PPIT Project questionnaire

Cybersecurity and Data Privacy

- 1. How does your organization approach the ethical dimensions of cybersecurity and data privacy, especially in a global context?
- 2. Can you discuss a scenario where cybersecurity or data privacy concerns clashed with regional ethical standards, and how it was resolved?
- 3. What measures are in place to protect against data breaches, and how are they ethically justified?
- 4. How does your organization handle ethical dilemmas related to user data privacy and surveillance?

Al and Emerging Technologies

- 1. How does your company address ethical challenges in AI development, particularly regarding bias, transparency, and fairness?
- 2. What measures ensure AI innovations align with societal values and ethical norms?
- 3. How do you address ethical concerns in the deployment of emerging technologies?

Diversity, Inclusion, and Cultural Sensitivity

- 1. How is your organization actively promoting diversity and inclusion in technology, particularly in AI and cybersecurity fields?
- 2. Can you share a success story or learning experience about integrating diverse perspectives in tech projects?
- 3. How do you address cultural sensitivities in your global IT operations?

Sustainability and Corporate Social Responsibility

- 1. How is sustainability embedded in your IT strategies, particularly regarding energy consumption and electronic waste?
- 2. Can you provide an example of how your IT initiatives have positively impacted environmental sustainability?

3. How is sustainability integrated into your IT strategies and operations, and can you provide an example of a CSR initiative led by your IT department?

Regulatory Compliance and Cyber Law

- 1. How does your organization keep up with the evolving landscape of cyber law and regulatory compliance across various jurisdictions?
- 2. Can you illustrate how international regulations have shaped your cybersecurity and data privacy strategies?
- 3. How do you navigate the complexities of cyber law and regulatory compliance in different regions?

Ethical Decision-Making and Leadership

- 1. How is ethical decision-making incorporated into your IT leadership and project management?
- 2. Can you provide examples of challenging ethical decisions in IT and how they were handled within your organization?
- 3. How is ethical decision-making integrated into IT project management and leadership?

Health, Safety, and Digital Wellness

- 1. What policies ensure the health and safety of employees in IT roles, especially considering the digital nature of their work?
- 2. How do you address occupational health risks associated with technology use?
- 3. How does your organization handle the ethical aspects of information overload and digital wellness among employees?

Managing Globalization and Cultural Differences

- 1. How does your organization balance global IT strategies with local ethical and cultural values?
- 2. What challenges have you encountered in implementing a universal ethical framework across different countries and cultures?

3. How does globalization impact your ethical practices and policies in IT?

Responsible Innovation and Ethical Boundaries

- 1. How does your organization determine the ethical boundaries of technological innovation, particularly in new and emerging fields?
- 2. Can you share examples of technologies that raised ethical questions and how those were addressed?
- 3. How does your organization balance the pursuit of technological innovation with ethical boundaries?

Data Analytics and User Profiling Ethics

- 1. What ethical considerations does your organization take into account in user data analytics and profiling?
- 2. How do you ensure that user profiling practices respect individual rights and societal norms?
- 3. What ethical considerations are involved in user data analytics and profiling, and how do you ensure transparency and user consent in data collection and analysis?

Preparing for Future Ethical Challenges

- 1. What future ethical challenges do you anticipate in the IT sector, particularly related to cybersecurity and AI?
- 2. How is your organization preparing to address these future ethical challenges and opportunities?
- 3. What new ethical challenges do you foresee emerging in the IT sector in the next decade, and how is your organization adapting?

Research in the area

The ethical frontiers in information technology, particularly concerning cybersecurity, data privacy, and AI innovations, are marked by a complex landscape of benefits, risks, and evolving regulatory and ethical standards. Here are some key statistics and insights that highlight this dynamic field:

Cybersecurity and AI Innovations

- 1. **Cost of Cybercrime**: It's projected that cybercrime costs will grow from US\$3 trillion in 2015 to US\$6 trillion by the end of 2021, reaching US\$10.5 trillion by 2025. The average cost of a single data breach in 2021 was US\$4.24 million, a 10% increase from 2019. Ransomware claims have grown by 150% since 2018.
- 2. **Remote Work and Cyber Attacks**: The shift to remote work has significantly impacted cybersecurity. During the first six weeks of the 2020 lockdown, attacks on home-based workers increased fivefold from 12% to 60%.
- 3. Rise in Network-Connected Devices: With advances in 5G, IoT, and Wi-Fi 6, network-connected devices are projected to reach 29.3 billion by 2023 [37†source] . 5G networks, for instance, can support up to a million connected devices per square kilometer, a significant increase from 4G networks.
- 4. **Cybersecurity Talent Shortage**: There's a global shortage of over 3 million cybersecurity professionals, with an estimated 89% growth needed in the field to eliminate this gap.

Data Privacy Concerns and Regulations

- 1. **Web Traffic Tracking**: About 82% of web traffic involves third-party scripts by Google, with nearly half being tracking scripts. Facebook tracks around 15% of web traffic, while Twitter and Microsoft track about 4% each.
- 2. **Targeted Advertising**: 83% of Americans aware of "personal profiles" created by companies have seen targeted ads either "occasionally" or "frequently".
- 3. **Public Opinion on Data Privacy**: While 93% of Americans consider it important to control who accesses their personal data, only 9% feel they have significant control over the data collected from them. Half of American adults believe that online advertisers shouldn't store any customer information.
- 4. **Privacy Laws and Trust**: 66% of consumers want more governments to enact laws like the EU's GDPR, with a majority considering government regulation as the

- biggest hurdle to data usage.
- 5. **Social Media and Data Trust**: Only 47% of social media users are confident in these companies' ability to protect their data, with 81% of U.S. adults feeling their social media privacy is insecure.
- 6. **Data Breaches and Identity Theft**: In the first half of 2018, over 3.3 billion records were lost due to data breaches. Identity theft is the primary reason for most of these attacks.
- 7. **Government Data Requests**: In the second half of 2019, Apple received 159,128 device requests from governments, with the U.S. government accounting for over half of these requests

Societal and Ethical Implications

- 1. **Ethical and Social Dimensions**: Big Data brings with it several ethical and social challenges, necessitating a framework for safeguarding human rights and aligning ethical values with behaviors.
- 2. **Discrimination and Social Cooling**: Big Data technologies have the potential for discrimination and may contribute to 'social cooling', where people alter their behavior due to extensive data collection.
- 3. **Privacy vs Innovation**: There's a need to balance privacy and innovation, with solutions like Privacy by Design and Privacy Enhancing Technologies (PETs) playing a crucial role.

References

- 1. <u>Deloitte Insights on the cost of cybercrime</u>
- 2. Deloitte Insights on remote work and cyber attacks
- 3. <u>Deloitte Insights on the rise in network-connected devices</u>
- 4. Deloitte Insights on cybersecurity talent shortage
- 5. Cloudwards on web traffic tracking
- 6. Cloudwards on targeted advertising
- 7. Cloudwards on public opinion on data privacy

- 8. Cloudwards on privacy laws and trust
- 9. Cloudwards on social media and data trust
- 10. Cloudwards on data breaches and identity theft
- 11. Cloudwards on government data requests
- 12. Emerald Insight on ethical and social dimensions
- 13. Emerald Insight on discrimination and social cooling
- 14. Emerald Insight on privacy vs innovation