

Reliability Leadership Foundation  
People and Culture at Work Consortium

**FIRST EDITION**

# **BREAKING THE BARRIERS IN RELIABILITY**

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**A Report on How Attention to Diversity, Equity,  
and Inclusion Changes Your Reliability Results**



## **Reliability Leadership Foundation (RLF) Community of Knowledge Consortium**

Our RLF community members are a diverse group of professionals who are passionate about reliability, engineering, and maintenance — and who use Uptime® Elements - A Reliability Framework and Asset Management System™. They come from various industries and backgrounds, bringing a wealth of knowledge and experience to the community. Through collaboration and knowledge sharing, they contribute to the advancement of reliability practices and support each other's professional growth.

### **People and Culture at Work**

Leaning into the inquiry of advancing reliability and asset management through wellness, diversity and inclusion.

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# Introduction

## Why I Should Care

Diversity is a word that seems to either bring out the fanatics or cause people to run away. Yet, it is an aspect that must be addressed in everything we do. Multiple published reports show that the world generally benefits when diversity is embraced. As we will discuss later in more detail, the reports do not directly address the reliability and maintenance world. There are many missing aspects to how diversity and inclusion can be identified, tracked, and embraced.

The current and future reliability and maintenance community labor situation is very concerning. We've all had conversations about where we will find talent as our experienced employees retire. We've experienced the skills gaps before. Now, in this post-pandemic world, we find ourselves in an even tougher situation—a full-on labor gap. If we don't act now, this labor shortage will continue to negatively affect our industry and world.

As you read through this document, consider this: Your employees are a significant part of the company's intellectual property (IP). All teams are either assets or liabilities. While a team may be an asset now, it can quickly become a liability if they are not prepared. Consider what a difference your team would make if you saw increased innovation, improved productivity, supply chain improvements, and reputation improvement across the board. These are all benefits other companies have seen by embracing diversity, inclusion, equity, and belonging in everything they do. The goal of this report is to show how embracing diversity will enhance that asset in new ways.

## Terminology

The People and Culture at Work Consortium recently published a glossary (see QR code below) with terms and more. That and more can be found at [Reliabilityweb.com](http://Reliabilityweb.com). While all the terms below are also in the glossary, we want to take a few moments to review terms that apply directly to this report. They are diversity, equity, inclusion, and belonging (DEIB). Note that an entire report could be written for each term. In this report, however, we want to focus on how they work together for your teams.

- **Diversity (as per Reliabilityweb.com):**

Diversity is a variety of uniqueness, difference of view, perception, ideas, and approaches that result in value creation for the organization through inclusion to advance reliability and asset management.

- **Equity**

The policy or practice of accounting for the differences in each individual's starting point when pursuing a goal or achievement, and working to remove barriers to equal opportunity, as by providing support based on the unique needs of individual students or employees.

- **Inclusion**

Inclusion is an active, intentional, and continuous process to address inequities in power and privilege and build a respectful and diverse



### Glossary with Terms

Scan code or visit website

<http://uptime4.me/Diversity-Inclusion-Glossary>



community that ensures welcoming spaces and opportunities to flourish for all.

