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The Cutting Edge of Diversity Measurements and Strategy:

A Review of (almost) Three Years of Sweat and Tears

White paper #13, 2025.

The Diversity Index

Seema is a consultancy company that specializes in leadership and organizational development – targeted at releasing diversity potential. The company was founded in 2011 and convened the development of the world's first management systems standard for diversity. Seema works closely with organizations in the private and public sector in the Nordic and European market. We use and develop advanced analytical tools to pinpoint precise areas for improvement. Seema aims to give organizations competence, confidence, tools, and leadership skills to harness diversity for value generation. Currently, Seema's CEO is convening the development of the ISO management systems standard for diversity (ISO 37401).

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Introduction

Over the last two and a half years (from October 2022 to March 2025) we have collected close to 7000 data points from a range of large Norwegian companies (large for being in Norway, at least). These companies have been distributed geographically and across industries (retail, tech, oil, power production, transport, media – you name it). We have been thorough with the scientific method to make sure that we don't fall into the same trap as the now debunked diversity reports from McKinsey&Co (Hunt et al, 2015; Hunt et al, 2018; Dixon-Fyle et al, 2020), where oversimplified approaches lead to erroneous results (for example Green&Hand, 2021).

As we are increasingly addressing an international market in our own business, we want to concisely outline our approach to measurements/analysis and effective diversity measures that improve the bottom line. This article has a number of short chapters, each highlighting a central point for achieving success in the field of diversity science as applied to organizations.

The field of diversity science

A first and perhaps obvious point to make is that the field of diversity, equity and inclusion (DEI) is a scientific undertaking at its core. Although DEI can be said to have been riddled with activism and strong emotion, it's of great importance to understand that our organizational approach builds on what is currently known as diversity science (Blaine&Brenchley, 2021; Vertovec, 2014). This multifaceted field consists of research from psychology, social anthropology, sociology, data analysis, applied statistics, economics, philosophy (mainly ethics) and so forth.

Whatever one chooses to do to improve how an organization performs in a DEI-context, it must be based on relevant empirical work and sound theoretical thinking as opposed to merely feelings and opinions. Especially if the latter originates from sources that use single stories to represent everyone in certain groups.

The paradigms for working with diversity

In 1996 an article surfaced in the Harvard Business Review (Thomas&Ely, 1996) that introduced three maturity paradigms for working with DEI. The first of these, often referred to as "the sympathy paradigm" describes working with diversity as a way to help people in need. The second paradigm describes achieving equality/equity in what one might think of as "the fairness paradigm". And lastly, the most mature paradigm is "the value creation paradigm" where the point of

DEI-work is to get the best results possible for the organization.

Although all the paradigms have their place in organizations, it's usually the third that makes sense. This is not only because of the focus on value generation, but also because the two other paradigms are very vulnerable to opinions, politics and so on. A strategy that has a strong and sensible business case connected to DEI, with proven results, will survive even in the face of pushback from those opposing DEI. As a bonus, success with the third paradigm seems to largely solve the issues in the other two paradigms (Blaine&Brenchley, 2021).

As a result of working in the third paradigm, we take a very utilitarian approach to the business ethics involved as well: What is "right" is what creates the best results. Those involved in activism or politics often support other ethical perspectives discussing "right" from "wrong" (e.g. Kantian ethics maxims), which can often be the primary source of disagreement in the field.

Accurate analysis

As mentioned, the string of reports on DEI-work from McKinsey&Co have been put aside by experts in the field and considered to be creating more problems than advantages. Failed endeavours quickly become ammunition for those who oppose working with diversity. Because of this, it is absolutely essential to have scientifically sound methods for analysis so that claims in the field, especially local to organizations, are as honest and unassailable as possible. Going forward we will briefly describe our approach to measurements.

Theoretical foundations

Work with DEI has often been focused on specific demographic groups. This is understandable from a historical and political point of view, but makes little scientific sense. Diversity is by definition always relative. If one is by oneself, there is no source of comparison and thus no diversity to be found. We base our approach on Social identity theory, a social psychological tradition with a large body of empirical work stemming all the way back to 1959 (Tajfel, 1959; Løvstad&Kumar, 2023b). It deals with how different identities influence human interaction. Because of this, context is always important. Thus, existing studies of the type "what it is like to be [demographic group]" must be taken with more than a grain of salt. As we often somewhat humorously point out: "how it feels to be part of a certain group in Palo Alto is vastly different from what it's like in your IT-department in Lillehammer (a town north of Oslo)". In some contexts, some groups traditionally thought of as minorities can also be in majority – which very much changes the social dynamics.

