# ORGANIZATIONAL EQUITY: A KEY METRIC FOR SUCCESSFUL ORGANIZATIONS

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# Organizational Equity - A Key Metric for Successful Organizations

To create positive outcomes for their organizations, stakeholders and communities, U.S. executives should broaden their understanding of equity to include not only the net value of their company for owners and shareholders, but also the various ways in which power and resources are distributed — what we define below as "organizational equity." To do so, we suggest that leaders of U.S.-based organizations perform regular "organizational equity audits" using qualitative and quantitative methods.[1]  By collecting equity-related data and acting to remedy any inequities uncovered, organizations can create welcoming, supportive environments for their employees, garner public support for their practices and succeed in the global marketplace. In what follows, we will further explain the concepts of organizational equity and organizational equity audits; detail the importance of equity, diversity and inclusion for U.S.-based organizations; and outline some specific data-related best practices for organizational leaders to keep in mind as they work toward equity.

## Organizational equity and organizational equity audits: definitions and suggestions

Organizational equity defines the relative distribution of power and resources among key internal organizational stakeholders, including directors, executives, managers and all other employees.[2]  Importantly, an analysis of organizational equity takes into account the already unequal societal distribution of equity, and as a result, is especially interested in how and why resources and power are allocated to members of groups historically underrepresented in the highest echelons of business. Historically, most organizational decision-making within the United

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1    The productive possibilities of organizational equity audits were first introduced to us by Dr. J Jackson-Beckham, founder and principal strategist of Crafted For All, LLC, founder and executive director of Craft x EDU, equity and inclusion partner of the Brewers Association. Her 2019 presentation at the Craft Brewers Conference in Denver, Colorado, focused on the concept. In general, Dr. Jackson-Beckham's interventions into the craft beer industry are exemplary. Jackson-Beckham, J. (2019). Real Talk: Performing Cultural Climate Audits to Benchmark Organizational Inclusion, Equity, and Justice. Craft Brewers Conference, Denver, Colorado.

2    In addition to organizational equity, organizations will want to pay close attention to their reputational equity. Johnson and Bonds (2020) detail the aspects of reputational equity that organizations should track in their white paper, "Does your firm have reputational equity?" In addition to the types of internal data that we suggest here, they encourage organizations to consider external stakeholder experiences and community engagement. Johnson, J. H., & Milliken Bonds, J. (2020). "Does your firm have reputational equity?" Kenan Institute of Private Enterprise. https://kenaninstitute.unc.edu/wp-content/uploads/2020/12/Firm-Reputational-Equity-updated.pdf.

States has been made by white, straight, cisgendered men, and even as population demographics have changed over time, the majority of power remains distributed to this group.[3] [4]

To understand the current state of their organizational equity, we suggest leaders conduct regular organizational equity audits. Such audits use data about organizational systems, employee backgrounds and contemporary social systems to interpret information related to:

- Employee recruitment, hiring, retention and advancement
- Employee pay and benefits
- Employee experiences, engagement and satisfaction
- Leadership prioritization and resource commitment

Without regular monitoring in these areas, organizational leaders may miss early indicators of organizational inequity, and as a result, be left clueless as to why they fail to diversify their leadership team, appeal to young workers or receive public congratulations for their professed commitments to diversity and inclusion.

## Wells Fargo and the case for regular organizational equity audits

Had Wells Fargo executives regularly audited their bank's organizational equity, CEO Charles Scharf may have avoided the backlash he received in the summer of 2020 from customers, employees and the general public. Scharf was critiqued for publicly stating, in a meeting and in a memo, "While it might sound like an excuse, the unfortunate reality is that there is a very limited pool of black talent to recruit from." [5] The pipeline myth to describe racial inequity, which Scharf deployed, assumes that non-white workers do not have the skills or backgrounds necessary for success in a particular field. As Lauren Rivera describes in her book, "Pedigree," this myth

3   Ray, V. (2019). Why so many organizations stay white. Harvard Business Review. https://hbr.org/2019/11/why-so-many-organizations-stay-white?ab=seriesnav-bigidea

4   Labor force characteristics by race and ethnicity, 2018 (No. 1082; BLS Reports). (2019). U.S. Bureau of Labor Statistics .https://www.bls.gov/opub/reports/race-and-ethnicity/2018/home.htm

5   According to the article by Moise, DiNapoli and Kerber, Scharf originally made the statement at a Zoom town hall and repeated it later in a memo. Moise, I., DiNapoli, J., & Kerber, R. (2020, September 22). Exclusive: Wells Fargo CEO ruffles feathers with comments about diverse talent. Reuters.Com. https://www.reuters.com/article/us-global-race-wells-fargo-exclusive/exclusive-wells-fargo-ceo-ruffles-feathers-with-comments-about-diverse-talent-idUSKCN26D2IU

discounts the various ways that organizational systems produce the pipelines they aim to blame and, in so doing, create paths of privilege for white individuals seeking employment and advancement.

