behave ethically, but legally.

Broader than cookies, “The General Data Protection Regulation (GDPR) is the toughest privacy and security law in the world” (GDPR, N.D.a) and there are heavy fines for non-compliance. The legislation sets out specific conditions for an individual to consent to having their personal data used, including that it must be clear what an individual is consenting to, that there is evidence that consent has been given, and that, like the ePrivacy Directive, consent can be withdrawn (GDPR, N.D.b). Any computing professional dealing with personal data would need to understand the rules of consent with the GDPR legislation. The

legislation applies to data that a company already holds as well as gathering new data. So where the ePrivacy Directive is concerned with interactions on a website, GDPR is far more reaching. A computing professional might not even be designing a website, but is perhaps constructing a marketing campaign to their existing customers. If they use their customers' data for marketing purposes without having been given consent to do so, they will potentially be in breach of GDPR, which would be both illegal (in the EU) and unethical.

Now let's assume that the computing professional in question is not ready to start their marketing campaign yet because they need to do some research first. Consent is an important ethical concern for research, such as questionnaires. It is important to obtain informed consent from participants for their participation and how the data will be used. However, often researchers believe that filling in an online survey is, by its nature, implied consent; "if you fill the survey out, you are consenting to doing it" (Buchanan & Hvizdak, 2009), but that is not the case. It is important for the computing professional to explicitly state at the beginning of the survey what the data will be used for, and to obtain and record the participants informed consent. Of course it is also important for the facts presented to be accurate. Getting informed consent for one purpose and then using the results for another purpose would be completely unethical!

Finally, a topic of some interest at the moment is the use of data in Artificial Intelligence (AI) models, and in particular large language models or generative AI. Training an AI model with personal data would of course require informed consent. What starts to become less clear is training large language models and generative AI. This is typically done by filling them with large quantities of data, but there are questions about the legitimacy of using data without permission. For example, OpenAI and Microsoft are being sued by The New York Times for copyright infringement because published work has been used to train ChatGPT, which can now answer questions that would otherwise be sourced from The New York Times, thereby driving traffic away (Grynbaum & Mac, 2023). Similar concerns have been raised about generative AI image generation, which generates new images but after being trained on existing images. The as yet unanswered question is "should the owners of the images used to train the model have some rights over the new images created?" Or another way, "should the owners of existing images be required to consent to their images being used in the first place?" These are points that are not yet enshrined in legislation because they are as yet untested I law, but from an ethical perspective the computing professional should be mindful, once again, of using any data without the explicit informed consent of its owner.

References

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