

# Importance of Preventing Data Bias: Societal Strategy for Sustainability

Ehi E. Aimiuwu  
eeaimiuwu@campbellsville.edu  
School of Business, Economics, & Technology  
Campbellsville University

## Abstract

About 93% of high-performing firms want to adopt AI for decision making because it can improve revenue, costs, customer service, and risks, but over 60% of them fear being liable for false decisions made from its biased outputs and lack the skills to understand and monitor its data for being accurate and complete. Literature reviews on bias shows that minority women are ignored and become violent towards children; Blacks must deal with unjust criminal records and police brutality; Native Americans are encumbered with poverty and segregation; Hispanics are burdened with cultural disregard and neglect; people with disability are labeled as abnormal and incapable; and Asians are beset with mental and psychological health issues. This literature review shows data educators the need to intentionally prevent biases from contaminating AI through adequate education and training for societal sustainability by ensuring responsible and inclusive data collection as well as accountable algorithms.

**Keywords:** AI, Bias, Data, Social Costs, Sustainability.

## 1. INTRODUCTION

This paper is for the introductory section in courses, such as Artificial Intelligence (AI), AI Policy, Database Management, Data Ethics, Data Mining, Data Analytics, and any course that is related to data gathering and data analysis. Students need to understand and appreciate the value of keeping data accurate, current, consistent, and complete from data collection through data analysis to decision making by the prevention and elimination of data bias. It is also recommended for Bachelors, Masters, and Doctoral students.

Data bias has been an issue in AI since around 1997 (Mitchell, 2007). AI will affect our lives daily in the areas of health, economic status, social relevance, and environmental issues, so the data issues resulting in discriminatory decisions, as well as lack of accountability and responsibility of data is a huge concern to many firms and users (Rossi, 2018; Kwak, Holtkamp, & Kim, 2019; Bardhan, Chen, & Karahanna, 2020; Kordzadeh & Ghasemaghaei, 2022). Many high-performing firms are interested in AI to make adequate

decisions for their business, employees, and consumers, but unfortunately, inaccurate decisions are being made based on irresponsible datasets and misleading algorithms that may hurt stakeholders and lead to lawsuits. Biased data can cause harm to a firm's reputation and lead to lawsuits because biased data ultimately leads to false decisions, inadequate predictive performance, missed opportunities, and financial disparity (Roselli, Matthews, & Talagala, 2019; Kordzadeh & Ghasemaghaei, 2022). Poor and inefficient decisions made on inconsistent dataset and non-inclusive algorithms could lead to already disadvantaged groups being perceived as inadequate and undeserving, which may lead to declined ethnic capital, social relevance, access to resources, and ability to afford both adequate health and legal services.

Technical solutions are not sufficient in correcting or deleting unwanted biases because AI for decision making learn from historical data, which may have historical biases (Roselli, Matthews, & Talagala, 2019). Biased data does not only need technical intervention, but also human regulation in how we recognize ourselves equally amongst

each other in society (Waelen & Wieczorek, 2022). Since dataset and algorithms can be biased and inaccurate, trying to detect and eliminate these inefficiencies through technical or digital innovations may not be sufficient since many users, auditors, and regulators do not even understand these algorithms or how the datasets were collected. This means that many technical interventions and solutions cannot also be monitored, vetted, and approved as responsible data and unbiased algorithm for accurate decision making.

Digital technologies seem to be viewed by many as platforms to equalize access for the disfranchised peoples, expose inequalities, & advance social ideals (Aanestad, Kankanhalli, Maruping, Pang, & Ram, 2021). For AI to be trusted, bias detection and bias mitigation techniques are needed due to unbalanced and non-inclusive datasets or training data (Rossi, 2018). Aside from technical techniques to detect and eradicate bias from both datasets and algorithms, data collection or dataset must be contributed and approved by all stakeholders from various communities and sectors for the dataset to be considered as current, complete, consistent, and accurate before analysis. This will lead to an inclusive and balanced dataset that is responsible, fair, and safe for all stakeholders. Also, the chosen algorithm for the approved data must be fully explained and understood by all stakeholders, auditors, and regulators before analysis for the output to be considered vetted and trusted for decision making.

In the rest of this literature review paper, the research question will be stated. Then, the origins of data bias will be presented, the social costs of bias will be explained, and the need to create accountable and responsible data outputs will be addressed. Also, the sustainability model and methodology for the study will be discussed. Lastly, the limitations and conclusion will be addressed.