Wells Fargo and Scharf would have especially benefited from more consistency in and analysis of their data. Wells Fargo does not share its EEO-1 data, but several external sources of related information do exist. Undoubtedly, more data transparency would have benefitted Wells Fargo and its employees (and researchers' attempts to uncover root causes). A 2014 "Opportunity and diversity report card" by the NAACP used 2011 data to determine that Wells Fargo's employment practices unfairly disadvantaged Black workers. In 2011, roughly 7 percent of new hires, mid/lower-managers, highly skilled workers and board members were Black. Black employees held fewer than 4 percent of top management positions, and the turnover rate for Black employees was at least 15 percent.[6] To be clear, this leaky pipeline was not due to reduced merits — Black Americans have received 10 percent or more of U.S. bachelor's degrees since 2003 and received 13 percent of master's or doctoral degrees in 2011.[7] [8] [9]

In 2015 and 2016, Wells Fargo set several goals related to corporate social accountability, including three under the umbrella of "Ensure diversity, inclusion, respect, and engagement are fully woven into the fabric of the Wells Fargo culture and business practices."[10] The 2015 report provided updated details regarding the representation of Black employees at Wells Fargo: top management representation increased to 7 percent, mid/lower-level manager representation increased to 8 percent, and other categories decreased.[11] By 2020, the numbers had shifted again, and fewer than 2.8 percent of executives and senior managers at Wells Fargo were Black, while all other categories slightly rose in Black representation.[12]

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6  NAACP Opportunity and Diversity Report Card: The Consumer Banking Industry. (2011). NAACP. https://www.naacp.org/wp-content/uploads/2011/09/OpportunityDiversityReportCard.pdf

7  We use these degrees as general measures of the available labor pool for banks.

8  NAACP Opportunity and Diversity Report Card: The Consumer Banking Industry

9  Musu-Gillette, L., Robinson, J., McFarland, J., KewalRamani, A., Zhang, A., & Wilkinson-Flicker, S. (2016). Status and Trends in the Education of Racial and Ethnic Groups 2016 (nces 2016-007). U.S. Department of Education. https://nces.ed.gov/pubs2016/2016007.pdf?utm_source=NCSSLE+Vol+4%2C+Issue+24&utm_campaign=e-Digest+Vol+4+Issue+24&utm_medium=email

10  Wells Fargo unveils five-year corporate social responsibility effort. (2016, April 21). Wells Fargo Newsroom. https://newsroom.wf.com/English/news-releases/news-release-details/2016/Wells-Fargo-Unveils-Five-Year-Corporate-Social-Responsibility-Effort/default.aspx

11  2015 Corporate Social Accountability Report. (2015). Wells Fargo and Company. https://www08.wellsfargomedia.com/assets/pdf/about/corporate-responsibility/2015-social-responsibility-report.pdf

12  Wells Fargo Environmental, Social, and Governance (ESG) Goals and Performance Data. (2020). Wells Fargo. https://www.wellsfargo.com/assets/pdf/about/corporate-responsibility/goals-performance-data.pdf

According to its 2018 business standards report, Wells Fargo took several actions between 2015 and 2018 that were designed to increase workplace diversity inclusion.[13]  The report outlined several actions and commitments the bank made following its 2016 public scandal regarding fraudulent behavior.[14]  According to the report, Wells Fargo:

- Created team member and manager expectations related to diversity and inclusion, including "intentionally build and engage a diverse team"[15]

- Collected feedback from employees through "pulse surveys, focus groups, companywide assessments and surveys, and confidential exit surveys and interviews"[16]

- Created a culture dashboard for tracking trends related to the workforce[17]

- Published the results of their annual pay equity study

Wells Fargo also has an enterprise diversity and inclusion council, which is led by the CEO.

An equity audit would have compiled all of the above data and analyzed it in order to identify problem areas for Wells Fargo and its diversity goals. Scharf could have then reviewed the audit, and as a result, had much more to share about the barriers to diversity at Wells Fargo. Instead, he relied upon the pipeline myth and, ultimately, apologized for his "unconscious biases."[18]

Beyond avoiding public outcry, conducting equity audits is important for organizations hoping to support all of their employees. One's experience of U.S.-based organizations and their organizational impacts is, in many ways, determined by employees' social identities.[19] Recognizing and attending to common patterns of inequity and unique workplace experiences is necessary for creating an environment

13  Learning from the past, transforming for the future: Business standards report. (2018). Wells Fargo & Co. https://www08.wellsfargomedia.com/assets/pdf/about/corporate/business-standards-report.pdf