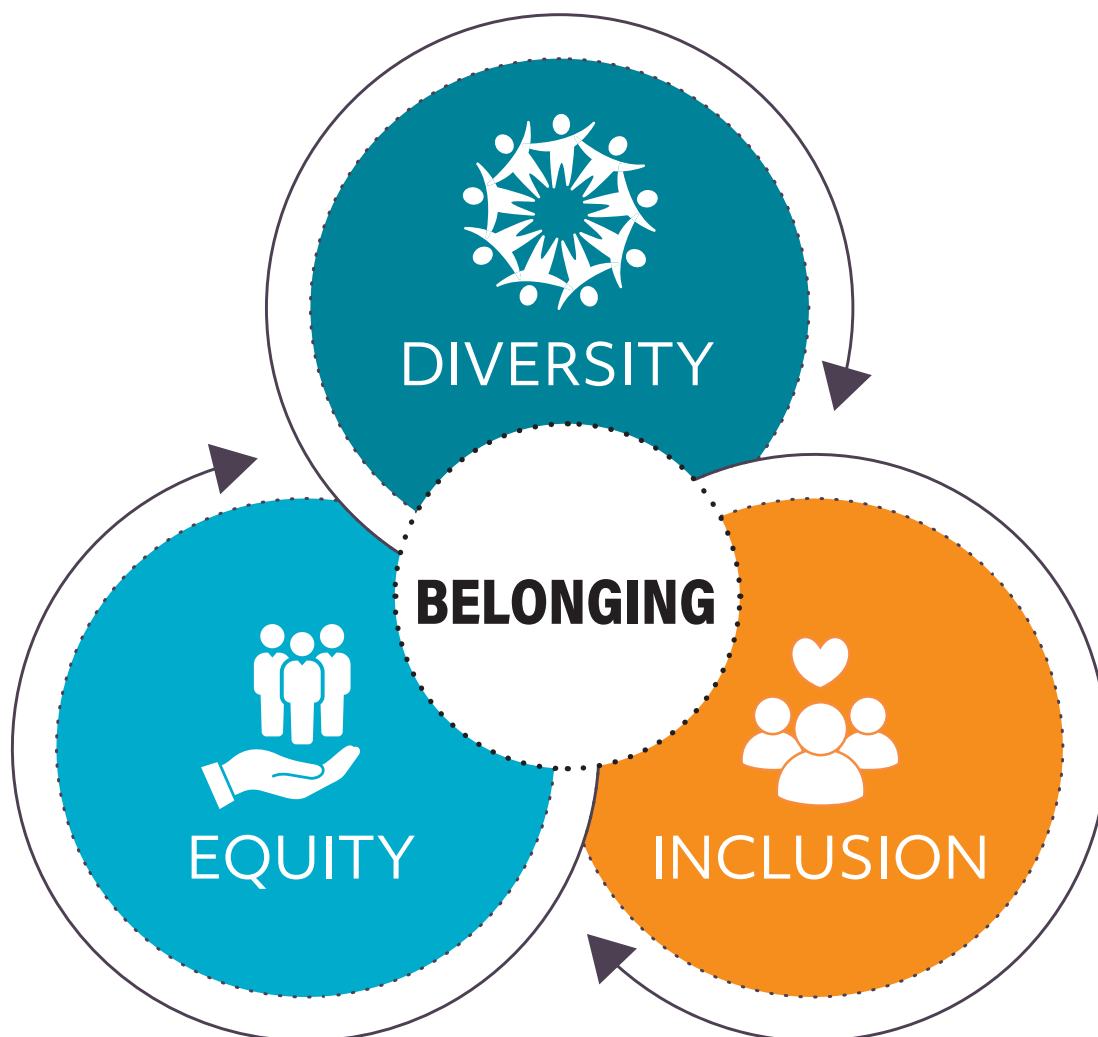
- **Belonging**

Belonging is the feeling of security and support when there is a sense of acceptance, inclusion, and identity for a member of a certain group. It is when an individual can bring their authentic self to work. When employees feel like they don't belong at work, their performance and their personal lives suffer. Creating genuine feelings of belonging for all is a critical factor in improving engagement and performance. It also helps support business goals. People need to feel valued.

While each of these terms is important on its own, it's important to understand how much stronger they are when they work together. As more studies have been completed, the terms

have grown and evolved. Initially, we heard the word diversity and assumed we knew what that meant without any study. Diversity is more than just what can be seen. It is more than just acknowledging what makes us different. Seeing and acknowledging obvious differences can hurt the goal of having a cohesive team. As seen in the diagram below, it is critical that we embrace the idea that diversity is just one aspect of a diversity initiative.

When putting things into action, think of diversity as being invited to the party without having to ask for an invite. Think of inclusion as having the music to dance and not being judged for your moves. Think of equity as being able to attend the dance without any barriers or access issues. Lastly, as this diagram shows, belonging is the perfect combination of all three. ■



# State of the Workforce

## U.S. Bureau of Labor Statistics

The U.S. Department of Labor Bureau of Labor Statistics (BLS) has been capturing data about the workforce for decades. One can evaluate the data from multiple perspectives—age, race, gender, education received, and more.

One data graph provided by the BLS indicates that out of the 614,000 total employed in maintenance in 2021, only 5,100 were women. When looking at the race statistics, we can see another large discrepancy. Black or African American, Asian, and Hispanic make up less than half (32.3 percent) of maintenance and repair workers category, while the remaining are White (84.6).

Another concern is age. The age of the available and trained workforce is getting older. When looking at the statistics from an age perspective, we can see that the median age for all maintenance related jobs is 42.9. However, the industry has 1,165,000 employees that will age out of the



system. There are only 496,000 employees in the workforce under 24. These numbers will lead to an eventual issue where we have more work than we have employees. This is complicated by the fact that the industry gets more technical every day, and employees who can handle the technical aspects of the job are needed. Remember that the latest data available from the BLS is from 2021. Many maintenance and reliability departments have already begun struggling with a shortage of

Household Data: Annual Averages						
Employed persons by detailed occupation, sex, race, and Hispanic or Latino ethnicity (Numbers in thousands)						
Occupation	2021					
	Total Employed	Women	White	Black or African American	Asian	Hispanic or Latino
Total, 16 years and over	152,581	47%	77.5%	12.3%	6.6%	18%
Maintenance and repair workers, general	614	5.1%	84.6%	8.8%	2.5%	21%

Figure 1: Source U.S. Bureau of Labor Statistics <https://www.bls.gov/cps/cpsaat11.htm>



available workers. With the data we have, we have an employee shortage crisis coming very soon.

These statistics clearly show that the maintenance and reliability industry is not diverse in terms of race, gender, and age. However, that is not the full story.

### What's Missing?

#### Maintenance and Reliability Specifics

Data specific to maintenance and reliability is difficult to find. The BLS pulls information from the U.S. Census and attempts to pool this data by occupation. While representative, some maintenance technicians may self-report their occupation as “millwright” or “electrician.” They would, therefore, be excluded from the “maintenance” fields in Figure 1. Nonetheless, the trend in these fields is as the data shows.

While there are many studies that point to the many benefits of diversity in teams, these studies were focused on upper management, administrative, or software teams. These have not focused on maintenance or reliability departments.

