

## AI Driven Strategic Management Empowering Women In C- Suite

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### Abstract :

The integration of artificial intelligence (AI) in strategic management has emerged as a transformative force within the corporate world, offering new opportunities to tackle the persistent issue of gender disparity in executive leadership. Despite significant strides in promoting gender equality, women remain substantially underrepresented in C-suite positions across various industries. This study explores how AI-driven strategies can empower women to achieve and excel in C-suite positions by addressing gender disparities in executive roles. The research aims to provide insights into how AI can identify and mitigate unconscious biases in hiring and promotions, enhance decision-making, and support personalized career development to create more inclusive and equitable workplaces. The research employs case studies and real-world examples to analyze the impact of AI on female leadership. By examining the integration of AI in strategic management, the study investigates how AI fosters a supportive environment, promotes work-life balance, and enables access to global markets for women leaders. It also explores the importance of increasing female representation in AI development and executive roles. The findings highlight the transformative potential of AI in promoting diversity, equity, and innovation in leadership. AI empowers women by breaking biases, enhancing decision-making, and offering personalized support, which leads to more inclusive and equitable workplaces. Additionally, AI drives ethical leadership and social impact, aligning business success with societal well-being. The insights underscore AI's potential to foster a supportive environment, promote work-life balance, and enable access to global markets, ultimately driving sustainable organizational growth in the digital age.

**Keywords :** Artificial Intelligence (AI), Gender Equality, Women Empowerment, C-suite Leadership, Gender Diversity, Leadership Development.

### 1. Introduction :

#### 1.1 Background of the study :

In the past few years, using AI in strategy management has become a major trend that is changing the business world. offering new opportunities to tackle the persistent issue of gender disparity in executive leadership. Despite significant strides in promoting gender equality, women remain substantially underrepresented in C-suite positions, such as CEO, CFO, and COO roles, across various industries (Poirier, 2009). This under representation is often due to a combination of entrenched biases, limited access to mentorship and networking opportunities, and systemic barriers within corporate cultures. Strategic management that is driven by AI can help a lot with these problems by using new technologies to make workplaces more fair and open to everyone (Sundarapandiyana Natarajan, 2024). A lot of data can be analysed by AI to find and fix unconscious biases in the hiring and promotion process. This makes sure that smart women aren't passed over for leadership positions. Additionally, AI-powered tools can help women get ahead in their careers by giving them personalised job development plans, matching them with mentors, and skill-building resources that are just right for them. AI can also improve the decision-making process by giving executives data-driven insights that help them make choices that are better thought out and more objective (Moinuddin, 2024). This might lead to the creation of more fair rules and actions that encourage female equality and include everyone in the company, at all levels. For instance, AI can help track and measure the effectiveness of diversity initiatives, ensuring that companies are held accountable for their progress and continuously improve their strategies (Chowdhury, 2023) .The potential of AI to empower women in the C-suite extends beyond internal corporate practices. It can also influence broader industry standards and societal perceptions by showcasing the success of companies that prioritize diversity and inclusion. As these companies thrive, they set a precedent for others to follow, gradually transforming the landscape of senior leadership across industries.

## 1.2 The Concept of Artificial Intelligence :

Being smarter and more like people means making computers understand and do things like people. This is called artificial intelligence. Technology and products that use artificial intelligence are easy to understand. Some examples are robots, self-driving cars, smartwatches, smart universities, smart cities, Financial Technology (FinTech), and more. Prof. John McCarthy came up with the term "Artificial Intelligence" in 1956, and in 1971, he was honoured for his extensive study in this area. Artificial intelligence can be broken down into four groups: Reaction machines, short memories, the mind, and being aware of oneself (Perez, 2018). AI is the study of machines that can learn, connect with others, and solve problems, all of which are cognitive tasks that humans normally do (Nilsson, 1982). For a long time, operations and transportation tasks have been done automatically with AI-based tools. Because computers are getting faster, there is a lot more data, and there are new machine-learning methods, companies can now use AI to do managerial tasks (Brynjolfsson & McAfee, 2017). Now that Unilever is adding new people, AI-based solutions are very important (Marr, 2020), Netflix's process for choosing movie plots, directors, and stars (Westcott Grant, 2018) and Pfizer's process for discovering and developing new drugs (Fleming, 2018).