Mapping types of diversity

In extension of the theoretical framework, we only make relative mappings of diversity in organizations. This means that we exclusively ask whether individuals feel different than their colleagues in up to ten different dimensions of diversity:

- Gender
- Age
- Neurodiversity
- Cultural
- Religion/faith
- Disability
- Sexual orientation
- Socioeconomic status
- Education and/or work experience
- Body size

Because of the relative approach, a respondent can be a man among women, or vice versa, in the gender-dimension, older or younger than colleagues in the age-dimension, bigger or smaller than colleagues in the body size-dimension and so on. And it's possible to feel different in several

dimensions simultaneously. This is known as intersectionality (Vertovec, 2014).

In addition, we measure how different a respondent experiences diversity of perspectives through a test battery that asks whether the person in questions feels different, thinks differently, makes different decisions etc – compared to colleagues. It's what we might call "diversity under the hood". It is, after all, possible to be different in the dimensions described without it actually meaning that you have much difference on the inside (and vice versa).

Reliability in our measurement tools

A central issue in a lot of analysis done outside of academia is basing results on unreliable tools (DeVellis, 2017). Quite often we see companies simply adding a few questions on diversity to employee engagement surveys or using a "counting strategy" where they simply tally chosen groups in the company and try to see if there are any significant correlates between these and key performance indicators (KPIs).

As anyone familiar with research methods in social sciences will be aware of, creating a tool that reliably measures abstract constructs, is a complex task. One must devise a set of question items that all adequately point to the same phenomenon and correlate well with each other, while ensuring that one doesn't actually measure several phenomena with the chosen items. The six factors we've chosen as relevant psychosocial variables for our measurement tool (called The Diversity Index) are:

1. **Inclusion and belonging**
   This factor measures to what extent employees feel like they are part of the workplace community. This is basically the experience of being respected, included and understood by colleagues.
2. **Authenticity (cold and hot)**
   This is a two-part factor consisting of "cold" and "hot" authenticity. The cold part measures to what extent employees can voice their professional opinions and thus influence the way things are done ("authenticity of perspectives"). The hot part measures to what extent employees can give voice to who they are as human beings – what they think and feel on a personal level ("authenticity of feelings"). This latter part is important to well-functioning teams, especially under stressful circumstances.
3. **Competence utilisation**
   This factor measures to what extent employees experience that their knowledge, skills and ideas are sought after by colleagues.
4. **Relationship to manager/quality of leadership**
   This factor measures both to what extent employees feel they can be open with and be understood by their manager, as well as feeling that the manager has their best interests in mind.
5. **Development opportunities**
   This factor measures to what extent employees feel they can have a career path within the organization. This can mean getting promoted and gradually approaching the C-suite but also getting relevant courses to build expert competence.

For these factors, we do complete reliability analysis for all items every time we distribute our survey tool in a new organization. Factor loadings are always $r > 0.6$ and the large majority are $r > 0.8$. Cronbach's α are always $r > 0.8$ and Chi Square analysis show that no factors are divided (Løvstad&Kumar, 2023a). For those not used to this notation, it basically means that we can trust the survey tool's reliability – that it upholds the required scientific standards. This is a prerequisite for predicting anything else of importance, which we'll get back to later in this article. Should you encounter other types of tools in the field, it's still essential to establish that they uphold such standards if they are to be applied to analytical tasks.

Descriptive statistics

The role of descriptive statistics is to simply show "what is" in the organization. Before looking at what effects diversity has, we need to see what the diversity consists of, how complex it is, how well the organization is performing on the aforementioned six psychosocial factors, the distribution of differences in terms of feelings/opinions/behaviour and so forth. An organization where the diversity is mainly about age and gender will have very different approaches to dealing with optimizing their workforce compared to one that mainly has respondents feeling different in the neurodiversity and socioeconomic dimensions. And an organization with a low degree of intersectionality likely has less friction than one where there is a lot of complexity (Lau&Murnighan, 1998).

