

Introduction to Data Science and AI

Assignment 4: Ethics

Stefan Velev, 0MI3400521

This essay will examine a possible introduction of a staff tracking system. It will endeavour to acquaint the reader with the potential ethical issues that lie behind that decision. It will outline the appropriateness of using such technologies in the field. All of this will be presented in the form of an answer to a specific moral dilemma. It will determine which parties could be moral agents and what their moral responsibilities are in the presented situation. To answer the key question of whether such an employee monitoring system should be installed and used, we will analyse the situation from the perspective of the separate ethical theories – consequence-based ethical theories (utilitarianism), duty-based ethical theories (deontological ethics), character-based ethical theories (virtue ethics). The essay will conclude with the author’s point of view regarding the ethical case.

A company is considering using a system that will allow management to track staff behaviour in real-time, gather data on when and who they email, who accesses and edits files, and who meets whom when. The HR department at the company is in favour of introducing this new system and believes it will benefit the staff at the company. The company’s management is also in favour.

The main stakeholders concerned are the **company’s management**, the **HR department**, and the **staff**. They are all moral agents, i.e. people who have the ability to discern right from wrong and to be held accountable for their own actions. All moral agents have a moral responsibility not to cause unjustified harm. Moral agency is assigned only to those who can be held responsible for their actions. In our situation the three groups of stakeholders identified have that ability even though the final decision comes from the company’s management. The staff tracking system is not a moral agent. It is only a tool having its own advantages and disadvantages.

When solving moral dilemmas, we always make a decision based on some reason that outweighs all others for us. However, behind the choices we make, there are always some ethical theories despite the fact that we are not aware of them. We will examine the presented ethical case through the prism of the three divisions of normative ethics – **utilitarianism**, **deontological ethics**, **virtue ethics**. For that reason, we will briefly familiarise ourselves with their foundation.

The consequence-based ethical theories (utilitarianism) always determine morally correct behaviour by analysing the harms and benefits of the consequences of a given event. If the total positive consequences exceed the total negative consequences, then the action is morally correct. Otherwise, it is morally wrong. According to the English philosopher Jeremy Bentham (1748-1832), who was among the first philosophers to systematically formulate the utilitarian ethical theory, the most important criteria are social utility and the degree of happiness that it brings. John Stuart Mill (1806-1873) further emphasised on increasing the level of happiness in people as a criterion for explaining a moral system. Unlike other goods that humans desire as means to one or more ends, Mill argued that people desire happiness for its own sake. Thus, he concluded that happiness is an intrinsic, universal good. According to him, when we are asked repeatedly “Why do you want to ...?”, it will eventually lead to the answer “Because I want to be happy”.

We consider two types of utilitarianism – act-utilitarianism and rule-utilitarianism. In act-utilitarianism what we are concerned with are the consequences of individual acts, while in the rule-utilitarianism we

look at the results of following rules and principles. Thus, according to act-utilitarianism, specific acts of torture or slavery could be morally permissible if the social benefit of those acts outweighed the cost of adverse consequences. Rule-utilitarianism, on the other hand, argues that policies which allow unjust acts of torture or slavery would have generally negative social consequences from the perspective of society that is unacceptable in itself.

How should we proceed from the perspective of our ethical case? We need to determine which consequences will be more favourable than unfavourable for the greatest number of people. If we look from the staff point of view, there are different advantages and disadvantages. One benefit for them would be the file versioning aspect. They would be able to see who works on a specific file or who is responsible for a specific change in it. In that way, the traceability in the company would improve and that would mean that employees would not lose time to ask who is working on a specific file or who has made that change so that they can ask them why. While this is a useful function of the system, the other characteristics are not. Gathering data on when and who staff email exceeds the admissible limits since having an email account is something personal and individual. Moreover, employees can see their own email history and are able to send emails with carbon copy (CC) and blind carbon copy (BCC) as a way of including more people as recipients. If they are in a situation where they have to provide evidence for a specific email, they can find it on their own and there is not any danger of changing the attributes of the letter as they are fixed and cannot be modified. The only admissible situation for gathering that data would be if the recipients and the whole data are anonymised and if the company is large enough so that specific cases cannot be revealed. In fact, that gathering should only be utilised for conducting statistical data analysis. The other mentioned functionality of the system (tracking who meets whom when) is unproductive for the staff as well since in such situations they would only think about the fact that they are watched and followed which would cause social harms for the whole company.

What about the company's management? They would benefit from such data as they will have control of the internal processes in real-time. A more thorough analysis with the system will help them detect if a specific employee does not contribute much to a specific department. If so, he/she could be moved to another department or even be dismissed. Moreover, the relationships between the employees can be easily tracked. Based on that information, the company can perform rearrangements with the aim of improving the total productivity. All the practices mentioned are on the edge of the law, some of them even unacceptable. The HR department is also in favour. As well as following the employees, they can use cognitive dark patterns which are often manipulative.

As a whole, if we think from the viewpoint of consequence-based ethical theory, we have to consider whether the employees outnumber the company's management and the HR department. In most situation, the employees prevail so our decision should be against introducing all functionalities of that system. We should only preserve the version tracking feature as it is a good practice when working with a lot of files and modifying code for instance.

Duty-based theories ground morality in specific, foundational principles of obligation. These theories are also called deontological in view of the fundamental nature of our duty. According to the German philosopher Immanuel Kant (1724-1804), it is our duty that underlies morality, not the consequences of actions, nor the happiness of having done them. Our rational nature and capacity are what distinguish us from other species. Kant views duty theory through the prism of the so-called "categorical imperative", which in one of its versions states that we should treat people as ends, never as a means to some end, i.e. we should always treat people with dignity and never use them merely as instruments. Thus, slavery will never be justified, not because it may have negative social consequences, but because in this way some people are used as a means to some end.