AI isn't just for tech pros; regular people use it all the time in a lot of different occasions. Experts and people who make decisions use AI to make their organisations' operations and processes better. Aside from that, they save more time, work, and money than old technology or ones that are done by hand. Also, AI usually gives correct results and cuts down on human mistakes. According to Park et al. (2021), AI gives clients more worth and brings in more money for the company. As an example, a doctor in a clinic can use cutting-edge technology to get a neuro image of a patient at the same time. As another example, think about the CEO of a big company who can look at huge amounts of complicated data and turn them into helpful reports that help them make important decisions. Businesses also look for smarter and more creative ways to use technology to improve their business cycles by reengineering how they make things, sell them, and keep workers safe. On the other hand, some people like having smart watches that let them know about health alerts like when to exercise, when to go to bed, and when to drink water. Also, the fact that students send in their work by email and go to virtual lessons from home is interesting. They can share their thoughts on a variety of issues and talk about their experiences with people all over the world with just one click on an electronic platform or social media. As an example, Apple, Amazon, Google, Microsoft, Facebook, and APEX are just a few of the big names that are spending in AI. Grewal et al. predicted in 2017 that AI systems would have a big effect on how people shop. (Grewal, 2021)

## 1.3 Addressing AI-Related Gender Gaps in the Tech Industry

In recent years, changes in digital technology and workplace reforms have changed the nature and scope of work. As a result, women face many problems, such as the gender digital gap, unequal pay, and harassment (Treuthart, 2019). Recent studies in the US job market have shown that gender discrimination is a big problem in the workplace. For example, 73% of workers polled said that women in tech-related roles face discrimination (Boudreau, 2020). Discrimination comes in many ways, such as unfair treatment, stereotyping, and being left out of decision-making (Hart, 2004). A big chunk of women working in tech say they've been discriminated against because of their technical skills, showing that there is widespread bias against their technical knowledge and skills (Shevinsky, 2015). Ali say that these problems make it harder for women to move up in their careers and be happy with their jobs in technology (Ali, 2011). They also say that these problems help to keep an unfair and exclusive culture going in the field.

The fact that not many women work in these important areas makes people worry about the openness and diversity of the tech-driven economy. This could lead to technology solutions that don't fully consider the needs and views of half the population. This difference between men and women may also slow down economic growth and new ideas, since teams with a mix of people are better at being creative and fixing problems. The digital gap between men and women is one of the main reasons women don't work in tech-related fields, and it's especially bad in developing and poor countries (Thorsteinsdóttir, 2021). The difference in how much men and women use the internet in these areas shows a bigger problem with education and access to digital tools. Women don't have the same access to technology or know-how as men when it comes to basic and advanced technology skills, which are necessary to use digital tools for business and work (Yansen, 2014).

## 1.4 Empowering Women in India Through AI :

India is the biggest nation and one of the most important and well-known countries in the world. But women are behind the times in society because of personal and social problems and unfair rules. Women face problems like child marriage, killing babies, sexual harassment, and dowry abuse, even though they are regarded as goddesses (SAHNI, 2020). India's view of women has changed over thousands of years, and abuse against women has become common because men are thought to be better than women. This kind of violence includes sexual, physical, and mental abuse that is often hidden in families and society. Taking care of these problems is very important for giving women in India more power and safety. In India, women are vulnerable to many types of online threats, such as cyberbullying, blackmail, and extortion, which can cause them emotional pain and damage their image (Bist, 2020). Abusive comments that don't go away make the internet a toxic place, and scammers target women, which is bad for their mental health, privacy, and safety. These problems show how important it is to be more aware and take action. Women also have trouble getting digital technologies and are underrepresented in tech roles because of issues with affordability, education gaps, biases that come naturally, and

social norms (Antonio, 2014) . The fast growth of internet access has opened up a new way for women to be abused online, which shows how important it is to fix these digital problems.

This needs to stop and be fixed right away to protect women in the digital age. In order to make the world better, this chapter supports the smart use of AI and data analytics to give women more power, encourage acceptance, and create a safe space. It goes into detail about how AI tools can be used to predict safety, showing how AI-driven solutions could improve public safety and especially help women who are worried about their safety (Jacobs, 2024).

