

MANAGING CHANGE

Sustainable Practices, Inclusive Leadership, and
Gender Equality in the Digital Industrial Revolution



EDITED BY

Mehak Arora, Manish Srivastava & Arpit Gupta

Managing Change

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Managing Change: Sustainable Practices, Inclusive Leadership, and Gender Equality in the Digital Industrial Revolution

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INVESTOR IN PEOPLE

This book is dedicated to the pioneering minds and committed advocates who continue to shape the transformative path towards sustainable practices, inclusive leadership, and gender equality in the era of the digital industrial revolution. It is through the efforts of individuals and communities like these that the ideals of fairness, innovation, and justice are translated into real-world change.

To the esteemed authors of each chapter, we express our deepest gratitude. Your rigorous research, critical insights, and commitment to excellence have made this volume possible. Each chapter reflects the collective wisdom, vision, and expertise of professionals across diverse fields. Together, you have contributed to an enriched understanding of how technology, policy, and human values intersect in our rapidly changing world.

This dedication extends to the thought leaders, educators, and activists who have laid the groundwork for advancements in these areas and continue to inspire us through their unwavering dedication to positive social impact. Your work and passion provide a foundation upon which future leaders can build a more just and resilient society.

We would also like to thank our families, friends, and colleagues, whose support has been invaluable. Their encouragement and patience have been our anchors throughout the development of this book. This dedication is a reflection of our gratitude for the love and strength they continue to give us as we pursue our academic and professional journeys.

Lastly, we dedicate this work to the generations who will inherit the challenges and opportunities presented by the digital industrial revolution. May this volume serve as both a guide and an inspiration to those who will carry forward the mission of inclusivity, equality, and sustainability. Our hope is that this book contributes meaningfully to the larger global discourse and encourages action towards building a future where these ideals are realised for all.

With respect and gratitude,
Mehak Arora, Manish Srivastava, and Arpit Gupta

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Foreword

This book titled *Managing Change: Sustainable Practices, Inclusive Leadership, and Gender Equality in the Digital Industrial Revolution* provides a substantial and comprehensive exploration of the dynamic factors that shape the contemporary modern world by analysing how sustainable practices, inclusive leadership, and gender equality intersect with the demands of an increasingly digital setting. With insightful research, real-world case studies, and actionable strategies, this book extensively equips scholars, practitioners, and leaders with the tools necessary to manoeuvre the complexities of change, make meaningful contributions to their fields, and create positive, lasting impact. In reading this book, readers may be inspired to not only understand the challenges and possibilities of our time but also to lead with vision and purpose as they collectively shape a more equitable, sustainable, and inclusive future.

Dr. Vivek Kumar
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Preface

It gives us immense pleasure to present the book titled, *Managing Change: Sustainable Practices, Inclusive Leadership, and Gender Equality in the Digital Industrial Revolution*. This book imperatively examines multifaceted challenges and opportunities that sprout in the era of the digital industrial revolution italicizing the necessity for effective change management, sustainable practices, inclusive leadership, and gender equality. As a matter of fact, it is evident that with rapid technological advancement and profound societal transformation, the digital industrial revolution presents both unprecedented challenges and remarkable opportunities. In view of this, it is noticeable that the rise of digital technology has impacted every facet of our lives, from the way we communicate to the methods we employ in production, from business structures to the very nature of human connection. However, with great power comes the need for great responsibility. Organisations, leaders, individuals, and many others must address the critical imperatives of managing change, fostering sustainable practices, embracing inclusive leadership, and advancing gender equality to create a future that serves all.

In consideration of this, the present book comprehensively offers a profound understanding of the complex dynamics that shape contemporary business and contemporary societal settings. We focus not only on the technological advancements at the heart of the digital industrial revolution but also on human and ethical considerations. Technological progress brings with it not only efficiency and productivity but also significant challenges – disruptions to traditional work structures, environmental impacts, and shifts in power dynamics. It is essential to examine these challenges alongside the opportunities and to do so with an eye towards inclusivity and sustainability.

Throughout this book, readers will find an extensive analytical integration of four interconnected themes that define our time: managing change, sustainable practices, inclusive leadership, and gender equality. In each of these areas, we delve into current theories, practices, and case studies that reflect both successes and ongoing struggles in various sectors. We examine organisations that have successfully taken the helm of transformative change and those that have innovated in response to urgent environmental concerns. Correspondingly, we ponder at leaders who have embraced inclusivity as a core value, as well as workplaces striving to break down gender barriers to ensure equality and equity.

