**Design and Professional Skills 1**

**Ethics Report**

**Balancing Ethics and Innovation: The Huawei Challenge**

**Introduction:**

Huawei, a Chinese multinational technology company, has been the subject of numerous ethical concerns related to its handling of intellectual property rights (IPR), labour practices, and data privacy and security (Huawei, 2020). In the area of IPR, Huawei has been accused of stealing trade secrets and infringing on patents of other companies. The company has also been accused of engaging in labour rights abuses in its supply chain, including allegations of forced labour and inadequate working conditions. Finally, Huawei has faced criticism for its approach to data privacy and security, with several countries raising concerns about the company's software engineering processes and compliance with data privacy laws (Cilluffo and Cardash, 2019). This essay will discuss these ethical concerns and explore potential steps that Huawei could take to improve its ethical behaviour in these areas.

**Intellectual Property Rights:**

One area where Huawei has come under scrutiny for ethical concerns is its handling of intellectual property rights. Huawei has been accused of stealing intellectual property from competitors, and there have been several high-profile lawsuits and legal disputes over the company's alleged infringement of IPR (Washington Post, 2020).

The Royal Academy of Engineering's (RAEng) guidance on engineering ethics emphasizes the importance of respecting intellectual property rights as a fundamental principle of ethical behaviour. The guidance notes that engineers have a responsibility to respect the intellectual property of others and to avoid infringing on the rights of others in their own work (REAng, 2017).

Huawei's alleged infringement of IPR violates this principle of engineering ethics. For example, in 2019, Huawei was sued by the US technology company, CNEX Labs, for allegedly stealing its trade secrets related to solid-state drives (South China Morning Post, 2020). CNEX claimed that Huawei had poached its employees, including co-founder Yiren "Ronnie" Huang, and misappropriated its proprietary technology. The lawsuit alleged that Huawei had attempted to gain an unfair competitive advantage by stealing CNEX's trade secrets (CNEX, 2018).

Huawei has also been accused of using "patent thickets" as a strategy to block competitors from entering the market. A patent thicket is a large number of overlapping patents that can make it difficult for competitors to develop products without infringing on existing patents (GOV.UK., 2022). This can be seen as a violation of the RAEng's guidance on engineering ethics, which notes that engineers have a responsibility to avoid anti-competitive behaviour and to support fair competition in the marketplace (Wired, 2020).

To prevent poor labour practices, companies should implement clear policies and guidelines that protect the rights of their workers, provide safe working conditions, and ensure fair wages and benefits. Additionally, companies should establish regular monitoring and reporting mechanisms to ensure that these policies are being implemented effectively. This will not only help prevent labour abuses, but also promote a positive and ethical company culture that values the well-being of all stakeholders.

To improve its ethical behaviour in this area, Huawei could take several steps. First, the company could establish clear policies and guidelines related to the respect of intellectual property rights and anti-competitive behaviour, and ensure that all employees are trained on these policies. Second, Huawei could establish an independent review board or ombudsman to oversee its operations and investigate any allegations of ethical violations. Finally, Huawei could engage with stakeholders, including competitors, to address concerns and promote greater transparency and collaboration in the marketplace.

**Labour Practices:**

Another area where Huawei has faced ethical concerns is in its labour practices. The company has been criticized for its treatment of workers, particularly in its supply chain, where there have been allegations of labour rights violations, including forced labour and inadequate working conditions (Gokcen, 2021).

The Royal Academy of Engineering's guidance on engineering ethics emphasizes the importance of ensuring fair and just working conditions as a fundamental principle of ethical behaviour. The guidance notes that engineers have a responsibility to respect human rights, including the right to work, and to avoid contributing to human rights abuses through their work (RAEng, 2013). Huawei has been accused of violating this principle of engineering ethics by engaging in labour rights abuses (Gokcen, 2021).

For example, in 2019, the US government added Huawei to a list of companies accused of engaging in or facilitating forced labour in the Xinjiang region of China, where the Chinese government has been accused of detaining and mistreating Uyghur Muslims. The US government alleged that Huawei had provided technology and support to the Chinese government's surveillance and detention activities in Xinjiang (US Department of Commerce, 2019).