Because women are more likely than men to be victims of violence, abuse, and discrimination, we need new ways to deal with these problems. Traditional safety measures don't always work, which is why people are moving towards proactive methods that use AI and data analytics to find possible threats and make places safer (Kitchin, 2016). For a more in-depth look, it is important to think about how different factors interact to make it harder for some women to use digital tools that can strengthen them through AI. Also, collecting and using data in an ethical and safe way is a key issue that affects women's freedom through AI (Oprescu, 2024). The fact that women are often sexually abused online and in real life shows how important it is to look closely at the reasons why some women don't have the same access to digital tools that can strengthen women through AI.

This study examines how AI-driven strategic management can empower women to achieve and excel in C-suite positions. It explores how AI can identify and reduce biases in hiring and promotions, enhance decision-making, and support women's career development. By analyzing case studies and real-world examples, the research aims to provide insights and recommendations for using AI to promote gender diversity and inclusion in top leadership roles.

### **1.5 Problem Statement:**

Women still don't make up nearly enough of the C-suite in many fields, even though progress has been made towards gender equality. We need to fix the serious problem of the persistent lack of women in top leadership positions. The integration of artificial intelligence (AI) in strategic management offers a transformative opportunity to tackle this problem by identifying and mitigating unconscious biases in hiring and promotions, enhancing decision-making processes, and supporting personalized career development. This study seeks to explore how AI-driven strategies can empower women to achieve and excel in C-suite positions, ultimately creating more inclusive and equitable workplaces.

### **1.6 Purpose of the study :**

The purpose of this study is to explore how AI can be leveraged to empower women in achieving and excelling in C-suite positions. This involves understanding the opinions of prominent women leaders in AI, identifying effective AI-driven strategies that support career advancement, and examining the importance of increasing female representation in both AI development and top executive roles. The study's goal is to help make workplaces more fair and open to everyone by looking at these issues.

### **1.7 Research Question :**

**RQ1:** How does AI impact women's advancement in executive roles?

**RQ2:** What do CEOs and experts think about AI's role in empowering women?

**RQ3:** Are there common perspectives among CEOs and experts on this issue?

**RQ4:** What recommendations do they offer for leveraging AI to empower women in executive positions?

### **1.8 Significance of the study :**

The significance of this study lies in its potential to inform and catalyze positive change in the realms of both technology and leadership. By understanding the perspectives of prominent women leaders in AI and identifying AI-driven strategies for women's empowerment, this research can contribute to a more inclusive and equitable corporate landscape. Moreover, by exploring the importance of increasing female representation in AI development and top executive roles, the study sheds light on the broader implications for organizational effectiveness and innovation. In conclusion, this study's findings can be very helpful for businesses and policymakers who want to use AI to promote female equality, encourage diverse leadership, and support long-term growth in the digital age.

## **2. Literature Review :**

### **2.1 Key research challenges :**

Key research challenges in AI-driven strategic management for empowering women in C-suite positions include addressing embedded gender biases in AI algorithms, developing systems to identify and mitigate unconscious biases in hiring and promotions, and ensuring AI strategies are inclusive and tailored to diverse industries. Additionally, gathering comprehensive data for training AI models and fostering trust in AI solutions among organizational leaders are significant hurdles to overcome.

The existing literature underscores the growing importance of AI in promoting gender diversity and empowering women in leadership roles. From uncovering biases in AI algorithms to exploring the impact of AI on decision-making, studies have highlighted the potential of AI-driven strategies to advance gender equality in the C-suite.

**Ramchandani et al.(2024) :** examined the benefits of Artificial Intelligence (AI) on women's empowerment in India. They discussed how AI could help close the gender gap, make healthcare and education more accessible, improve women's

income status, and fight for gender equality. Through an analysis of different projects and case studies, the article demonstrated the potential pros and cons of using AI to advance women's rights and increase their involvement in various aspects of Indian culture. The results indicated that while AI has the potential to empower women, careful usage is necessary to avoid bias and promote inclusion.

**Rao et al.(2023)** conducted a study that examined the various ways a mix of men and women in business boardrooms could enhance organizational effectiveness. Their research of data and case studies showed that having a diverse workforce was linked to better profits, decision-making, new ideas, and value for shareholders. In 2015, McKinsey & Company did a study that showed that companies with broad boards often did better than their competitors. Companies like Apple, GM, and IBM showed how having a mix of men and women at work helps growth and new ideas. The study was mostly about how female diversity in business leadership affects society as a whole and how important it is from a strategic point of view.

