

Innovations

Data-unraveling the nexus of human resource analytics and diversity and inclusion: A literature review

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Abstract

In this article, we delve deeply into the literature that examines how diversity and inclusion relate to human resource analytics. This study seeks to give a thorough comprehension of how organisations use HR analytics to promote diversity and inclusion initiatives by critically reviewing existing studies, theories, and frameworks. It explores the foundational ideas and methods of HR analytics in the context of diversity and inclusion, shedding insight on the field's past achievements, current obstacles, and promising future. This analysis and synthesis of the available literature adds to the body of knowledge by providing useful insights and suggestions for researchers, HR professionals, and policymakers who are working to improve diversity and inclusion using HR analytics.

Keywords : HR Analytics, diversity, inclusion, vanity metrics

Introduction

Numerous studies have demonstrated that a diverse, equitable workplace is beneficial for corporate performance, innovation, customer loyalty, and employee trust, hence diversity and inclusion has been a major focus for many organisations in recent years (Grissom, 2018). However, true diversity and inclusion is difficult to achieve since it means going beyond vanity metrics and fixing the real problems that keep diverse groups of employees from succeeding. Inclusion, which is described as a work environment in which all individuals feel appreciated, respected, accepted and supported and in which all employees are able to actively participate in decision-making processes and opportunities for growth within the organisation, is one of the most difficult things to evaluate and keep tabs on (Hays-Thomas, 2022). Although diversity in the workplace is highly beneficial, it can be challenging to capture and quantify employee impressions of inclusion across locations and demographics. With an emphasis on assessing inclusion at work, this article seeks to investigate the potential of HR analytics in spotting and fixing diversity and inclusion problems. Human resource analytics, or HR analytics, is the practise of applying analytical methods to HR data in order to boost organisational effectiveness in areas such as talent management, employee engagement, and retention, and strategic decision making (Huselid, 2018). By using HR analytics, businesses may evaluate their

present diversity and inclusion practises, pinpoint areas for growth, track the success of D&I initiatives, and share the outcomes with key stakeholders. The purpose of this article is to provide a comprehensive overview of the literature on the topic of HR analytics' application to the measurement of workplace inclusion, including its potential benefits and drawbacks, as well as its consequences and recommendations for HR practitioners and leaders. In addition, the paper will give case studies of companies that have used HR analytics to effectively monitor diversity and inclusion progress. This study aims to:

- Investigate the existing landscape of HR analytics in organisations and how they are being applied to the task of measuring and bettering diversity and inclusion outcomes.
- To pinpoint the difficulties and potential benefits of using HR analytics to tackle issues of diversity and inclusion.

Literature Review

The importance of diversity and inclusion (D&I) to a thriving business is becoming more widely acknowledged. Numerous studies have demonstrated the positive effects of a varied and egalitarian workplace on productivity, creativity, client retention, and confidence in management (Philip & Soumyaja, 2019; Salter & Migliaccio, 2019; Cletus, Mahmood, Umar & Ibrahim, 2018). However, many businesses still have trouble assessing the value of their diversity and inclusion initiatives and sharing that information with key audiences. In addition, organisations typically struggle to make real progress with their diversity and inclusion projects because they lack the data-driven insights that would allow them to go beyond empty gestures. By providing objective and actionable data about diversity and inclusion's present state and growth inside an organisation, HR analytics can be a powerful tool for promoting diversity and inclusion initiatives (Salau, Osibanjo, Igbino, Joel, Atolagbe, Adegbuyi & Adeniji, 2022). Data gaps can be found, group experiences can be evaluated, diversity and inclusion metrics can be tracked over time, and diversity and inclusion interventions can be evaluated with the use of HR analytics. Using HR analytics, businesses may develop a culture of data-driven decision making that encourages open communication, individual responsibility, and ongoing enhancement.

