

**Areas of Risk Working with Data on Machine Learning and AI projects:**

**Steps to reduce or eliminate bias, discrimination, and unfairness in work:**

Individual Data Privacy Concerns

AI and Data Collection needs to undergo rigorous testing from industry experts to identify risks, concerns, and impacts of the system being hacked especially in the accounting tax field. Personal information is always a concern and we, as accountants, have a fiduciary duty to protect clients from personal tax information being leaked. These systems should be required to ask for permission to collect data from clients as well as for new users to be able to opt out whenever they like.

Algorithmic discrimination

In order to prevent AI bias from occurring in our data models, especially in the accounting field, we need to make sure that the training data has been obtained from all races, ethnicities, jobs, and different pay grades so that tax or audit information doesn't bias one group more than the other. This is especially important when making new tax laws we don't want to make laws that would harm certain people more in our society.

Poor Data

Machine learning models work on data that we provide to it. Depending on what data we provide the machine learning model we could get good or bad answers. Steps to reduce this from occurring include: evaluating the training data, looking for any outliers in the data that might skew it as well, and any unstructured data that the model will struggle with understanding. It is typical in the field of accounting and finance to have outliers in data sets. We as accountants need to make sure that the information, we provide to managers is not skewed and it is important to observe the data for any deficiencies before we feed it to the machine learning models.

Regulatory challenges and Risks

People heavily rely on information they see online without fact checking. Because of this, AI could also increase false information, social manipulation, privacy concerns etc. In order to solve this problem, we need to first educate congress and law makers about the ability of

the machine and be honest with what it can and cannot do. Then we need to sit down with lawmakers to decide what is the best way to positively use AI to benefit everyone while also keeping everyone safe. This is critical in the accounting field where laws for tax are constantly changing. There needs to be some sort of fact checking available, so people do not get fed false information about tax credits or refunds available to clients.

#### Dependence on AI

Overreliance on AI has decreased creativity, critical thinking skills, and human intuition. We need to take steps to ensure that we do not lose our own right to think for ourselves and make decisions. This should start in the classroom. Allowing kids to use AI is a good thing, but there needs to be rules of when and when not to use it, so we do not lose basic human intuition and critical thinking skills. Certain tasks can be automated in accounting such as booking journal entries for transactions. But it is important that we are also able to understand what the transactions mean, especially in audit matters when you have to work backwards. Relying on AI to do all of this is risky and can cause manipulation in companies financials.

#### Ethical Dilemmas

Relying on AI to instill moral and ethical decisions could lead to significant unforeseen consequences and challenges. Researchers and law makers need to come together and make a committee that would create guidelines and guidance for AI and its uses when it comes to ethical dilemmas. In the accounting field there are lots of ethical dilemmas faced each day. Some accountants have even lost their right to practice due to these reasons. AI could help with minimizing the workload but without checking the work could cause inaccuracy and questionable reporting not in line with the generally accepted accounting principles. In this case when accountants rely on AI and do not check the work of AI this should cause termination of their jobs.