### **Research Question**

The question to be addressed in this literature review paper through the sustainability model is:

*How do data educators educate citizens about the social costs of bias to see the value of ensuring accountable data inputs and responsible algorithms to guarantee unbiased data outputs?*

## **2. LITERATURE REVIEW**

### **Origins of Data Bias**

Machine learning systems or AI derive their

biased data from the developers or organizations using them by simply abiding by the rules set by human decision makers and must rely on the datasets given (Atkinson, 2016), which should lead us to reexamine our societal structural relations in terms of social recognition (Waelen & Wieczorek, 2022). This shows that the bias in AI is derived from the bias of humans in society. AI behave, think, and act like the humans that created it and control both its inputs and outputs. If the dataset being examined does not include non-members or sectors that have the least access to be present at executive tables, then their representation within the data is stagnated or is irrelevant.

Biased data may be derived from inputting the business intent into the dataset to get a desired result, samples from historical datasets, and individual inputs (Roselli, Matthews, & Talagala, 2019). Irresponsible data is non-inclusive data, which is dataset and algorithms to derive a desired output against the truth for fairness and accountability. This unsafe data does not only lead to discrimination in decisions but can hurt the disadvantaged and neglected peoples for generations economically, socially, legally, and the environment where they reside.

AI algorithms tend to provide biased results when the output violates moral or social standards and expectations, which results in one group being treated with privilege and the other discriminated against (Kwak, Holtkamp, & Kim, 2019; Bardhan, Chen, & Karahanna, 2020; Peters, 2022). It is the discriminatory mindset and lifestyles of society that becomes the mindset and lifestyle of the AI we create. We need to prevent our biases from contaminating data and algorithms in AI by ensuring that all stakeholders, auditors, and regulators approve datasets and understand the algorithms to be used for the data before analysis. It is the derived output from accountable datasets and responsible algorithms that will lead to fair and beneficial decisions for all stakeholders for generations in terms of economic access, social relevance, legal equity, and environmental wellbeing.

Even in academic institutions, where most of the faculty and researchers are White or accept White paradigms, the syllabi have content acceptable to White knowledge and expressions, and most invited speakers at university sponsored events are White males (Henry, 2021). The academia mindset above explains why our society and AI for decision making are contaminated with bias. Even the educational institutions that are supposed to be the vehicle for sustaining an

equitable society continuously for the future are under attack from societal bias. This means that before accountable algorithm can become the norm and having unbiased datasets with the inclusion of all subgroups, the educational institutions themselves first need to have a 50-50 White to non-White and 50-50 men to women ratio in management, employment, books, events, and speakers, with people with disability obviously present and minority subgroups matching their local population percentage.

### **Social Costs of Bias**

Data algorithms are known to downgrade women's resumes, predict that black people are most likely to be repeat offenders of crime even though they are equal to white offenders, misclassified darker skin tones in facial recognition, and mislabeled blacks as primates (Peters, 2022). The algorithm and dataset are a direct reflection of who we truly are as an organization or society. AI for decision making should be the opportunity to correct organizational, societal, and historical misrepresentations. Machine learning algorithms in AI may provide outputs that discriminate against people based on their social identity, race, and gender, where the social identity could lead to political biases that are harmful to the victims and are harder to detect as well as eradicate (Peters, 2022). AI should not only expose our shortcomings to the organization or society, but rather, give us the opportunity to make adequate decisions for the benefit of all peoples by eradicating some of the consequences of historical data bias below:

Research shows that there is a correlation between stress and frustration from societal bias and domestic violence among Black mothers, who may choose to use harsh forms of punishment to prepare their children for the biased structures that intentionally target their children's existence and survival (Cannon, Ferreira, & Buttell, 2020). This shows that the violence perpetrated on minorities by institutional bias is generational, and the violence is perpetrated on children through love and protection for their future. It is a vicious cycle that needs to be broken and eradicated to raise a generation that makes more inclusive, just, and fair policies for minorities and women, even in our datasets and algorithms.

Popular culture based on color blindness defines what good partnership, family makeup, and best child-rearing practices are for everyone, regardless of cultural or ethnic differences, which leads to lack of adequate services for minority individuals who may want to live life in a minority

cultural manner (Cannon, Ferreira, & Buttell, 2020). All people should understand that people are different, not all want or need to act like the majority, and that many people are very happy being a minority, even in organizations. So societal, economic, political, and environmental laws need to be equitable for all, without the majority feeling that they are going to lose power or influence over resources to minorities and women, especially when creating datasets and algorithms for analysis.