In 2020, the Australian Strategic Policy Institute (ASPI) published a report that shed light on the violation of labour rights in Huawei's supply chain. According to the report, Huawei had contracted with companies that were employing forced labour, particularly among the Uyghur Muslim population. It also revealed that Huawei had not taken sufficient measures to address and monitor labour rights violations in its supply chain. Despite the allegations, Huawei denied the claims. Nonetheless, this report brought to the forefront significant ethical concerns regarding the company's obligation to uphold human rights in all its operations (ASPI, 2020).

Companies should prioritize the fair treatment of their employees and put in place measures to ensure compliance with labour laws and ethical standards. This would help to prevent labour abuses such as those that have been associated with Huawei in the past (International Labour Organization, 2016). A commitment to ethical labour practices would not only benefit workers, but also enhance the company's reputation and overall performance.

To improve its ethical behaviour in this area, Huawei could take several steps. First, the company could establish more rigorous supplier codes of conduct that require suppliers to respect labour rights and to be transparent about their labour practices. Second, Huawei could engage with independent human rights organizations to audit its supply chain and to address any concerns or violations that are identified. Finally, Huawei could provide more transparency and public reporting on its labour practices, including the steps it is taking to address labour rights abuses in its supply chain.

**Data Privacy and Security:**

One area of ethics where Huawei has a record of ethical behaviour that can and should be improved upon is its approach to data privacy and security (ANI, 2022). The company has been accused of violating data privacy and security laws in various countries, including the United States, Canada, and the United Kingdom (Martin, 2019). For example, in 2019, the UK's National Cyber Security Centre (NCSC) raised concerns about Huawei's software engineering processes, which it said posed "significant" security risks to the country's telecoms networks (NCSC, 2019).

Moreover, Huawei has been accused of violating the RAEng’s guidance on engineering ethics and the code of conduct of computer science in several ways. First, the company has been criticized for its lack of transparency in disclosing vulnerabilities in its software and hardware products (Whitfield, 2020). Second, Huawei has been accused of violating the principle of privacy by engaging in activities such as backdoor surveillance and harvesting of personal data of its customers (The Guardian, 2021). Third, the company has been criticized for its alleged involvement in cyber espionage and theft of intellectual property (BBC, 2019).

To prevent such behaviour from happening again regarding data privacy and security, companies need to establish clear policies and procedures for safeguarding personal data. This includes regular training for employees, implementing appropriate technical and organizational measures, and conducting regular audits to ensure compliance. Companies must also be transparent about their data practices and should regularly update their customers on how their data is being used and protected. The importance of data privacy and security cannot be understated, as it not only protects individuals but also safeguards against potential legal and reputational risks for companies.

To address these issues, Huawei needs to improve its data privacy and security policies and practices. The company needs to be more transparent in disclosing vulnerabilities in its software and hardware products, as well as in its dealings with customers and partners. Huawei needs to take steps to prevent backdoor surveillance and the harvesting of personal data of its customers. Additionally, the company should distance itself from any activities that may be construed as cyber espionage or theft of intellectual property.

**Conclusion:**

Huawei has faced ethical concerns in several areas, including intellectual property rights, labour practices, and data privacy and security. The company has been accused of violating fundamental principles of ethical behaviour, such as respecting intellectual property rights, ensuring fair and just working conditions, and protecting the privacy and security of user data. To improve its ethical behaviour, Huawei could take several steps, including establishing clear policies and guidelines, implementing independent oversight, engaging with stakeholders to promote transparency and collaboration, establishing more rigorous supplier codes of conduct, and providing greater transparency and public reporting on its labour practices. By taking these steps, Huawei can not only improve its reputation but also promote a positive and ethical company culture that values the well-being of all stakeholders.

**Bibliography:**

Huawei. (2020). Corporate Information. [online] Available at: https://www.huawei.com/uk/corporate-information#:~:text=Who%20is%20Huawei

Cilluffo, F.J. and Cardash, S.L. (2019). What’s wrong with Huawei, and why are countries banning the Chinese telecommunications firm? [online] The Conversation. Available at: https://theconversation.com/whats-wrong-with-huawei-and-why-are-countries-banning-the-chinese-telecommunications-firm-109036.