#### Global Statistics

Finding global statistics directly related to maintenance and reliability has also been challenging. The Organization for Economic Co-operation and Development (OECD.org) has done some work to help define barriers to stable employment that includes issues such as age and (dis)ability. It is unclear if the OECD has considered other diversity issues. It is important to note the aspects that make up diversity look different in different regions around the world. Each region is affected not only by education requirements, but also the availability of education and training, access, gender, race, and much more. ■

Household Data: Annual Averages									
Employed persons by detailed occupation and age (Numbers in thousands)									
Occupation	2021								
	Total, 16 Years and Over	16-19 Years	20-24 Years	25-34 Years	35-44 Years	45-54 Years	55-64 Years	65 Years and Over	Median Age
Total Employed	152,581	5,266	13,409	34,578	32,734	30,554	25,912	10,127	42.2%
Installation, maintenance, and repair occupations	4,840	100	396	1,120	1,039	1,021	900	265	42.9%

**Figure 2:** Source U.S. Bureau of Labor Statistics <https://www.bls.gov/cps/cpsaat11b.htm>

# Aspects of DEIB

As reliability leaders, we deal not only with assets, but also with people. Understanding diversity will help us better lead change, inspire creativity, and implement action. Diversity comes in many forms, but generally there are four types of workplace diversity.



## Internal Diversity

There are certain inherited traits we are born into. We cannot change these aspects. Often, when we think of diversity, our tendency is to think of these characteristics first.

Age  
Race  
Ethnicity  
National Origin  
Physical Ability  
Mental Ability  
Gender Identity  
Sexual Orientation

## External Diversity

As we grow and move into adulthood, outside factors and opportunities define our personalities and make us unique. External diversity considers the events that shape us into who we are. A per-

son's location, family status, and socio-economic status could also be considered factors of external diversity.



## Worldview Diversity

Everyone has different life experiences and these events and encounters are unique to each of us. Shared events may impact people differently based on other diverse traits and how we perceive the event. Some members of a group may not have faced the same situation and cannot share in the experience. Worldview diversity encompasses how our past experiences and life events



have shaped our personalities. It is important to note that worldview diversity characteristics may change with time and experience.



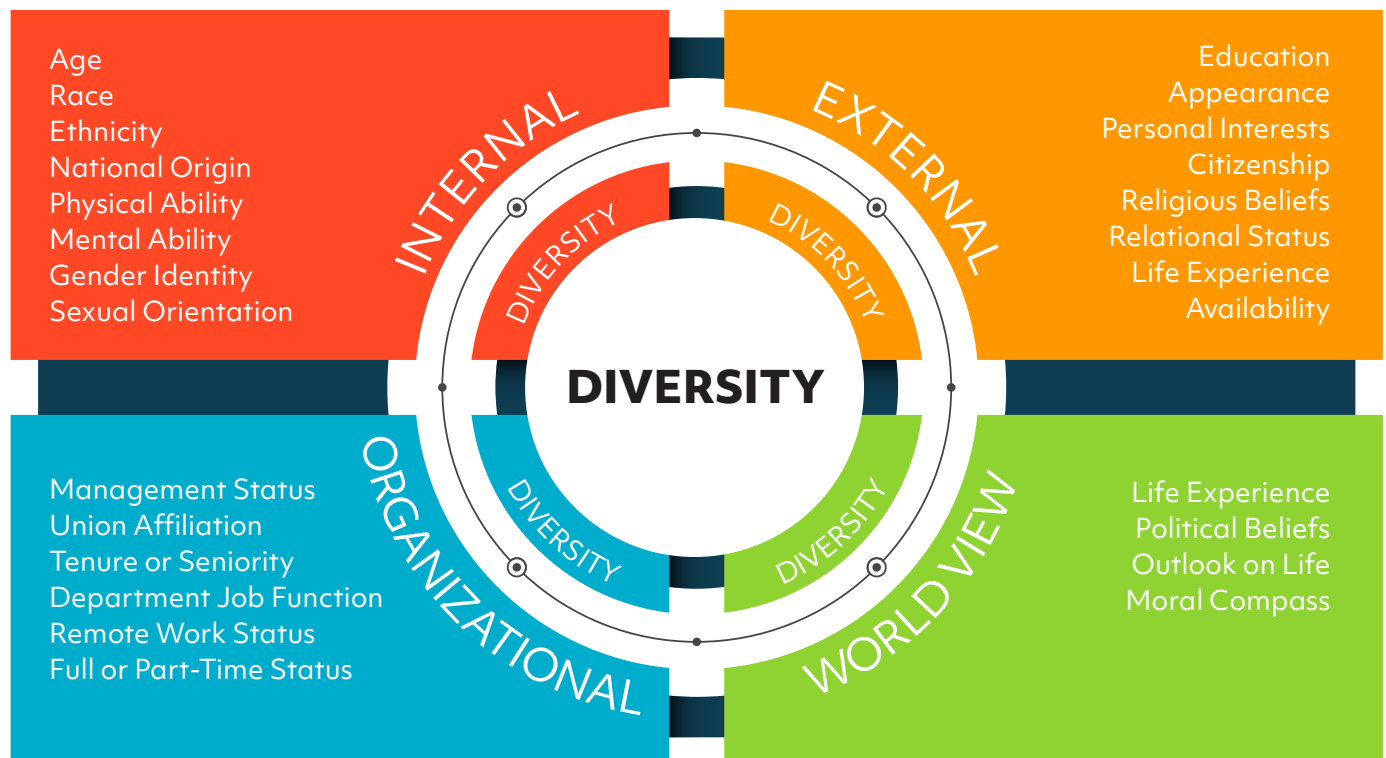
## Functional or Organizational Diversity

Every group we belong to has a structure of varying degrees, written rules and unwritten

rules that define the group. Social and work groups have unique structures that create diversity due to the way members of the group are organized. This is called functional or organizational diversity.