The book addresses one very important aspect of *change management*, examining how leaders can guide their organisations through the dynamics of digital transformation. Key strategies and frameworks are discussed with a prime focus

on fostering resilience and adaptability within teams and across entire organisations. Various sections of the book deal with the discussion on the ways in which companies can implement eco-friendly processes and support global sustainability goals. The book also highlights organisations leading the charge towards greener operations, demonstrating that environmental responsibility and profitability can indeed go hand in hand. The discussion advances on *inclusive leadership*, a critical factor in the successful integration of diversity and equity within the workforce. It also explores the characteristics and practices of inclusive leaders, italicizing empathy, adaptability, and a commitment to equity. By examining both research and real-world examples, the book aims to provide readers with insights into building teams and organisations where every voice is valued. Notwithstanding, this book intends to focus on another theme gender equality. Despite substantial progress, gender disparities remain pervasive, especially in digital and technological fields. The book examines the structural barriers that continue to hinder gender equity, from biases in hiring practices to disparities in pay and opportunities for advancement. The digital industrial revolution offers a unique chance to rewrite these norms, and this section discusses how policies, organisational initiatives, and cultural shifts can promote greater gender equity in the workplace and beyond.

This book is essentially intended for diverse scholars, practitioners, and decision-makers who are committed to fostering change and leading responsibly in the digital age. We believe that readers will benefit from the *diverse perspectives, case studies, and forward-looking insights* presented throughout these chapters. It is our hope that this book serves as both a resource and a call to action – a guide for those looking to understand the complex intersections of technology, leadership, and social progress, as well as an inspiration to contribute actively to a more sustainable, inclusive, and equitable future.

Acknowledgements

We extend our heartfelt gratitude to everyone who contributed to the completion of this book, *Managing Change: Sustainable Practices, Inclusive Leadership, and Gender Equality in the Digital Industrial Revolution*.

First and foremost, we thank the esteemed authors of the chapters whose insights, research, and expertise have shaped this book into a comprehensive exploration of sustainability, leadership, and gender equality in the digital age. Their contributions have enriched this collection with critical perspectives that push forward the dialogue on inclusive leadership and sustainable practices in rapidly changing industries.

We also wish to acknowledge the invaluable input of our reviewers. Their careful reading, constructive feedback, and thoughtful suggestions have been instrumental in refining the quality of the chapters. Their commitment to academic rigour has enhanced the clarity, accuracy, and relevance of the content presented.

Our sincere thanks go to our publishing partner, *Emerald Publishing*, for their unwavering support throughout the publication process. Their dedication to fostering impactful and socially responsible scholarship has allowed us to bring this important work to a wider audience. We deeply appreciate their professionalism, guidance, and support from the initial stages of the manuscript through to its final publication.

Additionally, we are grateful to our colleagues and institutions for providing the environment that nurtured this project. Their encouragement and belief in the importance of advancing gender equality, sustainability, and leadership in the era of digital transformation have been a constant source of motivation.

Finally, we extend our deepest appreciation to our families and friends, whose patience, understanding, and support made this endeavour possible.

Thank you all for being a part of this journey.

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Chapter 1

Navigating the Nexus: Integrating Sustainability Through Efficient Leadership, Inclusion, and Gender Parity in the Era of Digital 4.0 Metamorphose

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Abstract

The Digitised Industrial Revolution (Industry 4.0) has transformed organisational culture significantly. This era, driven by artificial intelligence (AI) as well as automation, has invited substantial transformation in organisational procedures, job roles, reshaping, and creating new employment opportunities. With a focus on digital skills and agility, these changes necessitate ongoing learning and upskilling. To thrive in a constantly evolving environment, organisations must foster inclusive cultures and adopt sustainable practices. This chapter emphasises the crucial need for fostering inclusive leadership to ensure smooth administrative processes within organisations. It details the essential skills required of an inclusive leader in the Industry 4.0 context. Inclusive leaders are vital for organisational success, as they harness diverse perspectives to generate an encouraging environment wherein all employees feel valued, respected as well as empowered. These leaders ensure that diversity and equality are deep-rooted in every area of the business, such as recruitment, hiring, promotion, retention, etc. Achieving this necessitates maintaining gender equality in the workplace. The chapter explores the strategies and policies needed to address the gender gap. It focusses on fair hiring practices, equitable