14  Arnold, C. (2016, October 4). Former Wells Fargo employees describe toxic sales culture, even at HQ. In Morning Edition. NPR.org. https://www.npr.org/2016/10/04/496508361/former-wells-fargo-employees-describe-toxic-sales-culture-even-at-hq

15  Learning from the past, transforming for the future: Business standards report. p.14

16  Ibid, p.40

17  Ibid

18  In an apology, Scharf said that his comments were the result of unconscious bias. Wack, K. (2020, September 23). Wells Fargo's Scharf apologizes for "insensitive" comments on Black talent. American Banker. https://www.americanbanker.com/news/wells-fargos-scharf-apologizes-for-insensitive-comments-on-black-talent

19  "Social identity is defined as 'the individual's knowledge that he belongs to certain social groups together with some emotional and value significance to him of the group membership' (Tajfel 1972a: 31)" Abrams, Dominic, and Michael A. Hogg. Social Identifications A Social Psychology of Intergroup Relations and Group Processes, Taylor & Francis Group, 1990. ProQuest Ebook Central, http://ebookcentral.proquest.com/lib/unc/detail.action?docID=178266.

that addresses and meets the needs of protected groups.[20] For example, Native American culture is vastly different from U.S. business culture, so to successfully navigate the U.S. market, American Indians must find ways to connect both cultures, ultimately requiring them to overcome hurdles that their non-Native American counterparts might never even see.[21] Another example — Black students must deal with the "achievement gap" in the U.S. education system. On average, Black students receive lower scores than white students on tests, and this gap has been proven to be a result of racism, not the achievements of Black individuals.[22] It's easy to see how both of these disadvantages would leave individuals from these social identity groups disadvantaged by typical workplace processes (such as networking expectations, hiring processes and performance review standards). And these are just two small examples. To create an environment that meets the needs of all stakeholders, organizational leaders must recognize the wide variety of employee experiences and proactively work to incorporate everyone into organizational systems.

The U.S. government has long acknowledged the unearned disadvantages faced by some workers in the United States and both collects data on and defends these individuals' employment rights. Specifically, members of U.S.-based organizations are legally protected from harassment and discrimination based on their:

- Racial and ethnic identity — including personal characteristics associated with race (such as hair texture, skin color or certain facial features)

- National origin

- Religion

- Sexuality, sex and gender — including pregnancy and gender expression

- Age

- Mental and physical ability

- Veteran status

- Genetic information [23]

20    Grubbs, V. (2020). Diversity, Equity, and Inclusion That Matter. New England Journal of Medicine, 383(4), e25. https://doi.org/10.1056/NEJMpv2022639

21    Stewart, D., Verbos, A. K., Birmingham, C., Black, S. L., & Gladstone, J. S. (2017). Being Native American in business: Culture, identity, and authentic leadership in modern American Indian enterprises. Leadership, 13(5), 549–570. https://doi.org/10.1177/1742715016634182

22    Johnson-Ahorlu, R. N. (2012). The academic opportunity gap: how racism and stereotypes disrupt the education of African American undergraduates. Taylor & Francis Online. Vol 15 No. 5, pp 633-652. https://doi.org/10.1080/13613324.2011.645566

23    Employers. (n.d.). U.S. Equal Employment Opportunity Commission. https://www.eeoc.gov/employers

While these social identities do not account for all forms of experience that might both affect and be affected by an organization's internal equity, these groups' legally protected status means that most organizations' HR offices will hold at least some related data. Therefore, we suggest organizations begin their equity audit process by monitoring the experiences of individuals who may be disadvantaged by the types of discrimination protected against by the U.S. government. Importantly, while organizations will have some of this data, other data will likely be limited. This limitation adds to the complexity of understanding and rectifying the inequitable allocation of resources and power among stakeholders, and later in this essay we address the forms it may take.

# Organizational equity - benefits

Creating organizational equity would benefit organizations externally and internally, providing more returns on employee efforts and creating more inclusive, engaging workplaces.

## External benefits of organizational equity

Attending to organizational equity and, as a result, improving organizational diversity and inclusion, would financially benefit most organizations. Equity, diversity and inclusion researchers have long known that organizations generally perform better than the industry average when they focus on diversity. For example, companies that have active and engaged gender-diverse boards have lower risk and volatility associated with their stocks.[24] Additionally, companies that have higher-than-average demographic diversity in their workforce generate 45 percent of revenue through innovation, which is 19 percent higher than companies that have below-average diversity scores. This difference is attributed to the creativity and diligence produced by cultural heterogeneity; diverse organizations have a larger breadth of ideas and lenses to draw from, creating robust and novel solutions to problems as well as more substantial decision-making processes.[25]  Organizations hoping to achieve the financial benefits that follow a commitment to diversity must pay close

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24   Jizi, M.I. and Nehme, R. (2017), Board gender diversity and firms' equity risk, Equality, Diversity, and Inclusion, Vol 36 No. 7, pp. 590-606. https://doi-org.libproxy.lib.unc.edu/10.1108/EDI-02-2015-0044

25   Phillips, K. (2014), How Diversity Makes Us Smarter, Scientific American. https://www.scientificamerican.com/article/how-diversity-makes-us-smarter/

attention to equity. If, for example, organizations monitor and balance their internal equity, they will quickly learn which departments are homogeneous, why they are and how they might encourage more team diversity.