Schools in urban areas in the United States are still burdened with low scores, high drop-out rates, gang life, and low student engagement because of socioeconomic problems linked to lack of exposure from the dominant culture (Beachum, 2018), which is the type of mindset that brings biased datasets. In academia in the United States, Native Americans are portrayed as inferior and degraded in curriculums, and their voices are ignored since their unemployment rate is double that of the national average, their children live in poverty, attend low-funded schools with the lowest graduation rates, and are the least ambitious of all racial groups (Desai & Abeita, 2017). The above findings show that American educational systems are suppressed by the shackles of societal bias. Adoption of unbiased data and responsible algorithms is desperately needed to provide outputs that are historically factual to learn about continual problems and derived adequate solutions to the threat of bias in the future.

Ableism also correlates with racism, and these are interdependent in labeling those that are unfit or disabled as abnormal or problematic, which creates the justification to segregate or exclude them for remedy (Annamma, Jackson, & Morrison, 2017). Hispanic and Native American students face discrimination in college because they have little or no access to minority faculty, face racist vandalism, they are used as offensive mascots, their cultural symbols are incorporated into university seals, and they are subjected to repeated verbal and non-verbal abuse (Desai & Abeita, 2017). Diverse content is necessary for all grade school and college students to understand that everyone (Mabbott, 2017), including people with disability, women, and minorities, are as able and competent as anyone in terms of social, biological, mental, legal, economic, political as well as environmental capabilities.

Using AI to gather and present diverse and inclusive content for education and training can increase student and employee productivity, enhance teacher and employer efficiency, as well

as optimize labor and time, which can lead to quality environmental sustainability (Lakshmi & Corbett, 2020; Lakshmi & Corbett, 2023). AI diverse and inclusive content can help to sustain developments against societal challenges, such as climate change, healthy living, and inclusive economic growth (schoormann, strobels, Moller, & Petrik, 2021). Each one is equally responsible in having equal access to resources to make themselves, their communities, and ultimately, America, greater. This equal ableism should be reflected in the fairness of all levels of our academic curriculums as well as in all datasets and algorithms.

Asians as America's forced model minority is just a racial label that allowed them to catch up socially and economically with the majority after World War II in order to encourage assimilation, but also caused division among the other minority groups in unifying to demand structural equality, social justice, and to end institutionalized bias, which has led to their acculturation and psychological stressors as well as mental health issues and increased suicide (Shih, Chang, & Chen, 2019). Forcing Asians in the 1960s to be the model minority was too much of a burden for them to carry for the last 50 years because Whites are 59.3% of the American population and Asians are just about 6.1% today (U.S. Census Bureau, 2021). The study above shows that exchange for privileged assimilation left Asians with mental health and suicide problems. This study attempts to show the social costs of bias that needs to be prevented from contaminating our data outputs.

### **Creating Responsible & Accountable Data Outputs**

The goal of this literature review is to ensure that future data professionals (educators, policy makers, regulators, auditors, and system developers) understand that digital technology through the collection of big data and efficient algorithms for analysis is to make society more equitable, fair, & just for all people and workers (Aanestad, Kankanhalli, Maruping, Pang, & Ram, 2021). AI producers, algorithms analyst, human decision makers, and organizations can make a choice to have responsible data that respects inclusion, privacy, transparency, and fairness in the scope, rules, and resources in terms of developing, deploying, and using the AI (Waelen & Wieczorek, 2022). Individual choices do become societal choices. If the majority in a society or those who have access to power choose to live in fear of losing control instead of choosing to live an equitable lifestyle for the benefit of all peoples based on factual and complete data, then

there will always be bias in the datasets and irresponsible algorithms to protect that unjustified fear.

Algorithms of AI must be transparent, vetted, and understood by policymakers, non-developers, non-technical management, auditors, and regulator against data bias for the available data to be considered responsible, fair, and accountable (Rossi, 2018; Roselli, Matthews, & Talagala, 2019; Waelen & Wieczorek, 2022). Once we choose to have unbiased data and responsible algorithms, firms, politician, judges, police, and even health practitioners can make optimum decisions for a higher quality of life for all people with equal access to power, employment, healthcare, and legal services. Humans responsible for data used by AI to make better decisions must be aware and properly trained on data diversity or inclusivity, data handling, data storage, and data usage (Rossi, 2022). Producers, auditors, and regulators of data as well as students and employees of data should be trained against bias to allow holistic and factual historical data for both adequate machine learning & responsible algorithms.