In our dataset we see that 45% of all respondents have reported to be part of at least one type of diversity. Ignoring effects on psychosocial variables that pertain to almost half of all employees is in general a bad idea. As many have pointed out before us: The workforce is already very diverse and so the question is simply how one chooses to manage it in the best way possible for the organization to thrive.

In terms of complexity, we have companies with employees representing as much as eight degrees of intersectionality, but most max out at four or five degrees. In addition, we see that the number of unique combinations of diversity dimensions usually fall somewhere between 50 and 150 depending on the size of the company. By combination we mean that an individual can be different in terms of age, sexual orientation and religion/faith while another might be different in terms of socioeconomic status and gender. The total number of these configurations is important to pay attention to as it drives home to point that one can't simply work with one dimension like "gender" or "age" – people are complex and multi-dimensional and need to be treated in a more holistic manner (as whole human beings). Also, one should be aware that within these categories there are more granular narratives. Being gay and neurodiverse from Ethiopia likely means something else than being gay and neurodiverse from Sweden, although both these individuals would likely tick off the boxes for sexual orientation, neurodiversity and culture.

Inferential statistics

When it comes to using factors for predictions, such as the ones we measure, we can go in two directions: Either we a) need to predict other "soft" constructs that we know from research are important to workforce performance or b) we need to predict hard factual data such as sick leave, turn-over, bonuses etc. The latter prediction is self-explanatory because we can use variables relevant to diversity to find out to what degree they make people quit less or more often, perform better or worse at work, get sick more or less and so on. We've done this on several occasions, and it provides the basis for a very straightforward business case (such as "how much money can be saved on sick leave given better management of diversity in the organization?").

In the other case of predicting "soft" constructs it's important to use those relevant from existing research. For example, we know subjective well-being is important to performance, health, prosocial behaviour and lots of other important things (Eid&Larsen, 2008). Thus, it's a variable that is smart to be able to predict as we can then lean on decades of peer-reviewed research. Choosing constructs with no scientific tradition behind them means predicting something that we don't know the consequences of. This is a common mistake when people create survey tools, which results in measurements that have no real predictive interpretation for business outcomes.

Regression analysis

When we do inferential statistics, we start off by doing a simple regression analysis. When

we do this, we disregard the effects of diversity. This means that the regression analysis shows how the six psychosocial factors influence KPIs regardless of whether they represent diversity. As a result, the analysis is akin to employee satisfaction surveys, but with the added benefit of using scientifically sound target variables with solid research behind them. And also, we get a map of which factors influence, and how much they influence, KPIs for all employees in a given organization. Subjective well-being might depend on competence utilisation and development opportunities in organization A, while organization B needs to focus on inclusion and belonging and authenticity. Often, we talk to leaders who have fancy-looking statistics without information about what to focus on to improve. Naturally, this makes it tougher to make changes. Figure 1 shows an example of one of our regression models. In this case, all six factors influence subjective well-being, but to different degrees – as shown by darker colour for the more influential ones. The organization should primarily focus on inclusion and belonging, authenticity (perspectives) and development opportunities, if the goal is to ensure more well-being among employees in general.

