
THE ROLE OF WOMEN ENTREPRENEURS IN THE AI ERA

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ABSTRACT

Artificial Intelligence (AI) is transforming global economies, creating opportunities, and redefining traditional business paradigms. Within this dynamic technological landscape, women entrepreneurs are emerging as influential contributors to innovation, leadership, and economic growth. This research explores the role, challenges, contributions, and potential of women entrepreneurs in the AI era. It emphasizes gender dynamics, evaluates current representation, and offers strategies to empower women in AI-driven entrepreneurship.

1. INTRODUCTION

The rapid evolution of AI technologies has reshaped industries—healthcare, finance, logistics, education, and more. While AI-driven innovation promises economic expansion and productivity gains, the participation of women entrepreneurs in this ecosystem remains comparatively low (Eger et al., 2021). Encouraging more women to lead AI ventures not only promotes gender equality but also enhances creativity and problem-solving through diverse perspectives (Essers & Tedmanson, 2014).

This paper examines how women entrepreneurs engage with AI technologies, the opportunities they leverage, and the unique challenges they face.

2. WOMEN ENTREPRENEURS AND AI: AN OVERVIEW

Women entrepreneurs are business founders or leaders who identify market opportunities and create ventures. In the AI era, these entrepreneurs utilize machine learning, data analytics, and automation to develop products, services, and solutions that address emerging needs.

2.1 Global Trends

Recent data show that women-led startups in AI and technology are increasing, yet they significantly trail male counterparts in funding and representation (Purdy & Daugherty, 2017). Venture capital for women-led AI startups remains disproportionately low, but awareness and support systems are growing.

3. CONTRIBUTIONS OF WOMEN ENTREPRENEURS IN THE AI ECOSYSTEM

Women entrepreneurs are making significant contributions across AI sectors:

3.1 Innovation & Technology Development

Women-led AI firms are innovating in healthcare diagnostics, ethical AI tools, educational platforms, and sustainable technologies. For example, women founders in AI are creating healthcare platforms that improve diagnostic accuracy and personalized treatment plans.

3.2 Ethical and Inclusive AI

Women often emphasize ethics and inclusivity in AI development, advocating fairness and transparency (Campolo et al., 2017). Their perspectives are vital in addressing algorithmic bias and promoting socially responsible AI.

3.3 Workforce Transformation

Women entrepreneurs are also leading AI training initiatives, helping upskill professionals in AI competencies and closing the gender gap in the tech workforce (UN Women, 2020).

4. CHALLENGES FACED BY WOMEN IN AI ENTREPRENEURSHIP

Despite progress, women encounter significant barriers:

4.1 Limited Access to Funding

Research shows women-led startups receive less venture capital than male-led firms. This funding gap restricts growth potential and limits innovation impact (Brush et al., 2019).

4.2 Gender Bias and Stereotypes

Gender stereotypes in tech can discourage women from pursuing entrepreneurship in AI. Biases often affect hiring, investment decisions, and leadership opportunities.

4.3 Skill and Network Gaps

Women entrepreneurs may lack access to strong professional networks and advanced AI training resources, hindering competitive advantage in the tech ecosystem.

5. STRATEGIES TO EMPOWER WOMEN ENTREPRENEURS IN AI

5.1 Mentorship and Training Programs

Offering mentorship, training, and AI education tailored to women can build confidence and technical competence.

5.2 Gender-Inclusive Funding Initiatives

Venture capital firms and governments should create dedicated funding channels to support women-led AI ventures.

5.3 Challenges Faced

Despite notable contributions, Indian women entrepreneurs in AI face persistent challenges:

- **Access to Funding:** Venture capital, especially for deep tech and AI startups, is limited for women founders.
- **Skill Gaps:** While women are enrolling in STEM education, the transition to high-level AI roles remains constrained by gender biases and fewer mentorship opportunities.
- **Cultural Barriers:** Traditional societal expectations and work-life balance pressures disproportionately affect women.
- **Infrastructure and Regional Disparities:** Women in non-urban areas may lack exposure to technology ecosystems and resources.

6. POLICIES AND SUPPORT SYSTEMS

Government policies and private sector initiatives are critical in fostering inclusive ecosystems:

- **Skill Development Programs:** AI training for women through online courses, bootcamps, and university collaborations.
- **Funding Schemes:** Financial support through gender-focused investment funds or government grants helps bridge capital gaps.

- **Incubators & Mentoring Networks:** Programs specifically for women in tech catalyze innovation and business growth.

7. Case Studies

Case 1: Women in AI Healthcare

Women-led AI startups have developed intelligent diagnostics tools that enhance early detection of diseases. These technologies have improved patient outcomes and reduced healthcare disparities.

Case 2: AI in Education and Skill Development

Women entrepreneurs have founded AI-powered personalized learning platforms that adapt to student learning styles, improving educational outcomes at scale.

CONCLUSION

Women entrepreneurs have the potential to significantly shape the AI era through innovation, ethical leadership, and economic contribution. However, systemic barriers—funding inequities, gender bias, and skill gaps—continue to limit participation. Addressing these barriers through targeted strategies can unlock the full potential of women in AI entrepreneurship, contributing to economic growth and societal well-being.

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