### **3. RELATIONSHIP & MODEL**

Since sustainability of an equitable society through unbiased data and responsible algorithms is the essence of this literature review, the model used for this study is the Triple Bottom Line for Sustainability. This is because unbiased data is used as a sustainability tool towards achieving an equitable society, even for the environment. Our lifestyle does affect the environment, so a biased lifestyle based on biased datasets & unaccountable algorithms for profit or power may lead to a contaminated environment in that region for some of its citizens. Triple Bottom Line for Sustainability states that sustainability is achieved or becomes valuable when there is a balance between social, economic, and environmental sustainability (Dao, Langella, & Carbo, 2011; Braccini & Margherita, 2019). For there to be balanced and valuable sustainability in the community, the people, businesses, and the environment need to be sustained equally.

Social sustainability results in equality and diversity, well-being, and community, as well as health and safety; economic sustainability results in profits and return of investments, business stability, and financial resilience; and environmental sustainability results in renewable resources from wind, water, and solar; low emissions and waste, as well as biodiversity and

pollution prevention (Dao, Langella, & Carbo, 2011; Braccini & Margherita, 2019). Sustainability is basically using laws and policies to enhance the quality of life of the citizens by making businesses more profitable to provide jobs for people, but both the people and the businesses must take care of the environment by being conscious of a green lifestyle, so that the environment can provide both with healthy elements for safety and survival. Safety and survival could be a healthy and natural existence, longer life, affordable healthcare or low premiums, adequate employment, affordable legal representation, and inheritance for children.

In this literature review, social sustainability will be broken into legal and political sustainability because it is necessary for education (grade school & college) and employment training to address both separately to have any effect in enlightening the people for the future about the legalization and political base of bias. Figure 1 in the Appendix has unbiased education and employment training influencing legal, political, economic, and environmental sustainability. Also, each sustainability is influencing continual unbiased education and employment training, as well as each other in Figure 2. Environmental sustainability is essential to an equitable organization or society because it is the result of the economic, legal, and political sustainability, which shows or measures the access the disadvantaged peoples or workers must overcome to have a decent and respectable quality of life.

#### 4. METHODOLOGY

This is a literature review on how institutionalized bias affects various groups in society and the workplace as well as how unbiased data and responsible algorithms can be used to sustain equity for all groups by preventing societal biases from contaminating data outputs. Unbiased data and responsible algorithms in this paper is used as a sustainability tool to transform societal choices for the equity of all people.

Eight information systems professors were emailed as expert consensus to review the topic, the research question, method of presenting the topic to a class, and best courses the paper could be suitable for. Five of the professors responded to provide suggestions about the best courses, the research question, and ways to facilitate the class.

Articles from Google Scholar, ACM Digital Library, JSTOR, EBSCO, ERIC, ProQuest, and ABI/INFROM

Global databases were used in the study. This study was about the origins and social costs of bias and how to prevent societal biases from contaminating data outputs to sustain all groups in society. The keywords used in the database search: Data Bias, Artificial Intelligence Bias; Bias & Black Americans; Bias & Women; Bias & Age; Bias, Latino, & Hispanic; Bias & Asian; Bias & Disability; Bias & Technology; Bias & Digital Divide; Bias & Critical Race Theory; and Bias in Artificial Intelligence.

There were 26 articles selected from the databases, but four were rejected because there were no findings or implications for societal bias. Also, one news article and a government website were used from Google search to compliment the findings in the journals.