## Internal benefits of organizational equity

The financial benefits of organizational equity, diversity and inclusion (EDI) are inextricably related to the functional and performance-related benefits of having employees and leaders from a wide variety of backgrounds. For example, some common consequences related to having more gender-diverse environments include:

- Higher perceptions of leadership effectiveness
- Increased performance-based rewards and retention systems
- More ethical organizational decision-making
- More social welcoming for female employees
- Decreased mental and physical health risks for employees
- More LGBT-friendly policies [26]

These impacts directly affect company culture and improve the workplace environment. Additionally, recognizably equitable organizations that encourage open communication about EDI-related topics are more likely to have happy, engaged employees, appeal to young workers and retain diverse talent.[27] [28] [29] In tumultuous times, any of these competitive advantages could lead to future success; alternatively, avoiding the internal work necessary to create equity, celebrate diversity and cultivate belonging could mean failure.

## Organizational equity in 2020 and beyond

Given the complexities of our current context, U.S.-based organizations would be wise to immediately begin the process of auditing their organizational equity. As Dr. Stephanie Mahin explained, organizations are currently in the midst of multiple

26  Fine, C., Lawford-Smith, H., Sojo, V. (2019). Why does workplace gender diversity matter? Justice, organizational benefits, and policy. Social Issues and Policy Review. https://spssi.onlinelibrary.wiley.com/doi/pdf/10.1111/sipr.12064

27  Catalyst. (2018). Generations: Demographic trends in population and workforce. Catalyst.org. https://www.catalyst.org/knowledge/generations-demographic-trends-population-and-workforce

28  Downey, S., van der Werff, L., Thomas, K., Plaut, V. (2015). The role of diversity practices and inclusion in promoting trust and employee engagement. Journal of Applied Social Psychology, 45, 35 - 44. https://doi.org/10.1111/jasp.12273

29  Hewlitt, S., Marshall, M., Bourgeois, T.  (2017). People suffer at work when they can't discuss the racial bias they face outside of it. Harvard Business Review. https://hbr.org/2017/07/people-suffer-at-work-when-they-cant-discuss-the-racial-bias-they-face-outside-of-it.

crises.[30] The emergence and pandemic rise of COVID-19 is devastating communities, reconfiguring the economy and shifting the very meaning of work. U.S.-based organizations, already uniquely impacted by these global transformations, are also facing a painful national reckoning regarding the deep racist underpinnings of the United States and its key social systems.[31] In response to these concurrent, connected crises, U.S. citizens and organizational employees expect more from the organizations that shape their daily lives.[32] To continue calculating equity as simply the difference between what an organization owns and owes would be to dismiss the truths uncovered in 2020 and further stall the progress Americans want, need and deserve.

# Organizational equity audits — data to collect and potential limitations

To begin the process of auditing their organizational equity, companies must recognize that problems associated with EDI are complex and widespread. As a result of this complexity, the activities aimed at addressing these EDI-related problems fail to address their root causes, resulting in little to no change in the company environment or organizational equity. Using qualitative and quantitative data will increase the effectiveness of EDI initiatives, as long as organizational leaders take note of (international) legal limitations and mitigate potential data bias.[33]

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30  Dr. Stephanie Mahin shared her research at UNC's Kenan-Flagler Day live Q&A on Facebook Live. Kenan-Flagler and What's Next for Business. (2020, June 16). [Facebook Live]. https://www.facebook.com/156595989024/videos/4483078961709618

