The United States Technology Policy Committee (TCP) recently released a document titled, “Statement on Principles for Responsible Algorithmic Systems”, which aimed to address certain risks associated with poorly written code primarily used for AI, and proposed a framework that developers can use to create responsible systems. As AI is becoming increasingly more commonplace in governments and organizations, the purpose of the statement is to ensure that the algorithmic systems that AI is built on is compliant with legal, ethical, and scientific norms. If these systems are not complaint with these norms, the result can be an AI or similar program which holds unique biases or produce disastrous erroneous results. In this paper, I will provide an assessment of the core of this document and describe the future policy implications surrounding algorithmic systems.

An algorithm is a self-contained step-by-step set of operations used to perform calculations, data processing, and automated reasoning tasks (ACM, 2022). AI is built on a system of algorithms that are trained on preexisting datasets or other sources of information (articles, research papers, etc.) to produce a certain output. For example, ChatGPT, a popular large language model, produces its output based on a wide range of documents that are found online. The algorithms behind the model decide the information to output, based on the input from the user. A problem can arise when the algorithms used in the AI are dysfunctional or are missing certain protocols. For example, when ChatGPT was first released, the model would output misinformation and harmful statements. The Statement on Principles for Responsible Algorithmic Systems provides guidelines for developers to prevent similar reoccurrences. There are 10 principles, but the first five are key. They are: Legitimacy and competency (i.e. Designers should have the management competence and explicit authorization to build and deploy systems), Minimizing harm, Security and privacy, Transparency, and Interpretability and explain

ability (can the developers explain certain outputs through evidence). To mitigate the risks of bias, discrimination, and other negative effects, policymakers could consider enacting legislation mandating transparency and accountability in algorithmic decision-making processes. This could involve implementing requirements for extensive impact assessments prior to deploying AI systems, along with mandating the use of audit trails to ensure transparency and fairness. Additionally, holding operators of AI systems accountable for the decisions made by these systems, regardless of whether algorithmic tools are used, could be crucial in ensuring responsible use and minimizing potential harm to individuals and society.

However, there are a few possible problems with the enforcement of some policies, as mentioned in the statement. The most important is that Algorithms and other underlying mechanisms used by AI/ML systems to make specific decisions can be opaque, rendering them less understandable and making it more difficult to determine whether their outputs are biased or erroneous (ACM, 2022). Some factors which contribute to this include: informational (the data to train models and create analytics are used without the data subject's knowledge or explicit consent), technical (the algorithm may not lend itself to easy interpretation), and economic (the cost of providing transparency may be excessive) (ACM, 2022).

The core of this policy event revolves around the growing utilization of algorithmic systems, particularly AI-based ones, by governments and companies in decision-making processes across various industries. Issues such as opacity in algorithmic decision-making, potential biases, and lack of transparency pose significant challenges to ensuring fairness, accountability, and ethical use of these systems. Information professionals can find themselves at the forefront of advocating for transparency and ethical practices in algorithmic decision-making, while society at large stands to benefit from policies that prioritize fairness, accuracy, and

accountability in the deployment of AI systems. However, failure to address these issues adequately could exacerbate existing inequalities and undermine public trust.

References

ACM global technology policy council releases joint statement on principles for responsible algorithmic systems by US and Europe policy committees. (2022). Association for Computing Machinery. https://www.acm.org/articles/bulletins/2022/november/tpc-statement-responsible-algorithmic-systems