Ethics Case Study

Synthetic Voice for AI System

Acknowledgement

This sample case study is derived from actual case that is documented in the 2019 CSIRO Discussion Paper “Artificial Intelligence: Australia’s Ethics Framework”.

Context

Alan and Brad have implemented an AI-based Home Assistant system that responds to voice commands. They have chosen a female voice to use, based on research that shows that more people respond to and trust a female voice.

Dilemma

Their own research shows that an overwhelming majority of the users of this system like this voice. However, this decision comes under much criticism from a vocal lobby group that claims that this reinforces the subservient female stereotype.

Options

What action can Alan and Brad take?

1. Ignore the criticism as it reflects only a minority.
2. Invite the lobby group to engage in a public debate about the merits or otherwise of this female voice.
3. Modify the voice to make it more neutral (i.e., of indeterminate sex).
4. Create male and female versions and decide which to use based on user feedback.
5. Create male and female versions and give users the choice of which to use.
6. Something else? Which is…

Considerations

To uphold ACS values, Alan and Brad need to be mindful of the following from the Code of Professional Ethics:

2.2 h Develop systems which are robust, secure, and user-friendly: Systems should be user-friendly to wide audience as possible, so the criticism that the choice of voice is offensive to some people should be taken seriously.

2.3.1 a For unavoidable harm, develop mitigation strategies: If some users of this system find the choice of voice offensive, you must mitigate that harm.

2.3.1 b Be respectful of the views and opinions of others. Respect their differences and take into account others’ points of view: Alan and Brad should acknowledge the concerns about gender stereotypes or any other potential biases that can arise in their system.

2.3.1c Be impartial and fair and do not discriminate unfairly against people in interpersonal interactions or in the design and function of systems: This reinforces the need to take the

objections seriously, and to find a way not to discriminate against those who find that voice offensive.

2.3.1d Model and encourage inclusivity in all your work: To make your AI systems inclusive you need understand who your users are and what they want from your system. The system should not impose or assume any values or preferences that may conflict or offend your users' beliefs, identities, or expressions.

2.3.2c Seek to enhance, in the professional choices you make, the environmental sustainability of ICT systems and the overall quality of life of those affected by them. Ensure that the public interest is defended: This represents a great opportunity to demonstrate that ICT systems can be adapted to avoid offense and contribute to a positive view of the ICT industry.

Ethical Decision

Based on the ethical considerations and practical aspects, option 5 - creating male and female versions and giving users the choice appears to be the most balanced and ethical approach. This addresses user preferences and avoids imposing a single voice type while acknowledging the concerns about gender stereotypes. This option also demonstrates that technology industry is able to adapt its systems.