## Summary

Embracing diversity is more than identifying the type of diversity and the nuances that come with it. We must understand that each type of diversity is individual. Each type is uniquely complex and is often not a singular aspect our colleagues experience. In fact, understanding the overlap of many attributes will likely change how we holistically track and manage diversity programs. ■





# How Will Paying Attention to DEIB Change My Results?

Through this document, we have learned about the different types of diversity and the importance and impact of diversity, equity, inclusion, and belonging. How does this all tie into reliability and asset management? How does embracing DEIB improve our results, and where are the links to the Uptime Elements framework?



The Leadership for Reliability (LER) domain elements deal with the culture of reliability in an organization. Strategy alone is not sustainable. It takes leadership and culture to establish a mindset and culture in an organization. This is the most important domain's for ensuring efforts employed to achieve the organization's aim are met. The LER domain's focus is also to drive continuous improvement to ensure efforts are supported and sustained.

As we have outlined, a more diverse group brings new perspectives, viewpoints, and experiences to a group. Engaging and ensuring that everyone's voice is heard and considered leads us to finding the best course of action to achieve the group's mission or aim. It is the collective intellect that will drive culture.

“  
**It takes leadership and culture to establish a mindset and culture in an organization.**  
”

Tactically speaking, specific elements from the framework also are highly impacted by DEIB.



Diversity brings new perspectives to problem-solving. Root cause analysis (RCA) results will be stronger with a diverse group that is engaged. When RCA is ingrained in an organization's continuous improvement culture, improvement is more effective and sustainable. Decision-making improves with diversity as the team will have a broader understanding of the balance of cost, risk, and value.



Lastly, let's consider the element of corporate responsibility. Corporate responsibility defines how the organization will manage the impact of the organization on the community and the environment. This element is relevant to asset management because it helps drive decision-making. Organizations have an impact on the communities they operate in. Those communities include financial, economic, environmental, and social.

Diversity, equity, inclusion, and belonging are drivers of culture. A culture of reliability will help us achieve success in the triple bottom line of people, profit, and planet.

# Barriers

There are many barriers to adopting a culture that truly embraces diversity, equity, inclusion, and belonging. These barriers are not always identified and, if not identified, can block the effectiveness of any program. We share these with you not to overwhelm you, but to help you ensure you understand the barriers. For each barrier, we will also identify ways to address and overcome them. Note that these barriers are not listed in any specific priority order.

## Vocabulary Comprehension

Diversity, equity, inclusion, and belonging are terms that are used in a plethora of situations. The meaning of these words, however, can be altered by the perception and knowledge of the listener. Misunderstanding the terms can lead to a misunderstanding of the meaning behind agendas pushed out. In that case, the culture of inclusion and belonging will fail to be created.

### Ways to Counteract This Barrier:

Ensure that everyone understands the four terms. This will ensure that the spirit behind the message is portrayed correctly. To ease that endeavor, the consortium has published a helpful glossary that you may use.

## Bias

Just as perceptions drive an employee's understanding of DEIB, so too will their inherent biases. As is defined in the glossary, inherent bias is often unknown to the individual and will require some awareness about what inherent bias is and how

they can find which ones play a role in their lives. In fact, it is also known as unconscious bias.

One interesting aspect is that unconscious or inherent bias is usually determined by a person's upbringing, experiences, and local culture. Therefore, you will find that the same inherent bias issues do not exist at each facility around the country. In one area, there may be an inherent bias against people of a specific race, but you may not see that in other facilities that are physically located elsewhere.

### Ways to Counteract This Barrier:

Knowledge is the first step to change. Sharing with colleagues about what implicit bias is, as well as how it affects them, will go a long way to ensure people start holding themselves accountable for their own implicit biases. There are two tools that can assist you on this endeavor.

1. An Introduction to the Implicit Association Test (IAT)<sup>1</sup> is a video published by Olson Zaltman. You can refer to it and use it to assist you in counteracting this barrier. It's short and can be included in any presentation shared with your employees.
2. Project Implicit<sup>2</sup> has done a good amount of research on implicit bias through Harvard University. It has put together several assessments to help others determine what their own implicit biases are. The Harvard Implicit Association Test<sup>3</sup> is an easy way for an individual to identify their own unconscious biases and begin to learn that they actually exist.



Knowledge is the first step to true change. Incorporating these links after showing the video can allow your own employees to self-identify and start course correcting.

### Be Cautionary of Labels

One of the most common trackers for DEIB used across the USA is tracking labels. Around the country, there are multiple awards a company can win based on their growth in the diversity sector. These awards often track demographics to determine just “how diverse” a company is and its progress. The struggle here is that diversity and inclusion are more than what you can see or identify in that way. It’s a large part of the culture. While someone with a race that isn’t White may appear to be diverse because of their label, it’s important to acknowledge that we are not diverse when we are with people who match our demographics. For example, a White person on a board of all Black people could be considered diverse.

Likewise, a male on a board that is otherwise all females could be considered as diverse.

To complicate matters, the description of diversity provided by Reliabilityweb.com’s diversity hackathon points to differences in job titles, experience, education, and decision-making processing. Therefore, the consortium recommends that while tracking numbers can assist and show you how you are progressing, you should consider labels in context. Let HR focus on the demographics.

### Ways to Counteract This Barrier:

Instead of looking at labels, take an honest look at your departments, your teams, and your project teams. Let’s call these working groups for this explanation. When looking at these, consider the following in addition to the demographics:

- Are they effective at thinking outside of the box?
- Are we getting the best results possible?