#### 5. DISCUSSION

Figure 1 in the Appendix shows the influence of unbiased education and employment training with diverse or inclusive content from all perspectives and all subgroups of people will have access to legal, political, economic, and environmental sustainability as well as how each of the sustainability will influence continual unbiased education and employment training with diverse or inclusive content and each other. Below are the components of unbiased education and employment training with the four sustainability:

**Unbiased Education and Employment Training:** The main purpose of unbiased education and employment training in this paper is to transform traditional education towards eliminating systemic bias from society so that all peoples can have equal access to resources and prosperity without bias. It is also to educate both educators and students as well as employers and employees in order to make them aware and enlightened about the policies and laws that have led to all of the social ills affecting minorities and women through diverse and inclusive content created by the unbiased data and responsible algorithm, which are selected by qualified individuals in that field from all subgroups that have been chosen to represent each subgroup by that subgroup. The goal is to create a generation of thinkers, policy makers, and voters to embrace a lifestyle of equitable living by their laws, votes, words, thoughts, and deeds through every major, subject, chapter, project, exam, and quiz. No subgroup is to be blamed or made to feel guilty about past misguided policies and laws, but rather, to modernize present and future laws as well as policies to include the opinions, feelings, needs, and perspectives of all subgroups.

**Legal Sustainability:** The main purpose of this sustainability in unbiased education and employment training is to educate law students and police academies in taking a stand against slave laws or Black codes that were intentionally created and are still used today in many cities and states across America to terrorize Blacks with lynching (Ahmaud Abbery & Travon Martin), police brutality (George Floyd & Breonna Taylor), criminal records, and longer jail time, which serves as the basis for unemployment, low marriage rates, high number of fatherless homes, delinquency, and poverty. Also, immigration and cultural laws should be modernized for Hispanics to have a respectable path to citizenship, and Native Americans should have modernized laws for their reservations and be able to police themselves and defend themselves against intruders. All subgroups should be treated as the model citizens to achieve the socioeconomic success that Asians have achieved in the last 50 years, which will remove the pressure of assimilation from Asians, and every subgroup should be allowed to be themselves to have social services and workers that can cater to their specific cultural and health needs. There should also be 50-50 laws for both men and women and 50-50 laws for Whites and minorities or at least match their local population percentage in management, employment, academic books, events, and speakers, with adequate consideration for people with disability or the elderly.

**Political Sustainability:** The main purpose of this sustainability in unbiased education and employment training is to educate future politicians about what is acceptable in policy making to guarantee an equitable society for all subgroups. It is also to enlighten future voters to be aware of the type of politicians that are needed to help sustain an equitable society. Future students are supposed to be trained to watch for red flags and undesirable actions from both politicians and judges that promote the social ills of American society as well as reduce our productivity and performance on key social issues. According to USnews.com (2021), America ranks 6th among the nations of the world, based on global performance from metrics developed in collaboration with The Wharton School & U. S. News & World Report, as well as ranked 18th in women's issues, 19th in social purpose, 20th in quality of life, 20th in green living, 22nd in raising children, and a dismal 69th in racial equality. Ultimately, future voters should be educated and be aware enough to vote for only judges and politicians that can enhance and sustain equity in our country, states, and cities to

optimize the performance and productivity of every subgroup in the country.

**Economic Sustainability:** The main purpose of this sustainability in unbiased education and employment training is to educate all workers, especially minorities and women, to believe that they are all "model citizens" and should have access to all resources equally to excel socioeconomically like the Asians in America in the last 50 years. The future generation of thinkers, policy makers, and voters should argue for equity in access to resources, and affirmative action should be equal for all minority subgroups according to their percentage makeup in the locality. Future workers are to identify businesses that invest in unbiased education and employment training, have equity hiring practices that also benefit minorities, and enforce green practices for their products and services. These businesses should be supported to increase their profits, return on investments (ROI), business stability, and financial resilience.

**Environmental Sustainability:** The main purpose of this sustainability in unbiased education and employment training is to educate all citizens to be conscious and enlightened towards the use of renewable resources from wind, water, and solar energies; low emissions and waste, as well as biodiversity and pollution prevention. This is what will keep future citizens healthy, have natural resources available for business and job creation for future generations, and increase creativity in creating biodegradable products to sustain the planet. Also, future citizens are supposed to be aware and watch out for politicians, judges, and businesses that help to promote the social ills that reduce the efficiency and effectiveness of America through greed and institutionalized bias. Those that spend time and energy enhancing social ills, as well as minorities and women that lose time and energy by having to deal with mental health issues, suicide attempts, incarcerations and criminal records, poverty, and segregation, as well as neglect and immigration issues do not have the luxury to care for the environment adequately. Many have little access to long life, healthy living, affordable healthcare, good legal representation, or inheritance for their children. This is because stressed and frustrated women and minorities are also part of the environment that needs to be sustained, and those sickened from the stress and frustration within the environment help to sustain an unhealthy environment.