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training, flexible scheduling, and salary parity. By removing prejudices and empowering women, organisations may create spaces where talent can flourish without gender barriers. Organisations that embrace and adapt to these inclusive practices are better positioned to thrive in the rapidly evolving digital landscape. Inclusion of academic insights and frameworks will provide a deep understanding of the interplay among sustainability, gender equality, and inclusive leadership in digital transformation.

Keywords: Sustainability; inclusive leadership; diversity; gender equality; organisational resilience

1. Introduction

The Digitised Industrial Revolution, often termed Industry 4.0, is profoundly reshaping workplace and organisational cultures by weaving together automation and AI. This transformative era is categorised by the convergence of the physical and digital realms, directing to significant shifts in organisational processes and job functions. Industry 4.0 utilises automation to streamline operations, boost efficiency, and minimise human errors. This transition to automated systems significantly influences organisational cultures in promoting continuous improvement and data-driven decision-making. These strategies focus on eliminating waste, reducing variability, and improving quality, which collectively foster a culture of continuous improvement (Vinodh et al., 2021). By examining current trends and challenges, this chapter stresses how important inclusive practices are in navigating technological advancements and diverse workforce dynamics. Insights are drawn from empirical studies and theoretical frameworks to elucidate the competencies required of inclusive leaders in driving sustainable success in the digital age.

With the sporadic changes in the workforce and work culture brought about by AI, traditional roles have been replaced by unique operational skills making it become increasingly integrated into business operations, necessitating new skills and altering the workforce landscape. AI and automation are replacing many jobs, yet human traits like intuition and empathy remain hard to replicate. While AI poses a threat to jobs, it enhances human resource skills and ensures adaptability, leading to human-machine integration where AI acts as a tool rather than a replacement for human labour.

This shift elevates the significance of skills in terms of critical thinking, analysis, and innovation, thereby transforming the nature of job roles across various industries. Employees are now required to possess a certain level of proficiency with digital tools and technologies to remain relevant in their roles. This necessitates continuous learning and upskilling, as workers must keep pace with rapidly changing technological advancements. Companies are dedicating resources to training programmes that boost their employees' digital skills, ensuring that they stay competitive on a global scale (Carlisle et al., 2023).

2. Aim and Objective

Highlighting on what are the crucial skills and training necessary for the workforce and the imperative of inclusive leadership in the Industry 4.0 era to foster innovation, resilience, and organisational excellence.

Addressing gender barriers that hinder employee potential by exploring inclusive leadership strategies and policies essential for overcoming the gender gap challenge.

3. Methodology

The qualitative method employed integrates insights and intersectional perspectives from diverse primary and secondary data sources. It examines inclusive leadership's role in fostering a sustainable workplace within the Industry 4.0 landscape, emphasising the significance of diverse and inclusive practices for sustainability and success of the organisation.

4. Review of Literature

While Industry 4.0 may replace certain traditional works, it simultaneously crafts newer opportunities in emerging fields. Data science and analytics, cybersecurity, and robotics and automation engineering are experiencing significant growth, driven by the increasing reliance on technology and empirically driven decision making (Davenport & Patil, 2012). Furthermore, the advent of these newer roles necessitates a workforce equipped with specialised skills and knowledge, fostering close collaboration between educational institutions and industry. This partnership ensures the development of relevant training programmes to prepare workers for Industry 4.0 demands. Raising awareness about inclusive leadership is vital for smooth administrative processes, as leaders need empathy, cultural competence, and collaborative problem-solving to achieve organisational excellence and promote diversity and equity (Clark & Polesello, 2017). This study highlights the need for continuous learning and upskilling. Expertise in data analytics, Internet of Things (IoT) as well as machine learning is essential for competitiveness and innovation (Lampropoulos et al., 2019).

