

The Effects of AI Anxiety on AI Adoption

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Technology and Culture

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April 23, 2023

Artificial intelligence (AI) is a rapidly growing industry with vast technological applications in our society, but with a change in technology comes a change in public perception of that technology and subsequent concerns over the vitality of companies and programs which utilize AI technology. As AI industries evolve, humans have held and developed more anxiety around both the personal use and general societal adoption of these technologies. There are three overarching fears that this human anxiety can be categorized: skepticism around the quality of the programming, a distrust that the AI may put people out of work by replacing human jobs, and the possibility that AI could become super-intelligent and subsequently take over all human control. The significance of these fears today is that as new AI technology is developed, this fear around the industry is potentially threatening the adoption of AI technologies by the public. Further, fear and hesitation in adopting AI technology could limit the significantly positive evolving technologies which affect a variety of social, economic, and humanity industries including arts, education, communications, healthcare, and general efficiency, as well as the future development of AI industries. In this paper, those fears will be explored, as well as the component of AI anxiety being represented in media as this is a significant reveal of how relevant these fears are for people. These even extend from personal fears to corporate image-based fears as companies who use and develop AI technologies strive to have their consumers maintain a level of confidence and certainty in their products and systems. By exploring dimensions of anxiety around AI, social problems triggered by AI can be seen, characteristics of this anxiety can be defined, and a foundation can be laid for both future study and “for regulating AI behavior” (Li, & Huang, 2020).

Human anxieties about AI technology have been seen throughout modern history, though this is also the case with many other new technologies that people are unfamiliar with at the start

of their adoption. One journal article discussing AI fear notes that “our emotions (including fear) are playing a key role in the formation of our intentions, and the emotive dimensions of the transition towards AI-mediated (and potentially fully managed) societies and thus an important aspect to examine both empirically and theoretically” (Cugurullo, & Acheampong, 2023). As any new technology is adopted the first fear from both a user/consumer side and a corporate/distributor side is that the quality of the technology is not up to par. Any innovation especially one with as much controversy as AI must meet a standard of quality in order to be safely and confidently used. If the AI is failing, experiencing bugs, or running into other issues in practice, fear develops out of this instability.

On the other side of this spectrum, there is fear around AI because of its nature; the idea of technology being created that acts in replacement of tasks that would previously require human intelligence, and subsequently, the idea of this programming rendering human intelligence unnecessary in fields of AI application. While AI industries have led to significant areas of job creation, it threatens to replace and put people out of jobs in the next few years in far greater numbers. One Business Insider article mentions that within a few weeks, “Buzzfeed announced that it will be using AI technology to generate content” and that according to a Vice article, “Netflix Japan has already created an animated film using AI-generated artwork” (Koh, 2023). Programming which replaces human efforts in a workforce causes fear of job replacement and with more advancements, an additional accelerated fear of the technology becoming beyond human control. Many analysts of this anxiety have pointed to the potential effects of this fear as falling into what writer Isaac Asimov called the “Frankenstein Complex”, which is the idea that if people have AI anxiety, it is “unlikely that in the future AI will become part our society” and that people reject that which they are afraid of (Cugurullo, & Acheampong, 2023). Asimov

(2023) also argued that above all, the most obvious of fears is that of “the possible harm that comes from machinery out of control” and in the case of AI, a future of technology out of human control.

One way to see the prevalence of fears around AI and evaluate their impact on adoption is to look at how those fears have manifested in media. With a rise in common fears around something comes media which explores those fears in content and theme. This can be seen with special clarity in horror film and television trends covering topics from climate disaster to economic downfall to the more recent themes of unhinged interactions with artificial intelligence. While Netflix’s *Black Mirror* and the 2022 film *Megan* are prime examples of media that explores ‘evil’ effects of evolving technology, cinema, in general, has “seen an increasing amount of Evil AI recently, and this will likely continue into the 2020s because of mounting public concern with AI” (Brownell, 2022). Often this media becomes violent like in those examples, yet in others, “the AI in question is simply malfunctioning” without “malevolence or benevolence in its actions”, and this is the case of an anime called *éX-Driver* in which autonomous cars occasionally get out of control, due to glitches, and human drivers have to chase them” (Cugurullo, & Acheampong, 2023). All of these fear types around AI technology can be seen in media as fictional stories and more recently as factual articles about weird interactions with and effects of AI applications.

Even with all these fears and anxieties around AI technologies, AI tech has grown and has been used increasingly in many fields. Innovation in AI technology is seemingly used and put into industries and used by major corporations whether this fear exists. The greater fear of AI which poses a significant threat to adoption lies in that of company image and standing amongst a consumer base when using AI systems. Author Emily Heyward discusses how a brand “will

run into trouble if it approaches one aspect of its business with good intentions and ignores ethics in another area” and goes on to write that consumers are “hungrier than ever for a brand that they can feel good about buying, and that includes confidence that no dirty secrets will be uncovered”, and that today’s consumers “don’t feel great about companies with AI solutions” (Brownell, 2022). Even companies such as Apple Inc have put off approving updates for “BlueMail”, their ChatGPT-powered app amid “concerns that artificial intelligence (AI) is not ready for large-scale public use” (Proactiveinventors, 2023). It is this fear of large companies which most directly influences AI growth and adoption and is the true holder of power in how anxiety affects the AI industries. Whether or not individuals hold AI anxieties, the “AI revolution is here to stay and its ramifications will become increasingly noticeable in our everyday lives” (Koh, 2023). Human AI fears as seen and perpetuated through media are significant when considering adoption but are not as threatening to AI adoption as the similar fears held by corporations utilizing new AI technologies.