Figure 2 in the Appendix explains how the four sustainability affect one another:

**Legal Sustainability:** Electing or appointing unbiased judges & law enforcers who make just decisions and policies for all citizens can enhance societal equity. Eliminating slave laws (Black Codes) as well as reforming police and immigration laws can enhance Blacks & Hispanics economically. Labor laws that allow a 50-50 gender & minorities workplace reality can boost women and minority performance in society or at least match their local population percentage. This could also empower them to demand higher well-being, healthy work environments, and safety from politicians through their votes to have better access to affordable legal representation, health insurance, and longer life.

**Political Sustainability:** Ability for all groups to vote and elect unbiased politicians could enhance their well-being, longer life, healthy community, and access to affordable healthcare and legal representation. This could lead to citizens demanding judges and police that can make and enforce the laws for all citizens to enjoy their environment equally. Firms that promote green and healthy lifestyles that the citizens elected politicians for should enjoy tax breaks and citizens can enjoy insurance discounts for their safe and healthy lifestyles. This should increase both the performance and productivity of the affected firms and citizens.

**Economic Sustainability:** Firms should enjoy tax breaks and citizens should enjoy equal access to good paying jobs based on policies that are provided by their elected politicians and judiciary based on their safe and healthy lifestyles. This could lead to citizens electing and appointing unbiased judges and police that can enhance their lifestyles for all citizens. All citizens being able to be productive and produce equally in their jobs and businesses; as well as to elect unbiased politicians to provide the environment that enhances their collective well-being, longer life, safety, affordable healthcare, and descent legal representation.

**Environmental Sustainability:** For all citizens or subgroups to enjoy an environment that guarantees entrepreneurship, longer life, safety, affordable healthcare, dependable legal representation, and overall well-being equally, they must be economically viable. This depends on access to good paying jobs and being productive in the workplace. This will be impossible without electing unbiased politicians to support their lifestyles and appointing judiciary to create laws that allowed equal access to law, healthcare, employment, safety, longer life, and entrepreneurship equally regardless of race,

gender, ethnicity, age, disability, or location.

## 6. LIMITATIONS & FUTURE STUDY

One of the limitations of this study is the bias of humans in choosing the right diverse or inclusive content for education and employment training. If the content we are using favor the status quo of White males, then we are most likely going to get the same old decisions that are causing the social ills of minorities and women. If we use content that only favor minorities and women, then the decisions will be biased against White males. For diverse or inclusive education to be efficient and effective, all subgroups must be present and must have qualified representatives within that field of study that have been chosen by the subgroup to represent them for the content to be approved and adequate. A case study is needed to show how diverse content can be selected by all subgroups and how educators, students, employers, and employees were engaged and receptive to learning from the perspective of women and minorities as well. A study can also be done to see if the above case study led to improved mindset and lifestyles against data bias.

The study could have been qualitative by interviewing experts in the AI field or could have been quantitative by using a survey method to verify the opinions of data educators, data producers, data auditors, and data regulators, but a literature review was sufficient for the study. The above methods could be used for future study. Triangulation was not done to see if data educators, data organizations, data producers, data auditors, and data regulators in the United States were already using a higher percentage of unbiased data and responsible algorithms for teaching, learning, and making business decisions compared to the past. Also, current policies were not reviewed to know how effective unbiased education and employment training will be in eradicating the social ills of minorities and women within the next 20 years.

## 7. CONCLUSION

In summary, the social ills created by institutional bias are reducing our efficiency in key social issues, such as racial equality, women's issues, raising children, green living, quality of life, and social purpose. These undesirable factors are also responsible for societal biases that contaminate our AI by creeping into our datasets and algorithms, thereby derailing adequate decision making in favor of discrimination in our organizational productivity and workplace

performances. This discrimination tends to be the basis for the social ills that have been plaguing minorities and women for decades and generations without end, which has also led to many mental and psychological health issues, an increase in suicide rates, unjust incarcerations and unnecessary unemployment, cultural denigration, and isolation, as well as being ignored and segregated, resulting in poverty or lesser resources and opportunities.