Industry 4.0 blurs traditional disciplines, requiring interdisciplinary knowledge to integrate various technologies effectively (Kumar & Mehta, 2023). The rapid technological advancements demand lifelong learning and continuous skill development (Jones & Lee, 2023). Technical skills alone are insufficient; workers must also improve soft skills and conceptual skills. In the context of Industry 4.0, collaboration among individuals with diverse backgrounds remains paramount for driving innovation and problem-solving. Cross-functional teams are crucial for integrating automation, AI, and advanced technologies across departments (Ledro et al., 2023). This integration requires effective communication and knowledge sharing to enhance team efficiency. Collaborative skills enable employees to adapt quickly to change and respond to shifting priorities. Additionally, collaboration fosters a culture of innovation by leveraging diverse perspectives

(West & Sacramento, 2012). As technology advances, understanding and addressing ethical and social implications is crucial. This ensures responsible innovation and builds trust among stakeholders, enhancing organisational reputation. Moreover, it promotes regulatory compliance and a culture of integrity (Brennan & Lo, 2017).

4.1. Fostering Inclusive Cultures and Adopting Sustainable Practices (Industry 4.0)

Inclusive cultures are built on the recognition and appreciation of diversity, ensuring that all employees, from diverse demographics, feel valued and respected. This inclusivity goes beyond mere representation; it requires the active engagement and integration of diverse perspectives into the processes of decision-making (Jerónimo et al., 2022). Hence, organisations must implement comprehensive policies that promote fair hiring practices, ensuring that recruitment efforts reach a diverse candidate pool. Equitable training and development opportunities are crucial, enabling all employees to acquire the digital skills necessary to steer through the evolving technological landscape. By cultivating a culture wherein everyone has an equal opportunity to be successful, organisations can harness the fullest workforce potential, motivating innovation and enhancing the overall performance of the employees (del Mar Fuentes-Fuentes et al., 2023; Okatta et al., 2024). This study searches for the accomplishment of fair hiring practices, equitable training opportunities, flexible work arrangements, and transparent salary structures, all crucial components supported by inclusive leadership.

4.2. The Synergy of Inclusivity and Sustainability

The interplay between inclusivity and sustainability is a powerful driver for organisational success in the Industry 4.0 era. Inclusive leadership brings up a culture in which different perspectives are valued, thereby, leading to creative solutions that address both social and environmental challenges (Bapuji et al., 2020; Kuknor & Bhattacharya, 2022). Sustainable practices, in turn, reinforce inclusivity by creating an environment that prioritises employees' well-being as well as our broader community. For instance, initiatives such as flexible work schedules not only support work–life balance but also reduce commuting-related carbon emissions (Yildizhan et al., 2023). By integrating inclusivity and sustainability into their core strategies, organisations can enhance their adaptability and competitiveness while contributing to a more equitable and sustainable future. This holistic approach ensures that the benefits of Industry 4.0 are widely shared, driving progress towards a more inclusive and environmentally responsible global economy (Bai et al., 2020). Cultural competence, another crucial skill for inclusive leaders in the Industry 4.0 context, involves understanding, respecting, and valuing cultural differences within the workplace. Inclusive leaders must be able to manoeuvre cross-cultural interactions effectively, leveraging diverse perspectives to drive innovation and problem-solving (Gallegos, 2013; Gómez-Hurtado et al., 2021).

5. The Crucial Need for Fostering Inclusive Leadership in the Industry 4.0 Context

Leaders drive and inspire change, promote innovation, and help organisational members understand their environment (Yukl & Chavez, 2002). Seeking and valuing diverse perspectives is the hallmark of an inclusive leadership in the Industry 4.0 context. All leadership approaches must bring sustainable outcomes. This is particularly important as organisations adopt new technologies and processes that require a range of skills and viewpoints to implement effectively. Diverse teams bring varied insights as well as creative solutions to complex problems (Govendo, 2005). Inclusive leaders create a culture of openness and collaboration, encouraging employees of varied backgrounds to provide ideas and work collectively for the success of the organisation (Rock & Grant, 2016). This method drives innovation and helps organisations adapt more swiftly to changes and disruptions. Leaders can achieve this; leaders should set clear sustainability goals and demonstrate that they are committed to reducing the environmental impact of their business activities. They may, for example, embrace sustainable waste management techniques, promote the use of renewable energy sources, and embrace energy-efficient technology. Open communication is another important component. Teams are more trusting of leaders who are open and truthful about company goals and procedures, especially when it comes to sustainability. This trust creates a more unified and driven team by boosting productivity and employee engagement. Businesses such as Buffer, for example, offer a totally open pay system that gives workers complete access to the information used to decide their remuneration. This clarity eliminates confusion and builds a sense of fairness between staff and management, contributing to improved job satisfaction and retention.