**Young et al.(2023)** conducted a unique cross-country data analysis to explore the intersection of gender and new job opportunities in data science and artificial intelligence (AI). Their study revealed persistent gender disparities in various aspects of these fields, including job roles, qualifications, seniority, industry representation, turnover rates, and self-confidence levels. Structural inequality was observed in data and AI domains, mirroring the historical trends in computing. The research highlighted the critical role of gender in shaping emerging high-tech job opportunities and emphasized the need for continued attention to gender equity in these areas.

**Petrat et al.(2022)** examined executives' attitudes towards the potential use of AI technology in leadership positions within organizations. Through an online survey, they presented three hypothetical scenarios involving AI performing managerial tasks with varying degrees of interaction with potential users. The results, analyzed using ANOVA, indicated that AI managers functioning as cognitive assistants received the highest level of acceptance. The study highlighted the potential role of AI in assisting leaders with team oversight and fostering a data-driven feedback culture.

**Hunt et al.(2022)** talked about how new developments in artificial intelligence (AI) had led to conversations about the future of work and worries about people losing their jobs. However, they noted significant methodological flaws in the existing data. Most studies either relied on modeling to predict outcomes based on opinions or used AI effect models to analyze the broader impacts of automation technologies. The authors highlighted the lack of research on the actual effects of AI-enabled tools in businesses. In their research note, they proposed a novel approach based on custom surveys of employers to address this gap. As an example of how useful this method is, they showed descriptive data about the link between using AI and organisations creating or losing jobs. These results come from a brand-new poll of UK business leaders. The authors recommended the adoption of this method in future studies.

**Karyotaki et al.(2022)** looked into the connection between women in business and society and modern technology. They wanted to find out what causes the digital skills gap and why there aren't enough women working in the growing digital business.

**Petrat et al. (2022)** emphasised AI technology's constant improvement and its promise to help people solve basic and difficult problems by analysing massive volumes of data. A few businesses had already started using AI to help with HR chores or to free up managers to work on more important tasks by doing administrative work for them. From the interviews they did, they wanted to know how people felt about AI as a boss. There were 32 interviews with 16 men and 16 women from diverse industries, with a mean age of 36.74 years ( $SD = 12.42$  years). 14 led, while 18 did not work. The survey found that tech-savvy people have trouble imagining AI in the workplace or leadership. Participants preferred a clear application that gave support and allowed them to contact a supervisor. The authors determined that more research is needed.

**Ahmed et al.(2021)** talked about how AI is used in the financial services industry (FSI), especially in sub-Saharan Africa's FinTech Ecosystems (FEs). They emphasized the rapidity and data-intensive nature of tasks in FSI and highlighted AI's role in addressing these challenges. However, they noted the perpetuation of gender inequality within FEs due to unique supply- and demand-side factors. The study underscored AI's non-neutrality and its potential to exacerbate racial and gender discrimination in regions with less developed economies. In four SSA countries—"South Africa, Kenya, Nigeria, and Ghana"—the study's main objective was to find out how AI-based systems affected women.

**Plato et al.(2021)** surveyed sixteen women in the C-suite of cybersecurity companies to learn about their experiences using a qualitative, descriptive, and psychological method. They looked into the problems these leaders faced and the steps they took to get ahead in the cybersecurity field despite racism against women. The study stressed how important it is to have mentoring, sponsorship, and talk about unconscious bias in the way organisations work. Findings highlighted the need for employers to support and develop women's careers and leadership skills by eliminating microaggressions, encouraging organizational support, writing inclusive job descriptions, and facilitating networking opportunities.

**Santiago et al.(2019)** predicted significant growth in the AI and big data analytics markets by 2020. They noted the dominance of a few tech giants in AI research, despite the vast global population. Their study aimed to examine AI's flaws and its impact on the executive function of business leaders, employing chaos and complexity theories. They highlighted the development of algorithms that self-modify, potentially relinquishing control from humans. The research emphasized the importance of leaders' cognitive awareness and regulatory frameworks in overseeing AI decisions to mitigate bias and ensure human oversight.

