Comparing the EU and Japanese Legal and Ethical Approaches to AI for Manufacturing

Dr Andrew A. Adams





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Overview

- Social, Legal and Ethical Issues in AI4M
- Common AI Standards
- EU Approach
- Japanese Approach
- Conclusions

Social, Legal and Ethical Issues in AI4M

- General Ethical Issues of AI: privacy; autonomy; accountability; power
- AI4M Ethical Issues: employee privacy; safety; access to jobs
- Legal Issues of AI: explainability; safety; evidence; liability
- Legal Issues of AI4M: safety; liability
- Social Issues of AI: democracy; autonomy; capital; accountability
- Social Issues of AI4M: economic transformation

Common AI Standards

- EU and Japan key partners in drafting international AI standards.
- Focus on AI for social and broad individual good.
- Concern to avoid exacerbating inequalities in power, wealth, autonomy.
- Concern about unaccountable AI systems being faceless arbiters of human concerns.

EU Approach

- First: Hard Law; Second: Research funding; Third: Social Issues
- Legal: Trustworthy AI, AI Act; Liability and accountability issues
- Ethical: accountability; safety
- Social: Limited focus on the social issues of AI4M at the EU level. Seen more as a Member State concern.
- Practical: H2020/Horizon Europe funding for future factories; SLE projects/elements of projects

Japanese Approach

- First: Self-regulation; Second: Research Funding; Third: social context
- Japan, single jurisdiction, has greater direct internal power than EU, but less international economic power
- Historically, self-regulation by commercial companies is the preferred route to socially acceptable outcomes
- Japan's demographics and current economics require different focusses (greater investment in robots, less concern about manual labour)

Conclusions

- EU and Japan share common goals on AI: positive social benefits
- Differences in internal approaches (hard law/self-regulation) may lead to divergent outcomes if they do not seek to work together on common detailed guidelines.
- Social differences (ageing population, existing economic situation) may lead to different social outcomes within common goals.