Research (Mensah & Ophelia, 2011) has concentrated on perceptions critical to the success of pay programmes like Performance-based Pay (PBP) from a motivational perspective, along with attitudes towards the implementation of these programmes. Concerning employee perceptions of factors such as expectancy, instrumentality, and valence (based on expectancy theory), the results have been varied. When goals were clearly defined, compensation was adequate, and there was strong backing for merit pay plans, PBP produced favourable outcomes. Similarly, Google's leadership briefs the public on corporate accomplishments, obstacles faced, and future objectives via frequent 'town hall' meetings known as thank god it's friday (TGIFs). By encouraging employees to voice their opinions and concerns in these open forums, the firm helps them feel more included and like they own it. Transparency in communication promotes a work environment where employees are more willing to participate, work together, and accept responsibility for their tasks. Employees feel more included and like they own the firm when they can voice problems and provide suggestions in these open forums, meetings, and conversations.

Another essential aspect of inclusive leadership in Industry 4.0 is the cultivation of a culture of psychological safety. A study on inclusive leadership (Korkmaz et al., 2022) presented a multi-tier model with four key dimensions

that characterises an inclusive leader: fostering employee individuality, enhancing team cohesion, demonstrating appreciation, and backing organisational initiatives. These dimensions encourage diversity, build relationships, acknowledge contributions, and further the mission of inclusion.

5.1. Ensuring Equity and Fairness

Achieving equity and fairness is a fundamental aspect of inclusive leadership in Industry 4.0. This involves implementing fair hiring practices, equitable training opportunities, flexible work arrangements, and transparent salary structures. Implementing fair hiring practices ensures unbiased recruitment based on qualifications through structured interviews, blind resume reviews, and diversity training (Yarger et al., 2020). Inclusive leaders are committed to removing prejudices and participation barriers that hinder the advancement of underrepresented groups, primarily, females in science technology engineering and mathematics (STEM) fields (Hall et al., 2022). By addressing these disparities, organisations create equal opportunities for employees to contribute and succeed. This enhances the satisfaction and retention of employees. This also further strengthens the organisation's competitive edge.

5.2. Promoting Continuous Learning and Development

In this dynamic landscape of Industry 4.0, continuous learning and development are essential for maintaining a skilled and agile workforce. Inclusive leaders prioritise ongoing learning opportunities for all employees, ensuring that they have the skills needed to implement new technologies and new processes (Kuknor & Bhattacharya, 2022). This involves more training programmes, mentorship, and career development resources that are tailored to cater to the varied needs of the employees. Through continuous improvement and lifelong learning, inclusive leaders help employees stay relevant and competitive, which is key for organisations' success in this digital phase (Malik, 2023).

Incorporating sustainability initiatives requires leaders to drive change and improvement to meet updated organisational goals. This involves creating a novel strategic vision, engaging fitting strategies for business, and executing renewed policies and processes for organisations' transformation. Inclusive leadership also plays a dynamic role in upholding sustainability within organisations. Leaders prioritise inclusive practice that benefits organisation as well as the environment. This involves assimilating environmental, social, and governance principles into corporate strategies, confirming that technological advancements lead to an equitable and sustainable future (Cherkowski, 2010).

6. Essential Skills Required of an Inclusive Leader in the Industry 4.0 Context

The growth of Industry 4.0, characterised by advancements in automation and AI, demands new leaders who will be inclusive and adept at navigating the difficulties of a digitalised workplace. An inclusive leader should be technically

proficient, emotionally intelligent, and deeply committed to strengthening diversity and equality. These continuous upskilling and reskilling are vital for ensuring that the workforce feels respected, appreciated, and empowered, thereby driving innovation and organisational success. For instance, companies such as IBM and Deloitte have implemented extensive training and development initiatives that prioritise both upskilling and reskilling (Deloitte, n.d.). These efforts help their workforce remain relevant amid the challenges posed by automation and digital transformation, ultimately supporting the long-term viability of the business.