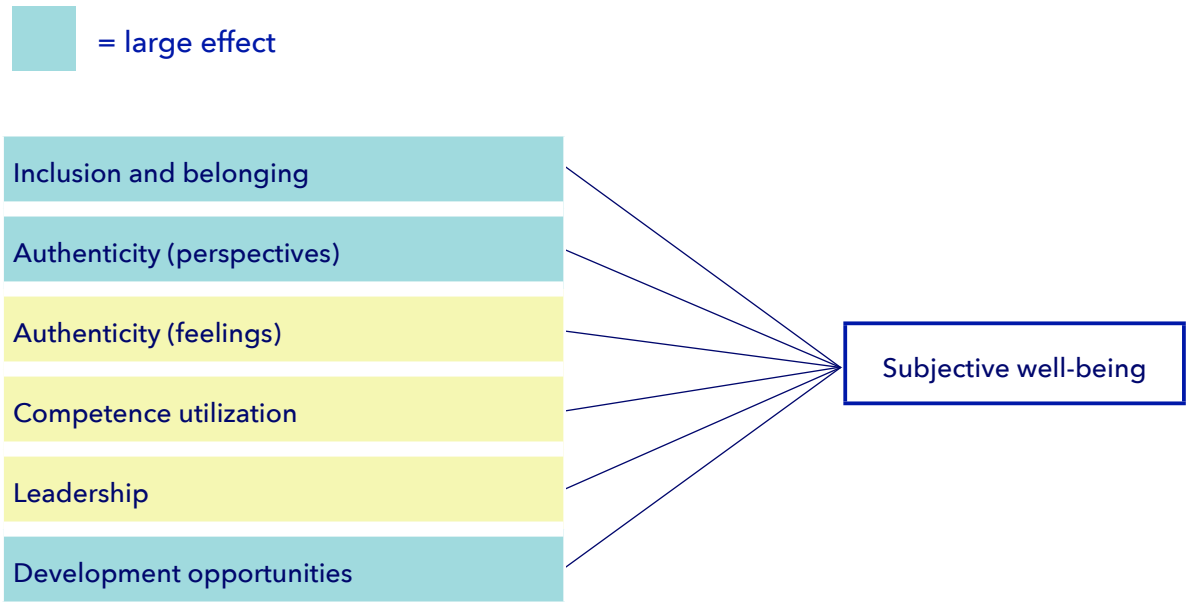

Figure 1: Example of a regression model where we show the relationship between our six psychosocial variables and Subjective well-being.

The three variables we always look to predict are subjective well-being, meaning at work and motivation at work. For subjective well-being, we use a version of "The Satisfaction with Life Scale" (Diener et al, 1985) tailored to the context of work life (and validated along with our other factors). For meaning, we use the "Work And Meaning Inventory" (WAMI; Steger et al, 2012) and for motivation we use the "Work Extrinsic and Intrinsic Motivation Scale" (WEIMS; Tremblay et al, 2010).

When doing regression analysis, we see that our six factors have an explained variance (R^2) of about 50-60% on subjective well-being, 34-40% on meaning and 25-30% on motivation (Løvstad&Kumar, 2024a-c). For those not

used to this way of describing effect sizes, they are large and moderate. Note that 50% percent explained variance doesn't mean that we are right 50% of the time – it means that changes in our variables explain 50% of all changes in, for example, subjective well-being at work. Which in turn leads to very accurate predictions. To our knowledge, reaching these levels of explained variance for the mentioned variables has not been done before. Because of this, our tool can also replace existing employee satisfaction surveys to introduce higher precision with regard to improving what science has shown to be most important factors for employee engagement.

We have also begun predicting sick leave and turnover. Although we have seen significant effects, it is still early days when it comes to predicting behavioral variables in organizations we work with. And so, we will not be discussing "hard" KPI predictions in this article (those who speak Norwegian can find details in Løvstad&Kumar, 2025).

Multi-mediation analysis

Moving on from general effects, we introduce what is known as multi-mediation – based on the PROCESS module in R (Hayes, 2018). This is incidentally to address the issues found in the McKinsey reports mentioned earlier: Instead of assuming a direct connection between diversity and KPIs, we look at the more rational claim that whether diversity leads to loss or gain businesswise has to do with how it's managed. This results in a "well, it depends"-type of thinking which means, statistically speaking, that diversity relates to the six factors we have mapped out and these in turn relate to relevant KPIs. The effect from diversity on KPIs is mediated through the six psychosocial factors.

This is illustrated in figure 2 where we see that three variables have been disconnected to show that they don't have an effect in this particular model, while the three remaining variables mediate effects from diversity to subjective well-being.

Figure 2: *Multi-mediation model where Feeling different (diversity in perspectives) influences subjective well-being through Inclusion and belonging, Authenticity (perspectives) and Development opportunities (three mediating variables).*

As mentioned before, we mainly use two approaches to measuring diversity itself: How many diversity categories respondents experience having (intersectionality) and to what degree they are different in terms of thinking/feeling/deciding (and so on). In all the Norwegian organizations we have measured, with the exception of one, the variable measuring how diverse you feel on the inside compared to colleagues has a much larger negative effect on all three "soft" KPIs (subjective well-being, meaning and motivation) compared to the categorical approach. This might be different in other countries as research done by cultural psychologist Michel Gelfand (Gelfand, 2019) shows Norway to be one of the strictest countries in the world when it comes to social control – belonging to the same group as Japan, South Korea and Singapore. Thus, it is expected that deviation from cultural norms and social standards here is much more burdensome than in for example Holland, which is comparative as a society when it comes to subjective well-being nationally, but with very low social control (a much more "loose" culture). We look forward to exploring this further as we expand our international client portfolio.