- Does this working group have healthy debate about how to address issues or are they all agreeing with the person who appears to be the leader?
- Is there any aspect of performing?
- Are they all from the same department?
- Do they have the same education level?
- Is there any variation in personality styles within this working group?
- Is there diversity of thought in the group?
- Is everyone being heard?

These kinds of questions allow you to see how working groups are working and if they are working to their best potential. Otherwise, it's possible that you are missing a few key diversity aspects.

## Decision-Making Processes & Procedures

It is important to assess existing procedures for implicit bias. Take time to understand the history of existing processes to uncover any root biases. This includes evaluating recruiting and hiring processes with an open mind. However, there are a few potential barriers to this:

1. Current processes and procedures often were created out of historical experience, unknowingly including existing implicit biases.
2. There may be significant emotional attachment to existing processes or procedures by existing employees.
3. It can be a big endeavor to evaluate existing processes and procedures.

### Ways to Counteract This Barrier:

Create a diverse team to evaluate existing procedures with the following guidelines:

1. Create a list of all existing processes or procedures.

2. Prioritize a review of existing procedures or processes based on the potential impact in affecting diversity and inclusion within your company. Note that the review includes meeting with those who currently use those existing procedures and processes.
3. Evaluate processes and procedures based on the priority list with an open mind. Then provide a list of recommendations to upper management.

## Checking the Box

A cursory review of most of the well-known diversity programs and companies who win diversity awards will lead you to realize that existing programs largely focus on checking boxes. This has led to companies reporting on how many people of diverse characteristics have been hired, are on the board, are in management, or how many have been promoted. While this is a convenient way of tracking "success," this doesn't necessarily indicate a thriving diverse workplace or culture. Meeting number requirements doesn't always mean that a healthy culture is being adopted within the facility, or how effective those efforts have been. In addition, aspects of diversity can only be considered diversity based on the group they are around. For example, a group of people with the same skin color may or may not be diverse.

### Ways to Counteract This Barrier:

Identify diversity agendas that are focused not on numbers from a high level, but on individual departments. The major aspects of diversity are already known by human resources.

Identify belonging and inclusion agendas that are focused either on campus or department. True diversity involves equity and inclusion as a result. It is more than what you can see and it is not easily tracked. ■

# How to Leverage Diversity Initiatives to Improve Your Reliability

## **Take a Stand and Make Diversity a Priority**

Making diversity a priority is not just about following HR rules. There's a need for everyone to make it a priority. It's up to you and your working groups to make diversity a priority every day.

This is important because each employee has their own viewpoint about inclusion. You can't determine how to help someone feel included without each employee identifying how they are diverse and what they need. Each employee's internal biases may be blinding them to how they are perceived. The following recommendations should help to assist with both issues.

## **Assign a Champion (or Multiple)**

As discussed, there are many demographics that could play a role in diversity and inclusion. Rather than trying to decide how every diverse group wants to be heard, look for multiple champions to lead the effort. They can drive conversations with those they work with and share knowledge about how to address inclusion for what makes them diverse. Note that this isn't one solution for all. As an example, some deaf employees may prefer to only communicate via text. Others may prefer to use an ASL interpreter to communicate. Still others may prefer to lip-read. Likewise, a neurodivergent individual may require alone time without distraction to get work done. They may also not respond in chats or emails immediately.

## **Create an Accountability Matrix to Hold Others Accountable**

While assigning champions can be a big start, it is not the only step. There must be an accountability matrix. For example, your champions might be responsible for holding lunch and learns once a quarter. However, they should not be the only people responsible for inclusivity. Working group management and employees need to make inclusivity a priority. Adding diversity and inclusion training/participation key performance indicators (KPIs) to each role will assist with that.

## **Address Harassment & Bullying Before It Happens**

HR addresses harassment and bullying at a corporate level, but it is important that it becomes more than that. Colleagues often click through required training without truly absorbing the information. Then they are surprised when another colleague feels harassed or bullied. People tend to notice when others are wrong, but they are unable to see that they are also wrong. They don't see how they are playing a part in the issue. For example, one might see that someone else is acting passive-aggressive toward another colleague. That person might decide to keep quiet because they feel it isn't their business. Likewise, someone could be the passive-aggressive colleague unknowingly and be causing unknown harm. Of course there is always the possibility that this isn't the case and they are fully aware of their actions.



There is no excuse. Harassment and bullying are not acceptable behaviors. They damage the team's productivity in many ways. Everyone must take a stand to remove harassment and bullying from the workplace. This is especially important for management at the team level.

Ideas to improve team knowledge:

- Bring up the topic in team meetings.
- Invite guest speakers to speak and increase awareness.
- Review the training that HR provided as a team.
- Communicate regularly with your teams about how they can bring up concerns in an in-person or anonymous format.
- Hold discussion groups during lunch hours.
- Ask your team for ideas.
- Build diversity and inclusion concepts into team member KPIs on their quarterly review (see per-

formance goals and objectives below for more information on how to do this) like:

- Attended diversity and inclusion training.
- Attended harassment and bullying table talk.
- Led a discussion group on a topic regarding diversity and inclusion.

## Hiring and Recruiting

### Gaps in the Process

Consider the gaps between the DEI initiatives of your organization, the hiring practices of your department, and the recruiting practices for openings in your department hiring specifically. Are all three aligned to ensure you get diverse candidates? Unclear objectives will result in lost opportunities.