6.1. Emotional Intelligence

Emotional intelligence (EI) skill is particularly important in forming an inclusive atmosphere where employees feel appreciated and heard. Research underscores that high EI leaders are well equipped to manage conflicts, inspire trust, and enhance team cohesion (Abdullahi et al., 2020). They exhibit greater sensitivity to emotions and needs of the team members, which is crucial for fostering inclusivity and leveraging diverse perspectives within organisations. So, high EI leaders are well equipped to navigate the difficulties of diverse teams, manage conflicts, and build strong interpersonal relationships. EI is instrumental in guiding decision-making processes, empowering leaders to make informed and empathetic choices that align with the needs of their teams and stakeholders. Leaders who value EI cultivate a culture of support and inclusivity, enhancing employee morale and bolstering resilience and organisational success in today's changing business environment (Jordan & Lawrence, 2009).

6.2. Technological Proficiency

In the context of Industry 4.0, leaders must possess a high level of technological proficiency. This includes an understanding of digital tools, data analytics, and AI technologies that are transforming organisational processes and job roles (Simmons & Yawson, 2022). Inclusive leaders need to be able to manoeuvre these novel technologies for fostering collaboration, improving efficiency, and driving innovation. They should also be capable of guiding their teams through digital transformations so that all employees have the necessary competencies as well as resources to accustom to new technologies. By integrating technological proficiency with inclusive practices, leaders can create a more agile and resilient organisation. This enhances innovation and efficiency and fosters a supportive setting where varied talents thrive (Shen et al., 2009).

6.3. Commitment to Lifelong Learning

The dynamic nature of Industry 4.0 necessitates a commitment to lifelong learning. Inclusive leaders must continually update their knowledge and skills to keep pace with technological advancements and changing market demands (Garavan et al., 2019). The Industry 4.0, integrating computing and operating systems, IoT, and AI, demands continuous learning to stay competitive and drive innovation,

as static knowledge rapidly becomes obsolete (Schwab, 2016). Leaders must ensure teams understand the latest technologies and promote a learning culture, highlighting the need for adaptive leadership and the ability to integrate new technologies in a way that benefits all employees. Ongoing professional development in these areas enables leaders to inspire and guide teams through Industry 4.0 transformations. Lifelong learning also helps leaders to stay informed about best practices in diversity and inclusion, enabling them to implement strategies that support a diverse and dynamic workplace (Gallegos, 2013).

6.4. Advocacy for Equality and Fairness

Finally, an essential skill for inclusive leaders in Industry 4.0 is a strong advocacy for equality and fairness. Leaders must be proactive in implementing guidelines and practices that uphold workplace diversity, workplace equity, and employee inclusion within their organisations (Waters et al., 2023). This includes fair hiring practices, equitable training opportunities, and transparent promotion processes. Inclusive leaders should also be vocal advocates for eliminating systemic barriers that hinder the participation and advancement of underrepresented groups, such as women and minorities in STEM fields (Caver & Livers, 2021). By addressing systemic barriers and biases, inclusive leaders build a fair platform where employees are provided equal opportunities to be successful. This commitment to fairness not only enhances employee satisfaction and retention but also attracts a broader talent pool. In the Industry 4.0 context, where digital skills and agility are paramount, having access to diverse talent is a significant competitive advantage (Ajgaonkar et al., 2022). Organisations underscoring equity and impartiality are better placed to thrive in the digital age. This involves implementing policies that ensure fair hiring practices, equitable training opportunities, and transparent promotion processes (Lemons & Jones, 2001).

6.5. Equitable Training and Development Opportunities

Inclusive leaders should ensure all employees' access to equitable training and development prospects which is important in the Industry 4.0 period, where continuous learning and upskilling are essential for staying competitive (Garavan et al., 2019). Leaders should provide resources and support for professional development, including mentorship programmes, workshops, and access to online courses. These opportunities should be open to employees, irrespective of gender, ethnicity, and other demographic factors. By investing in diverse workforce development, leaders can create an inclusive culture and ensure the availability of skills for sustaining a rapidly changing environment.

7. Harness Diverse Perspectives to Create an Encouraging Environment

In the Industry 4.0 context, inclusive leaders play a pivotal role in harnessing diverse perspectives to create an encouraging and innovative environment. As organisations navigate through rapid technological changes driven by automation