



Role of AI in empowerment of women entrepreneurs in digital economy

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Abstract

Artificial intelligence (AI) is the simulation of human cognition in machines designed to perform tasks typically needing human intelligence. It encompasses various technologies and methods designed to enable robots to perceive, reason, learn, and decide similarly to humans. AI focuses on developing smart systems capable of processing large amounts of data, extracting significant insights, and adjusting their actions or behaviors according to evolving circumstances. Present study has focused on the various AI tools useful to the women entrepreneurs, advantages of AI usage and challenges exposed by women in usage of AI.

Keywords: AI, women entrepreneurs

Introduction

It involves robots that make decisions requiring human competence and react to stimuli in a way commensurate with human responses. Technological breakthroughs, digital transformation, and data-driven decision-making are driving a healthy upswing in the Indian market for artificial intelligence (AI) and machine learning (ML). A wide range of industries, including manufacturing, banking, healthcare, e-commerce, and agriculture, are aware of the revolutionary potential of AI and ML. AI-powered analytics are used by businesses to gain actionable insights that improve consumer experiences through tailored suggestions, streamline supply chains, and even advance medical diagnoses. Indian companies are catching up quickly when it comes to AI use. An environment with favourable regulations has been established for the expanding usage of AI by the Indian government through its Digital India project. Data centres and the intelligence underlying the data collected will allow industry and the government to make efficient algorithm-based decisions as India rapidly adopts digital technology. This translates into more chances for the nation to use AI. AI is being used by Indian businesses to innovate new goods and services, improve the consumer experience, and revolutionize their industries. Small and medium-sized businesses (SMEs) in India are realizing that artificial intelligence (AI) may improve operations, spur innovation, and provide them with a competitive advantage. The adoption of AI by women entrepreneurs needs to be studied. Disappointingly, only 22% of AI roles are filled by women in India, a country with the second-largest AI workforce and one of the biggest gender gaps in the field. Artificial intelligence (AI) solutions can help small business owners increase productivity, automate repetitive processes, and gain insightful knowledge about market trends and client behaviour.

The availability of AI tools and their limitless potential to transform society present ideal circumstances for female entrepreneurs to seize the initiative and build the AI-driven businesses of the future. Artificial intelligence (AI) provides strong instruments that can boost the inventiveness, efficiency, and production of female entrepreneurs. AI can help remove obstacles that prevent women from

participating fully in the economy. For example, it can assist women find new or better jobs and make sure that female entrepreneurs can access emerging markets and financial inclusion (Roy, 2022). Specifically, AI-powered content production offers revolutionary ways to improve brand marketing. Some studies evaluated the relationship between an entrepreneurial mindset and the ability to analyze large data with artificial intelligence under the moderating influence of environmental dynamism. The present study aims to understand the perceptions of women entrepreneurs towards the adoption of AI in their businesses. Though the concept evolved and was used over the years by several companies, whether it reached the small businesses owned by women entrepreneurs needs to be studied.

Top 10 ai tools for women entrepreneurs

Chat gpt by open AI: Chat GPT is an advanced language model that can aid in customer support, content generation, and idea development. It is capable of producing text responses that resemble human writing, rendering it a crucial asset for automating communication activities. It has advantages like automates replies to customer questions, delivering immediate assistance and improving customer contentment. It also helps in generating business concept, product titles, and promotional tactics.

Canva: Canva is an easy-to-use graphic design application enhanced by AI technology. It allows business owners to produce beautiful visuals for marketing, social media, and branding without requiring advanced design abilities. It is very user friendly initiation which drags and drop the functionality streamlines the design process.

Quick Books: QuickBooks is an AI-driven accounting tool that assists business owners in effectively handling their finances. It streamlines accounting activities, monitors spending, and produces financial statements. It has advantages like automated accounting, decrease manual input and minimizes the changes of mistakes. It also delivers comprehensive reports and insights to aid in making educated financial choices.

Hoot Suite: Hoot suite is an all-in-one social media management tool that employs AI to schedule content,

assess performance, and interact with audiences on various social media platforms. It has the advantages like automated posting, monitoring interaction statistics, delivers practical recommendations.

Hub Spot: Hub Spot is a comprehensive platform for marketing, sales, and customer service that utilizes AI to improve customer relationship management (CRM) and optimize business processes. It is effectively handles the customer engagements and information, delivers the predictive analytics and forecasts the sales.