31  The impacts of COVID-19 in the United States are being unequally borne by communities already devastated by, among other things, an ever-growing wealth gap, chronic underemployment, health disparities, educational segregation, mass incarceration and a lack of access to high-quality jobs. COVID-19 has exposed these inequities and exposed the conditions that create them; more than ever, it is impossible to ignore the interlocking systems that oppress Black, Indigenous, and People of Color (BIPoC) populations. In cities and states across the country, Black and Latino communities suffer the most from COVID-19. According to a report by The New York Times (which sued the CDC to get this data), "Latino and African-American residents of the United States have been three times as likely to become infected as their white neighbors" and "twice as likely to die." And just in case American citizens have remained able to ignore these systemic inequities, a righteous racial reckoning is forcing awareness all across our country, a reckoning sparked by the racist murders of Black men and women in the spring of 2020. Individuals of all races and ages are rising up to protest the police brutality and white supremacy that killed, among too many others, Ahmaud Arbery, Rayshard Brooks, George Floyd and Breonna Taylor.See: Fragale, A., Johnson, J., Leigh, A., Melwani, S., & Pearsall, M. (2020, May). "A strategic response to the coronavirus pandemic for the African American working poor." Kenan Insights. https://kenaninstitute.unc.edu/kenan-insight/a-strategic-response-to-the-coronavirus-pandemic-for-the-african-american-working-poor/; Jr, R. A. O., Gebeloff, R., Lai, K. K. R., Wright, W., & Smith, M. (2020, July 5). The fullest look yet at the racial inequity of Coronavirus. The New York Times.https://www.nytimes.com/interactive/2020/07/05/us/coronavirus-latinos-african-americans-cdc-data.html; Leigh, A., & Melwani, S. (2019). #BlackEmployeesMatter: Mega-threats, identity fusion, and enacting positive deviance in organizations. Academy of Management Review, 44(3), 564–591. https://doi.org/10.5465/amr.2017.0127

32  Zheng, L. (2020). We're Entering the Age of Corporate Social Justice. Harvard Business Review. https://hbr.org/2020/06/were-entering-the-age-of-corporate-social-justice

33  Hays-Thomas, R., & Bendick Jr., M. (2013). Professionalizing diversity and inclusion practice: Should voluntary standards be the chicken or the egg? Industrial and Organizational Psychology, 6(3), 193–205. https://doi.org/10.1111/iops.12033

# Data to collect

For organizational leaders in the U.S. committed to conducting equity audits, we recommend collecting the following types of data (Table 1):

**Table 1: Data to collect and suggestions for analysis**

| Data to Collect | Analysis Suggestions |
|---|---|
| **Representation**<br>the presence and proportion of employees [34] from the groups you plan to monitor (hereafter referenced as "monitored groups") [35] | • Compare to labor market demographics, industry benchmarks and community demographics [36]<br>• Segment by department and include governing bodies<br>• Segment within work groups and teams |
| **Recruitment**<br>the presence and proportion of applicants from monitored groups | • Compare to applicant pool demographics, industry benchmarks, labor market demographics and community demographics<br>• Segment by department recruited for, applicant source and recruitment team |
| **Selection**<br>the presence and proportion of appointments of applicants from monitored groups | • Compare to appointments of applicants who are not from monitored groups, industry benchmarks, labor market demographics, applicant pool demographics and community demographics<br>• Segment by department of appointment, applicant source and selection team |
| **Retention and Attrition**<br>the average tenure for employees from monitored groups | • Include quantitative and qualitative information from exit interviews<br>• Compare to average tenure across the workforce, average tenure of employees who are not from monitored groups, industry benchmarks, workforce demographics, labor market demographics and community demographics<br>• Segment by department, team and role<br>• Segment attrition as voluntary or involuntary |

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34  Include full-time, part-time and contract employees. Include members of governing bodies.

35  We use the term "monitored groups" because each organization will need to determine its own priorities for monitoring. To begin, we recommend focusing on groups currently protected by the EEOC (see above).

36   Each organization will need to determine its own communities of comparison. We suggest national, state and municipal demographics as a starting point.

| | |
|---|---|
| **Development**<br>participation in professional growth opportunities by employees from monitored groups | • Include lateral moves, appointments to acting roles, training and other learning and development participation, and stretch assignment opportunities<br><br>• Include internal networking opportunities, informal and formal mentorship opportunities, and informal and formal sponsorship opportunities<br><br>• Include informal and formal reviews and other opportunities to receive constructive feedback<br><br>• Include quantitative and qualitative review systems and resultant data<br><br>• Compare to growth opportunities offered and utilized across the workforce, including by employees not from monitored groups, workforce demographics and industry benchmarks<br><br>• Segment by department, team, role and supervisor |
| **Promotion**<br>the promotions awarded to employees from monitored groups | • Include qualitative and quantitative data used for determining promotion<br><br>• Include qualitative and quantitative data about the promotion received<br><br>• Track those who are self-selecting out of promotion<br><br>• Track the time it takes to be promoted<br><br>• Compare to promotions awarded across workforce, including to employees not from monitored groups, workforce demographics and industry benchmarks<br><br>• Segment by department, team, role and supervisor |
| **Experience and Engagement**<br>the workplace experiences of employees from monitored groups | • Include quantitative and qualitative data from annual/bi-annual surveys, pulse surveys, focus groups, exit interviews and other internal sources of information about employee experiences<br><br>• Include quantitative and qualitative data from inclusion indexes, reviews on employment websites, information learned through "social listening"[37] and other external sources of information about employee experiences<br><br>• Compare to experiences of general workforce, including of employees not from monitored groups and industry benchmarks<br><br>• Segment by department, team, role and supervisor |
| **Resource Investment**<br>the resources being allocated toward creating an equitable, diverse and inclusive organization | • Include budgets, billable hours, permanent positions and other quantitative measures of investment into the organization's equity. For example, include the salary of all diversity and inclusion staff as well as budgets for business resource groups<br><br>• Include a qualitative description of current investments<br><br>• Compare to industry benchmarks<br><br>• Segment by internal or external investment |