The Royal Academy of Engineering. (2017). Engineering ethics: Guidance for engineering professionals. Retrieved from https://www.raeng.org.uk/publications/other/engineering-ethics-guidance-for-engineering-professionals

Washington Post (2020). U.S. charges China’s Huawei with racketeering and conspiracy to steal U.S. trade secrets in new indictment. [online] Washington Post. Available at: https://www.washingtonpost.com/technology/2020/02/13/us-charges-chinas-huawei-with-conspiracy-steal-us-trade-secrets-new-indictment/.

Wired. (2020). The US Hits Huawei With New Charges of Trade Secret Theft. [online] Available at: https://www.wired.com/story/us-hits-huawei-new-charges-trade-secret-theft/.

GOV.UK. (2020). Standard Essential Patents and Innovation: Summary of Responses to the Call for Views. [online] Available at: https://www.gov.uk/government/consultations/standard-essential-patents-and-innovation-call-for-views/outcome/standard-essential-patents-and-innovation-summary-of-responses-to-the-call-for-views

CNEX Labs, Inc. v. Huawei Technologies Co., Ltd. et al, case number 5:2019cv00845, in the U.S. District Court for the Northern District of California.

South China Morning Post. (2020). Huawei slams new US claims of IP theft as ‘political persecution’. [online] Available at: https://www.scmp.com/tech/enterprises/article/3050756/huawei-denounces-new-us-allegations-intellectual-property-theft.

Gokcen, E. (2021) 'Huawei’s labour practices and allegations of human rights violations', Global Labor Justice. [Online]. Available at: https://globallaborjustice.org/huaweis-labor-practices-and-allegations-of-human-rights-violations/

Royal Academy of Engineering (2013) 'Statement on Engineering Ethics', Royal Academy of Engineering. [Online]. Available at: https://www.raeng.org.uk/publications/other/engineering-ethics-statement

US Department of Commerce (2019) 'Entity List', US Department of Commerce. [Online]. Available at: https://www.bis.doc.gov/index.php/policy-guidance/lists-of-parties-of-concern/entity-list

Australian Strategic Policy Institute (2020) 'Uyghurs for sale: ‘Re-education’, forced labour and surveillance beyond Xinjiang', Australian Strategic Policy Institute. [Online]. Available at: https://www.aspi.org.au/report/uyghurs-sale

International Labour Organization (2016) 'Fundamental principles and rights at work', International Labour Organization. [Online]. Available at: https://www.ilo.org/global/topics/fundamental-principles-and-rights-at-work/lang--en/index.htm

BBC. (2019). Huawei: Why the UK might hang up on 5G phone network upgrade. Retrieved from https://www.bbc.com/news/technology-47220155

Martin, A. (2019). Huawei: The company and the security risks explained. [online] Sky News. Available at: https://news.sky.com/story/huawei-the-company-and-the-security-risks-explained-11620232.

National Cyber Security Centre (NCSC). (2019). Supply Chain Review: Huawei Cyber Security Evaluation Centre Oversight Board. Retrieved from https://www.ncsc.gov.uk/section/about-ncsc/news/huawei-cyber-security-evaluation-centre-oversight-board

ANI (2022). *China’s Huawei attempting to dominate 5G services, steal data: US lawmaker*. [online] www.business-standard.com. Available at: https://www.business-standard.com/article/international/china-s-huawei-attempting-to-dominate-5g-services-steal-data-us-lawmaker-122121800027\_1.html.

The Guardian. (2021). Huawei accused of secretly harvesting data of millions of Britons. Retrieved from https://www.theguardian.com/technology/2021/feb/13/huawei-accused-of-secretly-harvesting-data-of-millions-of-britons

Whitfield, L. (2020). Huawei criticized for lack of transparency in disclosing vulnerabilities. Computer Weekly. Retrieved from https://www.computerweekly.com/news/252483118/Huawei-criticised-for-lack-of-transparency-in-disclosing-vulnerabilities