Using data and statistical analysis, human resource analytics aims to boost productivity and morale in the workplace (Rasmussen & Ulrich, 2015). Policies and practises aimed at promoting diversity and inclusion in the workplace attempt to provide workers a feeling of acceptance and a stake in their job (Shore et al., 2018). Diversity and inclusion helps improve decision making and issue solving because it encourages the inclusion of diverse viewpoints and expertise (McKinsey, 2022). McKinsey (2022) and Achievers (2020) found that companies with teams that actively encourage diversity and inclusion outperform those that do not. Additionally, diversity and inclusion can boost employee engagement, retention, and performance by encouraging a culture of acceptance and inclusion (Achievers, 2020). More eligible applicants who place a premium on diversity and inclusion in the workplace can be attracted to companies that practise diversity and inclusion (Achievers, 2020). There are, however, obstacles to diversity and inclusion that must be overcome. It might be difficult for personnel from different backgrounds to work together because of prejudice and mistrust (Cletus, *et al.*, 2018). Likewise, it can be difficult to make diversity a priority and incorporate it into everyday operations if it isn't already (Agbontaen, 2019). Leaders and managers must be dedicated to fostering an environment where all employees are valued and respected, and they must provide employees with the resources they need to increase their cultural competency and awareness. Diversity and inclusion may also involve expenses and concessions including conflict resolution, meeting varying demands and preferences, and adjusting to new circumstances (Garg & Sangwan, 2021).

Challenges of HR Analytics

Many different approaches exist for HR analytics now. While some organisations have developed people analytics teams, others continue to face difficulties with data quality and reporting. McKinsey reports that while people analytics is a top concern for 70% of business leaders, just 9% are confident in their knowledge of the factors influencing employee performance. Furthermore, very few businesses have been successful at integrating data analytics into their regular HR procedures or employing predictive analytics to foresee potential difficulties with recruiting and retaining top personnel in the future. The complicated and disjointed state of HR technology is one of HR analytics' biggest obstacles. Human resources data can be gathered and stored using a wide variety of systems and tools, including but not limited to: core HR systems, payroll systems, performance management systems, learning management systems, employee engagement surveys, and external sources (Cho, Choi & Choi, 2023). It can be a challenging and time-consuming effort for HR analytics teams to integrate and harmonise numerous data sources. Data quality and consistency are also frequently undermined by things like human mistakes, missing values, and out-of-date records.

Using data to improve their strategic position and contribution to business outcomes, human resource professionals have turned their attention to HR analytics in recent years (Marler and Boudreau, 2017; Fernandez and Gallardo-Gallardo, 2020; McCartney et al., 2020). Despite the widespread interest in and use of HR analytics, the field still faces a number of obstacles and unfilled niches that must be filled before its full potential can be realised.

The availability and quality of data needed for HR analytics is a major obstacle. The term "data quality" was coined by the research group Wang et al. (1996) to describe how well-suited a set of data is for a certain task. Data availability is defined as "the degree to which data can be obtained, accessed, and used for analysis and decision making" (Chierici et al., 2019). Minbaeva (2018) and McCartney et al. (2020) note that few HR departments have access to high-quality data that can adequately reflect the complexity and dynamics of human capital and its relevance to organisational performance. Also, many HR divisions struggle to access and integrate data from disparate sources such as internal systems, external databases, surveys, social media, and sensors (Marler and Boudreau, 2017; Ferraris et al., 2019). That's why it's crucial to increase HR analytics' data availability and quality. The acquisition and use of analytical skills that can convert data into useful insights presents still another difficulty. Data collection, processing, analysis, and interpretation are all components of analytical competency (Minbaeva, 2018; Singh and Del Giudice, 2019). It has been shown that many HR practitioners lack the analytical skills necessary to conduct the kind of sophisticated and predictive analytics that can yield actionable insights (Marler & Boudreau, 2017; Fernandez & Gallardo-Gallardo, 2021; McCartney, Murphy & McCarthy, 2020). On top of that, HR pros often run into pushback and scepticism from managers and staff who either don't trust or comprehend analytics results or see them as an intrusion on their personal freedom or confidentiality (Ferraris, Mazzoleni & Davalle, 2019). Therefore, it is crucial to enable HR analytics to improve analytical skills and promote a culture of evidence-based management. Another difficulty is connecting HR analytics with the larger organization's goals and aspirations. When HR professionals have the strategic ability to act, they are able to make and implement decisions and actions that add value to their organisation based on data analytics (Minbaeva, 2018; Singh & Del Giudice, 2019). Marler and Boudreau (2017), Fernandez & Gallardo-Gallardo (2021), and McCartney et al. (2020) all report that many HR professionals have difficulty aligning and integrating HR analytics with the company plan and demonstrating its influence on key performance metrics. In addition, organisational politics, power dynamics, or a lack of resources might make it difficult for HR professionals to put into practise the advice gleaned from analytics (Ferraris et al., 2019). Therefore, improving HR analytics requires a focus on bolstering strategic capabilities to act and forming partnerships with important stakeholders.