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## Potential limitations

A thorough organizational equity audit would collect and process all of the above data points (and begin collecting any missing data); however, this may not be possible or prudent in all cases. Privacy considerations, legal regulations and possible data bias uniquely constrain each organization's audit efforts. Accordingly, organizational equity auditors should prioritize privacy, know the relevant (inter) national laws for their organizations and mitigate against common forms of data bias.

## Privacy and trust considerations

To get high-quality organizational data, equity auditors must prioritize and consider the degree of clarity, transparency and accountability in place around employee privacy. If employees do not trust that their survey responses and other private information will be handled with care, they may not give honest answers — and popular stories of botched "anonymous" surveys often make such trust illusory.[38] As studies have suggested, many employees only partially trust their employers, or do not trust them at all.[39] Therefore, we suggest that auditors commit to data privacy, process transparency and clear communication as they gather employee data. Auditors and organizational leaders should clearly explain the modes they are using for data collection, de-identification,[40] storage, dissemination and deletion. Given trust concerns and the legal limitations on data privacy described below, many organizations may want to hire a third-party vendor to run their data collection processes and manage all related data.

## Legal limitations

Additionally, organizational leaders should take note of the complex legal landscapes that govern their processes for data collection and analysis. Some countries, states and other governing bodies regulate the processing of data, and organizations must comply with all relevant laws — or have a high risk tolerance. Given the specificity

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38  Driscoll, K. (2018). Employees doubt the confidentiality of company's engagement survey. Rochester Business Journal, 34(31), 37-37,39. http://libproxy.lib.unc.edu/login?url=https://www-proquest-com.libproxy.lib.unc.edu/trade-journals/employees-doubt-confidentiality-companys/docview/2134169917/se-2?accountid=14244

39  Twaronite, K. (2016). A global survey on the ambiguous state of employee trust. Harvard Business Review. https://hbr.org/2016/07/a-global-survey-on-the-ambiguous-state-of-employee-trust

40  Data de-identification is the "the process of removing personally identifiable information from data collected, stored and used by organizations." Finch, K. (2016). A visual guide to practical data de-identification. Future of Privacy Forum. https://fpf.org/blog/a-visual-guide-to-practical-data-de-identification/.

of each organization's legal situation, we recommend EDI leaders speak with both employment and privacy lawyers before conducting their audits. For example, U.S.-based organizations with employees in the European Union are subject to the "General Data Protection Regulation" and may want to fully explain their data practices to employees before gathering data and obtain each employee's consent for collecting and processing special categories of sensitive data (including race, ethnicity and sexual orientation).[41]

## Data biases and mitigation

Leaders of U.S.-based organizations should also mitigate potential biases in the data they collect. Below, we outline some key biases to be conscious of, their impacts and potential mitigation strategies (Table 1).

**Table 2: Impact and Mitigation on Prominent Types of Data Bias**

| Data Bias | Impact of Bias | Mitigation of Bias |
|---|---|---|
| **Response Bias** a tendency to distort responses in order to align them with contextual demands or one's self-concept such as the tendency to give socially desirable responses [42] | Response bias leads to… systematic deviations in the data collected, skewing the results from their true value by moving the average in the same direction. This occurs in voluntary surveys and self-reporting methods, often due to poorly curated survey questions and participants' biases to perceive themselves or be perceived as socially desirable, distorting any results found with respect to correlates of the trait of interest [43] | To rectify this bias, companies can… <br>• Develop a company culture that facilitates high and truthful response rates (e.g., Microsoft) [44] <br>• Ensure that leadership acts on issues and successes gathered from responses, changing the negative issues and expanding upon the positives <br>• When respondents feel that the questionnaire is personally relevant to them (high topic involvement) and they think that the results of the research are important and useful to society, this usually increases their motivation to respond accurately.[45] <br>• "A correction method based on linear regression was suggested by Webster (1958). It involves first computing frequency indices to quantify the degree to which a respondent employed certain response biases." |

41  We are indebted to Shoshana Rosenberg of SafePorter for her work on international data privacy and the protection of personal information while investigating organizational equity, diversity, and inclusion. For a more thorough description of major global privacy laws regarding personal data, see: DLA Piper. (2021). Data protection laws of the world. https://www.dlapiperdataprotection.com/index.html

