

Ethical, Moral and Cultural Issues

Moral: Discussing what is right and wrong, from the viewpoint of an individual

Social: Discussing what is right and wrong, from the viewpoint of society

Ethical: Discussing what is right and wrong, from the viewpoint of an external entity

Cultural: Discussing what is right and wrong, from the viewpoint of ethnic groups, countries and religions

Environmental: Discussing what is right and wrong, from the viewpoint of the environment

Computers & The Workforce

- Computers are becoming more advanced, and are being used in the workforce
- Moral: Workers may struggle to stop working, adversely affecting their work/life balance
- Social: Driverless cars and drone deliveries will reduce the need for human drivers, leading to job losses. It will also lead to greater productivity, since the cars can run 24/7, improving efficiency and decreasing costs. Machines are more accurate and reliable. Human error related accidents will decrease, improving Road safety.
- Ethical: Mobile Devices are very easy to lose or have stolen; if there is sensitive information on them, this can breach the Data Protection Act
- Cultural: In Factories, shift sets from many lower-skilled workers, to a few highly skilled technicians to run the robots

Automated Decision Making

- Algorithms can be written to allow Automated Decision Making.
- Moral: Individuals may be harmed or killed because of an algorithm. However, productivity will increase, since algorithms will make decisions faster.
- Social: Driverless cars and drone deliveries will reduce the need for human drivers, leading to job losses. It will also lead to greater productivity, since the cars can run 24/7, improving efficiency and decreasing costs. Machines are more accurate and reliable. Human error related accidents will decrease, improving Road safety.
- Ethical: Less cars will be needed, since no cars will ever be left idle. Thus, the necessary materials can be used for other purposes. Greenhouse gas emissions will decrease. However, car companies will lose profit, leading to job losses or bankruptcy.
- Cultural: Less money spent on petrol and diesel. More money invested in other areas.

Artificial Intelligence

- Describes any machine programmed to think, work, and react like a human.
- Moral: An individual will not want to be judged by an AI system, as part of a university or company application.
- Social: Society may not agree with the idea of computers running important aspects of our daily lives.
- Ethical: AI recruitment will considerably speed up the process, increasing efficiency. However, less people will be needed in the Admissions department, leading to job losses.
- Cultural: Increase productivity, since AI are faster, more accurate and need less sleep than humans. However, using AI will lead to job losses and a greater rate of unemployment.

Environmental Effects

- Our devices place a large strain on the environment.
- Moral: Increases in temperature will lead to heatwaves in cold areas, where the inhabitants are ill-prepared.
- Social: Clear proof of global warming, creating a stronger movement to reduce emissions faster.
- Ethical: Crops will be able to grow in places where it was previously too cold. Selling these crops will lead to great profit.
- Cultural: Disposing of obsolete devices in landfill sites or the ocean can destroy a country's ecosystem by killing many species who can no longer survive in such conditions.

Ethical, Moral and Cultural Issues

Censorship & The Internet

- The deliberate suppression of materials in terms of what can be published or accessed
- Moral: In the UK, individuals are blocked (and protected) from accessing extreme pornography websites. However, in North Korea, individuals cannot access any material that disagrees with government policy, keeping the population indoctrinated.
- Social: In the UK, society will be protected from extreme websites. In North Korea, the government uses censorship to keep strict control over society, making sure that they don't rebel.
- Ethical: In North Korea, censorship will keep the government in control for longer. In the UK, employees will not access extreme pornography websites when they are supposed to be working.
- Cultural: In North Korea, censorship may be used to indoctrinate people to hate certain ethnic minorities.

Monitor Behaviour

- There are a range of devices and methods being used to track and monitor our behaviour.
- Moral: Individuals can use wearable devices to monitor their exercise and sleep patterns.
- Social: CCTV cameras reduce crime but can be considered as an invasion of privacy.
- Ethical: GPS tagging can track dangerous criminals so that the police always know where they are. However, companies may monitor employees' online activities outside of work hours.

Analyse Personal Information

- Companies extracting information from their massive volumes of data can be of enormous value.
- Moral: This data can be used to train machine-learning algorithms, improving their ability to diagnose and treat patients. However, having all this data can be considered as a massive breach of privacy.
- Social: Driverless cars can use data from their environment to reduce accidents and traffic jams.
- Ethical: Businesses can gain great profit. Cultural: Important in stopping climate change.

Piracy & Offensive Communications

- Piracy is the unauthorised copying of intellectual content. Offensive communication refers to any online harassment. Both are illegal.
- Moral: Both actions are immoral.
- Social: Businesses will raise prices to compensate. Social Media platforms will attempt to censor their content. Many inoffensive communications may accidentally be caught, while many offensive communications remain undetected.
- Ethical: Both will damage reputations, and make businesses lose lots of revenue.
- Cultural: Countries will see a drop in creation of innovative products, since creators will feel that their work is unprotected. Ethnic minorities may be targeted.

Layout, Colour Paradigms & Character Sets

- Websites must be designed to accommodate for all people. The Equality Act 2010 makes it illegal to discriminate against providing a service to a certain group of people.
- Moral: Users must find it easy to navigate between pages. People may be offended with the wrong colour scheme. People will be unable to read the wrong language.
- Social: People with visual impairments or other disabilities must be able to navigate your website (enlarge text, alter contrast, alt text).
- Ethical: Well laid-out websites, with a well-chosen colour scheme, will attract more customers.
- Cultural: Menus are on the left in English-speaking countries, but on the right in Arabic-speaking countries. In the Middle East, white = mourning. In the West, white = purity. Typically, a neutral colour scheme with widely positive connotations will be chosen.