On the other hand, Norway is seen as a very benign country when it comes to gender equality, sexual orientation and such. So conversely, intersectionality likely has a lesser effect in Norway compared to countries with less focus on such topics. We also see, in accordance with international research (Blaine&Brenchley, 2021) that visible diversity dimensions (what you can see with the naked eye, such as gender) has less negative impact on KPIs than invisible diversity (what you need to "find out" by indirect means, such as religion/faith). This is generally explained in the literature to be because invisible diversity comes with more stress in terms of socially managing who knows and who doesn't know about one's diversity, and the impact that might have.

Results and their consequences

From data gathered so far, we know that our methodology is sound. Reliability metrics, explained variance from regression analysis, percentage of diversity and so on have proven surprisingly stable across (very) heterogeneous organizations. Actual outcomes vary quite a bit, but this is to be expected in what is essentially social psychological studies on groups of people belonging to unique organizational cultures. As we keep repeating to anyone willing to listen: Every organization is like a village with its own norms and rules and needs to be studied as such. General studies performed by social scientists in various settings give rise to hypotheses about what the situation might be locally, but measurements have to be done to see to what degree it's true for the organization in question.

What we can agree on in general, however, is that being part of diversity in categories or "under the hood" consistently leads to detrimental effects on "soft" KPIs like subjective well-being, meaning and motivation. And from the limited data gathered so far, the same type of effects seems to be present for "hard" KPIs. This is not surprising, as studies in social psychology ever since the classic "Robbers Cave" experiment by Sherif (1954), have shown that being part of an outgroup is a suboptimal experience, no matter how that outgroup is defined. This means that for most companies, working with diversity has

to do with avoiding loss from poor intergroup dynamics and prejudicial systems. And measurements have to do with locating with precision what the challenges are (as in the multi-mediation models) as well as how much the detrimental effect is. Figure 3 shows a graph where we can see the baseline (thick line) for decrease in subjective well-being in all organizations analysed so far, with the stapled lines showing the first standard deviation. The thin blue line is the example company "Outgood", which in this case is within the norm (although one could argue that the norm should be no negative effects – in an ideal world).