Root cause analysis can be very helpful here. Root cause analysis is often used in our day-to-day

lives to address the core issues. We often forget that we can use those principles to improve other company practices as well. For example, the values/principles model (VPM) can be used to address the gap. The model is based on four values: representation, participation, application, and appreciation. The VPM provides a structured and measurable framework for transforming the workplace while hiring or recruiting.

### Representation

Representation is rooted in the idea that diversity is an asset. When we recognize people for their individuality and unique voice, our experiences become richer and more profoundly human. Meaningful representation requires that marginalized people not be included merely for appearances or to fill a quota. Rather, organizations must remove barriers to demographic representation while also embracing individuals' unique skills, backgrounds, and contributions. When an organization includes people with diverse sociocultural, educational, and economic backgrounds and experiences, it signals that many types of people can succeed there. Representation doesn't just empower those who have been denied a presence—it encourages us to learn about and learn from people who are unlike us.

- Identify key open positions/departments now and in the future that could be targeted for growth in DEI
  - The key positions should include senior leaders, middle managers, and rank-and-file employees
- Survey your existing hiring managers
- Evaluate your job postings and descriptions:
  - Are you limiting potential candidates because the job posting is restrictive or focused on a limited demographic?
  - Are you limiting potential candidates because the job posting indicates a required degree or desired education at a specific school?



- Evaluate interviewing process and questions with your HR department to ensure you are exploring questions about how the candidate will bring new and diverse ideas or practices to your group.
  - Focus should be on what they bring to the department, not necessarily how they fit culturally
    - Will they push the team to be better?
    - Do they have the knowledge they need to raise the bar of the whole team?
    - Will they bring processes into the team that didn't exist before?
  - Are you blocking certain demographics because you aren't inclusive in that process? Ideas include:
    - Consider (dis)abilities or cognitive differences
      - Are you asking the candidates if they need accommodations and, if so, which ones?
      - Are you considering their communication style and is the process welcoming?
  - Where are you posting open positions? Is it a place where you would reach a different demographic or are you limiting it to schools and universities that have experienced employees?



- Determine a communication plan for hiring managers
  - Cultural change requires us all to work together and a proper communication plan will help to make that happen
- Modify plan over time

### **Adopt Entrepreneurial Leadership**

Managers and front-line employees need to become engaged in problem-solving to achieve the four values. To empower employees, organizations need to bring more visibility to the diversity within. One way to do so is to cross-train managers and rotate them through departments. That way they will be exposed to different aspects of the organization and to diverse people. These experiences help advance DEI in several ways. Managers will develop empathy for people with different skills, backgrounds, and experiences as they encounter them across the organization. They can also uncover pockets of untapped expertise and gain an understanding of the challenges or obstacles employees may face. With this knowledge about how different people operate and what they need to succeed, managers can take more initiative. They can clear a path for employees whose achievements may not have been previously visible or who need support to develop their talents. They can decide to fill a role with someone who lacks traditional credentials but who has demonstrated the necessary skills and aptitude.

### **Modify the Plan Over Time: Apply the Application Techniques**

These systems include how organizations develop and promote employees, define job titles, and even create and sell products. Changing them is difficult because it's hard for organizations to change how they do anything. Even leaders may fail to understand how their organization's processes may exclude people. Some members of the organization may resist changing existing processes if they benefit. Successful applica-

tion should also be evident in an organization's products and services. Products designed for the average customer won't meet the needs of many. Organizations that adopt inclusive design learn to see that no customer is average. As a result, they learn to serve their customers better.



## **Engage the Community**

### **Identify Community Partners**

Identifying community partners to join you in your diversity and inclusion endeavor will have multiple positive outcomes. While some of these community partners will be able to train your team on local demographics and issues, others will be able to partner with you to educate and train potential employees. Still others will be able to talk to the schools about the opportunities nearby, what they look like and how to improve interest among the student population. You could even identify community partners that allow your employees to volunteer to build an open and inclusive environment between your corporation and your local community. All these strategies can assist in improving diversity and inclusion within your team members.

### **Identify Training Opportunities**

Have you considered that the local high school or community college students in your area may benefit from a partnership with you? As identified in the statistics section, our industry is facing a

## BREAKING THE BARRIERS IN RELIABILITY

worker shortfall we are not ready for. By partnering with your local high schools, community colleges, or after school clubs, you can increase access to the labor pool. Sharing job opportunities with these groups might inspire students to pursue a relevant education. After their education, they might apply to your company, ready to get started.

After identifying the employee shortage, 3M has actively pursued this approach in the areas surrounding their factories. The results have been positive. For more information, visit the 3M website and check out the social aspect of their global impact.

Another demographic to consider is the demographic of disabled people who are looking for work. Accenture recently came out with an interesting report called *Getting to Equal: The Disability Inclusion Advantage* | Accenture<sup>4</sup>. It is a great resource for those looking to include disability as one of their diversity and inclusion campaigns.

This quote sheds some light on the importance of disability inclusion:

***“Persons with disabilities present business and industry with unique opportunities in labor force diversity and corporate culture, and they’re a large consumer market eager to know which businesses authentically support their goals and dreams. Leading companies are accelerating disability inclusion as the next frontier of corporate social responsibility and mission-driven investing.”***

-Ted Kennedy, Jr.