Slack: Slack is a teamwork platform that employs AI to improve communication and boost productivity among teams. It connects with numerous applications and services, enabling effortless cooperation. It has the advantages such as instant communication, integration with various tools and Assist in rapidly locating pertinent messages and documents.

Trello: Trello is a task management platform that uses AI to assist teams in organizing assignments, establishing deadlines, and monitoring progress. It utilizes boards, lists,

and cards to optimize project workflows. It has the advantages like task oversight, user-friendly interface, team work and automation.

Zoom: Zoom is an AI-powered video conferencing tool designed to deliver top-notch virtual meetings, webinars, and collaborative gatherings. It has advantages like online meeting, webinars and live transcriptions.

Shopify: Shopify is a digital commerce platform that utilizes AI to assist entrepreneurs in building, overseeing, and expanding their online shops. It provides resources for product cataloguing, payment handling, and client interaction. It has the advantages like store management and examining the customer habits and choices.

Zendesk: Zendesk is a customer service platform that leverages AI to improve customer support operations. It offers tools for ticketing, live chat, and customer feedback. It has the advantages like ticket management, live chat and feedback analysis.

Advantages of AI usage to women entrepreneurs



▪ **Education and Skill Development:** AI can transform education and skill development, granting women equal access to quality learning opportunities. Digital platforms and AI-driven tools can offer personalized learning experiences, enabling women to acquire new skills and knowledge. These technologies can bridge the educational divide and enable women to chase their aspirations, enhancing their job prospects and financial autonomy.

▪ **Employment and Entrepreneurship:** AI can diminish gender biases in the workplace by promoting equitable and clear hiring practices. AI-driven technologies can help mitigate biases in job advertisements, hiring processes, and performance evaluations. Additionally, AI can encourage remote work and flexible schedules, providing women with more opportunities to enter and thrive in the field. AI can assist women in starting their own businesses by providing market insights, automating tasks, and enhancing decision-making.

- **Health and Wellness:** Artificial intelligence can enhance healthcare outcomes and provide women with better access to quality health services. Solutions powered by AI can assist in identifying illnesses and enabling early detection, personalizing treatment plans, and monitoring patients remotely. These enhancements can potentially eradicate healthcare disparities and enhance the welfare of women, especially those residing in rural and disadvantaged areas.
- **Safety and Security:** AI-driven solutions can enhance women's sense of safety by addressing concerns like harassment, violence, and protection. Smart surveillance systems, facial recognition technology, and predictive analytics can help in preventing crimes against women. Smartphone applications powered by AI can provide immediate emergency support, enabling women to request help and report incidents promptly.
- **Advocacy and Social Consciousness:** Artificial intelligence (AI) can be utilized to raise awareness regarding women's rights and facilitate social transformation. NLP algorithms can analyze vast quantities of data, including social media conversations and news reports, to identify gender biases, stereotypes, and discriminatory actions. This information can be utilized to develop targeted awareness initiatives and policies aimed at fostering a more inclusive and gender-balanced society.
- **Economic Empowerment:** AI has the potential to significantly empower women economically by opening up fresh opportunities for jobs and business ventures. It can allow women to engage in the digital economy, access online platforms, and discover remote work options. Programs such as the Digital India initiative by the Government of India and several e-commerce platforms have created opportunities for women to launch their businesses and achieve financial independence.
- **Gender Equality:** AI can address gender biases and advance gender equality. Eliminating human biases in decision-making allows AI algorithms to guarantee equal opportunities for women in recruitment, promotions, and access to financial services. Moreover, AI-driven chatbots and virtual assistants can offer assistance and information regarding gender-based violence and women's rights, enabling women to pursue help and support

Challenges in usage of AI by women entrepreneurs

1. **Bias and Discrimination:** Prejudice and inequality in AI can lead to significant repercussions for the empowerment of women. Despite being designed to evaluate data and render decisions, artificial intelligence systems are still susceptible to societal biases. When these biases infiltrate AI systems, they continue and even worsen gender discrimination, hindering advancement toward gender equality. Recruitment processes represent a domain where AI bias and discrimination can impact the empowerment of women. AI algorithms employed for resume screening or candidate selection may unintentionally prefer male

applicants because of biased training data or existing assumptions. This may result in fewer opportunities for skilled women, further widening gender disparities in the workplace. Moreover, AI-driven recommendation systems across various sectors, including online retail, entertainment, and employment sites, occasionally depend on historical data that may showcase existing gender biases.