Kant's theory of duty, however, does not tell us what to do when two or more moral duties clash. A more recent theory based on duties, that of the British philosopher William David Ross (1877-1971), provides

this answer. According to Ross, there are so-called *prima facie* (self-evident) duties that are part of the “fundamental nature of the universe” and that we must follow. If in a given situation only one of these duties can be chosen, we apply it (it becomes our *actual duty*) and know how to act. However, when situations in which we have to choose between two or more such duties arise, according to Ross we will intuitively determine which of these duties is our *actual duty* through a process of “rational intuitionism”.

One of the theories based on duty is the theory of rights. Rights and duties are related in such a way that the rights of one person imply the duties of another person. One of the foundational works for that theory is “Leviathan” by the English philosopher Thomas Hobbes (1588-1679). Through this biblical monster, Hobbes describes the power of the “Commonwealth” as a sovereign over the individuals. At the beginning, we are in our “state of nature”, in which there are no existing moral rules and laws. We are in a state of freedom (natural state), which allows us to satisfy all our desires. However, all this is not free since each individual has different goals and desires, and we must always think about being careful all the time. There is no sense of security, we are in the state of “the war of all against all”. To get out of this state, the “Commonwealth” comes to our aid – a collective entity of people in which we are all willing to sacrifice some of our “absolute” freedoms to the sovereign in the name of gaining security. These ideas are laid at the heart of the so-called social contract, a theory developed by the English philosopher John Locke (1632-1704) and then by Jean-Jacques Rousseau (1712-1778), to whom belongs the thought “Man is born free, and everywhere he is in chains”.

Having analysed some of the foundations of deontological ethics, we can see how it could help us and essentially be applied to our ethical case. The theory of duty can be considered in several aspects. On the one hand, introducing the staff tracking system only because it will help the company to have better control over its employees and in that way increasing its profit, constitutes a violation of the “categorical imperative”. In that situation, the company would not be essentially interested in the personality and freedom of its workers but only in its gain. In this way, the company’s management uses the staff as a means to blindly follow their goal. On the other hand, the General Data Protection Regulation of the European Parliament and of the Council must be considered. As the name says, the Regulation is on the *protection of natural persons with regard to the processing of personal data and on the free movement of such data*. In Article 5 we can see all the principles related to the processing of personal data. Introducing such staff monitoring system must be in compliance with the Regulation.

Moreover, if the specific type of system consists of AI components, then Regulation (EU) 2024/1689 of the European Parliament and of the Council (EU AI Act) will be into force. The staff tracking system would be classified as a high-risk AI system on the legal basis of Article 6(2) that refers to Annex III where specific high-risk AI systems pursuant to Article 6(2) are listed in different areas. The applicable category for the system (considered in the essay) is mentioned in Annex III in 4(b):

*AI systems intended to be used to make decisions affecting terms of work-related relationships, the promotion or termination of work-related contractual relationships, to allocate tasks based on individual behaviour or personal traits or characteristics or to **monitor and evaluate the performance and behaviour of persons in such relationships**.*

Being classified as a high-risk AI system, it will be assessed before being put on the market and also throughout their lifecycle. The technical documentation needed for such systems is huge in order to guarantee that the system fulfil the necessary requirements in the Act. In addition, people will have the right to file complaints about such AI systems to designated national authorities (when the Regulation enter into application).

The last theory we will consider is virtue ethics. Many philosophers believe that morality consists of adhering to specific “rules of conduct”. It is assumed that a person must learn these “rules” and then make sure that each of his/her actions conforms to them. Character-based ethics places less emphasis

on consequences (utilitarianism) and duty (deontological ethics) and instead emphasises on the importance of developing good habits of character. Historically, the virtue theory is one of the oldest normative traditions in philosophy, tracing its roots back to ancient Greek civilization in the writings of Plato and Aristotle.

According to Aristotle (384-322 BC), it is not enough to learn and reproduce certain rules, but to develop certain virtues in our habits. The right virtues are enough for a person to live well. The main question of how to act in a given situation should not point to certain rules, as in other theories, but focus on answering the question “Who should I be?”. A person who is inherent in the right virtues will not even think about how to act in given situations but will react at the moment according to his/her character traits and values. The limitations of this theory, however, are that it is valid only for homogenous societies, for people with the same views, worldview. This was the case with the ancient Greek civilization. Nowadays, it cannot be said that modern states are homogenous. On the contrary, they are heterogenous because the people who inhabit them have different ideals and points of view on different issues, different values, different virtues. How do we resolve conflicts that may arise with competing virtues? Which of them prevails? The theory of virtues does not directly give us this answer. That is also the reason why with the advent of the “Age of Reason” and the increasingly widespread thesis of individual human rights, this theory remains in the background.

For our case we do not have much information about the virtues of the moral agents. We only know that the company’s management and the HR department are in favour. The question that can be raised is to what extent such a system is morally correct to exist and what functionalities to include. In the view of the author tracking the meetings of the employees and gathering email data for them is morally intolerable because such data can be provided by the workers if required. Moreover, the attributes to emails cannot be deleted and formal meetings can still be registered. Informal meetings and emails need not be tracked and demanded as this violates specific human rights.

This essay has examined a possible inauguration of a staff tracking system. It has endeavoured to acquaint the reader with the potential ethical issues that lie behind that decision. It has outlined the appropriateness of using such technologies in the field and discussed the situation from the perspective of the separate ethical theories – consequence-based ethical theories (utilitarianism), duty-based ethical theories (deontological ethics), character-based ethical theories (virtue ethics). It has concluded with the writer’s point of view regarding the ethical case.