For America to rise above these social ills and become a more equitable society, both educators and students as well as employers and employees need to be educated and made aware by making use of diverse and factual content from every subgroup through unbiased education and employment training. Unbiased AI is excellent for analyzing vast data in real time and producing the best predictions as well as decisions for every major, subject matter, and chapter from historical and current data. The data and algorithms used must be free from all kinds of bias and error, so every subgroup must contribute equally to each model or dataset, each subgroup representative must be qualified in the subject matter, and they must be chosen by members of their respective subgroup to represent them for the models and datasets to be approved and adequate. They should also choose, understand, and approve the algorithms to be used.

Unbiased education and employment training towards the eradication of social ills must educate and train both educators and students as well as employers and employees to embrace equity as thinkers, future policy makers, and voters to sustain an equitable society for all subgroups through legal, political, economic, and environmental sustainability. A lifestyle or culture that breeds social ills for centuries and generations through greed, the quest for power, and controlling the legally ostracized, cannot bring the wellness, peace, security, and financial stability that is needed to sustain an equitable society.

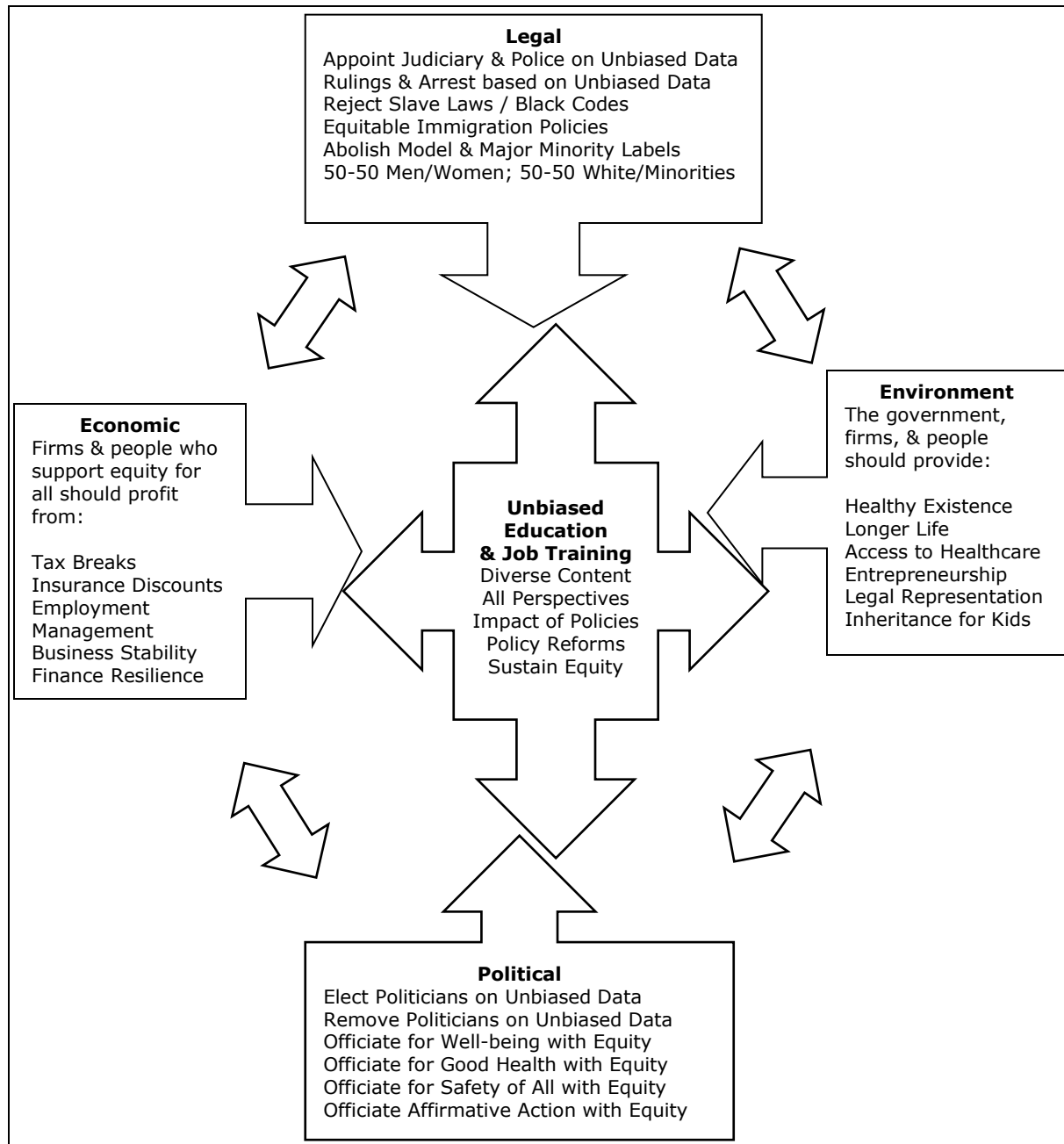
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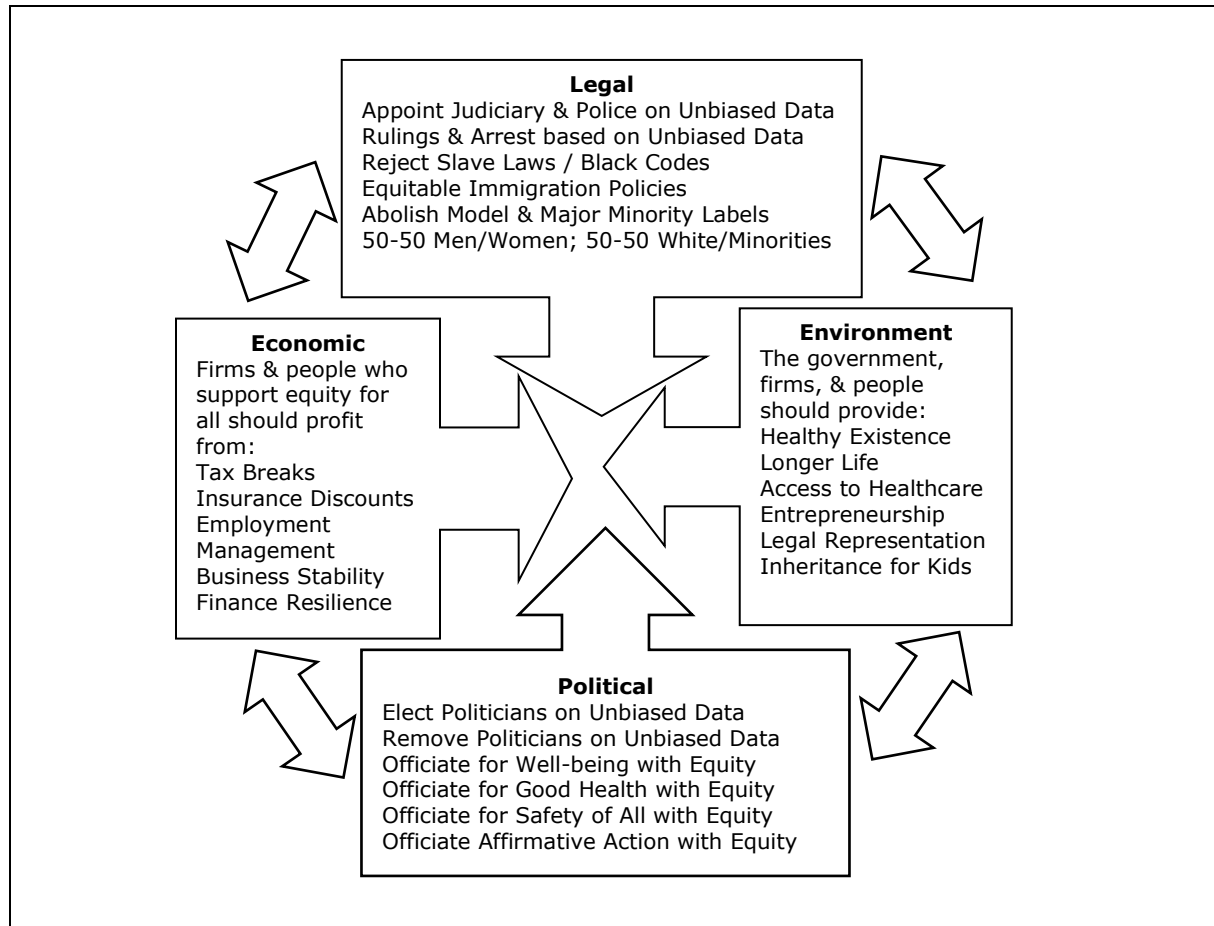


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## Appendix



**Figure 1. Unbiased Education & Employment Training to Sustain Societal Equity**



**Figure 2 Four Sustainability Sectors to Sustain Societal Equity**