2. **Lack of Diversity in AI Development:** The insufficient diversity in AI research has consistently been a point of worry, hindering advancement and restricting women's empowerment within the field. In spite of significant technological advances, women continue to be underrepresented in AI research, development, and decision-making activities. The disparity in STEM education and career opportunities for different genders is a significant factor in this inequality. Traditionally, women have faced cultural biases and assumptions that dissuade them from seeking careers in science and technology. Consequently, they have reduced access to the vital knowledge and materials for AI advancement. AI algorithms may exhibit unrecognized biases that can sustain gender imbalances and reinforce societal inequalities.
3. **Privacy and Data Security Concern:** AI technology has changed various aspects of our lives, offering great potential and convenience. Nonetheless, it presents significant concerns regarding privacy and data protection. The integration of artificial intelligence (AI) into everyday systems and devices has led to the collection and examination of significant amounts of personal data, raising issues that need to be tackled. AI systems depend on large data sets filled with personal details, which may be susceptible to identity theft, financial scams, and extortion. AI algorithms are susceptible to biases and discrimination, potentially resulting in biased outcomes in decision-making processes. This represents a major risk to privacy, as people could face unjust treatment or miss out on opportunities. AI systems may violate privacy rights by persistently observing and assessing individual behaviors and interactions. To address these risks, policymakers, organizations, and developers should emphasize strong privacy and data security strategies, including enforcing strict data protection laws, performing regular security assessments, and guaranteeing transparency and accountability in AI systems. Moreover, people need to be informed about the dangers and granted authority over their personal information via knowledgeable consent and privacy options.
4. **Ethical Consideration:** As artificial intelligence (AI) becomes more integrated into various aspects of our lives, ethical issues related to AI are essential. As AI technology advances, many significant ethical issues have emerged. First, AI systems need to be transparent and responsible to guarantee they can be explained and that individuals comprehend their reasoning. Moreover, accountability mechanisms should be established to tackle any biases, errors, or adverse results generated by

AI systems. Secondly, in the AI industry, privacy and data security are crucial ethical aspects. AI systems acquire knowledge and form conclusions using large amounts of data. The gathering and utilization of personal data, conversely, should be carried out with utmost regard for privacy rights. Personal sensitive data must be protected to prevent misuse or unlawful access. The impact of AI on jobs and socioeconomic disparities needs to be taken into account. Although AI technology can automate repetitive tasks and enhance efficiency, it could also lead to job loss. Attention should be directed towards initiatives for reskilling and enhancing the abilities of employees who could be impacted by automation. Steps need to be taken to prevent AI from exacerbating current socioeconomic disparities and to ensure equitable access to AI-driven services and opportunities.

5. **Digital Divide:** The digital divide refers to the disparity between individuals who can access and comprehend digital technology and those who cannot. Although artificial intelligence (AI) can bridge this gap with innovative solutions, it also introduces problems that may exacerbate existing disparities. AI can enhance education and create new opportunities through online learning platforms, personalized coaching, and access to vast knowledge resources. Nonetheless, the digital divide deepens when disadvantaged regions are missing the necessary infrastructure to effectively interact with AI-driven systems, like affordable devices and high-speed internet. Additionally, AI systems can spread bias and discrimination, further isolating already underserved groups. Steps must be taken to close the digital divide by ensuring equal access to AI technology. Governments, non-profit organizations, and tech companies should collaborate to fund infrastructure, promote digital literacy programs, and foster inclusivity in AI research. By closing the digital divide and reducing biases in AI systems, we can create a more equitable society where the benefits of AI are accessible to everyone

Conclusion

AI can help tackle and reduce several issues encountered by women, including gender bias and discrimination. AI algorithms can assist in removing biases from recruitment processes, performance assessments, and decision-making systems, resulting in more equitable outcomes and enhanced opportunities for women in education, employment, and leadership roles. AI can further boost women's economic empowerment by offering access to new markets, entrepreneurial ventures, and adaptable work options. Tools powered by AI can further aid in training and skills enhancement, allowing women to engage in new industries and fields. AI technologies can enhance women's access to high-quality healthcare and tackle health issues that are specific to their gender. Nonetheless, it is crucial to acknowledge and tackle possible challenges and dangers linked to AI. Gender bias in training data and algorithmic choices can sustain ongoing disparities and further disadvantage women. To realize the complete potential of AI, it is essential to embrace inclusive and ethical practices, while ensuring women's active involvement in AI creation and decision-making processes. In this way, AI can serve as

an impactful resource for promoting gender equality and fostering a more inclusive and empowered community for everyone.

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