## **2.2 Research Gap :**

Reading a lot of different works about artificial intelligence (AI), female diversity, and leadership has taught us a lot. While studies such as those by Ramchandani et al. (2024) and Plato (2021) shed light on the potential benefits of AI in empowering women and addressing gender bias in leadership, there remains a gap in understanding the nuanced challenges and opportunities faced by women leaders in adopting AI technologies. Rao (2023) and Petrat (2022) provide valuable perspectives on the strategic importance of gender diversity in business leadership and the acceptance of AI technologies in organizational settings. However, there is limited research exploring the specific barriers that women encounter in leveraging AI tools for leadership development and decision-making. Additionally, while Karyotaki (2022) acknowledge the digital skills gap contributing to gender underrepresentation in the technology sector, there is a lack of focus on the role of AI in bridging this gap and promoting women's leadership in AI-driven industries. Moreover, the studies by Young (2023) and Santiago (2019) highlight the persistence of gender disparities in emerging tech fields and the potential risks associated with AI bias and autonomy. However, there is a need for further research to explore practical strategies and interventions for promoting gender-inclusive AI leadership practices and mitigating the unintended consequences of AI adoption in organizational contexts. Thus, the research gap lies in understanding how women leaders can effectively harness AI technologies to advance gender diversity and foster inclusive leadership practices in the digital era.

## **2.3 Objectives of the study :**

In recent years, the use of artificial intelligence (AI) in many business and technology areas has led to talks about how it could help organisations change and come up with new ideas. An important part of AI's ability to empower women has been the role it plays in giving them more leadership and executive jobs. The study's goals are the following:

- Understand the opinions of prominent women leaders in AI on how AI can empower women in executive roles.
- Identify specific AI-driven strategies that have helped women advance in their careers and reach C-suite positions.
- Explore the significance of increasing female representation in AI development and top executive roles.

## **3. Research Methodology :**

### **3.1 Research Design:**

This study employs a discourse analysis methodology to investigate the role of AI in empowering women in executive roles. Discourse analysis focuses on how language constructs accounts of the social world, particularly in attempts at persuasion and legitimization (Elliot, 1996). Given that the data consists of interviews, letters, and conversations, discourse analysis is deemed appropriate. The analysis proceeds through the following steps:

- **Defining the unit of analysis:** Interview notes, letters, and talks are gathered from many places, like events, company websites, reviews, and newspapers. These are typed up into text, which makes 8 parts of Word documents. As a unit of analysis, relevant parts about AI and empowering women are taken out.
- **In-depth examination of the unit of analysis:** The extracted text parts are carefully read more than once to find out what the subjects were trying to say in a way that was both similar and different.
- **Categorizing the findings:** As meaning trends start to show up, the results are put into three groups:
  1. Support and representation for women in leadership positions
  2. Help and guidance for women who want to work in AI
  3. Problems and changes that need to happen in society
- **Reporting the findings:** The interpreted results are grouped into these groups, and quotes from the subjects back them up.

### **3.2 Data Collection :**

The study collects viewpoints from prominent women leaders in AI and related fields regarding the impact of AI on women's empowerment in executive roles. Through a systematic search using keywords related to "AI and women empowerment in leadership," relevant documents such as interviews, articles, and speeches are gathered. The sample includes perspectives from women leaders globally, without restricting to a specific region or country, to ensure diverse insights.

### 3.3 Content :

Background information about the subjects and the collected data are examined in-depth before analysis to provide context and inform interpretation. The content is summarized and documented in Table 1 for reference during the analysis process.

