Roadmap to Empower Researchers in AI Skills in Developing Countries

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Agenda Overview

UNDERSTANDING AI'S ROLE IN SCIENTIFIC RESEARCH

CHALLENGES FACED BY RESEARCHERS IN DEVELOPING COUNTRIES

A ROADMAP FOR EMPOWERING RESEARCHERS WITH AI TOOLS

MONITORING AND EVALUATION STRATEGIES

CONCLUSION

RECOMMENDATIONS FOR ENHANCING AI SKILLS

Why is this study necessary

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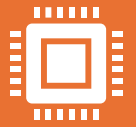
Research Methodology



This study employs a rigorous mixed-methods approach, as outlined by Dawadi 2021[30] to explore the integration of AI in scientific research within developing countries.

An extensive review of existing literature examines the state of research in these regions, identifying critical challenges such as infrastructure limitations and gaps in digital literacy.

Building on this foundation, the study highlights essential AI skills, including data literacy and collaborative AI tools, that researchers need to engage effectively in the global scientific community.

The Importance of AI in Research

The State of Scientific Research in Developing Countries

The state of scientific research in developing countries is characterized by several challenges as highlighted in literature studies:

1. Insufficient funding for research and development.
2. Lack of stable national research policies.
3. Weak research infrastructure.
4. Poor collaboration between academia and industry.
5. Brain drain of talented researchers.
6. Underutilization of human capital, despite the presence of promising talents.

As a result, the gap in scientific research — particularly in high-tech areas like artificial intelligence — continues to grow between developing and developed nations.

The Big Gap

Roadmap

Assessment and Planning → Enhance Digital Infrastructure → Develop Digital Literacy Programs

Provide Funding and Resources → Encourage Collaboration and Networking → Establish Research Support Platforms

Implement Policy Frameworks → Strengthen Research Ethics and Integrity → Engage Stakeholders and Communities

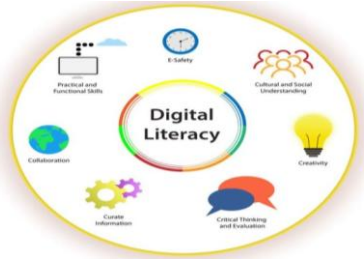
Leverage AI for Research

Assessing the Current Situation and Developing a Plan

- **Phase 1** Assessment and Planning.

- **Phase 2** Strengthening Digital Infrastructure

- **Phase 3** Developing Digital Literacy Programs.



Supporting Scientific Research and Academic Collaboration

- **Phase 1**: Establishing Research Support Platforms.

- **Phase 2**: Encouraging Collaboration and Communication.

- **Phase 3**: Providing the Necessary Funding and Resources.

- **Phase 4**: Implementing Policy Frameworks.

Promoting Ethics, Community Engagement, and the Use of AI

- **Phase 1** Promoting Research Ethics and Integrity .

- **Phase 2** Engaging Stakeholders and Communities.

- **Phase 3** Investing in AI in Research.

Monitoring and Evaluation Methods

Conclusion

Recommendations

1. Develop clear national strategies for scientific research and AI.
2. Increase investment in research and align it with development needs.
3. Foster partnerships between universities and industry.
4. Invest in digital and research infrastructure.
5. Support young researchers and promote innovation.
6. Enhance regional and international collaboration in AI fields.

Thank you

For reading the research

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For any question

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