Some best practises in HR analytics have arisen as a means of overcoming these obstacles. Among these are:

- Formulating an HR analytics strategy and vision that supports organisational objectives.
- Recruiting a multi-disciplinary group of analysts, data scientists, human resources professionals, and business partners
- Incorporating data integration, standardisation, security, and governance within an established framework
- Using sophisticated analytics methods like machine learning, natural language processing or network analysis to draw conclusions and provide recommendations
- Clearly and persuasively conveying the findings of HR analytics in order to motivate change and action through communication and visualization
- Evaluating the results of HR analytics projects on organisational performance and employee experience

Organisations can maximise their human resources and gain a competitive edge with the use of HR analytics. However, you can't just wing it; you need a plan, expertise, a solid data base, and a mindset that values experimentation and growth.

Using HR analytics to move beyond vanity metric

Vanity metrics are indicators that sound impressive on paper but fail to capture the underlying nature and results of diversity and inclusion efforts (Howson, 2021). Vanity metrics include things like the number of employee resource groups, the percentage of underrepresented groups in the hiring pool, and the number of diversity training sessions provided. However, these indicators do not represent the real outcomes or experiences of individuals from varied backgrounds, even if they may suggest a degree of dedication or effort from the organisation.

Organisations may get past vanity metric of diversity and inclusion by using data-driven methods to evaluate and enhance these areas (Huselid, 2018). Data is powerful because it can disclose the unarguable facts about the existing status of diversity and inclusion in an organisation, identify gaps and areas for development, track progress and effect over time, and share outcomes and accountability with internal and external stakeholders. In addition to improving corporate performance, creativity, customer loyalty, and employee trust, data may help companies learn how diversity and inclusion effect a variety of other outcomes (Howson, 2021). Data may demonstrate, for instance, that diverse teams perform better on complicated tasks, that inclusive environments encourage innovation and creativity, that workers from a wide range of backgrounds better reflect and service customers from all backgrounds, and that leaders who encourage diversity and inclusion boost employee engagement and retention.

Opportunities of using HR Analytics for Diversity and Inclusion

The capacity to track and analyse data on employees across demographic categories including gender, race, age, disability, sexual orientation, and socioeconomic status is a major benefit of HR Analytics for diversity and inclusion. Organisations can spot signs of bias, discrimination, or exclusion in their policies, practises, and culture by collecting and analysing data along these dimensions. Business outcomes like innovation, customer satisfaction, and employee engagement can be measured thanks to HR Analytics, which can also help organisations monitor the success of their diversity and inclusion programmes like recruitment, retention, promotion, and development of diverse talent (Howson, 2021). Using HR analytics for diversity and inclusion may also help raise consciousness about these challenges at the organisational and individual levels. A culture of accountability, openness, and learning in support of D&I goals and values may be fostered by giving data-

driven insights and feedback on diversity and inclusion metrics. HR Analytics, for instance, may aid businesses in conveying their diversity and inclusion vision and strategy, elucidating best practises and success stories, and initiating discussions and actions to solve diversity and inclusion obstacles and openings (Williamson&Kizilcec, 2022).

Several advantages can accrue to organisations when HR analytics are applied to diversity and inclusion efforts.

- Going beyond vanity metrics and empty box-checking. Human resource analytics may help businesses evaluate where they're falling short, how different departments or teams within the firm are faring, and how to best reduce employee turnover (Minbaeva, 2018). Using HR analytics, organisations may monitor their development over time and share the results with their constituents.
- The improvement in organisation output, creativity, client retention, and confidence in management. A diverse and inclusive workforce has been found to improve business results in a wide range of research. Teams that are culturally and linguistically diverse are better able to reflect the people they serve, make more well-rounded judgements, and provide more novel solutions to problems. Inclusion in the workplace has been shown to increase employee motivation, job satisfaction, and productivity (Garg & Sangwan, 2021). By connecting diversity and inclusion data to business indicators, HR analytics may assist organisations in measuring and optimising these results.
- Working to improve social fairness. Systemic prejudices and discrimination in an organization's policies, processes, and practises can be uncovered with the use of HR analytics (Williamson &Kizilcec, 2022). Monitoring and reducing the negative effects of external variables, like as the Covid-19 outbreak, on underutilised talent segments is another area where HR analytics may be useful. In this way, HR analytics may help businesses build a more diverse and inclusive workforce and community.