**“Table 1: The Data**

Name	Occupation	Experience	Source of Data
<b>Sophia Velastegui</b>	chief product officer at Aptiv.	more than 20 years of experience at Microsoft, Google, Apple, and Applied Materials	<a href="https://www.worklife.news/leadership/women-ai-boardrooms/">https://www.worklife.news/leadership/women-ai-boardrooms/</a>
<b>Mai-Lan Tomsen Bukovec</b>	vp of technology at Amazon Web Services.	Since 2010	<a href="https://www.worklife.news/leadership/women-ai-boardrooms/">https://www.worklife.news/leadership/women-ai-boardrooms/</a>
<b>Ivana Bartoletti</b>	Global Chief Privacy Officer at Wipro	Since october, 2020	<a href="https://medium.com/authority-magazine/wisdom-from-the-women-leading-the-ai-industry-with-ivana-bartoletti-of-wipro-818aea6c25c0">https://medium.com/authority-magazine/wisdom-from-the-women-leading-the-ai-industry-with-ivana-bartoletti-of-wipro-818aea6c25c0</a>
<b>Dr. Yevgeniya (Jane) Pinelis</b>	Chief, AI Assurance at DoD Joint Artificial Intelligence Center	Since january, 2020	<a href="https://www.forbes.com/sites/markminevich/2022/03/10/the-9-inspirational-women-leaders-in-ai-shaping-the-21st-century/?sh=b86a7b12bb08">https://www.forbes.com/sites/markminevich/2022/03/10/the-9-inspirational-women-leaders-in-ai-shaping-the-21st-century/?sh=b86a7b12bb08</a>
<b>Sol Rashidi</b>	Chief Analytics Officer at The Estée Lauder Companies Inc.	Since january, 2021	<a href="https://www.forbes.com/sites/markminevich/2022/03/10/the-9-inspirational-women-leaders-in-ai-shaping-the-21st-century/?sh=b86a7b12bb08">https://www.forbes.com/sites/markminevich/2022/03/10/the-9-inspirational-women-leaders-in-ai-shaping-the-21st-century/?sh=b86a7b12bb08</a>
<b>Atti Riazi</b>	Senior Vice President and CIO, DigiTs Memorial Sloan Kettering Cancer Center	Since 2020	<a href="https://www.forbes.com/sites/markminevich/2022/03/10/the-9-inspirational-women-leaders-in-ai-shaping-the-21st-century/?sh=b86a7b12bb08">https://www.forbes.com/sites/markminevich/2022/03/10/the-9-inspirational-women-leaders-in-ai-shaping-the-21st-century/?sh=b86a7b12bb08</a>
<b>Linda Leopold</b>	Head of Responsible AI & Data at H&M Group	Since 2018	<a href="https://www.forbes.com/sites/markminevich/2022/03/10/the-9-inspirational-women-leaders-in-ai-shaping-the-21st-century/?sh=b86a7b12bb08">https://www.forbes.com/sites/markminevich/2022/03/10/the-9-inspirational-women-leaders-in-ai-shaping-the-21st-century/?sh=b86a7b12bb08</a>
<b>Dr. Vivienne Ming</b>	Professional Mad Scientist, Co-Founder & CEO, Socos Labs	Since 2017	<a href="https://www.forbes.com/sites/markminevich/2022/03/10/the-9-inspirational-women-leaders-in-ai-shaping-the-21st-century/?sh=b86a7b12bb08">https://www.forbes.com/sites/markminevich/2022/03/10/the-9-inspirational-women-leaders-in-ai-shaping-the-21st-century/?sh=b86a7b12bb08</a>

### 4. Result and Discussion :

In this section, the findings of discourse analysis are presented under three titles:

1. Advocacy and Representation in Leadership
2. Advice and Mentorship for Aspiring Women in AI
3. Challenges and Societal Changes Needed

#### 4.1 Advocacy and Representation in Leadership

##### Sophia Velastegui :

In an interview with **Sophia Velastegui** , she underscores the importance of having women in leadership roles within AI and technology to ensure a diversity of concerns and perspectives are considered. Velastegui highlights that although

historically women have been underrepresented in the C-suite, the current wave of opportunities provides a chance to change this narrative. Reflecting on her experiences from ten years ago when she was often the only woman in meetings, she acknowledges some progress but points out that women are still a minority in these spaces.

She notes that at BlackLine, a company with a significant commitment to gender diversity, 50% of the board directors are women—a change driven by intentional efforts from the board and the female CEO. Velastegui believes that women in leadership roles create a domino effect, fostering an environment that encourages growth, creativity, and enhanced problem-solving. She stresses that as the AI sector evolves, diversity becomes increasingly critical to avoid biases in technology. She asserts,

"If we're not part of the creation, then some of our concerns will not be addressed. AI is exploding and has an impact. You can flip the bias to be more equitable because things are changing, but we have to partake."

she asserts, emphasizing the necessity of women's participation in AI development to flip biases and achieve equitable outcomes.