## Engage your Current Employees

### Annual and Quarterly Goals

Earlier in this report, we introduced quarterly KPIs as a way of reducing bullying or harassment. That strategy applies here, too. One of the most effective ways to ensure that a diversity and inclusion

program is successful is to set performance goals for all employees at all levels of engagement. If done well, change comes from within and drives the right results. Consider aligning these goals not only to diversity and inclusion initiatives, but also to improving teamwork interdepartmentally. That way overall company results are improved. When all departments are aligned on goals, they can work as one organism toward the same goals and objectives.

It is important to consider the goals based on position and ability to follow through. For example, it’s not appropriate to assign a goal to “create an employee resource group (ERG)” to someone who is on the front lines, working day-to-day next to equipment and with multiple departments. Instead, consider performance goals that speak to how an inclusive employee would work in their day-to-day. Maybe it might be to participate in an ERG activity of your choosing each quarter. It could also be to reach out to colleagues in other departments prior to scheduling maintenance to ensure they are aware and don’t have a conflict. Both allow the employee to grow and increase their awareness of how their work affects others.





At the manager level, similar goals should be assigned that hold them accountable. Examples might include: “ensure employees are given time in their day to attend an ERG” or “connect employees with other departments that are affected by their work.”

Again, the level of performance goal and the timing should be aligned. One shouldn’t identify a goal of “attend an ERG activity of your choosing” if an ERG does not exist. These goals should be considered from the perspective of your company and what you currently have, as well as what your employees need to feel like they belong.

It is important to note: to do this appropriately, reach out to the human resources or people and culture department in your organization. Know that they will be your allies in this endeavor, as they have been wanting this kind of engagement for quite a while and are likely already aware of the need.

One final note on this subject:

While this may seem like this is something that should be addressed from top-down—much higher than your pay grade—it is imperative that people from reliability and asset management take ownership of the goals and objectives within your own departments. Even if this would normally be someone else’s responsibility, act within your own department. Only you and your teams can address diversity and inclusion from within the walls of the organization. Address and change the day-to-day actions of your team members.

### Surveys

Surveys are a great way to understand where you are at and where you want to be. They can show results and can give you an return on investment (ROI) on how DEI initiatives have impacted reliability. Consider what data you would like to be able to track over time. Also note that changing

## BREAKING THE BARRIERS IN RELIABILITY

the wording or questions in the surveys will potentially give you different results. It is important to consider the goals of the survey and the data that will be needed to address those goals. Keep in mind that some of the data may already be available via human resources and a survey may not be needed.

Surveys are a great way to understand your employees, but surveys only work if the data is secure and input is protected. This means more than simply addressing their concerns with a statement. Being transparent with the data while protecting anonymity is paramount. If you get results from your survey that show there is work to be done, be open about that and then ask for honest feedback on how to address it. Honor their input in these voluntary surveys and let them know their honesty is appreciated.

Consider only asking for data that is needed. Your first thought may be to track the aspects that may make each employee diverse and then evaluate whether they feel as though they belong. That means you, as an employer, potentially have information that could make someone else vulnerable or open you up to liability. Therefore, focus on the results of the questions—not what makes each person unique.

Rather than try to recreate something that has already been done multiple times before, we have chosen to provide a few resources below that will assist you in developing your survey. The number of questions and their wording vary, but the intent is very similar. Below are some examples:

1. Diversityintech.co has a great article about the Top 20 survey questions for measuring inclusion at work. While this is not a complete list of possible questions, it's a fantastic place to start. It even considers whether the question should be an open-ended question or limited in response. If you just started with this, you

would already have a great understanding of how your colleagues are feeling now and where you need to go.

2. There is a free template from Poppulo.com called *How to Measure Belonging in Your Workforce*. It provides 23 survey questions and evaluates how you are doing in three areas. However, it does require you to enter your contact information prior to downloading. If you don't want to do this, go with the first option. One important note about this template: It does give some great best practices and examples of how to set up the survey to get the best possible results, which is why we chose to share it here.
3. If you already use SurveyMonkey® for other surveys, this can be a great tool to utilize. Developed with Paradigm, the SurveyMonkey® template for diversity and inclusion will allow you to learn how your employees feel about their work environment. This template also seeks to understand the extent to which they feel they can truly thrive at your company. If you don't want to have to worry about how to gather the data or have to create the survey in another system, this might be the easy option for you.

### **Personality and Communication Styles and Coaching**

In a recent presentation at the International Maintenance Conference in 2022, Melissa Ruth discussed how personality and communication styles affect how people respond to our leadership. Just like understanding learning styles helps us to create training that is more affective, so does understanding how people hear us and process what we have to say. The human mind and heart are complex, so it is important to note that understanding these specifics is only part of the battle here. This is made even more complex by adding to it neurodivergence and diversity of thought. So, how does one go about beginning to understand how to communicate effectively and get the results they need?





Take a moment here to think about each of your team members and their managers. Have you ever had an employee who didn't work well with another employee or a manager who failed to get results? We tend to believe that the person in your mind is not meant to be in that team or maybe even be a manager. We naturally assume they just weren't made for maintenance and reliability.

What if, instead, we gave them each the ability to understand how personalities and communication styles affected their results? This requires understanding both the way they communicate and the way their communication is interpreted.

There are many ways to understand this that don't require a degree in neuroscience. Additionally, many personality tools can be used here. Among them (in no particular order) are DiSC®, Enneagram, Personality Plus (now called "Wired That Way"), Myers-Briggs Type Indicator®, CliftonStrengths, 16 Personalities, 4 Color Personality Test, etc. There are so many assessments that it can be overwhelming to decide on which one. The truth is, they all bring value to the table. They all break down how your employee communicates naturally and how to adjust their communication style based on who they are talking with.