Limitations of using HR Analytics for Diversity and Inclusion

There are, however, some drawbacks to adopting HR Analytics for diversity and inclusion that should be recognised and remedied. The quantity and reliability of data on diversity and inclusion dimensions is a major obstacle (Williamson&Kizilcec, 2021). Organisations may struggle to gather, store, and retrieve correct data on D&I dimensions, such as self-reported or sensitive information, depending on the context and requirements. In addition, the comparability and generalizability of data and outcomes may be hindered by the fact that organisations' definitions and categories of diversity and inclusion characteristics may vary between cultures and regions. When employing HR Analytics for diversity and inclusion, companies should have strong data governance and ethical standards in place (Howson, 2021). The risk of data abuse or incorrect interpretation is another disadvantage of HR Analytics for diversity and inclusion. Human biases, preconceptions, or intentions may distort or corrupt the meaning and consequences of data and outcomes, despite the fact that data can give objective and true information on diversity and inclusion dimensions. Organisations may utilise data selectively or superficially to support rather than question or enhance preexisting diversity and inclusion practises or judgements. Equally problematic is when companies make diversity and inclusion recommendations or judgements based only on data or algorithms, without taking into account the impact on specific people or groups. As a result, businesses must use HR analytics for diversity and inclusion in a way that is ethical and considerate of all parties involved (Omotayo, Anthonia, Hezekiah, Odunayo, Opeyemi& Odion, 2020).

Related Theories

Human capital theory (HCT) which was proposed by Gary Becker in the 1960s is one of the theoretical underpinnings of HRA. HCT holds that human resources are a kind of capital that can be invested in, developed, and leveraged to increase an organization's competitive advantage. HRA, according to HCT, may help businesses increase their ROI by revealing which employees' knowledge, skills, and actions are most important to achieving their objectives. People capital theory also suggests that HRA may assist businesses in developing and executing policies and procedures that better use their people resources in service of their overall business goals.

Social identification theory (SIT) which was first proposed by Henri Tajfel and John Turner in the 1970s, describes how people classify themselves and others into social groups according to defining traits like colour, gender, age, ethnicity, religion, etc., is a foundational concept in diversity and inclusion (D&I). According to SIT, D&I may improve workplaces by lowering levels of bias, discrimination, and stereotyping among workers of all backgrounds and ethnicities. According to SIT, diversity and inclusion efforts help businesses reap the advantages of a more varied workforce by encouraging open communication, collaboration, and knowledge sharing between traditionally separate departments and teams.

Organisational justice theory (OJT) is also significant for diversity and inclusion since it considers how workers evaluate the fairness of organisational procedures and results. Employees' perceptions of procedural justice (the fairness of the methods and criteria used to allocate resources and rewards), distributive justice (the fairness of the outcomes received by different groups of employees), interpersonal justice (the fairness of the treatment and respect shown by managers and coworkers), and informational justice (the fairness of the explanations and communications provided by managers) can all be improved through D&I initiatives, according to OJT. OJT also suggests that D&I can assist businesses increase employee happiness, commitment, trust, citizenship, and performance as a result of the effects that employees' views of justice have on those factors. This theory was propounded by Jerald Greenbag in the late 1980s and early 1990s.

Policy recommendation

The following policy suggestions for organisations seeking to enhance their D&I outcomes are based on a review of the literature on the role of HR analytics in detecting and addressing diversity and inclusion challenges:

- Adopt legitimate and trustworthy techniques to gather information about workforce diversity, employee satisfaction, and company success.
- Analyse the data to see where your company's D&I efforts are lacking, where there are problems, and where there are openings for growth.
- Share your organization's D&I objectives with employees, supervisors, executives, consumers, and investors.
- Use inclusive recruiting practises, mentorship programmes, employee resource groups, bias training, and flexible work arrangements to improve D&I.
- Use data and feedback to track how D&I efforts affect employee participation, turnover, output, creativity, and the bottom line.
- Use consistent and clear metrics to report and discuss the outcomes of D&I initiatives both internally and internationally.

- Promote an environment where all workers are treated with dignity and accorded the respect, acceptance, support, and worth they deserve from their superiors and peers.

Conclusions

In this article, we discuss how HR analytics may help organisations spot and correct problems with diversity and inclusion. We've spoken about how HR analytics may help organisations get past vanity metrics and assess the real results of their diversity and inclusion efforts in areas like employee satisfaction, productivity, and retention. We've also highlighted some of the difficulties and recommended solutions involved in integrating HR analytics in a way that safeguards personal information, prevents discrimination, and promotes a welcoming environment for all employees. Our research leads us to believe that HR analytics may play a significant role in achieving diversity and inclusion targets, but only if they are implemented with a strategic plan that takes into account the organization's long-term objectives, core values, and the interests of key stakeholders.

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