#### **Linda Leopold**

In an interview with **Linda Leopold**, she echoes the sentiment that diverse perspectives are essential for technological advancement. She highlights the risk of missing out on significant talent and creativity if women are excluded from these processes. Leopold articulates,

"The world needs more brains, more creativity, and more perspectives in the development of the technology of tomorrow. We can't afford to miss out on so much female brain power!"

This statement encapsulates the need for inclusive approaches to harness the full potential of the workforce, which is vital for innovation and sustainable progress in AI.

#### **Dr. Vivienne Ming**

Dr. Vivienne Ming brings a unique perspective, having experienced life from both male and female viewpoints, alongside overcoming significant personal challenges such as homelessness. These experiences shape her understanding of leadership and innovation. Ming's diverse background underscores the value of varied life experiences in informing leadership roles in AI. Her journey from adversity to success illustrates the potential for inclusive leadership to drive meaningful change.

"I've had a lot of transformations in my life. I've seen what it's like to be a man and a woman. I have been homeless and I've founded companies,"

Ming explains, highlighting how these diverse experiences contribute to her leadership style and vision for AI development.

### **4.2 Advice and Mentorship for Aspiring Women in AI**

#### **Mai-Lan Tomsen**

Mai-Lan Tomsen Bukovec offers a compelling message to young women entering STEM fields, urging them to seize the opportunities available to them. She emphasizes the potential for women to lead in technology and encourages them to explore and make the most of new spaces they create in their careers. Bukovec believes that proactive engagement and exploration are key to success in STEM professions.

"The thing that I would tell any young woman who's going into any STEM profession is that the world is out there for you, you just have to take your space. When you're entering the workforce, or a few years into a new job, explore every inch of this new space you've created for yourself and wonderful things will happen when you do that. It will propel you in whatever STEM profession you're in,"

she advises, emphasizing the importance of initiative and curiosity in career development. She also asserts,

"I am 100% into this, I have this whole philosophy that if not me, then who? Every woman in technology has the potential to be a leader in it and I think we should."

#### **Ivana Bartoletti**

Ivana Bartoletti provides a structured approach for women to thrive in the AI space, emphasizing the value of diverse backgrounds and the importance of mentorship. She advises that there is no single path into AI, highlighting the need for various perspectives to ensure AI works for everyone. Bartoletti underscores the importance of mentorship and networking, urging women to remain authentic and supportive of each other.

"First, there is no unique way to get into AI. We need all backgrounds so we can ensure AI works for everyone. Second, identify a mentor and join a network. Third, be absolutely yourself and do not change to please anyone. Fourth, strive to connect with other women in your company and commit to help each other. Fifth, ask for help and do not be shy about it,"

she explains. This advice aims to build a supportive community that fosters growth and resilience among women in AI. She says,

"AI is transforming so many industries and so many areas of our life, and this cannot happen without women having a say and leading this change. I do not think AI will benefit the world if half of the population is not fully involved in it. It is not just about coding; it is also about women at the helm of businesses and governments shaping strategies and rules around AI."

#### **Sol Rashidi**

Sol Rashidi encourages women to embrace discomfort as a part of their growth journey. She believes that learning and progress often come from challenging experiences and that women should not be afraid to lean into these situations. Rashidi's advice is about building resilience and learning from the ups and downs of the journey.

"Get comfortable with being uncomfortable. You lean in, you trip, you fall, you learn. That's okay. With each step forward you learn, the 'ups and downs' are the majority of the journey," she states, advocating for a mindset that views challenges as opportunities for growth and learning.

#### **4.3 Challenges and Societal Changes Needed :**

##### **Atti Riaz**

Atti Riaz highlights systemic issues within the education system and media that impact girls' participation in technology. She points out that the current educational framework does not adequately support girls interested in math and engineering, and media portrayals often reinforce gender stereotypes.

Riaz believes that addressing these fundamental issues is crucial for encouraging more girls to pursue careers in technology.

"Our education system doesn't support girls who favor math or like engineering. And the way the media portrays girls and boys in technology is completely skewed. We have so many fundamental issues - the education sector, the family pressures, the media. We need to begin to address every one of them,"

she asserts, emphasizing the need for comprehensive changes to create a supportive environment for girls in technology.