Taking these personality assessments is not only about the individual employee—it's about the team. Consider for a moment what a team might

look like if they all had the same personality type and, therefore, all communicated the same way. Is this team one that everyone else wants to work with? Do people groan inwardly when you tell them they must work with them? Ouch. This is a perfect example of diversity and inclusion. It helps us to see the value of bringing in others who think and communicate differently from us.

It doesn't end with your evaluation of the team. It requires a few more things to consider:

1. Bring these learnings outside of the initial training and assessment process. How many times have you attended a training, learned a lot, but then failed to apply it afterward? If you want to get the most out of this endeavor, it cannot just be about the initial experience. Consider actionable events that will move the lessons from the theory to application. Make the information relevant. Push the personality test information further into the workplace. Use visual markers to communicate personality assessment results through the company. Some examples are:
  - a. Using the True Colors assessment results as a guide, the organization provides each employee with Lego® bricks (as shown below) in the four colors. Employees would place bricks on their desks in the order of communication style that was important to them. This gives other team members a quick visual reminder of that person's communication preferences.

- b. The organization first ensures each employee takes the CliftonStrengths assessment as part of their onboarding process. Afterwards, each employee is given training on how to build on their top five strengths. They were then provided color-coded PowerPoint® backgrounds with the ability to enter their unique strengths in the upper right corner. Then, they make it a background for online meeting platforms to communicate to other employees when on virtual meetings.
- c. Using another type of assessment based on the True Colors test, the organization provided stickers. Employees put them on their badges and on doors to allow people to understand as they spoke to each other (or before they walked into the room) what their dominant type was. Coworkers would then be able to modify their communication styles appropriately.



2. Remember that you will be bringing in new employees in the future, so you will need to have a plan to keep the process going. Otherwise, this process has the potential of negatively affecting the culture because the new employees will not understand the meaning of terminology used by the existing employees who have been through the training.
3. While it's great for each employee to understand their personality styles and those of their teammates, don't lose sight of the value there is for management to understand their personality types. A department went through the personality styles assessment and found that their entire team was one personality style. All members were the type A personality. Management had to determine what they were missing and how to balance that personality style. They began balancing the team by partnering members with people from another department who had different personalities. This exercise had a few benefits. By assessing each employee and understanding how they entered the room, they were aware that some customers would fail to appreciate that personality. It also allowed for a new perspective to enter the team. Those that were more analytical and methodical were able to provide a value they hadn't before in the team. Lastly, they were able to understand why previous analytically-oriented training had failed to be effective in that team. It was because these team members were not thinkers—they were doers. They were able to change the method of training to ensure they got the right information at the right time, in the right way. In conclusion, they got better results.
4. Once you have completed these steps, ensure that your communication plans align to all personality and communication styles involved. Consider that some people will respond well to being directly ordered, while others will respond negatively. You will be amazed at the results when you do this. ■

# Putting It All Together

Now that you have read the sections, it is time to consider which suggested actions to add to your personal action plans moving forward. There are many actionable ideas shared in this document, but it cannot stop there.

We have discussed reasons to care about diversity, equity, inclusion and belonging (DEIB), the state of the workforce, barriers to DEIB and how to overcome them, ways to address your hiring practices and, finally, ways to engage your own employees. Yet, none of this information matters if you don't choose to put any of it into action.

Therefore, as we wrap things up here, we want to challenge you to develop a plan and then put

it into action. Consider your employees as more than just assets to bring your company reliability. Rather, consider them as advocates who can make the company better than it was before.

- ❶ What three aspects will you put into action now?
- ❷ Which one or two will you share with someone else?
- ❸ Who will you work with to make things happen?

**KEEP IN MIND:** To fully embrace inclusion and belonging, one must consider that it's not just about your team—it's about the entire company ensuring facility reliability. This also means embracing the idea that outside viewpoints increase reliability and are critical to your success. ■

**Remember: Reliability is everyone's responsibility  
...but do they know it?**

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## References:

1. **An Introduction to the Implicit Association Test (IAT)** – <https://youtu.be/Hp8QK7TUxjc>
2. **Project Implicit** - <https://www.projectimplicit.net/>
3. **The Harvard Implicit Association Test** - <https://www.bing.com/ck/a?!&p=dcde107ed79ff603JmltdHM9MTY2MTEzMTU3OCZpZ3VpZD0zN2Q0Yzg1OS1hMzYzLTQxNzltOTI3OS1iNmIzODNiYzVjOTgmaW5zaWQ9NTQyOQ&ptn=3&hsh=3&fclid=6baf5a07-21b9-11ed-90cd-d13b93f0dd5c&u=a1aHR0cHM6Ly9pbXBsaWNpdC5oYXJ2YXJkLmVkdS9pbXBsaWNpdC90YWtYXRIc3QuaHRtbA&ntb=1>
4. **Getting to Equal: The Disability Inclusion Advantage | Accenture.** [https://www.accenture.com/t20181108t081959z\\_\\_w\\_/us-en/\\_acnmedia/pdf-89/accenture-disability-inclusion-research-report.pdf](https://www.accenture.com/t20181108t081959z__w_/us-en/_acnmedia/pdf-89/accenture-disability-inclusion-research-report.pdf)



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