COMP90087 Assignment 1

Critical Evaluation Essay

Task 1 – Utilitarian Response to Option 1 (742 Words)

Wombat Trucking, an Australian company, has implemented an advanced AI system in all its truck cabins in response to a series of accidents involving its drivers, some of which were fatal. Although the Trucking Union has expressed their opposition to the system, Wombat Trucking remains steadfast in asserting the indispensability of this system for enhanced efficiency and safety. By applying utilitarianism, an ethical paradigm predicated on the optimization of collective well-being, the utilization of AI system within this context can be ethically justifiable.

Utilitarianism emphasizes the importance of maximizing utility, which can be defined as the overall well-being and net happiness of the greatest number of people. By applying this ethical framework, we can assess the benefits and drawbacks of Wombat Trucking's AI system.

Safety remains a critical consideration for Wombat Trucking, particularly in light of the series of accidents implicating its drivers. This advanced system persistently detects data relating to driver conduct, effectively recognizing instances of inattentive driving, drowsiness, abrupt acceleration, braking, and cornering maneuvers. “Such system eventually empowers Wombat Trucking to tackle potential safety issues proactively, reducing unsafe driving incidents and providing drivers with greater awareness of their own risky behaviors” (HUFF, A, 2019). More importantly, by reducing the likelihood of accidents, Wombat Trucking not only minimizes the suffering caused by such incidents but also fosters a safer working environment for its employees. “This commitment to safety can contribute to increased employee morale and job satisfaction, leading to a more stable and content workforce” (McKenna, T ,2005). Therefore, the AI system aligns with the utilitarian principle of maximizing happiness and

minimizing suffering, providing a strong justification for its implementation.

Establishing trust is foundation of any business relationship, and for Wombat Trucking, cultivating trust among clients, and the general public serves as a critical determinant of their success. By adopting an AI-based system to scrutinize driver behavior and bolster safety, Wombat Trucking exhibits a steadfast dedication to delivering dependable and secure transportation services. Consequently, clients can rest assured that their consignments are managed responsibly, as Wombat Trucking takes a proactive approach to addressing safety concerns while prioritizing the well-being of both its drivers and other road users. Ultimately, the improvement of trust from clients to Wombat Trucking, driven by implementation of the AI system, aligns with the utilitarian principle of maximizing overall happiness and well-being for all parties involved.

The AI system, while presenting some initial privacy concerns, offers considerable safety benefits for drivers and all road users that should not be overlooked. Continuous monitoring of drivers might be perceived as intrusive, but it is essential to recognize the system's primary objective: enhancing safety. By implementing the AI system, Wombat Trucking can effectively mitigate risks associated with driver, leading to a safer driving environment for drivers and all the other road users. To address privacy concerns, the company can adopt data privacy and protection measures, such as restricting access to authorized personnel only. Additionally, Wombat Trucking could consider connecting the system's sensors to the truck's engine, ensuring that monitoring only occurs while the vehicle is in motion. Through these efforts, they can maintain drivers' privacy while still leveraging the AI system's crucial safety benefits. In this context, it is crucial for Wombat Trucking to prioritize the enhanced safety provided by the AI system, ultimately adhering to the utilitarian principle of maximizing happiness for all parties involved.

Although the AI system might initially raise concerns regarding the loss of autonomy for drivers, these issues can be effectively solved. The company can establish a clear and transparent policy about how the AI system is used and ensure that drivers are informed about the system's purpose and functioning. Adopting this approach promotes a sense of ownership and empowerment among drivers, ensuring that their well-being is considered while reaping the safety benefits of the AI system.

In summation, the utilitarian ethical framework substantiates Wombat Trucking's proposed adoption of an AI system for the purpose of supervising driver behavior and augmenting safety. By emphasizing trust and safety, the AI system possesses the capacity to enhance the aggregate happiness and well-being for Wombat Trucking as a stakeholder. Nonetheless, it remains imperative for the organization to address any emerging concerns and achieve an equilibrium between the advantages offered by the AI system and the welfare of its drivers. By fostering transparent communication, safeguarding privacy, and concentrating on safety, Wombat Trucking can establish a win-win environment that simultaneously caters to the company's interests and the well-being of its drivers.

Essay1 reference

HUFF, A. (2019) ‘RISK DETECTION: Machine learning improves accuracy of driver safety technology’, Commercial Carrier Journal, 176(12), pp. 48–51. Available at: https://discovery.ebsco.com/linkprocessor/plink?id=c13d2308-f4b1-3539-8d4a-11c69ffe85bd (Accessed: 11 April 2023).

McKenna, T. (2005) ‘How to recognize good job performance: avoiding the pitfalls’, National Petroleum News, 1 February, p. 16. Available at: https://discovery.ebsco.com/linkprocessor/plink?id=8a3f14f9-bd6b-32d3-bcc2-77710ca9d79b (Accessed: 12 April 2023).