##### **Dr. Yevgeniya (Jane) Pinelis**

Dr. Yevgeniya (Jane) Pinelis emphasizes the importance of freedom of choice and awareness of opportunities for women in AI. She wants her daughters to be aware of the opportunities available to them and to have the skills and confidence to seize them. Pinelis underscores the need for women to pursue their interests and talents free from societal expectations.

"What I want for my girls is to have the freedom of choice. Ultimately I want them to be aware of the opportunities available to them and to have the skills and the confidence to take advantage of those opportunities. I want them to be in touch with their talents and passions, to pursue those options that reflect their capabilities and interests. I want them to be able to do so free of societal expectations,"

she explains, highlighting the importance of empowerment and self-awareness for women in AI.

##### **Ivana Bartoletti**

Ivana Bartoletti underscores the necessity of engaging more women in the AI industry. She believes that AI's transformation of various industries and areas of life requires women's input and leadership. Bartoletti argues that AI will not benefit the world fully if half of the population is not involved in its development. She emphasizes that women's involvement is crucial not just in coding but also in shaping business and government strategies around AI.

"AI is transforming so many industries and so many areas of our life, and this cannot happen without women having a say and leading this change. I do not think AI will benefit the world if half of the population is not fully involved in it. It is not just about coding; it is also about women at the helm of businesses and governments shaping strategies and rules around AI,"

she states, emphasizing the broader impact of women's leadership in AI.

These insights from various women leaders highlight the importance of advocacy, mentorship, and addressing systemic challenges to empower more women in the AI and technology fields. By promoting diversity in leadership, providing guidance for aspiring women, and tackling societal issues, these leaders aim to create a more inclusive and equitable future in AI.

#### **4.4 Findings :**

This study shows AI can be a valuable resource in promoting gender equality by giving more power to women executives, we observe that many of the findings confirm this based on the content and data analysis. Findings supporting the aims of the study

- **AI and Bias Reduction** - The way AI technology has enabled the recruitment process to reduce prejudice due to unconscious bias during hiring, performance review etc. Sophia Velastegui and Linda Leopold argue that multiple viewpoints in AI development can prevent future gender-discriminating decision-making.
- **Career development:** AI enables a more personalized best-fit career growth and form of support, which is key to helping uplift women in advancing their careers. Mai-Lan Tomsen Bukovec and Ivana Bartoletti argue that AI tools could be used not only to mentor, but even provide career advice which would help women find their way through a professional maze.
- **Promoting Diverse Paths to Leadership:** AI helps pave the way for women to succeed in leadership and therefore, diverse executive teams. Insights from Dr. Vivienne Ming and Sol Rashidi demonstrate that AI-powered diverse leadership drives creativity and problem resolution in general.
- **Develop solutions for systemic challenges:** Finally, AI can be used to address some of the educational and media barriers that prevent women from entering STEM in the first place. But, as Atti Riaz and Dr. Yevgeniya (Jane)



Pinelis point out, there is only so much this capacity can do unless paired with a largersocial changes that incorporates the structural nature of these problems themselves for effective reform.

Female representation in AIEqually women make up only 12% of professionals in the field and it is critical that any profession develops inclusive technology to globalise viewpoints. Leaders such as Ivana Bartoletti believe it is essential that women play a central role in AI development to ensure future technological breakthroughs are inclusive and of benefit to all.

## 5. Conclusion:

In conclusion, the integration of Artificial Intelligence (AI) is revolutionizing female leadership across various fronts. By breaking biases, enhancing decision-making, and offering personalized support, AI empowers women to excel in executive roles. It fosters a supportive environment, promotes work-life balance, and enables access to global markets. Moreover, AI drives ethical leadership and social impact, aligning business success with societal well-being. The insights from prominent women leaders highlight the transformative potential of AI in promoting diversity, equity, and innovation in leadership.

## 6. Limitations of the study :

- Reliance on Publicly Available Information: The study primarily depends on publicly available statements and documents from CEOs and experts.
- Limited Depth of Inquiry: Researchers were unable to directly pose questions to the subjects, restricting the depth of the investigation.
- Potential Bias in Public Statements: Public statements of CEOs and experts may be influenced by their companies' management styles, organizational structures, and commercial considerations, potentially introducing bias into the data.

## Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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