42  Wetzel, E., Brown, A., & Böhnke, J. (2016). Response biases. In F. T. L. Leong (Ed.), The ITC international handbook of testing and assessment. New York : Oxford University Press, 2016. https://catalog.lib.unc.edu/catalog/UNCb8603310

43  Ibid

44  Microsoft. (2019). Diversity and Inclusion Report 2019. https://query.prod.cms.rt.microsoft.com/cms/api/am/binary/RE4aqv1

45  Wetzel, E., Brown, A., & Böhnke, J. (2016). Response biases. In F. T. L. Leong (Ed.), The ITC international handbook of testing and assessment. New York : Oxford University Press, 2016. https://catalog.lib.unc.edu/catalog/UNCb8603310

| **Feedback Loops** automated methods of using part or all of an algorithmic output as the input in future system operations and algorithms [46] | Feedback loops lead to… incorrect data outputs and data interpretation. If an algorithm is fed bias inputs, all future outputs and results will be steeped in the same bias. This is especially troubling for equity-related research, as inaccurate information gathered early in a process creates incorrect ongoing processes.[47] | To rectify this bias, companies can… <br>• Develop systems that periodically re-evaluate the results of each reiterated algorithm and the validity of inputs used <br>• Use a diverse team of data analysts, whether internal or third-party [48] |
|---|---|---|
| **System Drift** the utilization of statistical data that remains static over time. Data structures and models that do not change when presented with new information. | System drift leads to … outdated outputs and outdated data-based solutions by decision-makers and analysts. (e.g., the housing market crisis of 2008 was not predicted through statistics because of outdated data models utilization) | To rectify this bias, companies can… <br>• Stay up to date on changes occurring in modeled topics. Constantly review the efficacy of their data systems and how they can be better <br>• Be proactive in changing systems before a problem arises. Eliminate "this is how it's always been done" and "if it's not broken…" perspectives [49] <br>• Prototype models before scaling |
| **Omitted Variable Bias** occurs when statistically significant variables have been left out of regression-based statistical models from either lack of research or inherent human bias in the construction of the regression [50] | Omitted variable bias leads to … inaccurate regressions that overvalue the statistical impact of variables included within a given model, while undervaluing or dismissing other variables. This results in inaccurate modeling and facilitates incorrect business decisions. [51] | To rectify this bias, companies can… [52] <br>• Review models periodically with different analysts/analyst teams (internally or externally) with substantial research <br>• Ensure thorough research from various perspectives <br>• Measure fit and regression analysis |

46  Mansoury, M., Abdollahpouri, H., Pechenizkiy, M., Mobasher, B., & Burke, R. (2020). Feedback Loop and Bias Amplification in Recommender Systems. Proceedings of the 29th ACM International Conference on Information & Knowledge Management, 2145–2148. https://doi.org/10.1145/3340531.3412152

47  Casacuberta, D. (2018, May 9). Bias in a feedback loop: Fueling algorithmic injustice. CCCBLab. http://lab.cccb.org/en/bias-in-a-feedback-loop-fuelling-algorithmic-injustice/

48  Cowgill, B., Dell'Acqua, F., Deng, S., Hsu, D., Verma, N., & Chaintreau, A. (2020). Biased programmers? Or biased data? A field experiment in operationalizing AI ethics. Proceedings of the 21st ACM Conference on Economics and Computation, 679–681. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3615404

49  DeBois, P. (2017, April 10). Data drift: What it is and how to avoid it. CMS Wire. https://www.cmswire.com/digital-experience/data-drift-what-it-is-and-how-to-avoid-it/

50  Hanck, C., Arnold, M., Gerber, A., & Schmelzer, M. (2020). Omitted variable bias. In Introduction to Econometrics with R [open review]. https://www.econometrics-with-r.org/6-1-omitted-variable-bias.htm

51  Ibid

52  Ibid

| **Societal Bias** is rooted in the fact that culture plays a factor in perception. Although it does not directly translate into tangible data points, this bias affects how data is interpreted. [53] | Societal bias leads to … skewed opinions and perception of data sets and outcomes; decisions are negatively impacted by implicit human bias and inefficient or harmful (monetarily, ethically) programs are implemented. | To rectify this bias, companies should: <br>• Establish teams from a plethora of social, economic and cultural backgrounds when developing major data-supported business decision <br>• Train key decision-makers in acknowledging and combating implicit bias in the analytical and implementation process [54] |
|---|---|---|

# Examples of people-related data bias in contemporary organizations

Without mitigating the potential for data bias, effective measures for addressing inequity in the workplace cannot be attained.[55]  While the field of diversity-related data bias is still growing, many examples already reveal the dangers of biased people-related data. Examples include:

- Amazon reproduced societal bias when it attempted to build an AI tool for candidate screening trained on current employee data. Because technical roles are filled primarily by men, the algorithm ended up producing gender discrimination.[56]

- Twitter created response bias when it attempted to use tweets to analyze the behavior of individuals affected by Hurricane Sandy but failed to realize that most of the tweets came from individuals who were not severely affected by the hurricane or even in close geographical proximity. [57]

- Cost-Effective HealthCare (CEHC),[58]  a producer of medical news for patients and doctors, experienced omitted variable bias when it attempted to predict the probability of death for patients with pneumonia. Its machine-learning model learned a pattern in which pneumonia patients with asthma were at a lower risk of dying, stemming from the fact that these individuals were admitted to ICUs, lowering their risk of death. As a result, these patients were given lower probability of death and were not admitted to the hospital, instead treated as outpatients.

53   Praharaj, K. (2020, June 29). How are algorithms biased? Medium - towards data science. https://towardsdatascience.com/how-are-algorithms-biased-8449406aaa83

54   Ibid

55   Redman, T. C. (2016). Bad data costs the U.S. $3 trillion per year. Harvard Business Review. https://hbr.org/2016/09/bad-data-costs-the-u-s-3-trillion-per-year

56   Dastin, J. (2018). Amazon scraps secret AI recruiting tool that showed bias against women. Reuters.  https://www.reuters.com/article/us-amazon-com-jobs-automation-insight/amazon-scraps-secret-ai-recruiting-tool-that-showed-bias-against-women-idUSKCN1MK08G

57   Krishnamurthy, P. (2019, October 22). Understanding data bias. Medium - Towards data science. https://towardsdatascience.com/survey-d4f168791e57

58   Caruana, R., Elhadad, N., Gehrke, J., Koch, P., Lou, Y., & Sturm, M. (2015). Intelligible models for healthcare: Predicting pneumonia risk and hospital 20-day readmission. Association for Computing Machinery. https://dl.acm.org/doi/pdf/10.1145/2783258.2788613?casa_token=EKrtAYGUWosAAAAA:_CFbcK1wsbo1G81dxzWkttOJaIjE1x_OBKlgdEaM72UtTKuvqSviEMNQYJZYyCOzULRBZTcLdBxuDQ

- MovieLens,[59] a movie recommender system and virtual community, creates feedback loop bias in its distribution of ratings and subsequent rankings. The few most popular and well-positioned movies receive a large proportion of user ratings, while the majority of movies receive significantly fewer reviews and less attention due to their lower positioning. This results in the best-positioned movies propagating at the top in rank and position, even for those users not interested in them.

- Google faced system drift bias when its machine learning application, Google Flu Trends (GFT), failed to update its forecasting tool to account for Google's retroactively introduced search interface. This misstep skewed the relative magnitude of certain searches and resulted in GFT predicting more than double the proportion of doctor visits for influenza-like illnesses than the Centers for Disease Control and Prevention (CDC).

As we argue above, leaders of U.S.-based organizations should regularly audit their organizational equity while keeping a keen eye on data privacy laws and potential data biases. Without any data — or with illegal biased data — organizations are likely to create and support ineffective EDI strategies and risk legal trouble. With effective data, organizations can — and must — intelligently begin adjusting their organization's equity.

It is imperative that organizations act upon the data they receive, working to investigate and fix inequitable environments and processes. When organizations ask for feedback but do not act on the information they discover, they risk lower engagement on future surveys and frustration with a perceived lack of listening. [60] [61] When acting upon the data, it is also important for organizational leaders to be intentional and strategic. For example, when composing their strategic team, leaders should make sure that the team includes individuals from those groups most affected by organizational inequity, and that it has a sufficient budget. Everyone working on organizational EDI efforts should be paid and have access to the resources they need for success. If not, any EDI efforts may, in fact, recreate the inequity they aim to undo.

As they achieve equity, these organizations will see the numerous rewards associated with equity, diversity and inclusion. They will outperform their peers, have more engaged and committed employees, and know they are on a journey toward creating a culture people can believe in.

59  Mansoury, M., Abdollahpouri, H., Pechenizkiy, M., Mobasher, B., & Burke, R. (2020). Feedback Loop and Bias Amplification in Recommender Systems. Proceedings of the 29th ACM International Conference on Information & Knowledge Management, 2145–2148. https://doi.org/10.1145/3340531.3412152

60  Bernstein, S. (2014, January 10). Surveys without action do more harm than good. Waypoint Group. https://waypointgroup.org/surveys-without-action-do-more-harm-than-good/

61  Elzinga, D. (2018, December 7). People don't get survey fatigue, they get lack of action fatigue. Culture Amp Blog. https://www.cultureamp.com/blog/from-our-ceo-people-dont-get-survey-fatigue-they-get-lack-of-action-fatigue/

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