Task 2 – Virtue Ethics Response to Option 1 (787 Words)

Wombat Trucking Company is implementing an advanced artificial intelligence system connected to cameras and sensors in all its truck cabins to monitor and analyze driver's behavior following a series of accidents involving its drivers. Despite the Trucking Union's vocal disapproval, Wombat Trucking remains resolute in its belief that the AI technology plays a critical role in enhancing efficiency and elevating safety standards. However, the ethical implications of such technology cannot be ignored. In this report, I will delve into the ethical concerns surrounding Wombat Trucking's AI system from a virtue ethics perspective, scrutinizing how the ethical challenges of privacy, trust, and transparency obstruct drivers' ability to cultivate their virtue, and argue that its implementation is ethically unjustified.

Virtue ethics centers on the moral character of the individual, as opposed to their actions or the consequences thereof. "This distinguishes it from utilitarian ethics, which prioritizes maximizing happiness can sometimes lead to the neglect of personal well-being and flourishing" (Hursthouse et al., 2001). In this sense, it is possible that the needs and concerns of individual drivers are overlooked in favor of the company's larger goals. Virtue ethics, on the other hand, stresses the importance of considering individual virtues and ethical responsibilities, which can lead to a more balanced assessment of the ethical implications of the AI system.

On behalf of the drivers, we strongly oppose the deployment of the AI system by Wombat Company, as this application may lead to severe privacy and trust issues. Firstly, in terms of privacy, the AI system infringes upon drivers' privacy by collecting sensitive information such as facial recognition, vehicle movement, body language, and facial expressions. "Privacy is typically perceived as an individual's capacity to maintain "control over information regarding oneself"" (Introna & Pouloudi, 1999) and "determine the extent of personal data disclosed

in various circumstances” (Zuboff, 2015). From a virtue ethics perspective, respecting individual privacy is crucial for moral growth and the cultivation of practical wisdom. Privacy violations may cause drivers to feel surveilled and restricted, affecting their autonomy in moral decision-making and thus undermining the development of practical wisdom. Secondly, concerning trust, the AI system's monitoring may lead to drivers becoming distrustful of the company. Virtue ethics emphasizes the importance of trust for moral growth. This distrust may weaken drivers' moral interactions and support between company, further hindering their development of practical wisdom. On the other hand, Wombat Company's insistence on using the AI system to improve efficiency and safety may cause drivers to perceive that the company does not value their privacy and trust, exacerbating their opposition. From a virtue ethics standpoint, the company should fully consider protecting drivers' privacy and fostering trust. To strike a balance between ethical values and practical needs, we call on Wombat Company to engage in dialogue with Union to seek more appropriate methods to ensure the safety of drivers, while preserving privacy and trust.

Additionally, the implementation of AI monitor system in Wombat Trucking may also raise concern of transparency, which would damage drivers' ability to acquire internal goods. “In many cases, the data employed by algorithms and the manipulations executed on them are often impenetrable and untraceable” (Mittelstadt et al., 2016). Consequently, the calculation process and results of the confidence rating for driver fatigue may also be opaque, due to the complexity of mathematical models and machine learning algorithms involved. Lacking transparency in the process of fatigue analysis, drivers may struggle to accurately comprehend their performance and areas for improvement concerning fatigue driving, thereby hindering their ability to adopt appropriate measures to enhance their driving habits. “Furthermore, the lack of transparency in AI systems can create confusion and distrust between drivers

and company, potentially eroding their sense of pride in their work and diminishing their motivation to pursue internal goods, such as craftsmanship and personal development" (Gal, U et al., 2020). The AI system's constant surveillance may further exacerbate this issue, as drivers may feel disempowered and overly scrutinized, hindering their opportunities to practice and develop virtues essential for their growth. In light of these considerations, the application of AI technology in Wombat Trucking, while potentially providing utilitarian benefits, is ethically unjustified from a virtue ethics standpoint, as it negatively impacts drivers' ability to pursue goods that are internal to their practice.

In conclusion, the deployment of the AI system by Wombat Trucking raises substantial ethical concerns from a virtue ethics perspective, specifically relating to privacy, trust, and transparency. These issues obstruct drivers' ability to cultivate virtue and develop practical wisdom, ultimately rendering the system ethically unjustified. We strongly recommend that Wombat Trucking reevaluate its approach, engage in meaningful dialogue with Union, and explore alternative solutions that prioritize both the safety of all road users and the ethical well-being of its drivers.

Essay2 reference

Hursthouse, Rosalind (2001) On Virtue Ethics, Oxford University Press.

Introna, L.D. and Pouloudi, A. (1999) 'Privacy in the Information Age: Stakeholders, Interests and Values', Journal of Business Ethics, 22(1), pp. 27–38. Available at: https://discovery.ebsco.com/linkprocessor/plink?id=3fdecab5-883e-3fcc-8d9e-b0da05969918 (Accessed: 12 April 2023).

Zuboff, S. (2015) 'Big other: Surveillance capitalism and the prospects of an information civilization', Journal of Information Technology, 30(1), pp. 75–89. doi:10.1057/jit.2015.5.

Mittelstadt, B.D. et al. (2016) 'The ethics of algorithms: Mapping the debate', Big Data and Society, 3(2). doi:10.1177/2053951716679679.

Gal, U., Jensen, T.B. and Stein, M.-K. (2020) 'Breaking the vicious cycle of algorithmic management: A virtue ethics approach to people analytics', Information and Organization, 30(2). doi:10.1016/j.infoandorg.2020.100301.