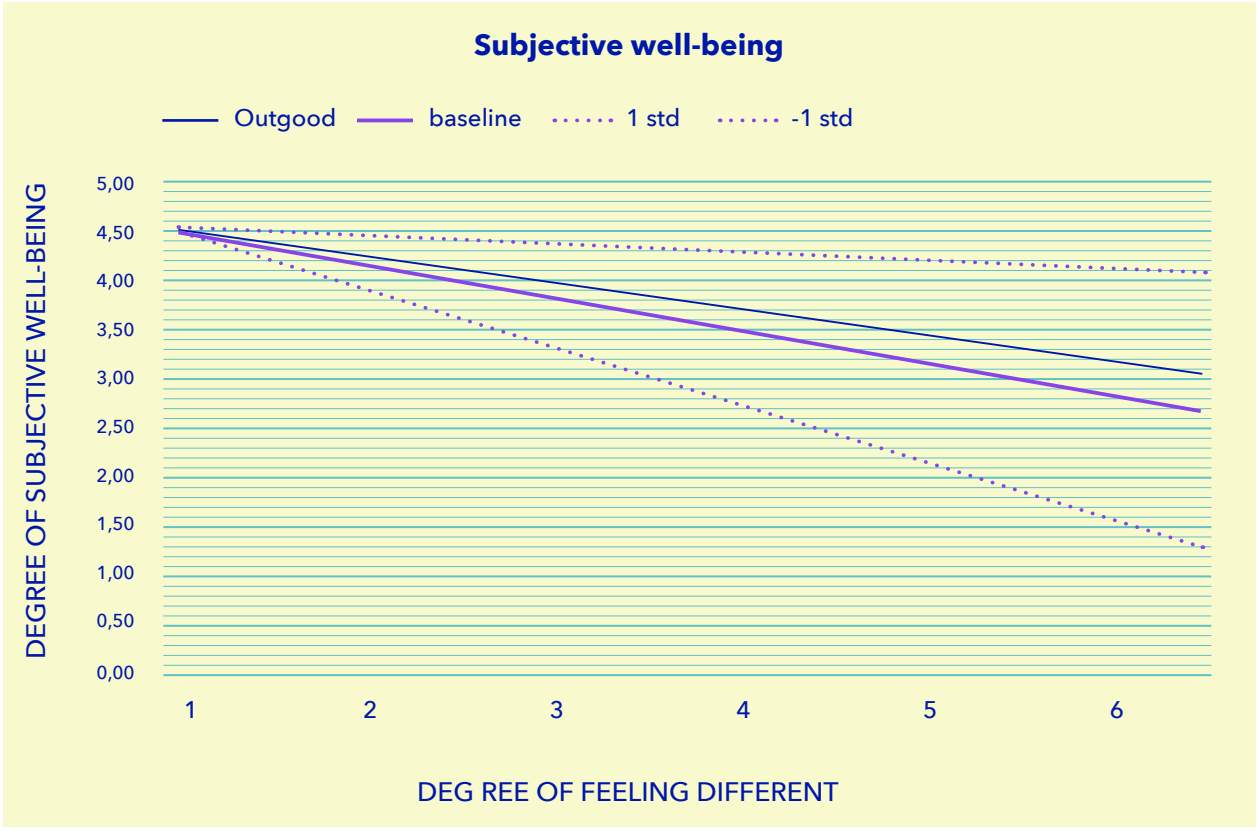

Figure 3: *Example of a graph showing the negative effects from feeling different on subjective well-being.*

Apart from the company-wide effort to not lose productivity from a diverse employee pool, there are also teams where diversity can become a big upside. With heterogeneous and creative tasks, you want to have a team that can contribute multiple perspectives in order to make something that will ensure competitiveness and the next generation of products and services for the organization. A first obvious question in this context is if being diverse in terms of categories also means you have diversity in perspectives. The answer to that question is "yes, but the effect is small". The explained variance between degree of intersectionality and degree of difference in perspectives is 9,4% (R^2 = 9,4%, n=5063, p=8,57*10^{-111}, α=0,01).

A second question is how we can create these "super teams". This is a hard question to answer scientifically as the teams are often too small to study with statistical methods. And they are often very heterogeneous

because they make impacts in a multitude of fields that don't necessarily have the same requirements for succeeding. That being said, Page (2019) offers sensible guidelines and case examples for reasoning about the challenges and making good decisions. Note, however, that this "diversity for innovation"-idea is most often only relevant to certain parts of the organization, where tasks are non-routine and actually require a richness of non-conform thinking. For the rest of the organization, the main point is that every employee should be in an environment where they can perform at their best.

Conclusion

At this point, it should be obvious that there is no escaping working actively with diversity. Since there is no getting around it, we encourage working with it in a structured manner. To do so, we need to rely on proper statistical methods and constructs that have scientific traditions that back them. Being able to predict something that we don't know the consequences of is meaningless. Most employee engagement surveys have been oversimplified to the point of bringing no actual value to the organization.

We also need to be precise about what the challenges are for a given organization, such as shown by the regression and multi-mediation models. Most often we elaborate on these results with qualitative studies to be even more clear on what needs to be done. For example, "Authenticity (perspectives)" might be uncovered to be about disagreements between professional groups within the organization, such as between engineers and economists. This sort of thing can only be explored through interviews or other arenas where employees can speak freely on what is really going on. We encourage everyone to address real pain points in intergroup dynamics through a scientific undertaking, like the one described in this article, both to mitigate adverse effects and yield positive results from diversity.

As can be understood from this paper, working with diversity is a complex undertaking, but one that has big implications for the productivity of the organization. Nevertheless, complexity should not be discouraging when methods for success exist. Done right, it is entirely possible to address the issues in a way that ensures improvement.

Lastly it should be noted that going from counting diversity to focusing on how it performs in the organization is a lot more fun and interesting – in addition to being profitable. As humans, we can be encouraged to show curiosity to those different from ourselves, instead of creating more distance between groups. But it requires leaning on proper research instead of single and potentially unrepresentative stories. Everything to facilitate engaging conversations with organizational performance in mind.

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