

Table of contents

Executive summary	I
1. Introduction	1
2. Mapping the main ethical dilemmas and moral questions associated with the deployment of AI 5	
2.1. Impact on society.....	6
2.1.1. The labour market	6
2.1.2. Inequality	8
2.1.3. Privacy, human rights and dignity.....	12
2.1.4. Bias	15
2.1.5 Democracy	16
2.2 Impact on human psychology	18
2.2.1 Relationships	18
2.2.4 Personhood	20
2.3 Impact on the financial system	21
2.4 Impact on the legal system	22
2.4.1 Criminal law	22
2.4.2 Tort law.....	27
2.5 Impact on the environment and the planet	28
2.5.1 Use of natural resources.....	28
2.5.2 Pollution and waste	28
2.5.3 Energy concerns.....	28
2.5.4 Ways AI could help the planet	29
2.6 Impact on trust	29
2.6.1 Why trust is important	30
2.6.2 Fairness.....	30
2.6.3 Transparency.....	31
2.6.4 Accountability.....	34
2.6.5 Control.....	35
3. Ethical initiatives in the field of artificial intelligence.....	37
3.1. International ethical initiatives	37
3.2. Ethical harms and concerns tackled by these initiatives	42

3.2.1 Harms in detail.....	45
3.3. Case studies	53
3.3.1. Case study: healthcare robots.....	53
3.3.2 Case study: Autonomous Vehicles	59
3.3.3 Case study: Warfare and weaponisation	63
4. AI standards and regulation.....	66
5. National and International Strategies on AI	71
5.1. Europe.....	73
5.2. North America.....	76
5.3. Asia.....	77
5.4. Africa.....	78
5.5. South America.....	79
5.6. Australasia	79
5.7. International AI Initiatives, in addition to the EU	80
5.8. Government Readiness for AI.....	82
6. Emerging Themes	84
6.1. Addressing ethical issues through national and international strategies.....	84
6.2. Addressing the governance challenges posed by AI.....	85
7. Summary	88
8. Appendix.....	90
Building ethical robots.....	90